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Clinical Assessment Program Review of the Michael E. DeBakey VA Medical Center Houston, Texas

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Washington, DC 20420

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Glossary

CAP	Clinical Assessment Program
CNH	community nursing home
EHR	electronic health record
EOC	environment of care
facility	Michael E. DeBakey VA Medical Center
FY	fiscal year
MH	mental health
NM	not met
OIG	Office of Inspector General
PC	primary care
POCT	point-of-care testing
QSV	quality, safety, and value
RME	reusable medical equipment
SPS	Sterile Processing Service
VHA	Veterans Health Administration

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Executive Summary

Purpose and Objectives: The review provided an evaluation of the quality of care delivered in the inpatient and outpatient settings of the Michael E. DeBakey VA Medical Center. We reviewed clinical and administrative processes that affect patient care outcomes—Quality, Safety, and Value; Environment of Care; Medication Management; Coordination of Care; Diagnostic Care; Moderate Sedation; Community Nursing Home Oversight; and Management of Disruptive/Violent Behavior. We also followed up on recommendations from the previous Combined Assessment Program and Community Based Outpatient Clinic and Primary Care Clinic reviews and provided crime awareness briefings.

Results: We conducted the review during the week of February 6, 2017, and identified certain system weaknesses in utilization management; environmental cleanliness; anticoagulation processes and staff competency; employee competencies for point-of-care testing; community nursing home committee representation, annual reviews, and cyclical monthly documentation; and the establishment of an Employee Threat Assessment Team and employee training related to the management of disruptive and violent behavior.

Review Impact: As a result of the findings, we could not gain reasonable assurance that:

1. Facility managers effectively monitor the documentation of physician advisors' decisions in the National Utilization Management Integration database.
2. Facility managers maintain clean floors and patient rolling equipment and ensure damaged patient rolling equipment is repaired.
3. The facility reviews quality assurance data for the anticoagulation management program, clinicians obtain all required laboratory testing prior to the initiation of anticoagulants, and employees involved in the anticoagulant program complete competency assessments.
4. The facility develops and implements employee competencies for glucometer point-of care testing and assesses competencies annually.
5. Facility managers ensure required disciplines participate in Community Nursing Home Oversight Committee functions, monitor the community nursing home program, and assure the safe care of patients in those homes.
6. The facility has an Employee Threat Assessment Team, and employees receive training to reduce and prevent disruptive behaviors.

Recommendations: We made recommendations in the following six review areas.

Quality, Safety, and Value – Ensure that:

- Physician Utilization Management Advisors consistently document their decisions in the National Utilization Management Integration database.

Environment of Care – Ensure that:
- Floors and rolling equipment in patient care areas are clean and in good repair.

Medication Management: Anticoagulation Therapy – Ensure that:
- The facility reviews quality assurance data for the anticoagulation management program monthly at Pharmacy and Therapeutics Committee meetings.
- Clinicians consistently obtain required laboratory tests prior to initiating anticoagulants.
- Competency assessments for employees actively involved in the anticoagulation program include required elements.

Diagnostic Care: Point-of-Care Testing – Ensure that:
- The laboratory director develops and implements a process to ensure employee competency for point-of-care testing with glucometers.
- Employees who perform glucose testing at the point of care have annual competencies for glucometers.

Community Nursing Home Oversight – Ensure that:
- The Community Nursing Home Oversight Committee includes representation by all required clinical disciplines.
- The Community Nursing Home Review Team completes required annual reviews.
- Social workers and registered nurses conduct and document cyclical clinical visits with the frequency required by Veterans Health Administration policy.

Management of Disruptive/Violent Behavior – Ensure that:
- The facility implements an Employee Threat Assessment Team or an alternate group that addresses employee-related disruptive behavior.
- Employees receive Level 1 Prevention and Management of Disruptive Behavior training and additional training as required for their assigned risk area within 90 days of hire and that the training is documented in employee training records.

Comments

The Veterans Integrated Service Network Director and Facility Director agreed with the Clinical Assessment Program review findings and recommendations and provided acceptable improvement plans. (See Appendixes E and F, pages 40–46, for the full text of the Directors' comments.) The facility considers recommendation 1 completed; however, we consider all recommendations open until we receive and review written documentation of the facility's completion of the proposed actions.

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Purpose and Objectives

Purpose

This CAP review provided an evaluation of the quality of care delivered in the inpatient and outpatient settings of the facility.

Objectives

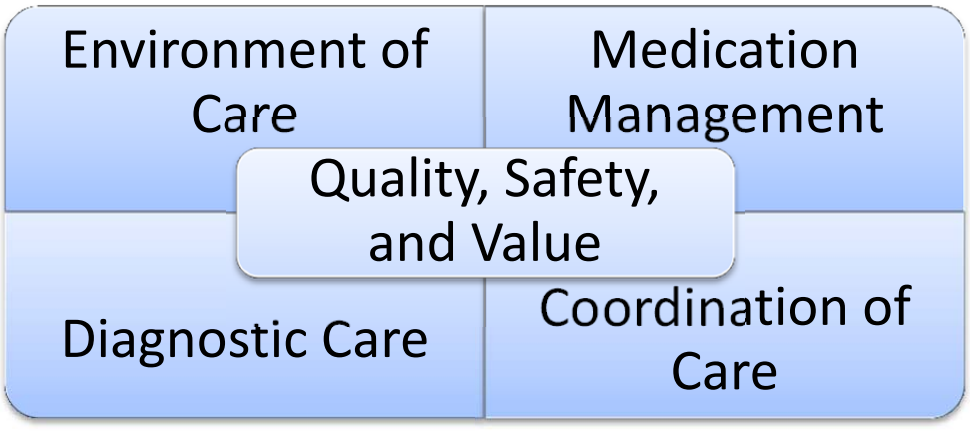
CAP reviews are one element of OIG's efforts to ensure that our Nation's veterans receive high quality VA health care services. The reviews include cyclical evaluations of key clinical and administrative processes that affect patient care outcomes. Areas of focus include QSV, EOC, Medication Management, Coordination of Care, and Diagnostic Care.

OIG also evaluates processes that are high risk and problem-prone—Moderate Sedation, CNH Oversight, and Management of Disruptive/Violent Behavior—and follows up on recommendations from the previous Combined Assessment Program and Community Based Outpatient Clinic and PC Clinic reviews. Additionally, OIG provides crime awareness briefings to increase employee understanding of the potential for program fraud and the requirement to refer suspected criminal activity to OIG.

Background

We evaluate key aspects of clinical care delivery in a variety of primary/specialty care and inpatient/outpatient settings. These aspects include QSV, EOC, Medication Management, Coordination of Care, and Diagnostic Care (see Figure 1 below).

Figure 1. Comprehensive Coverage of Continuum of Care



Source: VA OIG

Quality, Safety, and Value

According to the Institute of Medicine (now the National Academy of Medicine), there are six important components of a health care system that provides high quality care to individuals. The system:

1. Is safe (free from accidental injury) for all patients, in all processes, all the time.
2. Provides care that is effective (care that, wherever possible, is based on the use of systematically obtained evidence to make determinations regarding whether a preventive service, diagnostic test, therapy, or no intervention would produce the best outcome).
3. Is patient-centered. This concept includes respect for patients' values and preferences; coordination and integration of care; information, communication, and education; physical comfort; and involvement of family and friends.
4. Delivers care in a timely manner (without long waits that are wasteful and often anxiety-provoking).
5. Is efficient (uses resources to obtain the best value for the money spent).
6. Is equitable (bases care on an individual's needs and not on personal characteristics—such as gender, race, or insurance status—that are unrelated to the patient's condition or to the reason for seeking care).[1]

One of VA's strategies is to deliver high quality, veteran-centered care that compares favorably to the best of the private sector in measured outcomes, value, efficiency, and patient experience.[2]

Environment of Care

All facilities face environmental risks, including those associated with safety and security, fire, hazardous materials and waste, medical equipment, and utility systems. The EOC is made up of three basic elements: (1) the building or space; (2) equipment used to support patient care; and (3) people who enter the environment.[3]

The physical environment shapes every patient experience and all health care delivery, including those episodes of care that result in patient harm. Three patient safety areas are markedly influenced by the environment—health care-associated infections, medication safety, and falls. Because health care-associated infections are transmitted through air, water, and contact with contaminated surfaces, the physical environment plays a key role in preventing the spread of infections in health care settings. Medication safety is markedly influenced by physical environmental conditions, including light levels and workspace organization. Environmental factors, such as

[1] Teleki SS, Damberg, CL, Reville RT. *Quality of Health Care: What Is It, Why Is It Important, and How Can It Be Improved in California's Workers Compensation Programs?* Santa Monica: RAND Corporation; May 2003 Quality and Workers' Compensation Working Draft.
[2] Department of Veterans Affairs, Veterans Health Administration. *Blueprint for Excellence*. September 2014.
[3] The Joint Commission. *Comprehensive Accreditation Manual for Hospitals: E-dition*®: Joint Commission Resources; July 2016: Environment of Care (EC).

the placement of doorways, flooring type, and the location of furniture, can contribute to patient falls and associated injuries.[4]

Medication Management

Comprehensive medication management is defined as the standard of care that ensures clinicians individually assess each patient's medications to determine that each is appropriate for the patient, effective for the medical condition, safe given the comorbidities and other medications prescribed, and able to be taken by the patient as intended. Medications are involved in 80 percent of all treatments and impact every aspect of a patient's life. Drug therapy problems occur every day. The Institute of Medicine (now the National Academy of Medicine) noted that while medications account for only 10 percent of total health care costs, their ability to control disease and impact overall costs, morbidity, and productivity—when appropriately used—is enormous. The components of the medication management process include procuring, storing, securing, prescribing or ordering, transcribing, preparing, dispensing, and administering.[5,6]

Coordination of Care

Coordination of care is the process of coordinating care, treatment, or services provided by a facility, including referring individuals to appropriate community resources to meet ongoing identified needs, implementing the plan of care, and avoiding unnecessary duplication of services. Coordination of care is recognized as a major challenge in the safe delivery of care. The rise of chronic illness means that a patient's care, treatment, and services likely will involve an array of providers in a variety of health care settings, including the patient's home.[7]

In a 2001 report entitled "Crossing the Quality Chasm: A New Health System for the 21st Century," the Institute of Medicine (now the National Academy of Medicine) noted that, "Because of the special vulnerability that accompanies illness or injury, coordination of care takes on special importance. Many patients depend on those who provide care to coordinate services—whether tests, consultations, or procedures—to ensure that accurate and timely information reaches those who need it at the appropriate time." Health care providers and organizations need to work together to coordinate their efforts to provide safe, quality care.[8]

[4] Joseph A, Malone EB. *The Physical Environment: An Often Unconsidered Patient Safety Tool*. Agency for Healthcare Research and Quality. Patient Safety Network; October 2012.
[5] Patient-Centered Primary Care Collaborative. *The Patient-Centered Medical Home: Integrating Comprehensive Medication Management to Optimize Patient Outcomes, Resource Guide*. 2nd ed; June 2012.
[6] The Joint Commission. *Comprehensive Accreditation Manual for Hospitals: E-dition*®: Joint Commission Resources; July 2016: Medication Management (MM).
[7] The Joint Commission. *Comprehensive Accreditation Manual for Hospitals: E-dition*®: Joint Commission Resources; July 2016: Provision of Care, Treatment, and Services (PC).
[8] Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century*. The National Academies Press; March 2001.

