



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

Office of Healthcare Inspections

Report No. 15-00605-544

**Combined Assessment Program
Review of the
VA Maine Healthcare System
Augusta, Maine**

September 30, 2015

Washington, DC 20420

To Report Suspected Wrongdoing in VA Programs and Operations

Telephone: 1-800-488-8244

E-Mail: vaoighotline@va.gov

(Hotline Information: www.va.gov/oig/hotline)

Glossary

AD	advance directive
CAP	Combined Assessment Program
CT	computed tomography
EAM	emergency airway management
EHR	electronic health record
EOC	environment of care
facility	VA Maine Healthcare System
FY	fiscal year
MH	mental health
NA	not applicable
NM	not met
OIG	Office of Inspector General
QM	quality management
SCI	spinal cord injury
VHA	Veterans Health Administration

Table of Contents

	Page
Executive Summary	i
Objectives and Scope	1
Objectives	1
Scope.....	1
Reported Accomplishments	2
Results and Recommendations	4
QM	4
EOC	8
Medication Management.....	11
Coordination of Care.....	13
CT Radiation Monitoring	14
ADs	16
Surgical Complexity	17
EAM	18
Appendixes	
A. Facility Profile	21
B. Strategic Analytics for Improvement and Learning	22
C. Veterans Integrated Service Network Director Comments	25
D. Facility Director Comments	26
E. Office of Inspector General Contact and Staff Acknowledgments	35
F. Report Distribution	36
G. Endnotes.....	37

Executive Summary

Review Purpose: The purpose of the review was to evaluate selected health care facility operations, focusing on patient care quality and the environment of care, and to provide crime awareness briefings. We conducted the review the week of June 22, 2015.

Review Results: The review covered eight activities. We made no recommendations in the following activity:

- Computed Tomography Radiation Monitoring

The facility's reported accomplishments were a first time 3-year accreditation with exemplary conformance from the Commission on Accreditation of Rehabilitation Facilities for its Acceptance and Commitment Therapy for Pain Program and being one of five beta test sites for Maine's prescription monitoring program.

Recommendations: We made recommendations in the following seven activities:

Quality Management: Ensure the Facility Director chairs or co-chairs the Performance Improvement Board. Review privilege forms annually, and document the review. Assess observation criteria and utilization when conversions from observation bed status to acute admissions are 25–30 percent or more. Ensure the Special Care Unit Committee reviews all codes and screens each code episode for clinical issues that may have contributed to the code. Include most services in the review of electronic health record quality. Include all required elements in the quality control policy/process for scanning.

Environment of Care: Ensure patient care areas are clean. Repair damaged wall surfaces and the walkway from the handicapped parking area to the main entrance. Remove expired or undated medications.

Medication Management: Complete and monitor monthly medication storage area inspections on the medical/surgical unit and in the community living center. Develop and implement a policy for the safe use of automated dispensing machines.

Coordination of Care: Create/designate a committee to oversee consult management.

Advance Directives: Implement a transition plan to use the allowed note titles. Consistently correctly post patients' advance directives status. Hold advance directive discussions requested by inpatients, and document the discussions.

Surgical Complexity: Ensure Special Care Unit nurses have 12-lead electrocardiogram competency assessment and validation completed and documented.

Emergency Airway Management: Revise the emergency airway management policy to include required elements. Ensure completion of initial assessments for emergency

airway management competency prior to the clinicians providing coverage. Require that initial clinician emergency airway management competency assessment include evidence of successful demonstration of all required procedural skills on patients.

Comments

The Veterans Integrated Service Network and Facility Directors agreed with the Combined Assessment Program review findings and recommendations and provided acceptable improvement plans. (See Appendixes C and D, pages 25–33, for the full text of the Directors' comments.) We consider recommendation 8 closed. We will follow up on the planned actions for the open recommendations until they are completed.



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

Objectives and Scope

Objectives

CAP reviews are one element of the OIG's efforts to ensure that our Nation's veterans receive high quality VA health care services. The objectives of the CAP review are to:

- Conduct recurring evaluations of selected health care facility operations, focusing on patient care quality and the EOC.
- Provide crime awareness briefings to increase employee understanding of the potential for program fraud and the requirement to refer suspected criminal activity to the OIG.

Scope

The scope of the CAP review is limited. Serious issues that come to our attention that are outside the scope will be considered for further review separate from the CAP process and may be referred accordingly.

For this review, we examined selected clinical and administrative activities to determine whether facility performance met requirements related to patient care quality and the EOC. In performing the review, we inspected selected areas, conversed with managers and employees, and reviewed clinical and administrative records. The review covered the following eight activities:

- QM
- EOC
- Medication Management
- Coordination of Care
- CT Radiation Monitoring
- ADs
- Surgical Complexity
- EAM

We have listed the general information reviewed for each of these activities. Some of the items listed may not have been applicable to this facility because of a difference in size, function, or frequency of occurrence.

The review covered facility operations for FY 2013, FY 2014, and FY 2015 through June 22, 2015, and inspectors conducted the review in accordance with OIG standard operating procedures for CAP reviews. We also asked the facility to provide the status on the recommendations we made in our previous CAP report (*Combined Assessment Program Review of the VA Maine Healthcare System, Augusta, Maine, Report No. 12-03741-61, December 12, 2012*).

During this review, we presented crime awareness briefings for 43 employees. These briefings covered procedures for reporting suspected criminal activity to the OIG and included case-specific examples illustrating procurement fraud, conflicts of interest, and bribery.

Additionally, we surveyed employees regarding patient safety and quality of care at the facility. We distributed an electronic survey to all facility employees and received 347 responses. We shared summarized results with facility managers.

In this report, we make recommendations for improvement. Recommendations pertain to issues that are significant enough for the OIG to monitor until the facility implements corrective actions.

Reported Accomplishments

Acceptance and Commitment Therapy for Pain Program

The facility's Acceptance and Commitment Therapy for Pain Program received a first time, 3-year accreditation from the Commission on Accreditation of Rehabilitation Facilities with an exemplary conformance rating in responding to the preferences of the veterans served. This outpatient program assists veterans with chronic pain by improving functionality and decreasing suffering as well as identifying and making progress toward goals. The program responds to the preferences of the veterans by providing information and services on complementary therapies such as yoga, woodworking arts, music therapy, aqua therapy, relaxation, and mindfulness techniques.

Prescription Monitoring Program

In October 2014, the facility became a beta test site to share VHA data with the Maine Prescription Monitoring Program. Since February 2012, the facility has had the ability to access the state's prescription monitoring program to retrieve community provider prescription data for veterans but had not been able to share VHA prescription data with the community program. Beta testing demonstrated that VHA systems were able to submit VHA prescription data safely, accurately, and timely for use by local providers in the community.

This program is particularly important because it is an essential tool in efforts to control prescription drug misuse in Maine. While the facility supplies prescription medications

to approximately 3 percent of the state's population, it dispenses roughly 9 percent of all controlled substances in the state. Prescription monitoring program facilitators and VHA providers now have the ability to share each other's data freely, accurately, and in a timely manner. This transparency of information between community and facility providers helps achieve the overall desired goal of improved medication safety for both veterans and non-veterans throughout Maine.

Results and Recommendations

QM

The purpose of this review was to determine whether facility senior managers actively supported and appropriately responded to QM efforts and whether the facility met selected requirements within its QM program.^a

We conversed with senior managers and key QM employees, and we evaluated meeting minutes, 10 credentialing and privileging folders, and other relevant documents. The table below shows the areas reviewed for this topic. The areas marked as NM did not meet applicable requirements and needed improvement. Any items that did not apply to this facility are marked NA.

