Department of Veterans Affairs
Office of Electronic Health Record Modernization

Industry Day

May 29, 2019

Transforming Health Care for Veterans,
Revolutionizing Health Care for All
Welcome and Introduction of Deputy Secretary

Mr. John H. Windom
Executive Director, Office of Electronic Health Record Modernization, U.S. Department of Veterans Affairs
Opening Remarks

Mr. James M. Byrne
General Counsel, Performing the Duties of the Deputy Secretary, U.S. Department of Veterans Affairs
Introductions and Agenda

Mr. John H. Windom
Executive Director, Office of Electronic Health Record Modernization, U.S. Department of Veterans Affairs
Introductions

The Department of Veterans Affairs (VA) Office of Electronic Health Record Modernization (OEHRM) Leaders

Mr. John Windom
Executive Director

Dr. Laura Kroupa
Chief Medical Officer

Mr. John Short
Chief Technology Integration Officer

VA OEHRM Partners

Mr. Travis Dalton
President, Cerner Government Services

Mr. Kevin O’Connor
Vice President, Booz Allen Hamilton
## Key Players

### Project Management Office (PMO)

Provides execution and management oversight to achieve VA's vision and outcomes. Oversees the scope, schedule, risk, performance, and quality of the Electronic Health Record Modernization (EHRM) effort. Provides OEHRM financial, acquisitions, and lifecycle cost estimate management oversight. Manages EHRM testing and implementation. Oversees and manages OEHRM and VA/Department of Defense (DoD) governance processes.

**Key Takeaway:** Quarterback who integrates all functions

### Chief Medical Office (CMO)

Oversees strategy and planning efforts for change management, user testing and training, functional governance, care transformation, and business process re-engineering. Approves functional requirements. Leads communications for end-users and deployment. Responsible for the end-user experience.

**Key Takeaway:** Responsible for all things clinical

### Technology and Integration Office (TIO)

Provides technical leadership, management, and oversight of information technology (IT). Approves technical requirements and supports interoperability with DoD. Performs information security, architecture, data migration and management, configuration management, infrastructure engineering, transition and data engineering, and development.

**Key Takeaway:** Responsible for all things IT

### Contractor (Cerner Government Services, Booz Allen Hamilton)

Provides services and materials to VA to implement the new electronic health record (EHR) and integrate into the VA environment as directed in the Performance Work Statements (PWS). Contributes subject matter expertise in deployment of EHRs. Responsible for the technical implementation and functional work flows of the solution.

**Key Takeaway:** EHR implementer and integrator

### Contracting Officer (KO/CO)

Ensures performance of all necessary actions for effective contracting, monitoring compliance with the terms of the contract, and safeguarding VA's interests in its contractual relationships. Responsible for binding VA to a contract.

**Key Takeaway:** Enforcer and ultimate contract authority

### Contracting Officer Representative (COR)

Designated by the CO to perform technical administration of task order(s) and assure proper Government surveillance of the contractor’s performance defined in the Quality Assurance Surveillance Plan. Ensures contractor performance conforms to the requirements set forth in the PWS. Responsible for the review and approval of contract deliverables and invoices.

**Key Takeaway:** Supports CO and ensures contractor meets commitments

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**VA Office of Electronic Health Record Modernization: Transforming Health Care for Veterans, Revolutionizing Health Care for All**

May 29, 2019
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<tr>
<th>Time</th>
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<td>Welcome</td>
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<td>Opening Remarks</td>
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<td>9:15 – 9:20 am</td>
<td>Contracting Rules of the Road</td>
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<td>9:20 – 10:00 am</td>
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<td>10:00 – 10:45 am</td>
<td>CMO Briefing</td>
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<td>10:45 – 11:30 am</td>
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<tr>
<td>11:30 – 12:45 pm</td>
<td>Lunch</td>
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<td>12:45 – 1:30 pm</td>
<td>Cerner Government Services</td>
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<td>1:30 – 2:15 pm</td>
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<td>2:15 – 2:30 pm</td>
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<td>2:30 – 3:15 pm</td>
<td>Q&amp;A</td>
<td>Mr. John H. Windom</td>
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<td>Dr. Laura Kroupa</td>
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<td>Mr. Travis Dalton</td>
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<td>Mr. Kevin O’Connor</td>
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<tr>
<td>3:15 – 5:00 pm</td>
<td>Networking with Cerner Government Services and Booz Allen Hamilton</td>
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Ground Rules