Diagnostic Care

The diagnostic process is a complex, patient-centered, collaborative activity that involves information gathering and clinical reasoning with the goal of determining a patient's health problem. Diagnostic testing may occur in successive rounds of information gathering, integration, and interpretation, with each round refining the working diagnosis. In many cases, diagnostic testing can identify a condition before it is clinically apparent; for example, an imaging study indicating the presence of coronary artery blockage can identify coronary artery disease even in the absence of symptoms. PC clinicians order laboratory tests in slightly less than one third of patient visits, and direct-to-patient testing is becoming increasingly prevalent.[9]

Medical imaging also plays a critical role in establishing the diagnoses for many conditions. The advancement of imaging technologies has improved the ability of clinicians to detect, diagnose, and treat conditions while also allowing patients to avoid more invasive procedures. Performed appropriately, diagnostic care facilitates the provision of timely, cost-effective, and high quality medical care.[10]

High-Risk and Problem-Prone Health Care Processes

Health care leaders must give priority to high-volume, high-risk, or problem-prone processes for performance improvement activities.[11] "Specifically, they are responsible for identifying high-risk areas that could cause harm to patients, visitors, and employees; implementing programs to avert risks; and managing a robust reporting process for adverse events that do occur. But of all of their responsibilities, one of the most important is focusing on improving patient safety."[12]

Moderate sedation is a drug-induced depression of consciousness during which patients can still respond purposefully to verbal comments.[13] Properly credentialed providers and trained clinical staff must provide safe care while sedating patients for invasive procedures. Additionally, facility leaders must monitor moderate sedation adverse events, report and trend the use of reversal agents, and systematically aggregate and analyze the data to enhance patient safety and employee performance.[14]

[9] Committee on Diagnostic Error in Health Care. Balogh EP, Miller BT, Ball JR, eds. *Improving Diagnosis in Health Care*. Washington, DC: The National Academies Press; 2015: Chap. 2.
[10] Department of Veterans Affairs. Patient Care Services. Diagnostic Services. http://www.patientcare.va.gov/diagnosticservices.asp. Accessed September 21, 2016.
[11] The Joint Commission. *Comprehensive Accreditation Manual for Hospitals: E-dition*®: Joint Commission Resources; July 2016: Leadership (LD) Accreditation Requirements, LD.04.04.01, EP2.
[12] Bickmore, AM. Streamlining the Risk Management Process in Healthcare to Improve Workflow and Increase Patient Safety, *HealthCatalyst*, https://www.healthcatalyst.com/streamlining-risk-management-process-healthcare.
[13] American Society of Anesthesiologists (ASA), Practice Guidelines for Sedation and Analgesia by Non-Anesthesiologists, 2002. Anesthesiology 2002; 96:1004-17.
[14] VHA Directive 1073, *Moderate Sedation by Non-Anesthesiology Providers*, December 30, 2014.

As of October 2016, VHA has contracts with more than 1,800 CNHs where more than 9,500 veteran patients reside.[15] These CNHs may be either in close proximity to a VA facility or located hundreds of miles away. VHA requires local oversight of CNHs, which includes monitoring and follow-up services for patients who choose to reside in nursing homes in the community. This oversight involves annual reviews and monthly patient visits unless otherwise specified.[16]

According to the U.S. Bureau of Labor Statistics, health care workers are nearly five times more likely to be victims of nonfatal assaults or violent acts in their work places than average workers in all industries combined. Many of these assaults and violent acts are perpetrated by patients.[17] Management of disruptive/violent behavior is involves the development of policies, programs, and initiatives for reducing and preventing disruptive behaviors and other defined acts that threaten public safety.[18] VHA released a directive that addresses the management of all individuals in VHA facilities whose behavior could jeopardize the health or safety of others, undermine a culture of safety in VHA, or otherwise interfere with the delivery of health care at a facility. Unfortunately, staff training deadlines have been postponed several times.[19]

Scope

To determine compliance with requirements related to patient care quality, clinical functions, and the EOC, we physically inspected selected areas, discussed processes and validated findings with managers and employees, and reviewed clinical and administrative records. The review covered the following five aspects of clinical care.

- Quality, Safety, and Value
- Environment of Care
- Medication Management: Anticoagulation Therapy
- Coordination of Care: Inter-Facility Transfers
- Diagnostic Care: Point of Care Testing

[15] VA Corporate Data Warehouse. Accessed October 31, 2016.
[16] VHA Handbook 1143.2, *VHA Community Nursing Home Oversight Procedures,* June 4, 2004.
[17] U.S. Bureau of Labor Statistics. Janocha JA, Smith RT. *Workplace Safety and Health in the Health Care and Social Assistance Industry, 2003–07*. http://www.bls.gov/opub/mlr/cwc/workplace-safety-and-health-in-the-health-care-and-social-assistance-industry-2003-07.pdf. August 30, 2010. Accessed October 28, 2016.
[18] VHA Directive 2012-026, *Sexual Assaults and Other Defined Public Safety Incidents in Veterans Health Administration (VHA) Facilities,* September 27, 2012.
[19] VHA Chief Learning Officer. "VHA Approval to Temporarily Suspend Talent Management System (TMS) Required Training Assignments." Memorandum. March 21, 2016.

We also evaluated three additional review areas because of inherent risks and vulnerabilities.

- Moderate Sedation
- Community Nursing Home Oversight
- Management of Disruptive/Violent Behavior

We list the review criteria for each of the review areas in the topic checklists.

The review covered operations for FY 2015, FY 2016, and FY 2017, through February 6, 2017, and inspectors conducted the reviews 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 Combined Assessment Program report (*Combined Assessment Program Review of the Michael E. DeBakey VA Medical Center, Houston, Texas*, Report No. 13-03649-52, January 24, 2014) and community based outpatient clinic report (*Community Based Outpatient Clinic and Primary Care Clinic Reviews at Michael E. DeBakey VA Medical Center, Houston, Texas,* Report No. 13-03415-31, January 8, 2014).

We presented crime awareness briefings to 171 employees. These briefings covered procedures for reporting suspected criminal activity to 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 652 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 OIG to monitor until the facility implements corrective actions. When issues and concerns outside the scope of this CAP review come to our attention, they can be referred for further review separate from this report.

Results and Recommendations

Quality, Safety, and Value

The purpose of this review was to determine whether the facility complied with selected QSV program requirements.[a] VHA requires that its facilities operate a QSV program to monitor patient care quality and performance improvement activities. Many QSV activities are required by VHA directives, accreditation standards, and Federal regulations. Public Law 100-322 mandates VA's OIG to oversee VHA quality improvement programs at every level. This review focuses on the following program areas.

- Senior-level QSV/performance improvement committee
- Protected peer review
- Credentialing and privileging
- Utilization management
- Patient safety

We interviewed senior managers and key QSV employees, and we evaluated meeting minutes, 25 licensed independent practitioners' profiles, 10 protected peer reviews, 5 root cause analyses, and other relevant documents. The table below shows the areas reviewed for this topic. The area marked as NM did not meet applicable requirements and needed improvement.

Checklist 1. QSV Areas Reviewed, Findings, and Recommendations

NM	Areas Reviewed	Findings	Recommendations
	There was a senior-level committee responsible for key QSV functions that met at least quarterly and was chaired or co-chaired by the Facility Director. • The committee routinely reviewed aggregated data.		

NM	Areas Reviewed (continued)	Findings	Recommendations
	Credentialing and privileging processes met selected requirements: • Facility policy/by-laws specified a frequency for clinical managers to review practitioners' Ongoing Professional Practice Evaluation data. • Facility clinical managers reviewed Ongoing Professional Practice Evaluation data at the frequency specified in the policy/by-laws. • The facility set triggers for when a Focused Professional Practice Evaluation for cause would be indicated.		
	Protected peer reviews met selected requirements: • Peer reviewers documented their use of important aspects of care in their review, such as appropriate and timely ordering of diagnostic tests, timely treatment, and appropriate documentation. • When the Peer Review Committee recommended individual improvement actions, clinical managers implemented the actions.		
X	Utilization management met selected requirements: • The facility completed at least 75 percent of all required inpatient reviews. • Physician Utilization Management Advisors documented their decisions in the National Utilization Management Integration database. • An interdisciplinary group reviewed utilization management data.	• For 14 of the 80 cases (18 percent) referred to Physician Utilization Management Advisors December 1, 2016–January 31, 2017, there was no evidence that advisors documented their decisions in the National Utilization Management Integration database. This resulted in less data for the facility to use to set benchmarks; identify trends, actions, and opportunities to improve efficiency; and monitor outcomes.	**1.** We recommended that Physician Utilization Management Advisors consistently document their decisions in the National Utilization Management Integration database and that facility managers monitor compliance.

NM	Areas Reviewed (continued)	Findings	Recommendations
	Patient safety met selected requirements: • The Patient Safety Manager entered all reported patient incidents into the WEBSPOT database. • The facility completed the required minimum of eight root cause analyses. • The facility provided feedback about the root cause analysis findings to the individual or department who reported the incident. • At the completion of FY 2016, the Patient Safety Manager submitted an annual patient safety report to facility leaders.		
	Overall, if QSV reviews identified significant issues, the facility took actions and evaluated them for effectiveness.		
	Overall, senior managers actively participated in QSV activities.		

Environment of Care

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 SPS and the hemodialysis unit.[b]

VHA must manage risks in the environment in order to promote a safe, functional, and supportive environment. Further, VHA must establish systematic infection prevention and control program to reduce the possibility of acquiring and transmitting infections. We selected the hemodialysis unit and SPS as special emphasis areas due to the increased potential for exposure to infectious agents inherent to hemodialysis and procedures using RME. Hemodialysis patients are at higher risk for infections for various reasons, including that hemodialysis requires vascular access for prolonged periods of time and that opportunities exist for transmission of infectious agents when multiple patients receive dialysis concurrently. RME is intended for repeated use on different patients after being reprocessed through cleaning, disinfection, and/or sterilization. Patients undergoing procedures using RME are at higher risk of exposure to infectious agents if RME is not properly reprocessed.

We inspected the medical, surgical, acute inpatient MH, critical care, and hemodialysis units; the community living center; the Emergency Department; SPS; two PC outpatient clinics; the women's clinic; and the Katy Outpatient Clinic. Additionally, we reviewed relevant documents and 20 employee training records, and we interviewed key employees and managers. The table below shows the areas reviewed for this topic. The area marked as NM did not meet applicable requirements and needed improvement.

Checklist 2. EOC Areas Reviewed, Findings, and Recommendations

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.		

NM	Areas Reviewed for General EOC (continued)	Findings	Recommendations
	The facility had established a procedure for cleaning equipment between patients.		
	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.		
	The facility met general safety requirements.		
X	The facility met environmental cleanliness requirements.	• In 8 of 10 patient care areas, floors and/or patient rolling equipment were dirty or damaged and in need of cleaning or repair/replacement.	**2.** We recommended that facility managers ensure floors and rolling equipment in patient care areas are clean and in good repair and monitor compliance.
	Areas Reviewed for SPS		
	The facility had a policy for cleaning, disinfecting, and sterilizing RME.		
	The facility's standard operating procedures for selected RME were current and consistent with the manufacturers' instructions for use.		
	The facility performed quality control testing on selected RME with the frequency required by local policy and took appropriate action on positive results.		
	Selected SPS employees had evidence of the following for selected RME: • Training and competencies at orientation if employed less than or equal to 1 year • Competencies within the past 12 months or with the frequency required by local policy if employed more than 1 year		
	The facility met infection prevention requirements in SPS areas.		