NM	Areas Reviewed	Findings	Recommendations
X	There was a senior-level committee responsible for key quality, safety, and value functions that met at least quarterly and was chaired or co-chaired by the Facility Director. <ul style="list-style-type: none"> • The committee routinely reviewed aggregated data. • QM, patient safety, and systems redesign appeared to be integrated. 	<ul style="list-style-type: none"> • The Facility Director did not chair or co-chair the committee responsible for key quality, safety, and value functions. 	1. We recommended that the Facility Director chair or co-chair the Performance Improvement Board.
	Peer reviewed deaths met selected requirements: <ul style="list-style-type: none"> • Peers completed reviews within specified timeframes. • The Peer Review Committee reviewed cases receiving initial Level 2 or 3 ratings. • Involved providers were invited to provide input prior to the final Peer Review Committee determination. 		

NM	Areas Reviewed (continued)	Findings	Recommendations
X	<p>Credentialing and privileging processes met selected requirements:</p> <ul style="list-style-type: none"> • Facility managers reviewed privilege forms annually and ensured proper approval of revised forms. • Facility managers ensured appropriate privileges for licensed independent practitioners. • Facility managers removed licensed independent practitioners' access to patients' EHRs upon separation. • Facility managers properly maintained licensed independent practitioners' folders. 	<ul style="list-style-type: none"> • Facility managers did not review privilege forms annually. 	<p>2. We recommended that facility managers review privilege forms annually and document the review.</p>
X	<p>Observation bed use met selected requirements:</p> <ul style="list-style-type: none"> • The facility gathered data regarding appropriateness of observation bed usage. • The facility reassessed observation criteria and/or utilization if conversions to acute admissions were consistently 25–30 percent or more. 	<p>Twelve months of data reviewed:</p> <ul style="list-style-type: none"> • For March 2014 through February 2015, the facility converted more than 30 percent of observation patients to acute admissions but did not reassess observation criteria or utilization during that time. 	<p>3. We recommended that when conversions from observation bed status to acute admissions are 25–30 percent or more, the facility reassess observation criteria and utilization.</p>
X	<p>The process to review resuscitation events met selected requirements:</p> <ul style="list-style-type: none"> • An interdisciplinary committee reviewed episodes of care where resuscitation was attempted. • Resuscitation event reviews included screening for clinical issues prior to events that may have contributed to the occurrence of the code. • The facility collected data that measured performance in responding to events. 	<p>Eight months of Special Care Unit Committee meeting minutes reviewed:</p> <ul style="list-style-type: none"> • The committee did not review each episode. • Code reviews did not include screening for clinical issues prior to code that may have contributed to the occurrence of the code. 	<p>4. We recommended that the Special Care Unit Committee review each code episode and that code reviews include screening for clinical issues prior to the code that may have contributed to the occurrence of the code.</p>

NM	Areas Reviewed (continued)	Findings	Recommendations
	<p>The surgical review process met selected requirements:</p> <ul style="list-style-type: none"> • An interdisciplinary committee with appropriate leadership and clinical membership met monthly to review surgical processes and outcomes. • The Surgical Work Group reviewed surgical deaths with identified problems or opportunities for improvement. • The Surgical Work Group reviewed additional data elements. 		
	<p>Clinicians appropriately reported critical incidents.</p>		
	<p>The safe patient handling program met selected requirements:</p> <ul style="list-style-type: none"> • A committee provided program oversight. • The committee gathered, tracked, and shared patient handling injury data. 		
X	<p>The process to review the quality of entries in the EHR met selected requirements:</p> <ul style="list-style-type: none"> • A committee reviewed EHR quality. • A committee analyzed data at least quarterly. • Reviews included data from most services and program areas. 	<p>Twelve months of Health Information Management Committee meeting minutes reviewed:</p> <ul style="list-style-type: none"> • The review of EHR quality did not consistently include EHRs from most clinical service lines. 	<p>5. We recommended that the facility consistently include most services in the review of electronic health record quality.</p>
X	<p>The policy for scanning internal forms into EHRs included the following required items:</p> <ul style="list-style-type: none"> • Quality of the source document and an alternative means of capturing data when the quality of the document is inadequate. • A correction process if scanned items have errors. 	<ul style="list-style-type: none"> • The scanning policy did not include an alternative means of capturing data when the quality of the source document does not meet image quality controls, a correction process if scanned items have errors, a complete review of scanned documents to ensure readability and retrievability, and quality assurance reviews on a sample of the scanned documents. 	<p>6. We recommended that the quality control policy for scanning include an alternative means of capturing data when the quality of the source document does not meet image quality controls, a correction process if scanned items have errors, a complete review of scanned documents to ensure readability and retrievability, and quality assurance reviews on a sample of the scanned documents.</p>

NM	Areas Reviewed (continued)	Findings	Recommendations
	<ul style="list-style-type: none"> A complete review of scanned documents to ensure readability and retrievability of the record and quality assurance reviews on a sample of the scanned documents. 		
	Overall, if QM reviews identified significant issues, the facility took actions and evaluated them for effectiveness.		
	Overall, senior managers actively participated in performance improvement over the past 12 months.		
	Overall, the facility had a comprehensive, effective QM program over the past 12 months.		
	The facility met any additional elements required by VHA or local policy.		

EOC

The purpose of this review was to determine whether the facility maintained a clean and safe health care environment in accordance with applicable requirements. We also determined whether the facility met selected requirements in emergency management.^b

We inspected three community living center units, the acute MH unit, the hospice unit, two medical/surgical inpatient units, and the medical/surgical specialty care unit. We also inspected the Emergency Department and primary care clinic. Additionally, we reviewed relevant documents, including 10 employee training and competency records, and conversed with key employees and managers. The table below shows the areas reviewed for this topic. The areas marked as NM did not meet applicable requirements and needed improvement. Any items that did not apply to this facility are marked NA.

NM	Areas Reviewed for General EOC	Findings	Recommendations
	EOC Committee minutes reflected sufficient detail regarding identified deficiencies, corrective actions taken, and tracking of corrective actions to closure for the facility and the community based outpatient clinics.		
	The facility conducted an infection prevention risk assessment.		
	Infection Prevention/Control Committee minutes documented discussion of identified high-risk areas, actions implemented to address those areas, and follow-up on implemented actions and included analysis of surveillance activities and data.		
	The facility had established a process for cleaning equipment.		
	The facility conducted required fire drills in buildings designated for health care occupancy and documented drill critiques.		
	The facility had a policy/procedure/guideline for identification of individuals entering the facility, and units/areas complied with requirements.		

NM	Areas Reviewed for General EOC (continued)	Findings	Recommendations
	The facility met fire safety requirements.		
X	The facility met environmental safety requirements.	<ul style="list-style-type: none"> • Two of 10 patient care areas had visibly soiled floors. • One of 10 patient care areas had damaged wall surfaces. • The sidewalk from the handicapped parking area to the main entrance led through a damaged walkway that presented a tripping hazard. 	<p>7. We recommended that facility managers ensure patient care areas are clean and damaged wall surfaces are repaired and monitor compliance.</p> <p>8. We recommended that facility managers ensure the walkway from the handicapped parking area to the main entrance is repaired.</p>
	The facility met infection prevention requirements.		
X	The facility met medication safety and security requirements.	<ul style="list-style-type: none"> • Three of 10 patient care areas had opened multi-dose medication vials that were either expired or undated. 	<p>9. We recommended that employees promptly remove expired or undated medications from patient care areas and that facility managers monitor compliance.</p>
	The facility met privacy requirements.		
	The facility complied with any additional elements required by VHA, local policy, or other regulatory standards.		
Areas Reviewed for SCI Center			
NA	The facility completed and documented required inspection checklists of all ceiling mounted patient lifts.		
NA	The facility met fire safety requirements in the SCI Center.		
NA	The facility met environmental safety requirements in the SCI Center.		
NA	The facility met infection prevention requirements in the SCI Center.		
NA	The facility met medication safety and security requirements in the SCI Center.		
NA	The facility met patient privacy requirements in the SCI Center.		