Mr. Matthew Truex

Contracting Officer, Office of Acquisition Operations, U.S. Department of Veterans Affairs
Ground Rules

Event Ground Rules

- OEHRM Industry Day is for informational purposes only and does not constitute a solicitation or offer of future work, nor does it restrict the government’s future acquisition approach(es)
- OEHRM Industry Day is intended to inform industry stakeholders about progress of the EHRM effort
  - Information presented during these briefings is subject to change
- Questions will be taken during the Q&A period **ONLY** (2:30 – 3:15 pm)
  - Notecards have been placed on your seat for questions
  - Questions may be asked only during the Q&A period at the microphones
  - Please do not line up behind microphones prior to the Q&A session
  - Government responses to today’s questions should be considered **ADVISORY**
- There will be a networking opportunity following the conclusion of today’s event

Organizational Conflicts of Interest Flow-Down Provisions

Organizational conflicts of interest (OCI) **may** arise due to the nature of the work the Contractor(s) will perform under these contracts and that may preclude the Contractor(s) from being awarded future Electronic Health Record (EHR) contracts/orders in a related area. Whereas the Contractor has agreed to undertake this contract for EHR Modernization, it is agreed that the Contractor may be ineligible to act as a prime contractor, consultant, or subcontractor to any prime contractor or subcontractor at any tier which is to supply the services, system or major components thereof for any project where the Contractor has provided or is providing support as described in FAR 9.505-1 through 9.505-4.
Program Overview

Mr. John H. Windom
Executive Director, Office of Electronic Health Record Modernization, U.S. Department of Veterans Affairs
OEHRM Organizational & Reporting Structure

Mr. Robert Wilkie
Secretary of the Department of Veterans Affairs

Dr. Richard Stone
Executive in Charge, Veterans Health Administration

Mr. James Byrne
General Counsel, Performing the Duties of the Deputy Secretary

Mr. James Gfrerer
Assistant Secretary, Information and Technology & Chief Information Officer

Dr. Paul Tibbits
Executive Director, Technology Integration

Mr. John Windom
OEHRM Chief Technology Integration Officer

COL Michael Rutkowski
Deputy Executive Director, OEHRM

Mr. John Windom
OEHRM Program Management Officer (Acting)

Mr. Chuck Hume
Assistant Deputy USH, Health Informatics’ and Analytics

Mr. John Short
OEHRM Chief Medical Officer (Acting)

Dr. Laura Kroupa
OEHRM Chief Medical Officer
On June 5, 2017, SecVA announced the decision to adopt the same EHR solution being deployed by DoD.

The D&F cited the **public interest exception** to the competition, detailing the extensive benefits, including improved care for Veterans.
Stages of Interoperability

Stage 1: Interoperability within VA

Stage 2: Interoperability between DoD and VA

Stage 3: DoD/VA Affiliates and Community Providers

Stage 4: National Interoperability
### VA’s EHR Solution Areas

Delivering 138 capabilities across 36 solution areas

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<th>Access Management</th>
<th>Case Management</th>
<th>Emergency Medicine</th>
<th>Knowledge Solutions &amp; Clinical Decision Support</th>
<th>Point of Care &amp; Mobility</th>
<th>Support Services</th>
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<tr>
<td>Acute Care Delivery</td>
<td>Cerner Math</td>
<td>Extended Care</td>
<td>Laboratory</td>
<td>Population Health &amp; Analytics</td>
<td>System Access</td>
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<tr>
<td>Ambulatory</td>
<td>Clinical &amp; Document Imaging</td>
<td>Gastroenterology</td>
<td>Oncology</td>
<td>Quality &amp; Performance Improvement</td>
<td>Transaction Services</td>
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<td>Behavioral Health</td>
<td>Community &amp; Consumer Health</td>
<td>Health Information Management</td>
<td>Patient Accounting</td>
<td>Radiology</td>
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<tr>
<td>CareAware &amp; Device Connectivity</td>
<td>Critical Care</td>
<td>Interfaces</td>
<td>Perioperative</td>
<td>Research</td>
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<tr>
<td>Cardiology</td>
<td>Dental</td>
<td>Interoperability</td>
<td>Pharmacy</td>
<td>Supply Chain</td>
<td>Workforce &amp; Operations</td>
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On September 28, 2017, VA awarded a single award task order to Booz Allen Hamilton under the T4 NGen Indefinite-Delivery Indefinite-Quantity (IDIQ) contract. The scope of services includes:

- Contract Type: Time and Materials
- Ceiling (including options): $750 Million
- Ordering Period: 1-year base period, and 4-option years

On May 17, 2018, VA awarded a single award IDIQ contract to Cerner Government Services. The IDIQ provides:

- Contract Type: Firm-Fixed-Price (FFP)
- Ceiling (including options): $10 Billion
- Ordering Period: 5-year base period, and 5-year option

**What is the IDIQ contract?**
The base terms and conditions for the scope of services and products to deploy VA’s EHR solution.

**What does this single award task order provide to VA?**
- Program management and oversight services
- Clinical expertise
- Technology expertise
- Flexibility and surge support
- Access to industry expertise

**What does this IDIQ provide to VA?**
- A single lifetime EHR for service members and Veterans
- Flexibility
- 135 Cerner capabilities
- A single, common solution with DoD
- Access to commercial best practices
- Replacement of 130 disparate systems reducing complexity and maintenance
## Milestones

- **June 5, 2017** – D&F Published
- **June 26, 2017** – Acquisition Plan Approved
- **October 5, 2017** – Final RFP Posted
- **November 15, 2017** – Hearing before House Committee on Appropriations (HAC), Subcommittee on Military Construction, Veterans Affairs, and Related Agencies (MilConVA) on “Oversight Hearing – Veterans Affairs Electronic Health Record”
- **January 18-19, 2018** – UPMC Site Visit
- **February 7, 2018** – MITRE Interoperability Assessment Issued
- **March 7, 2018** – HAC MilConVA “Oversight and Investigations Legislative Hearing”
- **May 17, 2018** – Contract Awarded
- **June 25, 2018** – OEHRM Established
- **June 26, 2018** – Hearing before HVAC on “VA Electronic Health Record Modernization: The Beginning of the Beginning”
- **August 13 - 17, 2018** – EHRM Program Kick-Off
- **September 13, 2018** – Hearing before HVAC-TM on “The Role of the Interagency Program Office in VA Electronic Health Record Modernization”
- **November 5, 2018** – National Workshop 1
- **November 14, 2018** – Hearing before HVAC on “180-Day Review of the Electronic Health Record Modernization Program”
- **December 3, 2018** – HVAC-TM Member and Staff Site Visit to Spokane VAMC
- **January 14, 2019** – National Workshop 2 / Technical Design Session (TDS) 1
- **February 5, 2019** – Hearing before Senate Committee on Appropriations (SAC), Subcommittee on MilConVA on “Review of the VA’s Electronic Health Record Modernization”
- **February 25, 2019** – National Workshop 3 / TDS 2
- **March 6, 2019** – Hearing before HAC MilConVA on “Electronic Health Record Modernization and Information Technology Oversight”
- **April 8, 2019** – National Workshop 4 / TDS 3
- **April 15, 2019** – Puget Sound VA Medical Center Facility Tour with HVAC Chairman Takano, HVAC-TM Chairwoman Lee, and Representative Levin
- **May 20, 2019** – National Workshop 5 / TDS 4

### Key:
- **OEHRM Engagements**
- **Contract Activities**
- **Congressional Hearings**

### Diagram:
- **Go-Live Clock Starts**
- **Workshop 1**
- **Workshop 2 / TDS 1**
- **Workshop 3 / TDS 2**
- **Workshop 4 / TDS 3**
- **Workshop 5 / TDS 4**

### Event Details:
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Guiding Principles

- Standardize clinical and business processes across VA
- Design a Veteran-centric system focusing on quality, safety, and patient outcomes
- Flexible and open, single enterprise solution
- Clinical business process reengineering, adoption, and implementation over technology
- Configure not customize
- Decisions shall be based on doing what is best for VA’s health care system as a whole
- Decision-making and design will be driven by front-line and clinical staff
- Drive toward rapid decision making to keep the program on time and on budget
- Provide timely and complete communication, training, and tools to ensure a successful deployment
- Build collaborative partnerships outside VA to advance national interoperability
- Enable full Veteran engagement in their health care
Veterans Integrated Service Networks (VISN)
Future VISN deployments will be staggered over the next ten years, during which OEHRM will integrate every possible efficiency and lesson learned into the deployment process.