NM	Areas Reviewed for SPS (continued)	Findings	Recommendations
	Standard operating procedures for selected RME were located in the area where reprocessing occurred.		
	SPS employees checked eyewash stations in SPS areas weekly.		
	SPS employees had access to Safety Data Sheets in areas where they used hazardous chemicals.		
	Areas Reviewed for the Hemodialysis Unit		
	The facility had a policy or procedure for preventive maintenance of hemodialysis machines and performed maintenance at the frequency required by local policy.		
	Selected hemodialysis unit employees had evidence of bloodborne pathogens training within the past 12 months.		
	The facility met environmental safety requirements on the hemodialysis unit.		
	The facility met infection prevention requirements on the hemodialysis unit.		
	The facility met medication safety and security requirements on the hemodialysis unit.		
	The facility met privacy requirements on the hemodialysis unit.		

Medication Management: Anticoagulation Therapy

The purpose of this review was to determine whether facility clinicians appropriately managed and provided education to patients with new orders for anticoagulant medication.[c] During FY 2016, more than 482,000 veterans received an anticoagulant. Anticoagulants (commonly called blood thinners) are a class of drugs that work to prevent the coagulation or clotting of blood. For this review, we evaluated warfarin (Coumadin®) and direct-acting oral anticoagulants. Clinicians use anticoagulants for both the treatment and prevention of cardiac disease, cerebrovascular accident (stroke), and thromboembolism[20] in both the inpatient and outpatient setting. Although these medications offer substantial benefits, their use or misuse carries a significant potential for patient harm. A dose less than the required amount for therapeutic effect can increase the risk of thromboembolic complications while a dose administered at levels greater than required for treatment can increase the risk of bleeding complications. The Joint Commission's National Patient Safety Goal 3.05.01 focuses on improving anticoagulation safety to reduce patient harm and states, "…anticoagulation medications are more likely than others to cause harm due to complex dosing, insufficient monitoring, and inconsistent patient compliance."

We reviewed relevant documents and the competency assessment records of three employees actively involved in the anticoagulant program, and we interviewed key employees. Additionally, we reviewed the EHRs of 35 randomly selected patients who were prescribed new anticoagulant medications from July 1, 2015 through June 30, 2016. The table below shows the areas reviewed for this topic. The areas marked as NM did not meet applicable requirements and needed improvement.

Checklist 3. Medication Management: Anticoagulation Therapy Areas Reviewed, Findings, and Recommendations

NM	Areas Reviewed	Findings	Recommendations
	The facility had policies and processes for anticoagulation management that included required content.		
	The facility used algorithms, protocols or standardized care processes for the: • Initiation and maintenance of warfarin • Management of anticoagulants before, during, and after procedures • Use of weight-based, unfractionated heparin		

[20] Thromboembolism is the obstruction of a blood vessel by a blood clot that has become dislodged from another site in the circulation.

NM	Areas Reviewed (continued)	Findings	Recommendations
	The facility provided patients with a direct telephone number for anticoagulation-related calls during normal business hours and defined a process for patient anticoagulation-related calls outside normal business hours.		
	The facility designated a physician as the anticoagulation program champion.		
	The facility defined ways to minimize the risk of incorrect tablet strength dosing errors.		
X	The facility routinely reviewed quality assurance data for the anticoagulation management program at the facility's required frequency at an appropriate committee.	• The facility did not review quality assurance data for the anticoagulation management program monthly at Pharmacy and Therapeutics Committee meetings.	**3.** We recommended that the facility review quality assurance data for the anticoagulation management program monthly at Pharmacy and Therapeutics Committee meetings and that facility managers monitor compliance.
	For inpatients with newly prescribed anticoagulant medications, clinicians provided transition follow-up and education specific to the new anticoagulant.		
X	Clinicians obtained required laboratory tests: • Prior to initiating anticoagulant medications • During anticoagulation treatment at the frequency required by local policy	• In 3 of 14 EHRs, clinicians did not obtain all required laboratory tests prior to initiating warfarin treatment.	**4.** We recommended that facility managers ensure clinicians consistently obtain all required laboratory tests prior to initiating anticoagulants.
	When laboratory values did not meet selected criteria, clinicians documented a justification/rationale for prescribing the anticoagulant.		

NM	Areas Reviewed (continued)	Findings	Recommendations
X	The facility required competency assessments for employees actively involved in the anticoagulant program, and clinical managers completed competency assessments that included required content at the frequency required by local policy.	• For the three employees actively involved in the anticoagulant program, competency assessments did not include: o Pharmacology of anticoagulants o Monitoring requirements o Dose calculation o Common side effects o Nutrient interactions associated with anticoagulation therapy o Drug to drug interactions associated with anticoagulation therapy	**5.** We recommended that for employees actively involved in the anticoagulant program, clinical managers include in competency assessments pharmacology of anticoagulants, monitoring requirements, dose calculation, common side effects, nutrient interactions associated with anticoagulation therapy, and drug to drug interactions associated with anticoagulation therapy and that facility managers monitor compliance.

Coordination of Care: Inter-Facility Transfers

The purpose of this review was to evaluate selected aspects of the facility's patient transfer process, specifically transfers out of the facility.[d] Inter-facility transfers are frequently necessary to provide patients with access to specific providers or services. The movement of an acutely ill person from one institution to another exposes the patient to risks, while in some cases, failing to transfer a patient may be equally risky. VHA has the responsibility to ensure that transfers into and out of its medical facilities are carried out appropriately, under circumstances that provide maximum safety for patients, and comply with applicable standards.

We reviewed relevant documents and interviewed key employees. Additionally, we reviewed the EHRs of 25 randomly selected patients who were transferred acutely out of facility inpatient beds or the Emergency Department/urgent care center to another VHA facility or non-VA facility from July 1, 2015 through June 30, 2016. The table below shows the areas reviewed for this topic. The facility generally met requirements. We made no recommendations.

Checklist 4. Coordination of Care: Inter-Facility Transfers Areas Reviewed, Findings, and Recommendations

NM	Areas Reviewed	Findings	Recommendations
	The facility had a policy that addressed patient transfers and included required content.		
	The facility collected and reported data about transfers out of the facility.		
	Transferring providers completed VA Form 10-2649A and/or transfer/progress notes prior to or within a few hours after the transfer that included the following elements: • Date of transfer • Documentation of patient or surrogate informed consent • Medical and/or behavioral stability • Identification of transferring and receiving provider or designee • Details of the reason for transfer or proposed level of care needed		

NM	Areas Reviewed (continued)	Findings	Recommendations
	When staff/attending physicians did not write transfer notes, acceptable designees: • Obtained and documented staff/attending physician approval • Obtained staff/attending physician countersignature on the transfer note		
	When the facility transferred patients out, sending nurses documented transfer assessments/notes.		
	In emergent transfers, providers documented: • Patient stability for transfer • Provision of all medical care within the facility's capacity		
	Communication with the accepting facility or documentation sent included: • Available history • Observations, signs, symptoms, and preliminary diagnoses • Results of diagnostic studies and tests		

Diagnostic Care: Point-of Care Testing

The purpose of this review was to evaluate the facility's glucometer POCT program compliance with applicable laboratory regulatory standards and quality testing practices as required by VHA, the College of American Pathologists, and The Joint Commission.[e] The majority of laboratory testing is performed in the main laboratory. However, with newer technologies, testing has emerged from the laboratory to the patient's bedside, the patient's home, and other non-laboratory sites. This is called POCT (also known as ancillary or waived testing) and can include tests for blood glucose, fecal occult blood, hemoglobin, and prothrombin time.

All laboratory testing performed in VHA facilities must adhere to quality testing practices. These practices include annual competency assessment and quality control testing. Failure to implement and comply with regulatory standards and quality testing practices can jeopardize patient safety and place VHA facilities at risk. Erroneous results can lead to inaccurate diagnoses, inappropriate medical treatment, and poor patient outcomes.[21]

We reviewed relevant documents, the EHRs of 50 randomly selected inpatients and outpatients who underwent POCT for blood glucose from July 1, 2015 through June 30, 2016, and the annual competency assessments of 40 clinicians who performed the glucose testing. Additionally, we interviewed key employees and conducted onsite glucometer inspections of the Emergency Department, hemodialysis unit, medical intensive care unit, medical/surgical unit, and Katy Outpatient Clinic to assess compliance with manufacturers' maintenance and solution/reagent storage requirements. The table below shows the areas reviewed for this topic. The area marked as NM did not meet applicable requirements and needed improvement.

Checklist 5. Diagnostic Care: POCT Areas Reviewed, Findings, and Recommendations

NM	Areas Reviewed	Findings	Recommendations
	The facility had a policy delineating requirements for the POCT program and required oversight by the Chief of Pathology and Laboratory Medicine Service.		
	The facility had a designated POCT/Ancillary Testing Coordinator.		
	The Chief of Pathology and Laboratory Medicine Service approved all tests performed outside the main laboratory.		

[21] The Joint Commission. *Comprehensive Accreditation Manual for Laboratories and Point-of-Care Testing*. Update 2. September 2010.

NM	Areas Reviewed (continued)	Findings	Recommendations
X	The facility had a process to ensure employee competency for POCT with glucometers and evaluated competencies at least annually.	• The facility did not have a process to ensure employee competency for POCT with glucometers. • Thirty-nine of 40 employees (98 percent) who performed point-of-care glucose testing did not have annual competency assessments.	**6.** We recommended that the laboratory director develop and implement a process to ensure employee competency for point-of-care testing with glucometers. **7.** We recommended that the laboratory director ensure employees who perform glucose testing at the point of care have annual competencies for glucometers and that facility managers monitor compliance.
	The facility required documentation of POCT results in the EHR.		
	A regulatory agency accredited the facility's POCT program.		
	Clinicians documented test results in the EHR.		
	Clinicians initiated appropriate clinical action and follow-up for test results.		
	The facility had POCT procedure manuals readily available to employees.		
	Quality control testing solutions/reagents and glucose test strips were current (not expired).		
	The facility managed and performed quality control in accordance with its policy/standard operating procedure and manufacturer's recommendations.		
	Glucometers were clean.		

Moderate Sedation

The purpose of this review was to evaluate selected aspects of care to determine whether the facility complied with applicable policies in the provision of moderate sedation.[f] During calendar year 2016, VHA clinicians performed more than 600,000 moderate sedation procedures of which more than half were gastroenterology-related endoscopies.[22] Moderate sedation is a drug-induced depression of consciousness during which patients are able to respond to verbal commands. Non-anesthesiologists administer sedatives and analgesics to relieve anxiety and increase patient comfort during invasive procedures and usually do not have to provide interventions to maintain a patent airway, spontaneous ventilations, or cardiovascular function.[23] However, serious adverse events can occur, including cardiac and respiratory depression, brain damage due to low oxygen levels, cardiac arrest, or death. To minimize risks, VHA and The Joint Commission have issued requirements and standards for moderate sedation care.

