



**Department of Veterans Affairs
Office of Inspector General**

Office of Healthcare Inspections

Report No. 16-00969-257

**Combined Assessment Program
Summary Report**

**Evaluation of
Emergency Airway Management in
Veterans Health Administration
Facilities**

April 11, 2016

Washington, DC 20420

To Report Suspected Wrongdoing in VA Programs and Operations:

Telephone: 1-800-488-8244

E-Mail: vaoighotline@va.gov

Web site: www.va.gov/oig

Executive Summary

The VA Office of Inspector General Office of Healthcare Inspections completed an evaluation of emergency airway management in Veterans Health Administration facilities. The purpose of the evaluation was to assess compliance with selected Veterans Health Administration requirements related to emergency airway management performed outside of a facility's operating room.

We performed this evaluation in conjunction with 55 Combined Assessment Program reviews conducted from October 1, 2014, through September 30, 2015. We noted high compliance in many areas, including that facilities' policies incorporated most required components, facilities designated a subject matter expert consistent with Veterans Health Administration requirements, and videolaryngoscopes were readily accessible in designated facility locations.

To improve operations, we recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensure that:

- Facilities' policies include plans for managing difficult airways.
- Facility clinical managers provide all required initial training for designated employees who will perform airway management and ensure initial competency assessments include all required testing and demonstration.
- Facility clinical managers include all required elements in airway management competency reassessments.
- Facility clinical managers ensure competent clinicians provide emergency airway management during all hours of patient care unless the facility is exempt.
- Facility clinical managers conduct root cause analyses when clinicians without demonstrated airway management competency perform emergency intubations.
- Facility clinical managers ensure scopes of practice for non-licensed independent practitioners who perform airway management include a statement related to airway management.
- Facility Chiefs of Staff ensure clinicians complete required training and experience within a short timeframe after recommending airway management privileges.

Comments

The Under Secretary for Health concurred with the findings and recommendations. (See Appendix A, pages 9–13, for the full text of the comments.) The implementation plans are acceptable, and we will follow up until all actions are completed.



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

Purpose

The VA Office of Inspector General (OIG) Office of Healthcare Inspections completed an evaluation of emergency airway management in Veterans Health Administration (VHA) facilities. The purpose of the evaluation was to assess compliance with selected VHA requirements related to airway management performed outside of a facility's operating room (OR).

Background

Airway management is the process of ensuring an open pathway to the lungs in order to maintain adequate oxygenation. Generally, highly trained and experienced anesthesia employees perform this service in the OR.

The need for emergency airway management arises outside the OR when patients experience respiratory distress. VHA defines an urgent airway as the management of the airway in a patient whose respiratory status is deteriorating and who is in need of airway support and eventual intervention (such as intubation). VHA defines an emergent airway as the management of the airway in a patient who needs immediate support and intervention (such as a code situation).¹ This review covered both urgent and emergent airway support outside the OR.

VHA defines a licensed independent practitioner (LIP) as any individual permitted by law and the facility to provide patient care services independently within the scope of the individual's license, for example, a physician.² LIPs are credentialed and privileged prior to providing patient care. Credentialing, which the facility performs upon hire and every 2 years thereafter, verifies the education and training that allows the organization to grant privileges to an LIP to perform certain care activities. Facility leadership reviews the credentials and if acceptable, grants privileges that allow the LIP to give the care, treatment, and services to the facility's patients.

VHA allows the use of other health care providers, such as registered respiratory therapists, to perform airway management after successful demonstration of required competency assessment elements. Considered non-LIPs, facilities may authorize these individuals to perform airway management within their scopes of practice after they fulfill all required elements.

Some VHA facilities provide 24 hours per day, 7 days per week anesthesia coverage, and these facilities would not need to designate other clinicians with airway management privileges or scopes of practice for coverage. However, facilities that do not have 24-hour anesthesia coverage must designate other clinical staff who are competent in airway management.