NM	Areas Reviewed for SCI Center (continued)	Findings	Recommendations
NA	The facility complied with any additional elements required by VHA, local policy, or other regulatory standards.		
	Areas Reviewed for Emergency Management		
	The facility had a documented Hazard Vulnerability Assessment and reviewed the assessment annually.		
	The facility maintained a list of resources and assets it may need during an emergency.		
	The facility had a written Emergency Operations Plan that addressed key components.		
	The facility had a written description of how it will respond to an influx of potentially infectious patients and a plan for managing them over an extended period of time.		
	Employees received training and competency assessment on use of emergency evacuation devices.		
	Evacuation devices were immediately accessible and in good repair.		
	The facility complied with any additional elements required by VHA, local policy, or other regulatory standards.		
	Areas Reviewed for Construction Safety		
NA	The facility met selected dust control, temporary barrier, storage, and security requirements for the construction site perimeter.		
NA	The facility complied with any additional elements required by VHA or local policy, or other regulatory standards.		

Medication Management

The purpose of this review was to determine whether the facility had established safe medication storage practices in accordance with VHA policy and Joint Commission standards.^c

We reviewed relevant documents, the training records of 20 nursing employees, and pharmacy monthly medication storage area inspection documentation for the past 6 months. Additionally, we inspected medical/surgical unit 3N, the hospice (71) unit, the short stay rehabilitation unit, and the Emergency Department and for these areas reviewed documentation of narcotic wastage from automated dispensing machines and inspected crash carts containing emergency medications. The table below shows the areas reviewed for this topic. The areas marked as NM did not meet applicable requirements and needed improvement. Any items that did not apply to this facility are marked NA.

NM	Areas Reviewed	Findings	Recommendations
	Facility policy addressed medication receipt in patient care areas, storage procedures until administration, and staff authorized to have access to medications and areas used to store them.		
	The facility required two signatures on controlled substances partial dose wasting.		
	The facility defined those medications and supplies needed for emergencies and procedures for crash cart checks, checks included all required elements, and the facility conducted checks with the frequency required by local policy.		
	The facility prohibited storage of potassium chloride vials in patient care areas.		
NA	If the facility stocked heparin in concentrations of more than 5,000 units per milliliter in patient care areas, the Chief of Pharmacy approved it.		

NM	Areas Reviewed (continued)	Findings	Recommendations
	The facility maintained a list of the look-alike and sound-alike medications it stores, dispenses, and administers; reviewed this list annually and ensured it was available for staff reference; and had labeling/storage processes to prevent errors.		
	The facility identified in writing its high-alert and hazardous medications, ensured the high-alert list was available for staff reference, and had processes to manage these medications.		
X	The facility conducted and documented inspections of all medication storage areas at least monthly, fully implemented corrective actions, and monitored the changes.	<ul style="list-style-type: none"> The medical/surgical 4S and hospice (71) units had one or more missed monthly medication storage area inspections. 	10. We recommended that facility managers ensure monthly medication storage area inspections are completed and monitor compliance.
X	The facility/Pharmacy Service had a written policy for safe use of automated dispensing machines that included oversight of overrides and employee training and minimum competency requirements for users, and employees received training or competency assessment in accordance with local policy.	<ul style="list-style-type: none"> The facility did not have a written policy for safe use of automated dispensing machines. 	11. We recommended that the facility develop a written policy for safe use of automated dispensing machines and implement the policy and that facility managers monitor compliance.
	The facility employed practices to prevent wrong-route drug errors.		
	Medications prepared but not immediately administered contained labels with all required elements.		
	The facility removed medications awaiting destruction or stored them separately from medications available for administration.		
	The facility met multi-dose insulin pen requirements.		
	The facility complied with any additional elements required by VHA or local policy.		

Coordination of Care

The purpose of this review was to evaluate the consult management process and the completion of inpatient clinical consults.^d

We reviewed relevant documents, and we conversed with key employees. Additionally, we reviewed the EHRs of 42 randomly selected patients who had a consult requested during an acute care admission from January 1 through June 30, 2014. The table below shows the areas reviewed for this topic. The area marked as NM did not meet applicable requirements and needed improvement. Any items that did not apply to this facility are marked NA.

NM	Areas Reviewed	Findings	Recommendations
X	A committee oversaw the facility's consult management processes.	<ul style="list-style-type: none"> • The facility did not have a committee to oversee consult management. 	<p>12. We recommended that the facility create/designate a committee to oversee consult management.</p>
	Major bed services had designated employees to: <ul style="list-style-type: none"> • Provide training in the use of the computerized consult package • Review and manage consults 		
	Consult requests met selected requirements: <ul style="list-style-type: none"> • Requestors included the reason for the consult. • Requestors selected the proper consult title. • Consultants appropriately changed consult statuses, linked responses to the requests, and completed consults within the specified timeframe. 		
	The facility met any additional elements required by VHA or local policy.		

CT Radiation Monitoring

The purpose of this review was to determine whether the facility complied with selected VHA radiation safety requirements and to follow up on recommendations regarding monitoring and documenting radiation dose from a 2011 report, *Healthcare Inspection – Radiation Safety in Veterans Health Administration Facilities*, Report No. 10-02178-120, March 10, 2011.^e

We reviewed relevant documents, including qualifications and dosimetry monitoring for four CT technologists and CT scanner inspection reports, and conversed with key managers and employees. We also reviewed the EHRs of 50 randomly selected patients who had a CT scan January 1–December 31, 2014. The table below shows the areas reviewed for this topic. Any items that did not apply to this facility are marked NA. The facility generally met requirements. We made no recommendations.

NM	Areas Reviewed	Findings	Recommendations
	The facility had a designated Radiation Safety Officer responsible for oversight of the radiation safety program.		
	The facility had a CT/imaging/radiation safety policy or procedure that included: <ul style="list-style-type: none"> • A CT quality control program with program monitoring by a medical physicist at least annually, image quality monitoring, and CT scanner maintenance • CT protocol monitoring to ensure doses were as low as reasonably achievable and a method for identifying and reporting excessive CT patient doses to the Radiation Safety Officer • A process for managing/reviewing CT protocols and procedures to follow when revising protocols • Radiologist review of appropriateness of CT orders and specification of protocol prior to scans 		
	A radiologist and technologist expert in CT reviewed all CT protocols revised during the past 12 months.		

NM	Areas Reviewed (continued)	Findings	Recommendations
	A medical physicist tested a sample of CT protocols at least annually.		
	A medical physicist performed and documented CT scanner annual inspections, an initial inspection after acquisition, and follow-up inspections after repairs or modifications affecting dose or image quality prior to the scanner's return to clinical service.		
	If required by local policy, radiologists included patient radiation dose in the CT report available for clinician review and documented the dose in the required application(s), and any summary reports provided by teleradiology included dose information.		
	CT technologists had required certifications or written affirmation of competency if "grandfathered in" prior to January 1987, and technologists hired after July 1, 2014, had CT certification.		
	There was documented evidence that CT technologists had annual radiation safety training and dosimetry monitoring.		
	If required by local policy, CT technologists had documented training on dose reduction/optimization techniques and safe procedures for operating the types of CT equipment they used.		
	The facility complied with any additional elements required by VHA or local policy.		