We reviewed relevant documents; interviewed key employees; and inspected the cardiology/catheterization, Emergency Department, gastroenterology, interventional radiology, and pulmonology/bronchoscopy procedure rooms/areas to assess whether required equipment and sedation medications were available. Additionally, we reviewed the EHRs of 44 randomly selected patients who underwent an invasive procedure involving moderate sedation from July 1, 2015 through June 30, 2016, and the training records of 15 clinical employees who performed or assisted during these procedures. The table below shows the areas reviewed for this topic. The facility generally met requirements. We made no recommendations.

Checklist 6. Moderate Sedation Areas Reviewed, Findings, and Recommendations

NM	Areas Reviewed	Findings	Recommendations
	The facility reported and trended the use of reversal agents in moderate sedation cases, processed adverse events/complications in a similar manner as operating room anesthesia adverse events, and noted the absence of adverse events in Moderate Sedation Committee reports.		

[22] Per VA Corporate Data Warehouse data pull on February 22, 2017.
[23] American Society of Anesthesiologists. Practice Guidelines for Sedation and Analgesia by Non-Anesthesiologists. *Anesthesiology*. 2002; 96:1004.

NM	Areas Reviewed (continued)	Findings	Recommendations
	Providers performed history and physical examinations within 30 calendar days prior to the moderate sedation procedure, and the history and physical and the pre-sedation assessment in combination included required elements.		
	Providers re-evaluated patients immediately before moderate sedation for changes since the prior assessment.		
	Providers documented informed consent prior to moderate sedation procedures, and the name of provider listed on the consent was the same as the provider who performed the procedure, or the patient was notified of the change.		
	The clinical team, including the provider performing the procedure, conducted and documented a timeout prior to the moderate sedation procedure.		
	Post-procedure documentation included assessments of patient mental status and pain level.		
	Clinical employees discharged outpatients from the recovery area with orders from the provider who performed the procedure or according to criteria approved by moderate sedation clinical leaders.		
	Clinical employees discharged moderate sedation outpatients in the company of a responsible adult.		
	Selected clinical employees had current training for moderate sedation.		
	The clinical team kept monitoring and resuscitation equipment and reversal agents in the general areas where moderate sedation was administered.		

NM	Areas Reviewed (continued)	Findings	Recommendations
	To minimize risk, clinical employees did not store anesthetic agents in procedure rooms/areas where only moderate sedation procedures were performed by licensed independent practitioners who do not have the training and ability to rescue a patient from general anesthesia.		

Community Nursing Home Oversight

The purpose of this review was to assess whether the facility complied with applicable requirements regarding the monitoring of veterans in contracted CNHs.[g] Since 1965, VHA has provided nursing home care under contracts. VHA facilities must integrate the CNH program into their quality improvement programs. The Facility Director establishes the CNH Oversight Committee, which reports to the chief clinical officer (Chief of Staff, Associate Director for Patient Care Services, or the equivalent) and includes multidisciplinary management-level representatives from social work, nursing, quality management, acquisition, and the medical staff. The CNH Oversight Committee must meet at least quarterly.[24] Local oversight of CNHs is achieved through annual reviews and monthly visits.

We reviewed relevant documents, the EHRs of 46 randomly selected patients who received CNH care for more than 3 months during the timeframe July 1, 2015 through June 30, 2016, and the results from CNH annual reviews completed July 5, 2015 through June 30, 2016. Additionally, we interviewed key 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 not applicable.

Checklist 7. CNH Oversight Areas Reviewed, Findings, and Recommendations

NM	Areas Reviewed	Findings	Recommendations
X	The facility had a CNH Oversight Committee that met at least quarterly and included representation by the required disciplines.	• The facility's CNH Oversight Committee did not include a representative from acquisition.	**8.** We recommended that facility managers ensure the Community Nursing Home Oversight Committee includes representation by all required clinical disciplines.
	The facility integrated the CNH program into its quality improvement program.		
NA	The facility documented a hand-off for patients placed in CNHs outside of its catchment area.		

[24] VHA Handbook 1143.2, *VHA Community Nursing Home Oversight Procedures*, June 4, 2004.

NM	Areas Reviewed (continued)	Findings	Recommendations
X	The CNH Review Team completed CNH annual reviews.	• The CNH Review Team did not complete one of seven CNH annual reviews involving 3 of the 46 patients (7 percent) in our review.	**9.** We recommended that facility managers ensure the Community Nursing Home Review Team completes required annual reviews and monitor compliance.
	When CNH annual reviews noted four or more exclusionary criteria, facility managers completed exclusion review documentation.		
X	Social workers and registered nurses documented clinical visits that alternated on a cyclical basis.	• Eight of the 46 EHRs (13 percent) did not contain documentation of social worker and registered nurse cyclical clinical visits with the frequency required by VHA policy. One patient resided in each of Bay Oaks, Pasadena Care Center, Avalon Place, Afton Oaks, Senior Rehab, and Woodwind Lakes CNHs. Two patients resided in Parkwood Place CNH.	**10.** We recommended that facility managers ensure social workers and registered nurses conduct and document cyclical clinical visits with the frequency required by Veterans Health Administration policy for community nursing home oversight and monitor compliance.

NA=not applicable

Management of Disruptive/Violent Behavior

The purpose of this review was to determine the extent to which the facility complied with selected requirements in the management of disruptive and violent behavior.[h] VHA policy states a commitment to reducing and preventing disruptive behaviors and other defined acts that threaten public safety through the development of policy, programs, and initiatives aimed at patient, visitor, and employee safety. In addition, Public Law 112-154, section 106 directed VA to develop and implement a comprehensive policy on the reporting and tracking of public safety incidents that occur at each medical facility.

We reviewed relevant documents, the EHRs of 38 randomly selected patients who exhibited disruptive or violent behavior, 3 Reports of Contact from violent/disruptive patient/employee/other (visitor) incidents that occurred during the 12-month period July 1, 2015 through June 30, 2016, and the training records of 30 recently hired employees who worked in areas at low, moderate, or high risk for violence. Additionally, we interviewed key employees. The table below shows the areas reviewed for this topic. The areas marked as NM did not meet applicable requirements and needed improvement.

Checklist 8. Management of Disruptive/Violent Behavior Areas Reviewed, Findings, and Recommendations

NM	Areas Reviewed	Findings	Recommendations
	The facility had a policy, procedure, or guideline on preventing and managing disruptive or violent behavior.		
	The facility conducted an annual Workplace Behavioral Risk Assessment.		
X	The facility had implemented: • An Employee Threat Assessment Team or acceptable alternate group • A Disruptive Behavior Committee/Board with appropriate membership • A disruptive behavior reporting and tracking system	• The facility had not implemented an Employee Threat Assessment Team or acceptable alternate group.	**11.** We recommended that the facility implement an Employee Threat Assessment Team or an alternate group that addresses employee-related disruptive behavior.
	The facility collected and analyzed disruptive or violent behavior incidents data.		
	The facility assessed physical security and included and tested equipment in accordance with the local physical security assessment.		

NM	Areas Reviewed (continued)	Findings	Recommendations
	Clinical managers reviewed patients' disruptive or violent behavior and took appropriate actions, including: • Ensuring discussion by the Disruptive Behavior Committee/Board and entry of a progress note by a clinician committee/board member • Informing patients about Patient Record Flag placement and the right to request to amend/appeal the flag placement • Ensuring Chief of Staff or designee approval of an Order of Behavioral Restriction		
	When a Patient Record Flag was placed for an incident of disruptive behavior in the past, a clinician reviewed the continuing need for the flag within the past 2 years.		
	The facility managed selected non-patient related disruptive or violent incidents appropriately according to VHA and local policy.		
X	The facility had a security training plan for employees at all risk levels. • All employees received Level 1 training within 90 days of hire. • All employees received additional training as required for the assigned risk area within 90 days of hire.	• Eleven of 30 employee training records (37 percent) did not contain documentation of Level 1 training within 90 days of hire. • None of the applicable 20 employee training records contained documentation of the training required for their assigned risk area within 90 days of hire.	**12.** We recommended that facility managers ensure all employees receive Level 1 Prevention and Management of Disruptive Behavior training and additional training as required for their assigned risk area within 90 days of hire and that the training is documented in employee training records.

Facility Profile

Table 1 below provides general background information for this facility.

Table 1. Facility Profile for Houston (580) for FY 2016

Profile Element	Facility Data
Veterans Integrated Service Network Number	16
Complexity Level	1a-High complexity
Affiliated/Non-Affiliated	Affiliated
Total Medical Care Budget in Billions	$1.0
Number of:	
• **Unique Patients**	111,189
• **Outpatient Visits**	1,371,171
• **Unique Employees**[25]	4,426
Type and Number of Operating Beds:	
• **Acute**	324
• **MH**	73
• **Community Living Center**	141
• **Domiciliary**	Not applicable
Average Daily Census:	
• **Acute**	179
• **MH**	47
• **Community Living Center**	125
• **Domiciliary**	Not applicable

Source: VA Office of Academic Affiliations, VHA Support Service Center, and VA Corporate Data Warehouse

Note: We did not assess VA's data for accuracy or completeness.

[25] Unique employees involved in direct medical care (cost center 8200).

VA Outpatient Clinic Profiles[26]

The VA outpatient clinics in the communities within the catchment area of the facility provide PC integrated with women's health, MH, and telehealth services. Some also provide specialty care, diagnostic, and ancillary services. Table 2 below provides information relative to each of the clinics.

Table 2. VA Outpatient Clinic Workload/Encounters[27] and Specialty Care, Diagnostic, and Ancillary Services Provided for FY 2016

Location	Station No.	PC Workload/ Encounters	MH Workload/ Encounters	Specialty Care Services[28] Provided	Diagnostic Services[29] Provided	Ancillary Services[30] Provided
Beaumont, TX	580BY	30,840	12,905	Anesthesia Cardiology Endocrinology Hematology/ Oncology Infectious Disease Eye Neurology	EKG Laboratory & Pathology Radiology	Pharmacy Social Work
Lufkin, TX	580BZ	15,268	8,401	Anesthesia Cardiology Endocrinology Hematology/ Oncology Infectious Disease ENT Eye Neurology Orthopedics Poly-Trauma Urology	Laboratory & Pathology Radiology	Nutrition Pharmacy Social Work Weight Management
Galveston, TX	580GC	17,081	9,024	Anesthesia Cardiology Hematology/ Oncology Infectious Disease ENT Eye Orthopedics Urology	Radiology	Pharmacy Prosthetics Social Work Weight Management

[26] Includes all outpatient clinics in the community that were in operation before February 15, 2016. We have omitted Texas City, TX (580GJ), as no workload/encounters or services were reported.
[27] An encounter is a professional contact between a patient and a practitioner vested with responsibility for diagnosing, evaluating, and treating the patient's condition.
[28] Specialty care services refer to non-PC and non-MH services provided by a physician.
[29] Diagnostic services include EKG, EMG, laboratory, nuclear medicine, radiology, and vascular lab services.
[30] Ancillary services include chiropractic, dental, nutrition, pharmacy, prosthetic, social work, and weight management services.