¹ VHA Directive 2012-032, *Out of Operating Room Airway Management*, October 26, 2012.

² VHA Handbook 1100.19, *Credentialing and Privileging*, October 15, 2012.

VHA facilities may obtain an exemption from the requirements to provide emergency airway management if the planned response to respiratory distress is to call 911 Emergency Medical Services. In these facilities, employees trained in basic life support care for the patient until relieved by 911 responders.

In 2008, OIG issued a report³ that addressed appropriate competencies for practitioners who performed airway management outside of VHA facility ORs and the use of devices to confirm successful endotracheal tube⁴ placement. The review found that there was variation regarding the minimum number of procedures locally required to establish and maintain competency and that facilities were not consistently able to verify provider competence to perform certain procedures. OIG made three recommendations for improvement.

In 2012, VHA issued an updated directive⁵ that addresses the required competencies for clinicians who perform airway management outside VHA facility ORs and requires techniques to confirm successful endotracheal tube placement. VHA requires that unless exempt, each facility must have a written policy in place and a process for ensuring the competency of staff performing airway management during all hours patient care is provided. This review assessed compliance with selected requirements of the directive.

Scope and Methodology

We performed this evaluation in conjunction with 55 Combined Assessment Program (CAP) reviews conducted from October 1, 2014, through September 30, 2015. The facilities we visited were a stratified random sample of all VHA facilities and represented a mix of facility size, affiliation, geographic location, and Veterans Integrated Service Networks. OIG generated an individual CAP report for each facility. For this report, we summarized the data collected from the individual facility CAP reviews.

Fifty-three facilities and/or divisions handled emergencies in all or some areas with onsite employees, while eight facilities and/or divisions used 911 Emergency Medical Services for emergency response. We reviewed facility policies, exemption documentation, and coverage schedules. We also reviewed the competency assessments of 550 designated airway management employees (309 LIPs and 241 non-LIPs). We focused on the documentation in place prior to the clinician's first coverage assignment during 30 randomly selected dates January through June 2014. Additionally, we inspected 161 videolaryngoscope locations.

VHA policy establishes minimum airway management competency assessment requirements, although some facilities elected to require more procedural

³ *Healthcare Inspection –Out-of-Operating Room Airway Management in Veterans Health Administration Medical Centers* (Report No. 08-01130-173, July 29, 2008).

⁴ A flexible plastic tube inserted into the mouth or nose and then down in the airway to maintain an unobstructed passageway.

⁵ VHA Directive 2012-032.

demonstrations than required by the directive. For these facilities, we determined whether they met locally established thresholds.

Sampling. We randomly selected the VHA facilities scheduled for CAP visits, which we had stratified by the 12 catchment areas of the OIG's Office of Healthcare Inspections regional offices.

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

We noted high compliance in many areas, including that facilities' policies incorporated most required components, facilities designated a subject matter expert consistent with VHA requirements, and videolaryngoscopes were readily accessible in designated facility locations. However, we identified opportunities for improvement in seven areas.

Issue 1: Required Policy Component

VHA requires that facilities' policies include a plan for managing difficult airways, including who will provide backup expertise when a clinician encounters a patient with an airway that is particularly difficult to intubate.⁶

Twenty-two percent of policies did not include this required element.

We recommended that facilities' policies include plans for managing difficult airways.

Issue 2: Initial Training, Testing, and Demonstration

VHA requires that patient care providers who will perform airway management, other than anesthesia professionals, must demonstrate subject matter expertise and procedural skills.⁷ The subject matter expertise assessment must include the successful completion of an educational program that includes the following specific content and a written test:

- Knowledge of the major anatomic structures of the airway
- Knowledge of how to predict and manage a difficult airway
- Knowledge of alternatives to laryngoscopy and endotracheal intubation
- Ability to formulate and verbalize an appropriate alternative plan if initial attempts at intubation are unsuccessful, including a plan for mobilizing additional personnel

Procedural skills assessment must include the following components:

- Completion of a skills assessment with airway task trainers or human patient simulators demonstrating proficiency in airway management using the following four modalities:
 - ventilation using a bag and mask and either an oral or nasopharyngeal airway
 - insertion of a laryngeal mask airway
 - endotracheal intubation(s) using direct laryngoscopy
 - endotracheal intubation(s) using videolaryngoscopy
- Completion of a skills assessment demonstrated on a patient or patients using the above four modalities.