* Please note that this target timeline is subject to change based on IOC implementation, contracting barriers, funding, and other resources.
OEHRM’s priority is to deliver a new, state-of-the-art, EHR solution for Veterans. Its oversight responsibilities are to balance cost, schedule, performance, and risks within the portfolio, with a focus on providing capabilities that mitigate risk while gaining efficiencies throughout our deployment of the new EHR solution.
Current State Reviews

Initial Operating Capability Sites

Mann-Grandstaff VA Medical Center operates 46 hospital beds and 38 rehabilitation-oriented nursing home beds. A mobile clinic, outfitted with two exam rooms, provides selected primary care services to Veterans living in remote areas outside the metropolitan Spokane area. Site director and leadership team are strong proponents and are engaged.

Puget Sound Health System operates a large inpatient bed footprint with 414 total beds (210 inpatient, 64 Domiciliary, 121 CLC, 19 CWT/TR) as well as many associated clinics in the Seattle and surrounding area. The Seattle Division is one of the few VA facilities in the country to support lung transplant services. The American Lake Division has a dedicated Mental Health Residential Rehabilitation Program facility that provides treatment and rehabilitation for Veterans suffering from PTSD, homelessness, and substance abuse.

VA Puget Sound Health System Seattle Division*: Large hospital category; Large clinic tier
VA Puget Sound Health System American Lake Division*: Small hospital category

*Based on Cerner Commercial Criteria
Sizing for Hospitals: Small: 0-100 beds; Medium: 101-300 beds; Large: 301+ beds
Clinic Tier Types: Per Parent Station Location: Small: Up to 5 locations, Medium: Up to 10 locations, Large: Up to 11+ locations

Purpose
Gain an understanding of a site’s unique process flow and technology infrastructure to see how they align with the Cerner commercial standards to begin to develop the proposed “to-be” state.

Objectives
• Conduct organizational review around people, processes, and technology.
• Observe and capture current state workflow & technology footprint.
• Identify areas that will impact value achievement and present risk to the project.
• Identify quick wins from software being deployed.
• Identify scope items to address.

Summary of Findings
• Cerner did not uncover any new results that would significantly change the approach to the deployment path ahead for Mann-Grandstaff VA Medical Center and Puget Sound Health System.
• Cerner did uncover a number of technology gaps, scope gaps, and action items that will need to be managed throughout the IOC deployment and beyond.
• Cerner discussed a number of extensions from the VAMC (CMOP, patient access center, call center, etc.) that will need examined further to determine how they will be included for IOC.
• VA clinicians will find a number of functional wins by moving to Cerner solutions.
Summary

• Veteran-Centric
• User Adoption
• Thank you, DoD
• Execute against cost, schedule, and performance objectives
• How you can help
  • Visit https://www.ehrm.va.gov/
Clinical Overview

Dr. Laura Kroupa
Chief Medical Officer, Office of Electronic Health Record Modernization, U.S. Department of Veterans Affairs
Why EHRM?

EHRM is part of an enterprise-wide effort to modernize VA’s legacy systems and services to keep pace with technology advancements and the diverse needs of our Nation’s Veterans:

EHRM is transforming health care for Veterans, revolutionizing health care for all.