ADs

The purpose of this review was to determine whether the facility complied with selected requirements for ADs for patients.^f

We reviewed relevant documents and conversed with key employees. Additionally, we reviewed the EHRs of 50 randomly selected patients who had an acute care admission January 1–December 31, 2014. The table below shows the areas reviewed for this topic. The areas marked as NM did not meet applicable requirements and needed improvement. Any items that did not apply to this facility are marked NA.

NM	Areas Reviewed	Findings	Recommendations
X	The facility had an AD policy that addressed: <ul style="list-style-type: none"> • AD notification, screening, and discussions • Proper use of AD note titles 	<ul style="list-style-type: none"> • Non-allowed note titles were in common use, and there was no plan for transition to the allowed note titles. 	13. We recommended that the facility implement a plan for transition to the allowed note titles and that facility managers monitor compliance.
	Employees screened inpatients to determine whether they had ADs and used appropriate note titles to document screening.		
X	When patients provided copies of their current ADs, employees had scanned them into the EHR. <ul style="list-style-type: none"> • Employees correctly posted patients' AD status. 	<ul style="list-style-type: none"> • For nine of the 49 applicable EHRs (18 percent), employees did not correctly post patients' AD status. 	14. We recommended that employees consistently correctly post patients' advance directives status and that facility managers monitor compliance.
X	Employees asked inpatients if they would like to discuss creating, changing, and/or revoking ADs. <ul style="list-style-type: none"> • When inpatients requested a discussion, employees documented the discussion and used the required AD note titles. 	<ul style="list-style-type: none"> • Three of the seven applicable EHRs did not contain documentation that employees held the discussions requested. 	15. We recommended that employees hold advance directive discussions requested by inpatients and document the discussions and that facility managers monitor compliance.
	The facility met any additional elements required by VHA or local policy.		

Surgical Complexity

The purpose of this review was to determine whether the facility provided selected support services appropriate to the assigned surgical complexity designation.⁹

We reviewed relevant documents and the training records of 10 employees, and we conversed with key managers and employees. The table below shows the areas reviewed for this topic. The area marked as NM did not meet applicable requirements and needed improvement. Any items that did not apply to this facility are marked NA.

NM	Areas Reviewed	Findings	Recommendations
	Facility policy defined appropriate availability for all support services required by VHA for the facility's surgical designation.		
X	Employees providing selected tests and patient care after operational hours had appropriate competency assessments and validation.	<ul style="list-style-type: none"> None of the 10 nurses on the special care unit had 12-lead electrocardiogram competency assessment and validation documentation completed. 	16. We recommended that facility managers ensure that special care unit nurses have 12-lead electrocardiogram competency assessment and validation completed and documented.
	The facility properly reported surgical procedures performed that were beyond the facility's surgical complexity designation. <ul style="list-style-type: none"> The facility reviewed and implemented recommendations made by the Veterans Integrated Service Network Chief Surgical Consultant. 		
	The facility complied with any additional elements required by VHA or local policy.		

EAM

The purpose of this review was to determine whether the facility complied with selected VHA out of operating room airway management requirements.^h

We reviewed relevant documents, including competency assessment documentation of nine clinicians applicable for the review period January 1–June 30, 2014, and we conversed with key managers and employees. The table below shows the areas reviewed for this topic. The areas marked as NM did not meet applicable requirements and needed improvement. Any items that did not apply to this facility are marked NA.

NM	Areas Reviewed	Findings	Recommendations
	The facility had a local EAM policy or had a documented exemption.		
NA	If the facility had an exemption, it did not have employees privileged to perform procedures using moderate or deep sedation that might lead to airway compromise.		
	Facility policy designated a clinical subject matter expert, such as the Chief of Staff or Chief of Anesthesia, to oversee EAM.		
X	Facility policy addressed key VHA requirements, including: <ul style="list-style-type: none"> • Competency assessment and reassessment processes • Use of equipment to confirm proper placement of breathing tubes • A plan for managing a difficult airway 	<ul style="list-style-type: none"> • Facility policy did not address the availability of portable video laryngoscopes, the use of a device to confirm endotracheal tube placement in conjunction with auscultation, and a plan for managing the difficult airway. 	17. We recommended that the facility revise the emergency airway management policy to include the availability of portable video laryngoscopes, the use of a device to confirm endotracheal tube placement in conjunction with auscultation, and a plan for managing the difficult airway.

NM	Areas Reviewed (continued)	Findings	Recommendations
X	<p>Initial competency assessment for EAM included:</p> <ul style="list-style-type: none"> • Subject matter content elements and completion of a written test • Successful demonstration of procedural skills on airway simulators or mannequins • Successful demonstration of procedural skills on patients 	<ul style="list-style-type: none"> • Three of nine clinicians did not have an initial EAM competency assessment prior to providing coverage. • None of the six clinicians with initial EAM competency assessment had evidence of successful demonstration of all required procedural skills on patients. 	<p>18. We recommended that facility managers ensure completion of initial assessments for emergency airway management competency prior to the clinicians providing coverage.</p> <p>19. We recommended that the facility ensure initial clinician emergency airway management competency assessment includes evidence of successful demonstration of all required procedural skills on patients and that facility managers monitor compliance.</p>
NA	<p>Reassessments for continued EAM competency were completed at the time of renewal of privileges or scope of practice and included:</p> <ul style="list-style-type: none"> • Review of clinician-specific EAM data • Subject matter content elements and completion of a written test • Successful demonstration of procedural skills on airway simulators or mannequins • At least one occurrence of successful airway management and intubation in the preceding 2 years, written certification of competency by the supervisor, or successful demonstration of skills to the subject matter expert • A statement related to EAM if the clinician was not a licensed independent practitioner 		
	<p>The facility had a clinician with EAM privileges or scope of practice or an anesthesiology staff member available during all hours the facility provided patient care.</p>		

NM	Areas Reviewed (continued)	Findings	Recommendations
	Video equipment to confirm proper placement of breathing tubes was available for immediate clinician use.		
	The facility complied with any additional elements required by VHA or local policy.		