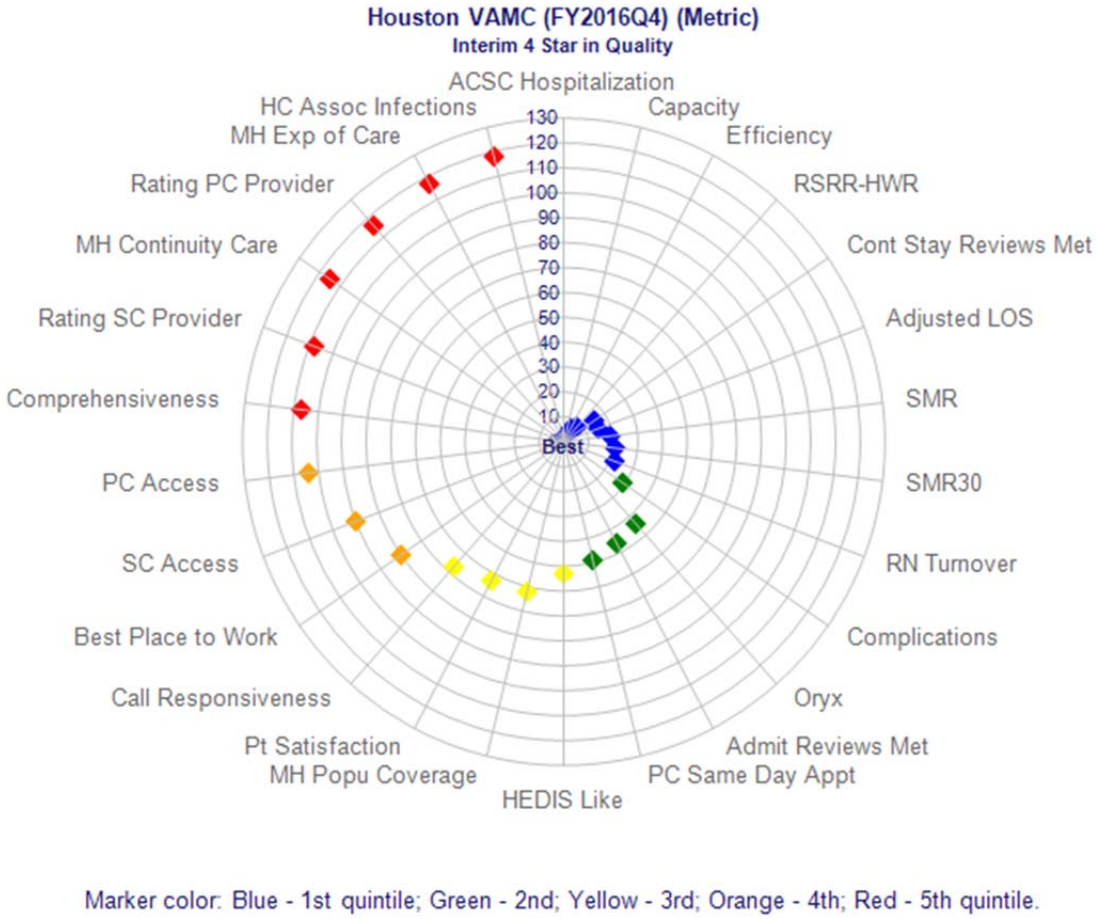
Location	Station No.	PC Workload/ Encounters	MH Workload/ Encounters	Specialty Care Services Provided	Diagnostic Services Provided	Ancillary Services Provided
Conroe, TX	580GD	17,254	12,085	Anesthesia Blind Rehab Cardiology Endocrinology General Surgery Hematology/ Oncology Infectious Disease ENT Eye Neurology Orthopedics Plastic Podiatry Vascular	Radiology	Pharmacy Social Work Weight Management
Katy, TX	580GE	14,986	12,125	Anesthesia Cardiology Endocrinology General Surgery Hematology/ Oncology Infectious Disease ENT Eye Orthopedics Plastic Podiatry Urology Vascular	Laboratory & Pathology Radiology	Nutrition Pharmacy Prosthetics Social Work Weight Management
Lake Jackson, TX	580GF	6,506	3,385	Anesthesia Cardiology Hematology/ Oncology Infectious Disease	Radiology	Pharmacy Social Work Weight Management
Richmond, TX	580GG	10,558	6,792	Anesthesia Cardiology Endocrinology Gastroenterology Hematology/ Oncology Infectious Disease ENT Eye Neurology Orthopedics Podiatry Urology Vascular	Radiology	Pharmacy Social Work Weight Management

Location	Station No.	PC Workload/ Encounters	MH Workload/ Encounters	Specialty Care Services Provided	Diagnostic Services Provided	Ancillary Services Provided
Tomball, TX	580GH	18,419	7,632	Allergy Anesthesia Cardiology Endocrinology General Surgery Hematology/ Oncology Infectious Disease ENT Eye Orthopedics Plastic Podiatry Urology Vascular	Laboratory & Pathology Radiology	Nutrition Pharmacy Social Work Weight Management

Source: VHA Support Service Center and VA Corporate Data Warehouse

Note: We did not assess VA's data for accuracy or completeness.

Strategic Analytics for Improvement and Learning (SAIL)[31]

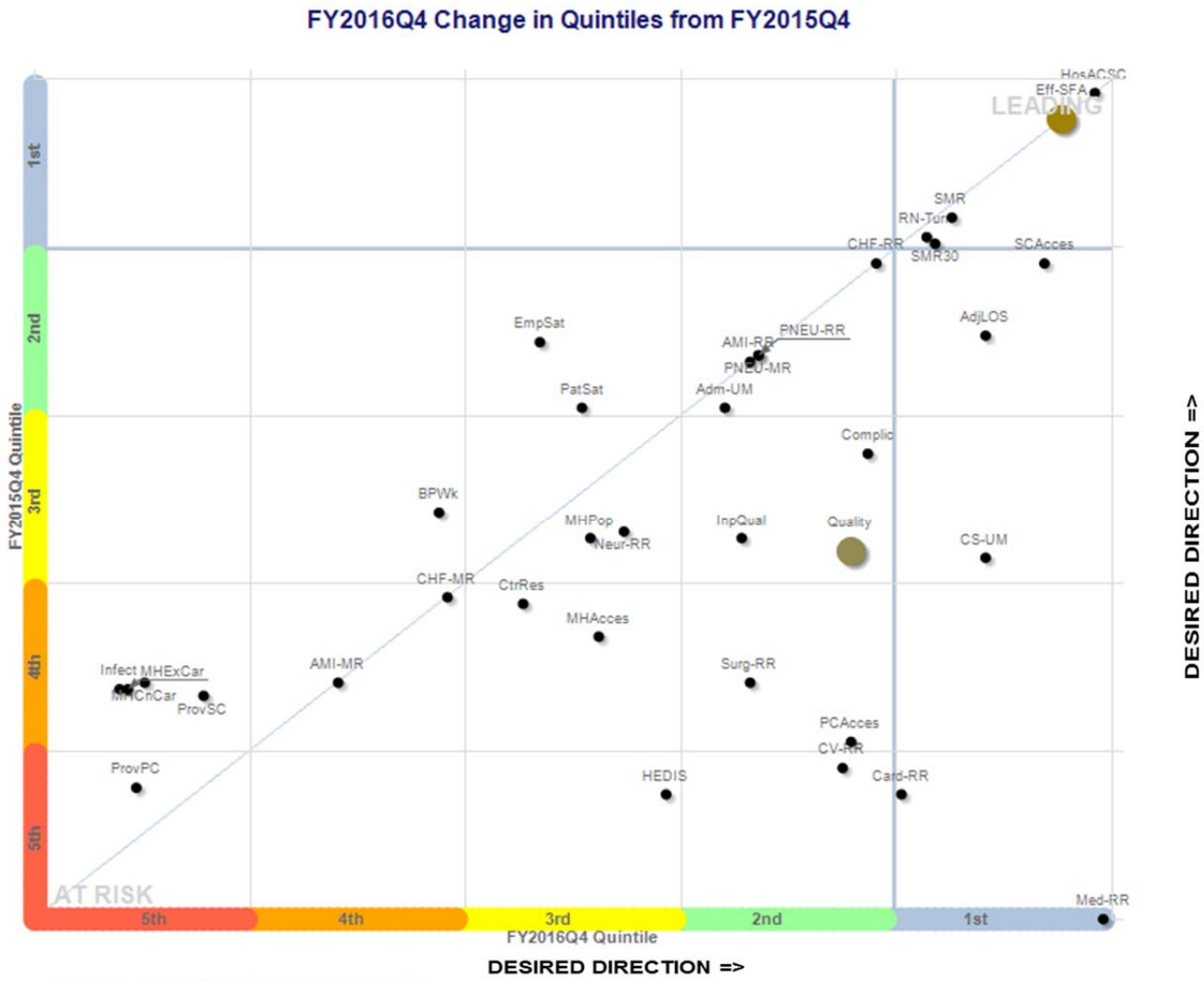


Source: VHA Support Service Center

Note: We did not assess VA's data for accuracy or completeness.

[31] Metric definitions follow the graphs.

Scatter Chart



NOTE

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

Source: VHA Support Service Center

Note: We did not assess VA's data for accuracy or completeness.

Metric Definitions[i]

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
Admit Reviews Met	% Acute Admission Reviews that meet InterQual criteria	A higher value is better than a lower 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
Cont Stay Reviews Met	% Acute Continued Stay reviews that meet InterQual criteria	A higher value is better than a lower 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 Like	Outpatient performance measure (HEDIS)	A higher value is better than a lower value
MH Wait Time	MH care wait time for new patient completed appointments within 30 days of preferred date	A higher value is better than a lower value
MH Continuity Care	MH continuity of care (FY14Q3 and later)	A higher value is better than a lower value
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
PC Routine Care Appt	Timeliness in getting a PC routine care appointment (PCMH)	A higher value is better than a lower value
PC Urgent Care Appt	Timeliness in getting a PC urgent care appointment (PCMH)	A higher value is better than a lower value
PC Wait Time	PC wait time for new patient completed appointments within 30 days of preferred date	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
Rating PC Provider	Rating of PC providers (PCMH)	A higher value is better than a lower value
Rating SC Provider	Rating of specialty care providers (specialty care module)	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