Five Primary Areas of EHRM Benefit

- **Quality Care and Veteran Experience**
  Empower Veterans to participate in their own care any time, anywhere

- **Taxpayer Savings**
  Modern, common platform saving millions spent today on local applications and non-enterprise modifications

- **Innovation**
  Driving innovation, security, and efficiency in Cerner solutions

- **Safety**
  Health and wellness for Servicemembers and Veterans – throughout their military careers and beyond

- **Efficiency**
  Standardized workflows that optimize quality, access to care, and Veteran experience
The new EHR solution will be a single source of Veteran health information for patients and providers

The new EHR solution will:

- Eliminate the cumbersome manual transfer of records when a service member transitions from military service to Veteran status.
- Present clinicians with role-based information to drive better health outcomes and provide Veterans with enhanced access to their complete health record.
- Enhance collaboration and improve health information sharing with DoD and community providers.
CMO Key Functions and Operation Areas

Chief Medical Office

Change Management
- Change Management Strategy
- Super User and End-User Training
- VA Innovative Technology Advancement Lab (VITAL)

Operations
- CMO-Related Risk Management
- Scheduling
- Deployment and Site Assessments

Chief Medical Informatics Office
- Clinical Informatics
- Interoperability
- Process Engineering
EHR Councils and Workgroups are interdisciplinary, represented by different roles in the subject area/specialty, and contain representatives from the field (VISNs) and from VA Central Office.
### National & Local Workshop Overview

<table>
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<tr>
<th>Question</th>
<th>Description</th>
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</table>
| **What are Workshops?**         | • National Workshops are meetings of the 18 VA National Councils; Local Workshops are meetings held at the local level  
  • National purpose: make EHR design decisions/validate and establish workflows; Local purpose: validate and configure  
  • Cerner will use an agile development process to address +1800 stories to enable redesign |
| **Who attends Workshops?**      | • National Council and workgroup members along with specified OEHRM staff; local staff along with some VISN representative attend the Local Workshops  
  • Hosting and agenda is a Cerner responsibility  
  • National attendance: 150-250 (up to 300) Council members per Workshop; Local attendance: subject matter experts |
| **Where are Workshops held?**   | • National Workshops: Kansas City, MO on Cerner campus  
  • Local Workshops: Local VAMC |
| **When do Workshops take place?** | • Eight National and seven Local Workshops over a 12-month period  
  • Three-day events approximately every six weeks for intense face-to-face work  
  • Councils review and validate designs between Workshops |

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### Workshop Schedule

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<tr>
<th>Workshop</th>
<th>Date</th>
<th>Location</th>
<th>Description</th>
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</table>
| Workshop 1 | 11/5/18 | Kansas City | Local Workshop 1: Mann Grandstaff & CPAC  
  12/28/18: Seattle & American Lake |
| Workshop 2 | 2/25/19 | Kansas City | Local Engagement Session 4: 4/15/19 & 4/22/19 |
| Workshop 3 | 5/20/19 | Kansas City | Local Workshop 6: 7/29/19 & 7/22/19  
  Local Workshop 5: 7/8/19 & 7/8/19 |
| Workshop 4 | 8/19/19 | Kansas City | Local Workshop 7: 8/9/19 & 8/9/19  
  Local Workshop 8: 8/30/19 & 8/30/19 |
| Workshop 5 | 10/14/19 | Kansas City | Local Workshop 8: 10/14/19 & 10/14/19  
  Local Workshop 9: 10/14/19 & 10/14/19 |
| Workshop 6 | 11/5/18 | Kansas City | Local Workshop 1: Mann Grandstaff & CPAC  
  12/13/18: Seattle & American Lake |
| Workshop 7 | 2/25/19 | Kansas City | Local Engagement Session 3: 3/11/19 & 3/18/19 |
| Workshop 8 | 5/20/19 | Kansas City | Local Workshop 4: 6/5/19 & 6/5/19 |

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**Model Validation:** 9/24/18  
**Workshop 1:** 11/5/18 ~134 sessions  
**Workshop 2:** 1/14/19 ~150 sessions  
**Workshop 3:** 2/25/19 ~190 sessions  
**Workshop 4:** 4/8/19 ~313 sessions  
**Workshop 5:** 5/20/19 ~240 sessions  
**Workshop 6:** 7/8/19 ~220 sessions  
**Workshop 7:** 8/19/19 ~190 sessions  
**Workshop 8:** 9/30/19 ~161 sessions