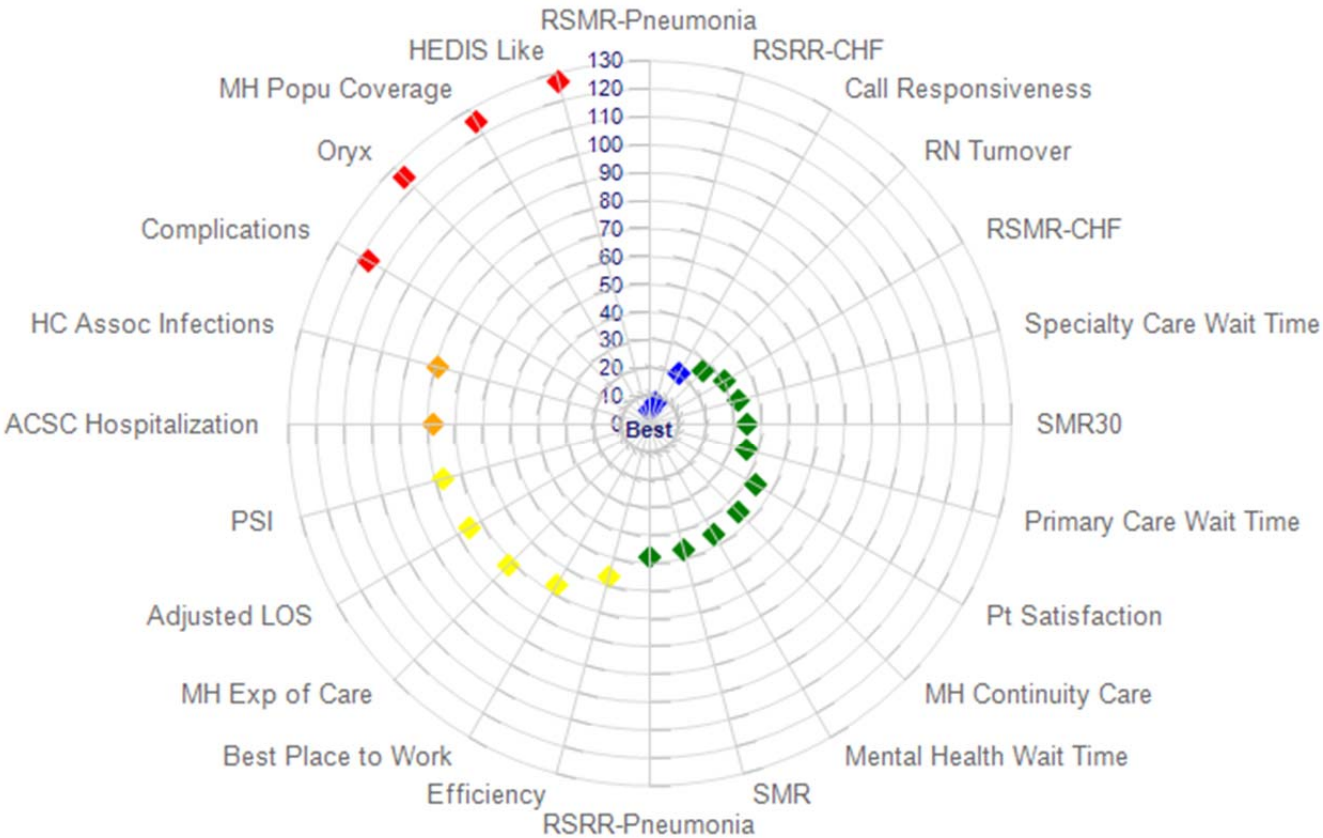
Facility Profile (Augusta/402) FY 2015 through June 2015¹	
Type of Organization	Secondary
Complexity Level	2-Medium complexity
Affiliated/Non-Affiliated	Affiliated
Total Medical Care Budget in Millions	\$266.9
Number of:	
• Unique Patients	36,943
• Outpatient Visits	375,423
• Unique Employees²	1,326
Type and Number of Operating Beds (as of May 2015):	
• Hospital	71
• Community Living Center	100
• MH	NA
Average Daily Census (as of May 2015):	
• Hospital	40
• Community Living Center	73
• MH	NA
Number of Community Based Outpatient Clinics	7
Location(s)/Station Number(s)	Caribou/402GA Calais/402GB Rumford/402GC Saco/402GD Lewiston/402GE Bangor/402HB Portland/402HC
Veterans Integrated Service Network Number	1

¹ All data is for FY 2015 through June 2015 except where noted.

² Unique employees involved in direct medical care (cost center 8200).

Strategic Analytics for Improvement and Learning (SAIL)³

Togus VAMC - 2-Star in Quality (FY2015Q1) (Metric)

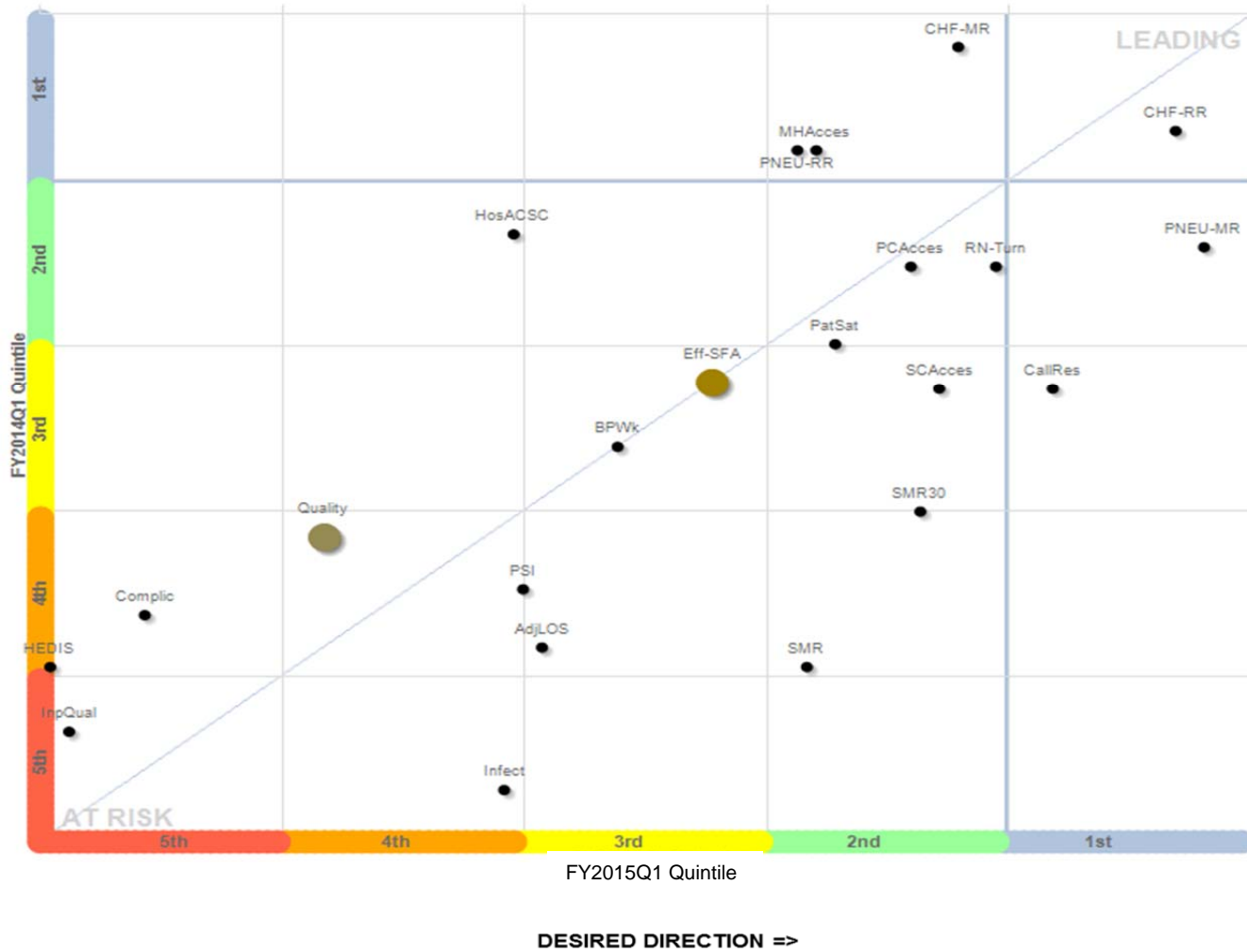


Marker color: Blue - 1st quintile; Green - 2nd; Yellow - 3rd; Orange - 4th; Red - 5th quintile.