⁶ VHA Directive 2012-032.

⁷ VHA Directive 2012-032.

Of the 195 clinicians with initial assessment for airway management competency, 47 percent did not have documented evidence of completion of all four required educational content elements, and 42 percent did not have documented evidence of a completed written test. Thirty-nine percent did not have documentation to support proficiency in the four required modalities on an airway simulator or mannequin, and 43 percent did not have documentation of successful demonstration of these modalities on patients.

We recommended that facility clinical managers provide all required initial training for designated employees who will perform airway management and ensure initial competency assessment includes all required testing and demonstration.

Issue 3: Competency Reassessment

VHA requires that facilities reassess clinicians who have previously been determined competent for endotracheal intubation and airway management for continued competency at the time of privilege reappraisal for LIPs or scope of practice renewal for non-LIPs.⁸ Reassessments must include a review of training and experience in the period since the previous assessment, including a review of employee-specific data on airway management. Additionally, reassessments must include the same educational program elements, completion of a written test, and skills assessment demonstrating airway management proficiency using the four modalities (as outlined on page 4).

Of the 355 clinicians with reassessments for continued airway management competency, 43 percent did not have completed reassessments at the time of privilege reappraisal or scope of practice renewal, and 39 percent did not have reassessments that included review of employee-specific airway management data. Thirty-one percent did not have documented evidence of completion of all four required educational components, and 29 percent did not have documented evidence of a completed written test. Forty-one percent did not have documentation to support proficiency in the four required modalities on an airway simulator or mannequin.

VHA also requires that competency reassessments include one of the following elements:⁹

- Successful airway management and intubation at the local VHA facility of at least one patient without complication in the preceding 2 years
- Written certification of airway management competency from the individual's evaluating superior at a non-VHA health care facility
- Successful demonstration of airway management and intubation skills to the facility subject matter expert with patients in a training situation using the four modalities (as outlined on page 4)

⁸ VHA Directive 2012-032.

⁹ VHA Directive 2012-032.

Twenty-one percent of the reassessments for continued airway management competency did not include documentation of at least one of the three elements.

We recommended that facility clinical managers include all required elements in airway management competency reassessments.

Issue 4: Coverage Requirements

VHA requires that facilities have a sufficient number of clinicians deemed competent in airway management to respond to respiratory distress, including cardiopulmonary arrest, during all hours patient care is provided. Additionally, facilities providing moderate or deep levels of sedation must have a clinician with airway management privileges or scope of practice available during those procedures, and these facilities cannot be exempt from VHA airway management requirements.¹⁰

We randomly selected 30 dates from January 1 through June 30, 2014, which included weekdays, weekends, and holidays. Facilities provided the names of the designated clinicians responsible for airway management coverage during the 24-hour period (or other timeframe) when patient care was provided. We evaluated whether the designated clinicians had documented airway management competency and reviewed selected timecards to ensure the designated clinicians were on duty on the designated dates.

Twenty-four percent of the facilities had gaps in airway management coverage during hours patient care was provided.

We recommended that facility clinical managers ensure competent clinicians provide emergency airway management during all hours of patient care unless the facility is exempt.

Issue 5: Requirement for Root Cause Analysis

VHA allows that in extraordinary circumstances where an individual with demonstrated competency in airway management is not available, clinicians may use their judgment to best respond to patients' needs, such as by initiating emergency intubation.¹¹ When this situation occurs, the facility must conduct a root cause analysis to determine why this potential vulnerability existed and initiate appropriate corrective action to minimize a repeat occurrence.