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Functional Priorities

- Involvement of **user community**
- **Standardization of practices** across VA
- **Integration** across modules/capabilities
- **Continuity** of current capabilities
- Enable **more efficient and effective care**
- VA and DoD contribute to a single EHR solution **enabling seamless, real-time access** to health records
- **Advance interoperability** to improve transitions between VA and community care
Technical Overview

Mr. John Short
Chief Technology Integration Officer, Office of Electronic Health Record Modernization, U.S. Department of Veterans Affairs
To ensure the successful deployment of VA’s EHR solution, it is critical that the necessary upgrades are in place prior to IOC. Requisite upgrades include:

- Deployment of the new infrastructure aligned to the existing DoD deployment
- Assessment and remediation/upgrades of VA’s existing infrastructure
- Optimization of the infrastructure to meet VA’s future needs.

Broadly speaking, there are several categories for infrastructure efforts within OEHRM.

**Networks**
- Wide Area Networks
- Local Area Networks (LAN)/Wireless LAN
- Network Security - MedCOI

**Readiness / Devices**
- Mobile Devices
- End-User Devices
- Printing, including barcode & specialty
- Biomedical devices

**Facilities / Construction**
- Telecommunication rooms - Switches, POE
- Computer rooms outside data centers
- Environmental controls - HVAC
- Power - UPS

OEHRM has several key components to its infrastructure approach. These are:

- Incorporate lessons learned and commercial best practices
- Conduct more extensive analysis, testing, and remediation processes to reduce infrastructure-related impacts on deployment of VA’s new EHR solution
- Plan and execute infrastructure upgrades in partnership with OIS, OIT, VHA, DoD, and Cerner

- Upgrade IOC facilities to avoid latency
- Develop scalable network plans
- Develop dashboards for infrastructure monitoring
Overview

Interface work is a collaborative effort between OEHRM, Cerner, OIT, and VHA BioMed. The work focuses on identifying applications, services, medical devices, systems, and interfaces that require information exchanges from or provide data to the new EHR solution.

Current State

- After completing extensive research on the current VA IT application landscape, VA and Cerner developed a consolidated list of VA applications and medical devices that will require integrations with Cerner.
- Currently, OEHRM is completing the identification phase and beginning the design phase for interfaces identified for IOC. Kickoff meetings and interface control document development are currently underway for interfaces on contract.
- Functional requirements are key to ensure continuity of care to Veterans.

**Beginning the Interface Phases**

Next Steps

- Planning interface cutovers to ensure seamless data transfer at Go-Live.
- Developing interfaces to leverage standards, such as HL7, and integration engines such as VDIF and Rhapsody.
# Data Migration for Continuity of Care

## Overview

The thoughtful and accurate migration of data is an essential prerequisite to continuity of both patient care and VHA operations, ensuring that:

- DoD and VA Caregivers have the right data at the right time to provide patient-centered care to service members and Veterans
- VA operational functions and research activities that depend on data will have access to critical information within the Cerner environment.

## Data Aggregation, Standardization, and Normalization

Migrate key VA clinical, administrative, and financial data to Cerner in support of the EHRM effort.

**WHAT**

1. Migrate VistA data directly from the 130 instances of VistA, identified and prioritized by the clinical councils, to Cerner HealtheIntent and subsequently to the new EHR solution prior to IOC.
2. Migrate all VistA data domains required for IOC to HealtheIntent. A portion of that data will be identified by the clinical councils to make up the longitudinal health record.

**HOW**

Leverage **proven tools** and **processes** to extract data directly from the consolidated VistAs into our data migration tool, providing metadata packages that contain all requisite information for Cerner to map the data.

## Next Steps

- Complete the push of data domains into Cerner for IOC
- Determine additional data domains to be added in the future
- Conduct on-going data quality, data domain extraction, and infrastructure optimization
Interoperability

Overview

Interoperability is getting the **right information** to the **right place** at the **right time** to enable seamless care for our service members & Veterans.