³ Metric definitions follow the graphs.

Scatter Chart

FY2015Q1 Change in Quintiles from FY2014Q1



NOTE
 Quintiles are derived from facility ranking on z-score of a metric among 128 facilities. Lower quintile is more favorable.

DESIRED DIRECTION ==>

DESIRED DIRECTION ==>

Metric Definitions

Measure	Definition	Desired direction
ACSC Hospitalization	Ambulatory care sensitive condition hospitalizations (observed to expected ratio)	A lower value is better than a higher value
Adjusted LOS	Acute care risk adjusted length of stay	A lower value is better than a higher value
Best Place to Work	Overall satisfaction with job	A higher value is better than a lower value
Call Center Responsiveness	Average speed of call center responded to calls in seconds	A lower value is better than a higher value
Call Responsiveness	Call center speed in picking up calls and telephone abandonment rate	A lower value is better than a higher value
Complications	Acute care risk adjusted complication ratio	A lower value is better than a higher value
Efficiency	Overall efficiency measured as 1 divided by SFA (Stochastic Frontier Analysis)	A higher value is better than a lower value
Employee Satisfaction	Overall satisfaction with job	A higher value is better than a lower value
HC Assoc Infections	Health care associated infections	A lower value is better than a higher value
HEDIS	Outpatient performance measure (HEDIS)	A higher value is better than a lower value
MH Wait Time	MH wait time for new and established patients (top 50 clinics; FY13 and later)	A higher value is better than a lower value
MH Continuity Care	MH continuity of care (FY14Q3 and later)	MH Continuity Care
MH Exp of Care	MH experience of care (FY14Q3 and later)	A higher value is better than a lower value
MH Popu Coverage	MH population coverage (FY14Q3 and later)	A higher value is better than a lower value
Oryx	Inpatient performance measure (ORYX)	A higher value is better than a lower value
Primary Care Wait Time	Primary care wait time for new and established patients (top 50 clinics; FY13 and later)	A higher value is better than a lower value
PSI	Patient safety indicator (observed to expected ratio)	A lower value is better than a higher value
Pt Satisfaction	Overall rating of hospital stay (inpatient only)	A higher value is better than a lower value
RN Turnover	Registered nurse turnover rate	A lower value is better than a higher value
RSMR-AMI	30-day risk standardized mortality rate for acute myocardial infarction	A lower value is better than a higher value
RSMR-CHF	30-day risk standardized mortality rate for congestive heart failure	A lower value is better than a higher value
RSMR-Pneumonia	30-day risk standardized mortality rate for pneumonia	A lower value is better than a higher value
RSRR-AMI	30-day risk standardized readmission rate for acute myocardial infarction	A lower value is better than a higher value
RSRR-CHF	30-day risk standardized readmission rate for congestive heart failure	A lower value is better than a higher value
RSRR-Pneumonia	30-day risk standardized readmission rate for pneumonia	A lower value is better than a higher value
SMR	Acute care in-hospital standardized mortality ratio	A lower value is better than a higher value
SMR30	Acute care 30-day standardized mortality ratio	A lower value is better than a higher value
Specialty Care Wait Time	Specialty care wait time for new and established patients (top 50 clinics; FY13 and later)	A higher value is better than a lower value

Veterans Integrated Service Network Director Comments

**Department of
Veterans Affairs**

Memorandum

Date: September 1, 2015

From: Director, VA New England Healthcare System (10N1)

Subject: **CAP Review of the VA Maine Healthcare System, Augusta, ME**

To: Director, Bedford Office of Healthcare Inspections (54BN)

Director, Management Review Service (VHA 10AR MRS OIG CAP
CBOC)

1. I have reviewed and concur with the action plans regarding the CAP Review of the VA Maine HCS.

Sincerely,



Michael Mayo-Smith, MD, MPH

Director, VA New England Healthcare System (10N1)

Facility Director Comments

**Department of
Veterans Affairs**

Memorandum

Date: September 1, 2015

From: Director, VA Maine Healthcare System (402/00)

Subject: **CAP Review of the VA Maine Healthcare System, Augusta, ME**

To: Director, VA New England Healthcare System (10N1)

1. I have reviewed and concur with the action plan regarding the Combined Assessment Program (CAP) review conducted at VA Maine HCS.



RYAN S. LILLY

Director, VA Maine Healthcare System (402/00)

Comments to OIG's Report

The following Director's comments are submitted in response to the recommendations in the OIG report:

OIG Recommendations

Recommendation 1. We recommended that the Facility Director chair or co-chair the Performance Improvement Board.

Concur

Target date for completion: March 31, 2016

Facility response: Facility Director was officially named co-chair of the Performance Improvement Board (PIB) effective November 2014. The PIB meets on a monthly schedule. Facility Director will actively participate as co-chair of the PIB achieving 50 percent attendance of meetings.

Recommendation 2. We recommended that facility managers review privilege forms annually and document the review.

Concur

Target date for completion: March 31, 2016

Facility response: A monthly schedule has been established that ensures all privilege forms are reviewed/modified by Services at least annually. Monthly reviews will focus on specific services to present privilege forms to the Professional Standards Board (PSB) and the reviews will be documented in the PSB minutes.

Recommendation 3. We recommended that when conversions from observation bed status to acute admissions are 25–30 percent or more, the facility reassess observation criteria and utilization.

Concur

Target date for completion: March 31, 2016

Facility response: The Utilization Management Registered Nurse will monitor facility's observation conversion rate monthly by service. The UM nurse will send an Observation Conversion Rate report to each Service Chief and copied to Chief of Staff. When the observation conversion rate is at or exceeds the 25 percent threshold, the Service Chief(s) will review each conversion not meeting observation criteria and follow up as appropriate. Each Service Chief will document their assessment and corresponding corrective action if necessary in an email to UM nurse and copied to

Chief of Staff. UM nurse will maintain record of documented actions in response to conversion rates at or exceeding 25 percent.

Recommendation 4. We recommended that the Special Care Unit Committee review each code episode and that code reviews include screening for clinical issues prior to the code that may have contributed to the occurrence of the code.

Concur

Target date for completion: March 31, 2016

Facility response: The Code Review Committee, a sub-committee of the Special Care Unit Committee meets monthly to review all code events. A quality tool designed by the American Heart Association is used to identify trends, clinical issues, and potential protocol deviations of all code events. Clinical issues that may have contributed to the occurrence of the code are reported to the Special Care Unit Committee monthly for appropriate

follow-up. Facility Code Response and facility Inpatient Rapid Response policies have been revised to reflect improved code review processes. Revised policies are scheduled to be reviewed at Clinical Executive Board meeting in September 2015. Evidence of compliance will be documented in the Special Care Unit Committee minutes.

Recommendation 5. We recommended that the facility consistently include most services in the quality review of electronic health record quality.

Concur

Target date for completion: March 31, 2016

Facility response: On July 1, 2015, a memo went out to select clinical service line Chiefs to identify a point person for POC Audits for their respective areas. On July 21, 2015, Quality Management Specialist and Chief of Health Information Management System met with the point persons from the respective clinical service lines. Education that included the requirements of point of contact (POC) audits, distributed a POC audits schedule and template, and provided an opportunity for questions. POC audits will be submitted to HIMS committee by identified service lines on a "rolling quarter" schedule. Beginning in September 2015, POC audits will be submitted by select clinical service lines to HIMS committee for review (per the schedule). The point persons for the scheduled service lines will be invited to HIMS committee to answer any questions concerning their service lines' POC audit. HIMS committee will give recommendations and guidance where appropriate. POC audit activity will be reported to Clinical Executive Board (CEB) each month.