Managers did not complete root cause analyses at 13 percent of the facilities that had one or more airway management intervention by a clinician without demonstrated competency.

¹⁰ VHA Directive 2012-032.

¹¹ VHA Directive 2012-032.

We recommended that facility clinical managers conduct root cause analyses when clinicians without demonstrated airway management competency perform emergency intubations.

Issue 6: Non-LIP Scope of Practice

VHA requires that non-LIPs who have successfully demonstrated airway management competency have a statement in their scope of practice document indicating they are authorized to perform airway management.¹²

Twenty-four percent of the non-LIPs did not have an airway management statement in their scopes of practice.

We recommended that facility clinical managers ensure scopes of practice for non-LIPs who perform airway management include a statement related to airway management.

Issue 7: LIP Privileging Process

VHA requires that the privileges facilities approve are appropriate to the LIPs' training and experience.¹³

We reviewed documentation for providers granted airway management privileges. Fifty-six percent of providers lacked documentation of the required training and experience to perform airway management.

We recommended that facility Chiefs of Staff ensure clinicians complete required training and experience within a short timeframe after recommending airway management privileges.

Conclusions

We noted high compliance in many areas, including that facilities' policies incorporated most required components, facilities designated a subject matter expert consistent with VHA requirements, and videolaryngoscopes were readily accessible in designated facility locations.

We identified several opportunities for improvement. Facilities' policies need to include plans for managing difficult airways. Facility clinical managers need to provide all required initial training to and ensure completion of initial testing and demonstration by employees who will perform airway management. Facility clinical managers need to include all required elements in competency reassessments and ensure competent clinicians provide emergency airway management during all hours of patient care unless the facility is exempt. Facility clinical managers need to conduct root cause analyses when clinicians without demonstrated airway management competency

¹² VHA Directive 2013-032.

¹³ VHA Handbook 1100.19.

perform emergency intubations. In facilities where non-LIPs provide airway management, clinical managers need to include a statement related to airway management in non-LIP scopes of practice. Facility Chiefs of Staff need to ensure clinicians complete required training and experience within a short timeframe after recommending airway management privileges.

Recommendations

1. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensure facilities' policies include plans for managing difficult airways.
2. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensure that facility clinical managers provide all required initial training for designated employees who will perform airway management and ensure initial competency assessment includes all required testing and demonstration and that facility managers monitor compliance.
3. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensure that facility clinical managers include all required elements in airway management competency reassessments and that facility managers monitor compliance.
4. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, require that facility clinical managers ensure competent clinicians provide emergency airway management during all hours of patient care unless the facility is exempt and that facility managers monitor compliance.
5. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensure that facility clinical managers conduct root cause analyses when clinicians without demonstrated airway management competency perform emergency intubations and that facility managers monitor compliance.
6. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, require that facility clinical managers ensure scopes of practice for non-licensed independent practitioners who perform airway management include a statement related to airway management and that facility managers monitor compliance.
7. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, require that facility Chiefs of Staff ensure clinicians complete required training and experience within a short timeframe after recommending airway management privileges and that facility managers monitor compliance.

Under Secretary for Health Comments

**Department of
Veterans Affairs**

Memorandum

Date: March 22, 2016

From: Under Secretary for Health (10)

Subj: Office of Inspector General (OIG) Draft Report, Combined Assessment Program (CAP) Summary Report: Evaluation of Emergency Airway Management in Veterans Health Administration Facilities (Project No. 2016-00969-HI-0603) (VAIQ 7671920)

To: Assistant Inspector General for Healthcare Inspections (54)

1. Thank you for the opportunity to review and comment on the draft report. The Veterans Health Administration (VHA) is strongly committed to developing long-term solutions that mitigate risks to the timeliness, cost-effectiveness, quality and safety of the Department of Veteran Affairs (VA) health care system. VHA is using the input from the VA's Office of Inspector General, and other advisory groups to identify root causes and to develop critical actions. As VHA implements corrective measures, we will ensure our actions are meeting the intent of the recommendations. VHA is dedicated to sustained improvement in the high risk areas.