Interoperability is focused on providing a Veteran-centric, unified EHR across VA, DoD, and community care partners. OEHRM interoperability priorities are:

- Maintaining interoperability between VA, DoD, other federal partners (CMS, SSA for Affordable Care Act reporting), and external partners
- Ensure legacy applications are transitioned or modified to ensure seamless data sharing prior to IOC Go-Live
- Coordinate with DoD and other partners to coordinate legacy application integration efforts

Current State

Interoperability is critical to ensure cross-Departmental alignment to coordinate identified work efforts needed to transition to the new EHR. Our current efforts to improve interoperability include:

- Coordinating with key stakeholders (VA, DoD, other Interagency and external partners) to ensure a seamless transition to EHRM and facilitate a shared strategy and overarching goals for the targeted interoperability framework
- Identifying remaining legacy systems for decommissioning and ensuring functionality and requirements are captured
- Monitoring MISSION Act compliance

Next Steps

- Continue coordination with legacy VA health applications to track transition progress
- Continue joint interoperability decisions in partnership with DoD, federal partners, and community care providers in preparation for IOC Go-Live
An application programming interface (API) provides the ability to read or write information to or from a clinical package. OEHRM uses APIs to:

- Integrate data from clinical packages across Cerner, DoD, and VA
- Allow the free flow of health data between applications and to read, write and modify data from and to the new EHR.

OEHRM will continue to support the VA Open API effort. OEHRM will provide open APIs hosted on Cerner (Millennium and HealtheIntent) and VA-developed APIs. These open platforms are designed with publicly available APIs for application developers to consume. Joint governance bodies between DoD and VA determine the ability to connect to those APIs. The current environment of OEHRM APIs consists of the following:

- Cerner Ignite APIs (FHIR)
- External Connections (FDA)
- Cerner HealtheIntent Population Health APIs
- Data Sharing (HIEs, Registries, and Research)
- Bulk Data APIs
- VA APIs
- Innovation through SMART on FHIR Apps and other APIs

Current State and Next Steps

- Reviewing available APIs and identifying use cases
- Upcoming activities include:
  - Conduct analysis for API use cases and identify potential gaps
  - Initiate Sandbox testing
  - Determine cybersecurity approval path as needed
  - Work with Cerner to resolve anticipated data provenance gaps required by VA
  - Test performance for planned APIs
  - Explore opportunities for innovation with widely used APIs (e.g., SMART on FHIR)
Summary

- Continue with **IT infrastructure** modernization at IOC sites and plan for future sites
- Continue with development of critical **interfaces** to ensure continuity of care for Veterans
- Complete **data migration** into HealtheIntent for IOC
- Work to ensure **interoperability** with DoD, federal partners, and community care providers in preparation for IOC Go-Live
- Review available **Application Programming Interfaces** and explore opportunities for innovation
Cerner

VA OEHRM Industry Day

May 29, 2019

Travis Dalton

President, Cerner Government Services
Meet the Cerner Government Services team

Travis Dalton  
President

Joe Brown  
Director, Project Manager, VA EHRM

Chris Kemp  
Senior Director, Business Development

Jigar Patel  
Vice President, Chief Medical Officer

Mustafa Qadri  
Director, Chief Architect, VA EHRM

Chad Ruoff  
Vice President, Client Delivery

Brian Sandager  
Vice President, Chief Operating Officer

Melissa Solito  
Senior Director, Chief Nursing Officer

Julie Stoner  
Director, Client Delivery

David Waltman  
Vice President, Strategy & Technology
Today’s discussion

Why are we here?
What is our mission?
Who is Cerner today?
Who do we serve?
What is our role in EHRM?

How do we deliver the program?
How do we build, manage, and evaluate the team?
In what areas do current partners provide support?
How can you help?
What are the next steps?
To create a seamless and connected world where everyone thrives.
What is our mission?

We relentlessly seek breakthrough innovation that will shape health care of tomorrow.

Patient-centric

EHRM Outcomes
Who is Cerner today?

1979: From humble beginnings in Kansas City…

- 29,000 associates
- 27,500 client facilities
- 35 countries
- $5.4B annual revenue
- 70 of TOP 100 health systems have Cerner
- $7B R&D investment
- Neal Patterson, Founding CEO
- Brent Shafer, Current CEO
- Largest health IT provider to Federal Government

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Who do we serve?

Cerner supports some of the world’s largest health systems.