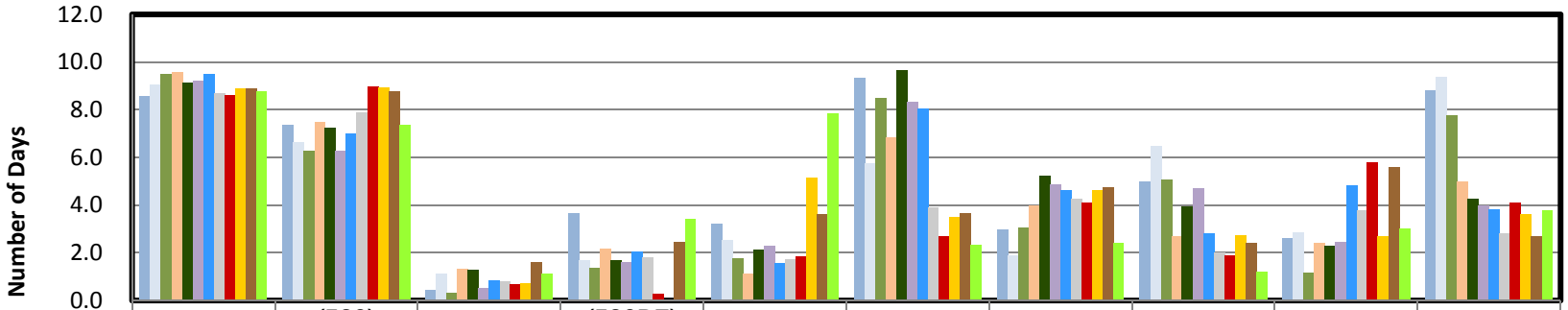
Measure	Definition	Desired Direction
RSMR-CHF	30-day risk standardized mortality rate for congestive heart failure	A lower value is better than a higher value
RSMR-Pneumonia	30-day risk standardized mortality rate for pneumonia	A lower value is better than a higher value
RSRR-AMI	30-day risk standardized readmission rate for acute myocardial infarction	A lower value is better than a higher value
RSRR-Cardio	30-day risk standardized readmission rate for cardiorespiratory patient cohort	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-CV	30-day risk standardized readmission rate for cardiovascular patient cohort	A lower value is better than a higher value
RSRR-HWR	Hospital wide readmission	A lower value is better than a higher value
RSRR-Med	30-day risk standardized readmission rate for medicine patient cohort	A lower value is better than a higher value
RSRR-Neuro	30-day risk standardized readmission rate for neurology patient cohort	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
RSRR-Surg	30-day risk standardized readmission rate for surgery patient cohort	A lower value is better than a higher value
SC Routine Care Appt	Timeliness in getting a SC routine care appointment (Specialty Care)	A higher value is better than a lower value
SC Urgent Care Appt	Timeliness in getting a SC urgent care appointment (Specialty Care)	A higher value is better than a lower 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 patient completed appointments within 30 days of preferred date	A higher value is better than a lower value

Source: VHA Support Service Center

Note: We did not assess VA's data for accuracy or completeness.

Patient Aligned Care Team Compass Metrics

FY 2016 New PC Patient Average Wait Time in Days



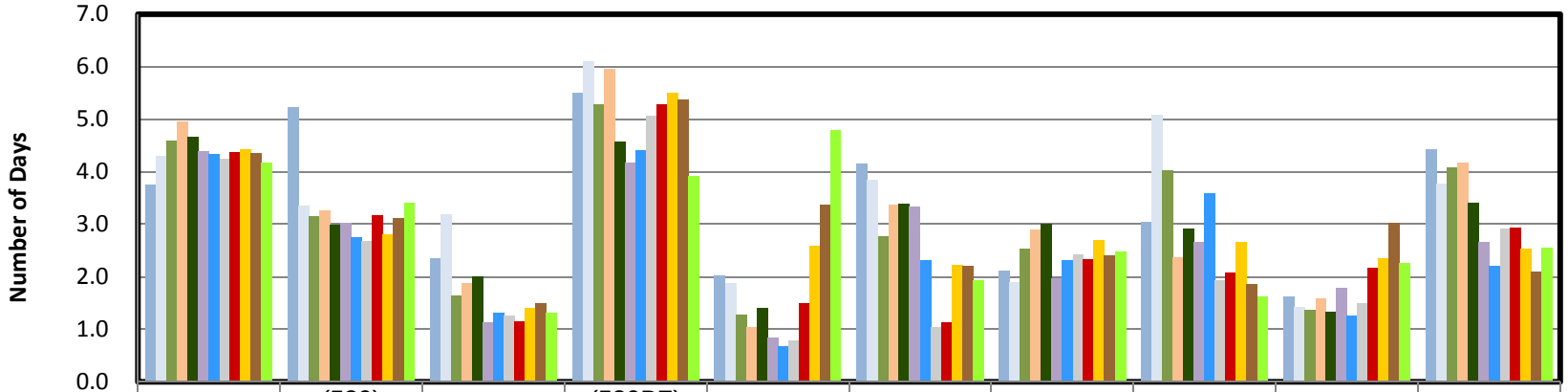
	VHA Total	(580) Michael E DeBakey VAMC	(580BY) Beaumont	(580BZ) Charles Wilson VA OPC	(580GC) Galveston County	(580GD) Conroe	(580GE) Katy	(580GF) Lake Jackson	(580GG) Richmond	(580GH) Tomball
OCT-FY16	8.6	7.3	0.4	3.6	3.2	9.3	3.0	5.0	2.6	8.8
NOV-FY16	9.1	6.6	1.1	1.7	2.5	5.8	1.9	6.5	2.9	9.4
DEC-FY16	9.5	6.3	0.3	1.4	1.8	8.5	3.0	5.1	1.2	7.8
JAN-FY16	9.6	7.5	1.3	2.2	1.1	6.9	4.0	2.7	2.4	5.0
FEB-FY16	9.1	7.2	1.3	1.7	2.1	9.7	5.2	3.9	2.3	4.3
MAR-FY16	9.2	6.3	0.5	1.6	2.3	8.3	4.9	4.7	2.5	4.0
APR-FY16	9.5	7.0	0.8	2.0	1.6	8.0	4.6	2.8	4.8	3.8
MAY-FY16	8.7	7.9	0.8	1.8	1.7	3.9	4.2	2.0	3.8	2.8
JUN-FY16	8.6	9.0	0.7	0.3	1.8	2.7	4.1	1.9	5.8	4.1
JUL-FY16	8.9	8.9	0.7	0.0	5.1	3.5	4.6	2.7	2.7	3.6
AUG-FY16	8.9	8.7	1.6	2.5	3.6	3.7	4.8	2.4	5.6	2.7
SEP-FY16	8.8	7.4	1.1	3.4	7.8	2.3	2.4	1.2	3.0	3.8

Source: VHA Support Service Center

Note: We did not assess VA's data for accuracy or completeness.

Data Definition[i]: The average number of calendar days between a new patient's PC completed appointment (clinic stops 322, 323, and 350, excluding Compensation and Pension appointments) and the earliest of three possible preferred (desired) dates (Electronic Wait List (EWL), Cancelled by Clinic Appointment, Completed Appointment) from the completed appointment date. *Note that prior to FY 2015, this metric was calculated using the earliest possible create date.*

FY 2016 Established PC Patient Average Wait Time in Days

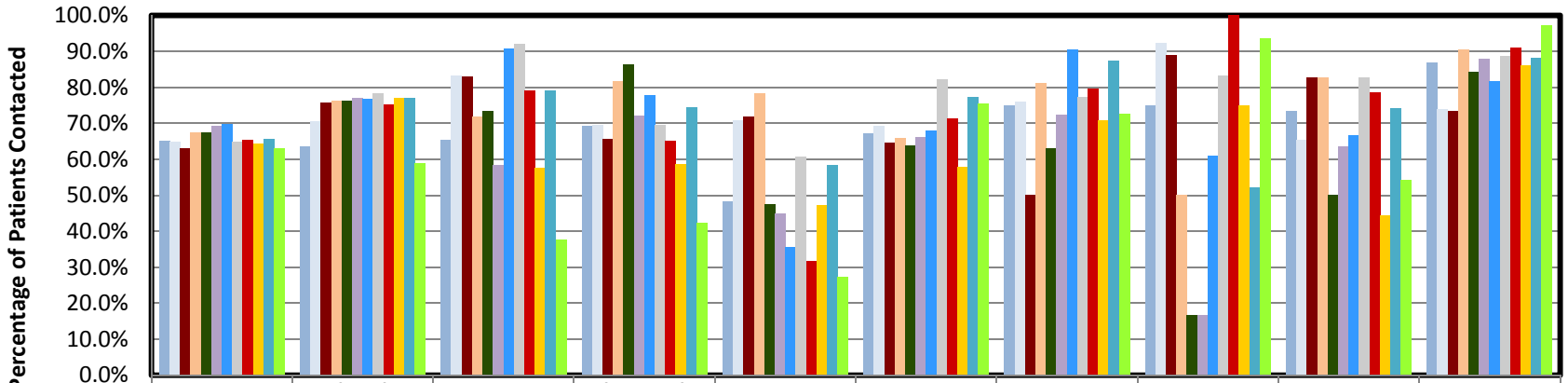


	VHA Total	(580) Michael E DeBakey VAMC	(580BY) Beaumont	(580BZ) Charles Wilson VA OPC	(580GC) Galveston County	(580GD) Conroe	(580GE) Katy	(580GF) Lake Jackson	(580GG) Richmond	(580GH) Tomball
OCT-FY16	3.8	5.2	2.4	5.5	2.0	4.2	2.1	3.0	1.6	4.4
NOV-FY16	4.3	3.3	3.2	6.1	1.9	3.8	1.9	5.1	1.4	3.8
DEC-FY16	4.6	3.2	1.6	5.3	1.3	2.8	2.5	4.0	1.4	4.1
JAN-FY16	4.9	3.3	1.9	6.0	1.0	3.4	2.9	2.4	1.6	4.2
FEB-FY16	4.7	3.0	2.0	4.6	1.4	3.4	3.0	2.9	1.3	3.4
MAR-FY16	4.4	3.0	1.1	4.2	0.8	3.3	2.0	2.7	1.8	2.7
APR-FY16	4.3	2.8	1.3	4.4	0.7	2.3	2.3	3.6	1.3	2.2
MAY-FY16	4.3	2.7	1.3	5.1	0.8	1.0	2.4	1.9	1.5	2.9
JUN-FY16	4.4	3.2	1.1	5.3	1.5	1.1	2.3	2.1	2.2	2.9
JUL-FY16	4.4	2.8	1.4	5.5	2.6	2.2	2.7	2.7	2.4	2.5
AUG-FY16	4.3	3.1	1.5	5.4	3.4	2.2	2.4	1.9	3.0	2.1
SEP-FY16	4.2	3.4	1.3	3.9	4.8	1.9	2.5	1.6	2.3	2.5

Source: VHA Support Service Center

Note: We did not assess VA's data for accuracy or completeness.