2. The recommendations in this report apply to high risk areas 1, 2, and 4. VHA's actions will serve to clarify policy, increase consistency with national processes, and improve staff training.

3. I have reviewed the draft report, and provide the attached action plan to address the report's recommendations 1-7.

4. If you have any questions, please email Karen Rasmussen, M.D., Director, Management Review Service at VHA10ARMRS2@va.gov.



David J. Shulkin, M.D.

Attachment

VETERANS HEALTH ADMINISTRATION (VHA)

Action Plan

OIG Draft Report, CAP Summary Report – Evaluation of Emergency Airway Management in Veterans Health Administration Facilities

Date of Draft Report: January 14, 2016

Recommendations/ Actions	Status	Completion Date
-----------------------------	--------	--------------------

OIG Recommendations

Recommendation 1. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensure facilities' policies include plans for managing difficult airways.

VHA Comments: Concur

The Deputy Under Secretary for Health for Operations and Management, with guidance from the Office of Specialty Care Services, will request certification from Veterans Integrated Service Networks (VISNs) that, unless a facility is exempt from the requirements of VHA Directive 2012-032, Out of Operating Room Airway Management (OOORAM), the facilities OOORAM policies include plans for managing difficult airways. Any facilities that are not compliant with this expectation will be required to submit an action plan to the VISN to include updates until they are compliant.

To close this recommendation, VHA will provide certification from each VISN demonstrating compliance.

Status:
In Process

Target Completion Date:
August 2016

Recommendation 2. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensure that facility clinical managers provide all required initial training for designated employees who will perform airway management and ensure initial competency assessment includes all required testing and demonstration and that facility managers monitor compliance.

VHA Comments: Concur

The Deputy Under Secretary for Health for Operations and Management, with guidance from the Office of Specialty Care Services, will request certification from VISNs that, unless a facility is exempt from the requirements of VHA Directive 2012-032, OOORAM, all required initial training for designated employees who will perform airway

management has been completed and documented, including the initial competency assessments that documents that the required training and skills assessment has been completed. Facility managers will monitor compliance and report to the VISN quarterly the number of new staff certified for OORAM and that all OORAM training and skills assessment requirements have been met and that OORAM is appropriately reflected in the individual's Privileges or Scope of Practice.

To close this recommendation, VHA will provide certification from each VISN demonstrating compliance and including the facility plan for future monitoring.

Status:	Target Completion Date:
In Process	August 2016

Recommendation 3. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensure that facility clinical managers include all required elements in airway management competency reassessments and that facility managers monitor compliance.

VHA Comments: Concur

The Deputy Under Secretary for Health for Operations and Management, with guidance from the Office of Specialty Care Services, will request certification from VISNs that, unless a facility is exempt from the requirements of VHA Directive 2012-032, OORAM, all required staff reassessments for continued OORAM competency have been completed and documented. Facility managers will monitor compliance and report to the VISN quarterly the number of OORAM certified staff that have been recertified according to the requirements of the Directive.

To close this recommendation, VHA will provide certification from each VISN demonstrating compliance and including the facility plan for future monitoring.

Status:	Target Completion Date:
In Process	August 2016

Recommendation 4. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, require that facility clinical managers ensure competent clinicians provide emergency airway management during all hours of patient care unless the facility is exempt and that facility managers monitor compliance.

VHA Comments: Concur

The Deputy Under Secretary for Health for Operations and Management, with guidance from the Office of Specialty Care Services, will request certification from VISNs that, unless a facility is exempt from the requirements of VHA Directive 2012-032, OORAM, the facility's OORAM policy ensures that competent clinicians provide emergency airway management during all hours of patient care.