Recommendation 6. We recommended that the quality control policy for scanning include an alternative means of capturing data when the quality of the source document does not meet image quality controls, a correction process if scanned items have errors,

a complete review of scanned documents to ensure readability and retrievability, and quality assurance reviews on a sample of the scanned documents.

Concur

Target date for completion: December 31, 2015

Facility response: On July 13, 2015, the Release of Information (ROI) Supervisor and the Chief of HIMS revised the policy related to scanning of documents for computerized medical records. Included in the revision are scanning quality control measures which have been implemented and audited for compliance by the Supervisory Medical Record Technician ROI. Also included are procedures which outline corrective action in the event the quality of the source document does not meeting image quality controls. The revised policy is currently going through the station's approval process and will be completed with a final review and approval by members of the Clinical Executive Board for publication by October 1, 2015.

Recommendation 7. We recommended that facility managers ensure patient care areas are clean and damaged wall surfaces are repaired and monitor compliance.

Concur

Target date for completion: March 31, 2016

Facility response: EMS has been waxing the patient bedrooms on 72 over the last month. The project is averaging one patient room/day. The West end of 72 has been thoroughly cleaned and waxed, and it is anticipated that the remainder of 72 and the entirety of 73 will be completed by 9/30/15. Of the five locations in B207 identified for repair needs, three have been completed, one room has isolation precautions and needs to be scheduled when the room is vacant, and one area requires a new fire door, which was ordered in July 2015. Facility Management Services expects all work to be completed by 9/30/15. EMS leadership will monitor patient areas for two consecutive quarters to ensure sustained compliance.

Recommendation 8. We recommended that facility managers ensure the walkway from the handicapped parking area to the main entrance is repaired.

Concur

Target date for completion: Completed

Facility response: The section sidewalk was torn up and a new concrete pad poured.

Recommendation 9. We recommended that employees promptly remove expired or undated medications from patient care areas and that facility managers monitor compliance.

Concur

Target date for completion: March 31, 2016

Facility response: Changes to improve the process of current medication storage inspections include educating staff that all expired medications or medications that will expire prior to the next scheduled medication room check are to be returned to the pharmacy or be destroyed. Compliance standard is expected to be 100 percent for all medication storage inspections. Members of the Nurse Pharmacy voted to approve the changes to current medication storage inspections for all in-patient care areas. The facility Pharmacy policy was also amended to reflect this practice. Compliance will be monitored by Nurse Pharmacy Committee monthly and will be documented in the Nurse Pharmacy Committee minutes.

Recommendation 10. We recommended that facility managers ensure monthly medication storage area inspections are completed and monitor compliance.

Concur

Target date for completion: March 31, 2016

Facility response: Facility response: Medication storage inspections will occur monthly for all in-patient care areas. Compliance with monthly inspections is expected to be 100 percent for each area. Members of the Nurse Pharmacy voted to approve the changes to current medication storage inspections for all in-patient care areas. The facility Pharmacy policy was amended to reflect this practice. Compliance will be monitored by Nurse Pharmacy Committee monthly and will be documented in the Nurse Pharmacy Committee minutes.

Recommendation 11. We recommended that the facility develop a written policy for safe use of automated dispensing machines and implement the policy and that facility managers monitor compliance.

Concur

Target date for completion: February 2016

Facility response: A facility policy for the safe use of automated dispensing machines was developed. Completion of a draft policy is tentatively set for Nov 30, 2015. Draft policy will then be sent to appropriate stakeholders for review and concurrences by Jan 30, 2016. Draft policy will be forwarded to Clinical Executive Board for final approval and publication by February 2016.

Recommendation 12. We recommended that the facility create/designate a committee to oversee consult management.

Concur

Target date for completion: March 31, 2016

Facility response: Consult Management Committee was created to oversee consult management effective July 2015. Committee is co-chaired by facility Access Champion and lead Medical Support Assistant. Committee meets monthly. Committee charter was developed and documented in a facility policy format. Draft Consult Management policy was reviewed at Clinical Executive Board in August 2015 with minor recommendations for improvement. Revisions were made to the consult committee charter. Revised draft consult management policy will be re-submitted to the Clinical Executive Board scheduled for September 3, 2015 for final approval and publication.

Recommendation 13. We recommended that the facility implement a plan for transition to the allowed note titles and that facility managers monitor compliance.

Concur

Target date for completion: March 31, 2016

Facility response: All disallowed note titles were deactivated on June 25, 2015. A request to the National Help Desk has been made for assistance with re-naming past encounters that utilized disallowed note titles. Advance Directive training was provided to social work staff on August 11, 2015, including the proper use of Advance Directive note titles. A collaborative effort between in-patient nurse managers and social work will be responsible for monitoring compliance by auditing 30 random chart reviews per month. Compliance data will be reported quarterly to the Performance Improvement Board until compliance has been sustained for two consecutive quarters.

Recommendation 14. We recommended that employees consistently correctly post patients' advance directives status and that facility managers monitor compliance.

Concur

Target date for completion: March 31, 2016

Facility response: Advance Directive training is being developed by Social Work Executive. Training will focus on how to find patients' advanced directive and how to post patients' advance directives status using appropriate note titles in CPRS. Training will be disseminated to all appropriate nursing, social worker, and provider staff. Monitoring will consist of 30 random chart audits per month. A collaborative effort between in-patient nurse managers and social work will be responsible for monitoring compliance by auditing 30 random chart reviews per month. Compliance data will be reported quarterly to the Performance Improvement Board until compliance has been sustained for two consecutive quarters.

Recommendation 15. We recommended that employees hold advance directive discussions requested by inpatients and document the discussions and that facility managers monitor compliance.

Concur

Target date for completion: March 31, 2016

Facility response: Nursing Assessment templates are being revised. Nursing Documentation Committee to prompt nursing staff to alert an inpatient social worker when a Veteran is requesting information or assistance with an Advance Directive.

Social workers will document substantive discussions using the Advance Directive Discussion note title. If Veteran declines social worker's offer of assistance and does not offer any information about his/her preferences, that will be documented as in an addendum to the nursing assessment. A collaborative effort between in-patient nurse managers and social work will be responsible for monitoring compliance by auditing 30 random chart reviews per month. Compliance data will be reported quarterly to the Performance Improvement Board until compliance has been sustained for two consecutive quarters.

Recommendation 16. We recommended that facility managers ensure that special care unit nurses have 12-lead electrocardiogram competency assessment and validation completed and documented.

Concur

Target date for completion: February 29, 2016

Facility response: A comprehensive list of necessary competencies to perform 12-lead electrocardiograms has been developed. Through collaboration with the education department and the VHA Resuscitation Education Initiative (REDI), a 12 Lead simulation trainer has been procured and annual training/competency assessments are have been developed. Special Care Unit nurses will complete the 12-lead electrocardiogram competency assessment and validation annually. Expected completion date is February 2016. Annual 12 Lead electrocardiogram competencies will be monitored by Special Care Unit Nurse Manager through tracking of VA's electronic Talent Management System (TMS).

Recommendation 17. We recommended that the facility revise the emergency airway management policy to include the availability of portable videolaryngoscopes, the use of a device to confirm endotracheal tube placement in conjunction with auscultation, and a plan for managing the difficult airway.