Data Definition: The average number of calendar days between an established patient's PC completed appointment (clinic stops 322, 323, and 350, excluding Compensation and Pension appointments) and the earliest of three possible preferred (desired) dates (Electronic Wait List (EWL), Cancelled by Clinic Appointment, Completed Appointment) from the completed appointment date

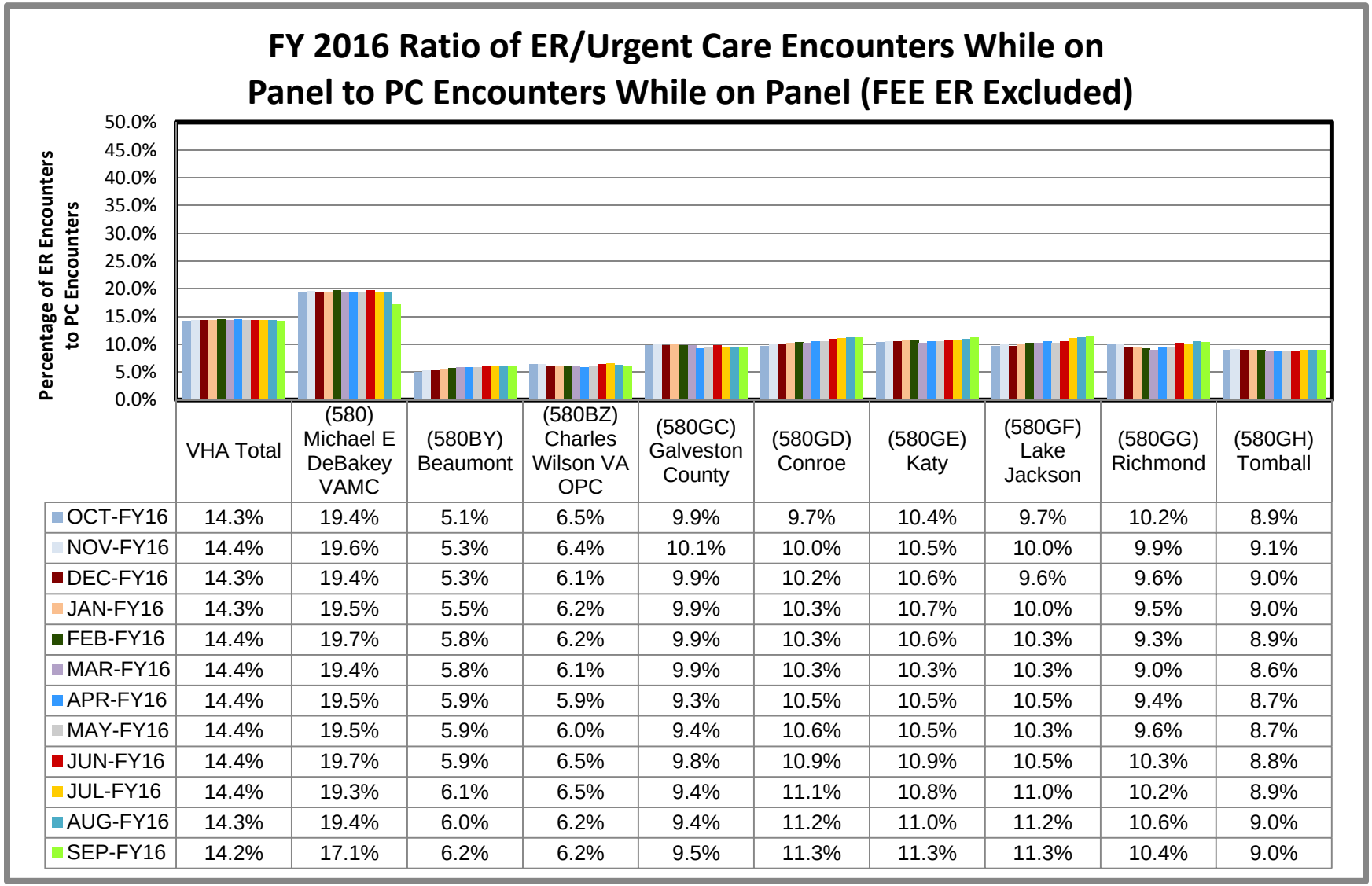


	VHA Total	(580) Michael E DeBakey VAMC	(580BY) Beaumont	(580BZ) Charles Wilson VA OPC	(580GC) Galveston County	(580GD) Conroe	(580GE) Katy	(580GF) Lake Jackson	(580GG) Richmond	(580GH) Tomball
OCT-FY16	65.2%	63.6%	65.3%	69.4%	48.3%	67.3%	75.0%	75.0%	73.3%	87.0%
NOV-FY16	64.9%	70.7%	83.3%	69.6%	70.7%	69.2%	76.0%	92.3%	65.5%	73.9%
DEC-FY16	63.2%	75.8%	83.0%	65.7%	71.8%	64.7%	50.0%	88.9%	82.6%	73.3%
JAN-FY16	67.5%	76.2%	71.8%	81.6%	78.4%	66.0%	81.1%	50.0%	82.6%	90.5%
FEB-FY16	67.6%	76.2%	73.5%	86.5%	47.6%	63.8%	63.0%	16.7%	50.0%	84.2%
MAR-FY16	69.2%	77.0%	58.5%	72.1%	44.9%	66.0%	72.5%	16.7%	63.6%	87.8%
APR-FY16	69.7%	76.7%	90.7%	77.8%	35.6%	67.9%	90.5%	61.1%	66.7%	81.8%
MAY-FY16	65.0%	78.4%	92.2%	69.4%	60.6%	82.2%	77.3%	83.3%	82.6%	88.6%
JUN-FY16	65.5%	75.2%	79.2%	65.0%	31.8%	71.4%	79.5%	100.0%	78.6%	90.9%
JUL-FY16	64.3%	77.0%	57.7%	58.6%	47.4%	57.9%	70.8%	75.0%	44.4%	86.2%
AUG-FY16	65.7%	77.0%	79.2%	74.5%	58.3%	77.3%	87.5%	52.2%	74.1%	88.2%
SEP-FY16	62.9%	58.8%	37.8%	42.4%	27.3%	75.5%	72.7%	93.8%	54.2%	97.1%

Source: VHA Support Service Center

Note: We did not assess VA's data for accuracy or completeness.

Data Definition: The percent of assigned PC patients discharged from any VA facility who have been contacted by a PC team member within 2 business days during the reporting period. Patients are excluded if they are discharged from an observation specialty and/or readmitted within 2 business days to any VA facility. Team members must have been assigned to the patient's team at the time of the patient's discharge.



	VHA Total	(580) Michael E DeBakey VAMC	(580BY) Beaumont	(580BZ) Charles Wilson VA OPC	(580GC) Galveston County	(580GD) Conroe	(580GE) Katy	(580GF) Lake Jackson	(580GG) Richmond	(580GH) Tomball
OCT-FY16	14.3%	19.4%	5.1%	6.5%	9.9%	9.7%	10.4%	9.7%	10.2%	8.9%
NOV-FY16	14.4%	19.6%	5.3%	6.4%	10.1%	10.0%	10.5%	10.0%	9.9%	9.1%
DEC-FY16	14.3%	19.4%	5.3%	6.1%	9.9%	10.2%	10.6%	9.6%	9.6%	9.0%
JAN-FY16	14.3%	19.5%	5.5%	6.2%	9.9%	10.3%	10.7%	10.0%	9.5%	9.0%
FEB-FY16	14.4%	19.7%	5.8%	6.2%	9.9%	10.3%	10.6%	10.3%	9.3%	8.9%
MAR-FY16	14.4%	19.4%	5.8%	6.1%	9.9%	10.3%	10.3%	10.3%	9.0%	8.6%
APR-FY16	14.4%	19.5%	5.9%	5.9%	9.3%	10.5%	10.5%	10.5%	9.4%	8.7%
MAY-FY16	14.4%	19.5%	5.9%	6.0%	9.4%	10.6%	10.5%	10.3%	9.6%	8.7%
JUN-FY16	14.4%	19.7%	5.9%	6.5%	9.8%	10.9%	10.9%	10.5%	10.3%	8.8%
JUL-FY16	14.4%	19.3%	6.1%	6.5%	9.4%	11.1%	10.8%	11.0%	10.2%	8.9%
AUG-FY16	14.3%	19.4%	6.0%	6.2%	9.4%	11.2%	11.0%	11.2%	10.6%	9.0%
SEP-FY16	14.2%	17.1%	6.2%	6.2%	9.5%	11.3%	11.3%	11.3%	10.4%	9.0%

Source: VHA Support Service Center

Note: We did not assess VA's data for accuracy or completeness.

Data Definition: This is a measure of where the patient receives his PC and by whom. A low percentage is better. The formula is the total VHA ER/Urgent Care Encounters While on Team (WOT) with a Licensed Independent Practitioner (LIP) *divided by* the number of PC Team Encounters WOT with an LIP **plus** the total number of VHA ER/Urgent Care Encounters WOT with an LIP.

Prior OIG Reports
March 1, 2014 through March 1, 2017

Facility Reports

Review of VHA's Alleged Manipulation of Appointment Cancellations at VAMC Houston, TX
6/20/2016 | *15-03073-275* | *Summary* | *Report*

Healthcare Inspection – Alleged Program Inefficiencies and Delayed Care, Veterans Health Administration's National Transplant Program
11/5/2015 | *15-00187-25* | *Summary* | *Report*

Community Based Outpatient Clinics Summary Report – Evaluation of Medication Oversight and Education at Community Based Outpatient Clinics and Other Outpatient Clinics
6/18/2015 | *15-01297-368* | *Summary* | *Report*

Healthcare Inspection – Patient Telemetry Monitoring Concerns, Michael E. DeBakey VA Medical Center, Houston, Texas
3/31/2015 | *14-03927-197* | *Summary* | *Report*

Audit of VHA's Mobile Medical Units
5/14/2014 | *13-03213-152* | *Summary* | *Report*

Appendix E

Veterans Integrated Service Network Director Comments

Department of Veterans Affairs

Memorandum

Date: June 9, 2017

From: Director, South Central VA Health Care Network (10N16)

Subject: **CAP Review of the Michael E. DeBakey VA Medical Center, Houston, TX**

To: Director, Dallas Office of Healthcare Inspections (54DA)

Director, Management Review Service (VHA 10E1D MRS Action)

1. The South Central VA Health Care Network (VISN 16) has reviewed and concurs with the findings, recommendations and action plans submitted by the Michael E. DeBakey VA Medical Center, Houston, TX, in response to the draft CAP Report.

Skye McDougall, PhD
Director, South Central VA Health Care Network (10N16)

Facility Director Comments

Department of Veterans Affairs

Memorandum

Date: June 7, 2017

From: Director, Michael E. DeBakey VA Medical Center (580/00)

Subject: **CAP Review of the Michael E. DeBakey VA Medical Center, Houston, TX**

To: Director, South Central VA Health Care Network (10N16)

The Michael E. DeBakey VA Medical Center has reviewed and concurs with the draft OIG Clinical Assessment Program Review Report.

Corrective action plans have been implemented to comply with the recommendations.

Francisco Vazquez, MBA
Director, Michael E. DeBakey VA Medical Center (580/00)

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 Physician Utilization Management Advisors consistently document their decisions in the National Utilization Management Integration database and that facility managers monitor compliance.

Concur

Target date for completion: Completed May 31, 2017

Facility response: Physician Utilization Management Advisors (PUMAs) have been registered for the VHA PUMA Subscription which provides automatic emails every Monday regarding any pending or incomplete reviews in the National Utilization Management Integration (NUMI) database. Additionally, the Utilization Management (UM) Coordinator provides each PUMA with a list of any outstanding reviews at the end of each week with a report to leadership for any reviews not completed within 48 prior to the 14 day expiration date. PUMA reviews are monitored by the UM Coordinator for accuracy and appropriateness on an ongoing basis with feedback as appropriate. The UM Coordinator is notified when any PUMA will be out of the office and the name of a surrogate PUMA is provided. Monitoring demonstrates 100% compliance for the months of March, April and May, 2017.

Recommendation 2. We recommended that facility managers ensure floors and rolling equipment in patient care areas are clean and in good repair and monitor compliance.

Concur

Target date for completion: September 30, 2017

Facility response: Environmental Management Services (EMS) Chief and supervisors have re-emphasized to staff the importance of ensuring thorough cleaning on an ongoing basis. EMS has incorporated the cleaning of rolling equipment into daily routine cleaning on the nursing units. All rusted/damaged IV poles and other rolling equipment have been replaced. To facilitate prompt communication with EMS staff for any issues requiring immediate attention, a 24 hour, 7 days per week telephone response system has been established. Additionally, EMS supervisors have established weekly, random monitoring of each area for cleanliness.