To close this recommendation, VHA will provide certification from each VISN demonstrating compliance and including the facility plan for future monitoring.

Status:	Target Completion Date:
In Process	August, 2016

Recommendation 5. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensure that facility clinical managers conduct root cause analyses when clinicians without demonstrated airway management competency perform emergency intubations and that facility managers monitor compliance.

VHA Comments: Concur

The Deputy Under Secretary for Health for Operations and Management, with guidance from the Office of Specialty Care Services, will request certification from VISNs that, unless a facility is exempt from the requirements of VHA Directive 2012-032, OORAM, the facility clinical managers conduct root cause analyses when clinicians without demonstrated airway management competency perform emergency intubations.

To close this recommendation, VHA will provide certification from each VISN demonstrating compliance and including the facility plan for future monitoring.

Status:	Target Completion Date:
In Process	August, 2016

Recommendation 6. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, require that facility clinical managers ensure scopes of practice for non-licensed independent practitioners who perform airway management include a statement related to airway management and that facility managers monitor compliance.

VHA Comments: Concur

The Deputy Under Secretary for Health for Operations and Management, with guidance from the Office of Specialty Care Services, will request certification from VISNs that, unless a facility is exempt from the requirements of VHA Directive 2012-032, OORAM, facility senior managers ensure that non-licensed independent practitioners who perform OORAM have a Scope of Practice that covers OORAM.

To close this recommendation, VHA will provide certification from each VISN demonstrating compliance and including the facility plan for future monitoring.

Status:	Target Completion Date:
In Process	August, 2016

Recommendation 7. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, require that facility Chiefs of Staff ensure clinicians complete required training and experience within a short timeframe after recommending airway management privileges and that facility managers monitor compliance.

VHA Comments: Concur

The Deputy Under Secretary for Health for Operations and Management, with guidance from the Office of Specialty Care Services, will remind facility Chiefs of Staff that clinicians must complete required OORAM training and skills assessment within a short timeframe after receiving OORAM privileges. Compliance will be monitored at the local level.

To close this recommendation, VHA will provide documentation supporting the requirement for clinicians to complete the OORAM training and skills assessment.

Status:
In Process

Target Completion Date:
August 2016

Office of Inspector General Contact and Staff Acknowledgments

Contact	For more information about this report, please contact the OIG at (202) 461-4720.
Contributors	James Seitz, RN, MBA, Project Coordinator Lisa Barnes, MSW Debra Boyd-Seale, RN, PhD Paula Chapman, CTRS Victoria Coates, LICSW, MBA Jennifer Christensen, DPM Laura Dulcie, BSEE Donna Giroux, RN David Griffith, RN, BS Wachita Haywood, RN LaFonda Henry, MSN, RN-BC Elaine Kahigian, RN, JD Sarah Mainzer, RN, JD Sherry Purvis-Wynn, RN, MA Clarissa Reynolds, CNHA, MBA Trina L. Rollins, MS, PA-C Glen Trupp, RN, MHSM Cheryl Walker, ARNP, MBA Jovie Yabes, RN, BSN Katrina Young, RN, MSHL
Other Contributors	Elizabeth Bullock Lin Clegg, PhD Julie Watrous, RN, MS

Report Distribution

VA Distribution

Office of the Secretary
Veterans Health Administration
Assistant Secretaries
Office of the General Counsel
Office of the Medical Inspector
Veterans Integrated Service Network Directors (1–23)

Non-VA Distribution

House Committee on Veterans' Affairs
House Appropriations Subcommittee on Military Construction, Veterans Affairs, and
Related Agencies
House Committee on Oversight and Government Reform
Senate Committee on Veterans' Affairs
Senate Appropriations Subcommittee on Military Construction, Veterans Affairs, and
Related Agencies
Senate Committee on Homeland Security and Governmental Affairs
National Veterans Service Organizations
Government Accountability Office
Office of Management and Budget

This report is available at www.va.gov/oig.