Concur

Target date for completion: December 31, 2015

Facility response: The Emergency Airway Management policy will be revised to include the availability of portable video laryngoscopes, the use of a device to confirm endotracheal tube placement in conjunction with auscultation, and a plan for managing

the difficult airway. The draft policy will reviewed at the October 1, 2015 Clinical Executive Board for review and approval for final publication.

Recommendation 18. We recommended that facility managers ensure completion of initial assessments for emergency airway management competency prior to the clinicians providing coverage.

Concur

Target date for completion: March 31, 2016

Facility response: All Respiratory Therapists at VA Maine HCS have completed competency assessments for emergency airway management (EAM) and provide afterhours coverage for EAM for the facility 24/7. It is common to have three or more Designated Airway Officers (DAO's) at any given code at any time. (Note: DAO's is a designation used to convey successful completion of all components of the OORAM course per auspices of an anesthesia provider). To improve EAM competency assessment for the physician providers, the Physician Educator implemented a tracking tool to maintain airway management skills in a standardized manner utilizing simulation training. It will be accomplished by means of the Out of OR Airway Management (OORAM) Course which providers are required to take to certify/recertify biennially. The tracking tool is an excel file that was developed and lists the names of providers and their renewal date deadlines. A list of future OORAM courses was also made available to providers to sign up for in order to obtain or maintain their EAM certification as required. The tracking log will be monitored by the Physician Educator and reported to the Chief of Medicine when follow up is necessary.

Recommendation 19. We recommended that the facility ensure initial clinician emergency airway management competency assessment includes evidence of successful demonstration of all required procedural skills on patients and that facility managers monitor compliance.

Concur

Target date for completion: March 31, 2016

Facility response: To improve EAM competency assessment for the physician providers, the Physician Educator implemented a tracking tool to maintain airway management skills in a standardized manner utilizing simulation training. It will be accomplished by means of the Out of OR Airway Management (OORAM) Course which providers are required to take to certify/recertify biennially. The tracking tool is an excel file that was developed and lists the names of providers and their renewal date deadlines. A list of future OORAM courses was also made available to providers to sign up for in order to obtain or maintain their EAM certification as required. The tracking log will be monitored by the Physician Educator and reported to the Chief of Medicine when follow up is necessary.

Office of Inspector General Contact and Staff Acknowledgments

Contact	For more information about this report, please contact the OIG at (202) 461-4720.
Inspection Team	Valerie Zaleski, Team Leader Elaine Kahigian, RN, JD Frank Keslof, EMT, MHA Jeanne Martin, Pharm D Clarissa Reynolds, CNHA, MBA Emorfia Valkanos, RPh Timothy Bond, Office of Investigations
Other Contributors	Elizabeth Bullock Shirley Carlile, BA Paula Chapman, CTRS Roneisha Charles, BS Lin Clegg, PhD Marnette Dhooghe, MS Julie Watrous, RN, MS Jarvis Yu, MS

Report Distribution

VA Distribution

Office of the Secretary
Veterans Health Administration
Assistant Secretaries
General Counsel
Director, VA New England Healthcare System (10N1)
Director, VA Maine Healthcare System (402/00)

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
U.S. Senate: Susan M. Collins, Angus S. King, Jr.
U.S. House of Representatives: Chellie Pingree, Bruce Poliquin

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

Endnotes

^a References used for this topic included:

- VHA Directive 1026, *VHA Enterprise Framework for Quality, Safety, and Value*, August 2, 2013.
- VHA Handbook 1050.01, *VHA National Patient Safety Improvement Handbook*, March 4, 2011.
- VHA Directive 2010-025, *Peer Review for Quality Management*, June 3, 2010.
- VHA Directive 2010-032, *Safe Patient Handling Program and Facility Design*, June 28, 2010.
- VHA Directive 1036, *Standards for Observation in VA Medical Facilities*, February 6, 2014.
- VHA Handbook 1100.19, *Credentialing and Privileging*, October 15, 2012.
- VHA Handbook 1102.01, *National Surgery Office*, January 30, 2013.
- VHA Directive 2008-063, *Oversight and Monitoring of Cardiopulmonary Resuscitative Events and Facility Cardiopulmonary Resuscitation Committees*, October 17, 2008.
- VHA Handbook 1907.01, *Health Information Management and Health Records*, July 22, 2014.

^b References used for this topic included:

- VHA Directive 2008-052, *Smoke-Free Policy for VA Health Care Facilities*, August 26, 2008.
- VHA Directive 2010-032, *Safe Patient Handling Program and Facility Design*, June 28, 2010.
- VHA Directive 2011-007, *Required Hand Hygiene Practices*, February 16, 2011.
- VA National Center for Patient Safety, “Issues continue to occur due to improper ceiling mounted patient lift installation, maintenance and inspection,” Addendum to Patient Safety Alert 14-07, September 3, 2014.
- Various requirements of The Joint Commission, the Occupational Safety and Health Administration, the International Association of Healthcare Central Service Materiel Management, the Health Insurance Portability and Accountability Act, Underwriters Laboratories, VA Master Specifications.

^c References used for this topic included:

- VHA Directive 2008-027, *The Availability of Potassium Chloride for Injection Concentrate USP*, May 13, 2008.
- VHA Directive 2010-020, *Anticoagulation Therapy Management*, May 14, 2010.
- VHA Handbook 1108.01, *Controlled Substances (Pharmacy Stock)*, November 16, 2010.
- VHA Handbook 1108.05, *Outpatient Pharmacy Services*, May 30, 2006.
- VHA Handbook 1108.06, *Inpatient Pharmacy Services*, June 27, 2006.
- VHA Handbook 1108.07, *Pharmacy General Requirements*, April 17, 2008.
- Various requirements of The Joint Commission.

^d The reference used for this topic was:

- Under Secretary for Health, “Consult Business Rule Implementation,” memorandum, May 23, 2013.

^e References used for this topic included:

- VHA Directive 1129, *Radiation Protection for Machine Sources of Ionizing Radiation*, February 5, 2015.
- VHA Handbook 1105.02, *Nuclear Medicine and Radiation Safety Service*, December 10, 2010.
- VHA Handbook 5005/77, *Staffing*, Part II, Appendix G25, Diagnostic Radiologic Technologist Qualifications Standard GS-647, June 26, 2014.
- The Joint Commission, “Radiation risks of diagnostic imaging,” Sentinel Event Alert, Issue 47, August 24, 2011.
- VA Radiology, “Online Guide,” updated October 4, 2011.
- The American College of Radiology, “ACR–AAPM TECHNICAL STANDARD FOR DIAGNOSTIC MEDICAL PHYSICS PERFORMANCE MONITORING OF COMPUTED TOMOGRAPHY (CT) EQUIPMENT,” Revised 2012.

^f The references used for this topic included:

- VHA Handbook 1004.02, *Advance Care Planning and Management of Advance Directives*, December 24, 2013.
- VHA Handbook 1907.01, *Health Information Management and Health Records*, July 22, 2014.

^g References used for this topic included:

- VHA Directive 2009-001, *Restructuring of VHA Clinical Programs*, January 5, 2009.
- VHA Directive 2010-018, *Facility Infrastructure Requirements to Perform Standard, Intermediate, or Complex Surgical Procedures*, May 6, 2010.

^h References used for this topic included:

- VHA Directive 2012-032, *Out of Operating Room Airway Management*, October 26, 2012.
- VHA Handbook 1101.04, *Medical Officer of the Day*, August 30, 2010.