Recommendation 3. We recommended that the facility review quality assurance data for the anticoagulation management program monthly at Pharmacy and Therapeutics Committee meetings and that facility managers monitor compliance.

Concur

Target date for completion: September 30, 2017

Facility response: The cumulative 2016 Anticoagulation (AC) report was presented directly to P&T Committee in Jan 2017. The reports are now being reported to the Medication Safety Subcommittee monthly effective February 2017. The Medication Safety Subcommittee reports quarterly to the P&T Committee which reports quarterly to the Clinical Executive Board. Chief of Pharmacy to monitor for ongoing compliance.

Recommendation 4. We recommended that facility managers ensure clinicians consistently obtain all required laboratory tests prior to initiating anticoagulants.

Concur

Target date for completion: July 31, 2017

Facility response: The inpatient anticoagulation order sets have been revised to generate a "stat" lab order when signed by the ordering provider. The outpatient anticoagulation order set pulls in the INR completed within the last 30 days. This alerts the provider if labs need to be ordered prior to the initiation of therapy. Face-to-face education was provided to Primary Care providers on the importance of obtaining baseline labs prior to initiation of anticoagulation therapy. Monitoring has been initiated with 100% compliance demonstrated. A review of newly-initiated warfarin orders during April through May 2017 timeframe indicates that INR results were obtained for all patients prior to the first administered in-house dose of warfarin.

Recommendation 5. We recommended that for employees actively involved in the anticoagulant program, clinical managers include in competency assessments pharmacology of anticoagulants, monitoring requirements, dose calculation, common side effects, nutrient interactions associated with anticoagulation therapy, and drug to drug interactions associated with anticoagulation therapy and that facility managers monitor compliance.

Concur

Target date for completion: September 30, 2017

Facility response: The anticoagulation specific competencies (knowledge of standard terminology, pharmacology of anticoagulants, monitoring requirements, dose calculations, common side effects, nutrient interactions, and drug to drug interactions associated with anticoagulation therapy) were added to the hospital anticoagulation management program pharmacist competencies with the opening of FY17 appraisal period in October 2016. These competencies will be added to all Community Based

Outpatient Clinic pharmacists involved in the anticoagulation management program. The anticoagulation Clinical Pharmacy Specialists (CPSs) must complete the TMS anticoagulation advanced module every 2 years. Chief of Pharmacy to monitor for continued compliance via TMS records.

Recommendation 6. We recommended that the laboratory director develop and implement a process to ensure employee competency for point-of-care testing with glucometers.

Concur

Target date for completion: June 30, 2017

Facility response: A process has been developed to ensure staff competence for Point of Care Testing (POCT) with glucometers using a written test in VA Talent Management System (TMS) and the performance of glucometer quality control testing, which is downloaded to the Remote Automated Lab System (RALS) database.

Recommendation 7. We recommended that the laboratory director ensure employees who perform glucose testing at the point of care have annual competencies for glucometers and that facility managers monitor compliance.

Concur

Target date for completion: September 30, 2017

Facility response: A process is being implemented whereby lab staff run monthly TMS compliance reports to ensure that employees who perform glucose testing at the point of care have completed required TMS testing and perform glucose monitoring control prior to the annual expiration date. Employees will lose access to perform glucometer testing on training expiration date if skill testing process is not completed.

Recommendation 8. We recommended that facility managers ensure the Community Nursing Home Oversight Committee includes representation by all required clinical disciplines.

Concur

Target date for completion: September 30, 2017

Facility response: Effective February 2017, Contracting Service appointed an Acquisitions representative and an alternate to attend the Community Nursing Home (CNH) Oversight Committee meetings. The Acquisition representative was present for both February and March meetings. Effective June 2017 meetings will occur quarterly.

Recommendation 9. We recommended that facility managers ensure the Community Nursing Home Review Team completes required annual reviews and monitor compliance.

Concur

Target date for completion: September 30, 2017

Facility response: The Community Nursing Home (CNH) review team has established a process to ensure that nursing summary report and exclusion reviews are completed annually as required. CNH leadership team will monitor for ongoing compliance.

Recommendation 10. We recommended that facility managers ensure social workers and registered nurses conduct and document cyclical visits with the frequency required by Veterans Health Administration policy for community nursing home oversight and monitor compliance.

Concur

Target date for completion: September 30, 2017

Facility response: The Community Nursing Home Program Guidelines have been updated to include procedures on monthly visits and documentation. The documentation template was revised to include the option to select the appropriate discipline (i.e. nursing or social work). CNH staff have been in-serviced on the revised guidelines and template. Monthly audits are completed by supervisor for compliance with documentation requirements and alternate visits between the social worker and nurse.

Recommendation 11. We recommended that the facility implement an Employee Threat Assessment Team or an alternate group that addresses employee-related disruptive behavior.

Concur

Target date for completion: July 1, 2017

Facility response: Employee Threat Assessment Team was implemented in January 2017. The team has met monthly since implementation.

Recommendation 12. We recommended that facility managers ensure all employees receive Level 1 Prevention and Management of Disruptive Behavior training and additional training as required for their assigned risk area within 90 days of hire and that the training is documented in employee training records.

Concur

Target date for completion: September 30, 2017

Facility response: Education Service Line Executive and Assistant Chief have initiated strategies to ensure that all employees receive Level 1 Prevention and Management of Disruptive Behavior (PMDB) training and additional training as required for their assigned risk area within 90 days of hire; and to ensure that appropriate documentation is documented in employee training records. Strategies that have been put in place includes increasing the number of PMDB trainers from 10 to 24; the provision of PMDB train-the-trainer classes to further increase the number of PMDB trainers; the provision of PMDB levels 1, 2A, and 2B training to all employees as appropriate during new employee orientation; increasing the frequency of PMDB level 3 training to twice monthly and level 4 to once a month; and the initiation of skills check-off classes for renewal of training for levels 2B, 3, and 4 in lieu of completion of the entire course. Monthly monitoring and tracking is sent out by Education Service Line to supervisors for follow-up and appropriate action to ensure compliance with requirements.

OIG Contact and Staff Acknowledgments

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Endnotes

[a] The references used for QSV were:
- VHA Directive 1026, *VHA Enterprise Framework for Quality, Safety, and Value*, August 2, 2013.
- VHA Directive 1117, *Utilization Management Program*, July 9, 2014.
- VHA Directive 2010-025, *Peer Review for Quality Management*, June 3, 2010.
- VHA Handbook 1050.01, *VHA National Patient Safety Improvement Handbook*, March 4, 2011.
- VHA Handbook 1100.19, *Credentialing and Privileging*, October 15, 2012.

[b] The references used for EOC included:
- VA Handbook 6500, *Risk Management Framework for VA Information Systems – Tier 3: VA Information Security Program*, March 10, 2015.
- VHA Directive 1116(2), *Sterile Processing Services (SPS)*, March 23, 2016.
- VHA Directive 7704(1); *Location, Selection, Installation, Maintenance, and Testing of Emergency Eyewash and Shower Equipment*; February 16, 2016.
- Various requirements of The Joint Commission, Centers for Disease Control and Prevention, Occupational Safety and Health Administration, International Association of Healthcare Central Service Materiel Management, Health Insurance Portability and Accountability Act, National Fire Protection Association.

[c] The references used for Medication Management: Anticoagulation Therapy included:
- VHA Directive 1026; *VHA Enterprise Framework for Quality, Safety, and Value*; August 2, 2013.
- VHA Directive 1033, *Anticoagulation Therapy Management*, July 29, 2015.
- VHA Directive 1088, *Communicating Test Results to Providers and Patients*, October 7, 2015.

[d] The references used for Coordination of Care: Inter-Facility Transfers included:
- VHA Directive 2007-015, *Inter-Facility Transfer Policy*, May 7, 2007.
- VHA Handbook 1907.01, *Health Information Management and Health Records*, March 19, 2015.
- VHA Handbook 1400.01, *Resident Supervision*, December 19, 2012.

[e] The references used for Diagnostic Care: POCT included:
- VHA Handbook 1106.01, *Pathology and Laboratory Medicine Service Procedures*, October 6, 2008.
- VHA Handbook 1106.01, *Pathology and Laboratory Medicine Service (P&LMS) Procedures*, January 29, 2016.
- VHA Directive 1088, *Communicating Test Results to Providers and Patients*, October 7, 2015.
- The Joint Commission. *Comprehensive Accreditation Manual for Laboratories and Point-of-Care Testing*. Update 2. September 2010.
- Boaz M, Landau Z, Wainstein J. Analysis of Institutional Blood Glucose Surveillance. *Journal of Diabetes Science and Technology*. 2010;4(6):1,514–15. Accessed July 18, 2016.

[f] The references used for Moderate Sedation included:
- VHA Handbook 1004.01, *Informed Consent for Clinical Treatments and Procedures*, August 14, 2009.
- VHA Directive1039, *Ensuring Correct Surgery and Invasive Procedures*, July 26, 2013.
- VHA Directive 1073, *Moderate Sedation by Non-Anesthesia Providers*, December 30, 2014.
- VHA Directive 1177; *Cardiopulmonary Resuscitation, Basic Life Support, and Advanced Cardiac Life Support Training for Staff*; November 6, 2014.
- VA National Center for Patient Safety. *Facilitator's Guide for Moderate Sedation Toolkit for Non-Anesthesiologists*. March 29, 2011.
- American Society of Anesthesiologists. Practice Guidelines for Sedation and Analgesia by Non-Anesthesiologists. *Anesthesiology*. 2002; 96:1004–17.
- The Joint Commission. Hospital Standards. January 2016. PC.03.01.01, EP1 and MS.06.01.03 EP6.

[g] The references used for CNH Oversight included:
- VHA Handbook 1143.2, *VHA Community Nursing Home Oversight Procedures*, June 4, 2004.
- VA OIG report, *Healthcare Inspection – Evaluation of the Veterans Health Administration's Contact Community Nursing Home Program*, (Report No. 05-00266-39, December 13, 2007).

[h] The references used for Management of Disruptive/Violent Behavior included:

- VHA Directive 2012-026, *Sexual Assaults and Other Defined Public Safety Incidents in Veterans Health Administration (VHA) Facilities*, September 27, 2012.
- Public Law 112-154. Honoring America's Veterans and Caring for Camp Lejeune Families Act of 2012. August 6, 2012. 126 Stat. 1165. Sec. 106.
- Acting Deputy Under Secretary for Health for Operations and Management. "Meeting New Mandatory Safety Training Requirements using Veterans Health Administration's Prevention and Management of Disruptive Behavior (PMDB) Curriculum." memorandum. November 7, 2013.

[i] The reference used for the Strategic Analytics for Improvement and Learning (SAIL) metric definitions was:

- VHA Support Service Center (VSSC), Strategic Analytics for Improvement and Learning (SAIL), accessed: October 3, 2016.

[j] The reference used for Patient Aligned Care Team Compass data graphs was:

- Department of Veterans' Affairs, Patient Aligned Care Teams Compass Data Definitions, accessed: December 19, 2016.