**HIGHLIGHTS**

**US:**
- Tenet
- Community Health Systems
- Universal Health Services

**Global (public sector):**
- UK National Health System
- Australia (3 states)
- Sweden (2 regions)

- Cerner associate presence
- Cerner solution(s) contracted in country
What is our role in EHRM?

Collaborate with partners to transform Veteran care.

<table>
<thead>
<tr>
<th>Major Performance Work Statement Areas</th>
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<tbody>
<tr>
<td>✓ Project Management</td>
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<tr>
<td>✓ EHRM Hosting and Managed Services</td>
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<tr>
<td>✓ VA Enterprise EHRM Baseline Preparation</td>
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<td>✓ Sustainment</td>
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<td>✓ Analysis and Migration of Legacy Data</td>
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<td>✓ Training</td>
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<td>✓ Transition Support</td>
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<tr>
<td>✓ EHRM System</td>
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<tr>
<td>✓ Information System Authorization, Testing and Continuous Monitoring</td>
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<tr>
<td>✓ Wave Planning and Deployment</td>
</tr>
<tr>
<td>✓ Business Intelligence, Data Analytics, Point of Care Decision Support</td>
</tr>
<tr>
<td>✓ Innovation and Enhancements</td>
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<tr>
<td>✓ EHRM Technical Support</td>
</tr>
</tbody>
</table>
How do we deliver the program?

Combine VA expertise with Cerner commercial best practices and methodologies.

Key Accomplishments

✓ Established 18 Clinical Councils
✓ Hosted 5 of 8 National Workshops
✓ Completed 18 of 19 EHRM Roadshows
✓ Stood up VITAL
✓ Migrated 70B health records of 23.5M Veterans to Cerner’s Data Center

What’s Next?

• Complete National Workshops and validate clinical workflows
• Enterprise solution configuration and localization
• Robust testing to ensure preparedness
• Ensure technical readiness of solution – data migration, interfaces
• Training and Go-Live readiness
• GO-LIVE

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How do we build, manage, and evaluate the team?

**Initial Review**
- VA experience
- Relevant capabilities
- Business size status
- Mission-centric

**Due Diligence**
- Performance/quality scores
- Certifications

**Select**
- Master Services Agreement

**Assign**
- Selection based on needs
- Final vetting prior to assignment

---

**Feedback & Evaluation**

**Interviews**

**Industry Days**

**Scoring**

**Down Select**

**Final Interviews**
In what areas do current partners provide support?

- Cyber
- HIE
- Clinical
- Interfaces
- Testing
- Data Migration
- PMO
- Change Management
- Training
- Revenue Cycle

**PURPOSE-BUILT TEAM**

Aligned to VA needs

25+ partners and growing

17 current partners are small businesses

60% of the work subcontracted to date has been to small businesses
How can you help?

We’re always looking for great partners with differentiated expertise.

Clinical
- Content creation and curation
- Informatics
- VA workflow, optimization, and sustainment
- Specialties: Behavioral Health, Ophthalmology, Rehabilitation, Prosthetics

Technical
- Cyber capabilities, including experience with DoD Risk Management Framework
- Enterprise architecture
- Data visualization and technical communications
- Advanced technical writing
What are the next steps?

1. Engage the team
2. Submit your value proposition:
   cerner.cvent.com/VAIndustryDay
Mr. Kevin O'Connor
Vice President, Booz Allen Hamilton
Program Manager for Electronic Health Record Modernization Program Management Support Contract
ABOUT BOOZ ALLEN HAMILTON

We bring bold thinking and a desire to be the best in our work in consulting, analytics, digital solutions, engineering, and cyber and with industries ranging from defense to health, energy, and international development.

Founded in 1914

Headquartered in McLean, VA

Our employees work at 400+ locations in 20+ countries

26,000+ NUMBER OF EMPLOYEES
As of March 31, 2019

November 2010

INITIAL PUBLIC OFFERING
OUR CAPABILITIES

CONSULTING
• Human Capital Planning
• Strategic Communications
• Wargames and Exercise Design

ANALYTICS
• Artificial Intelligence
• Data Science
• Automation
• Precision Health

DIGITAL SOLUTIONS
• Digital Strategy
• Digital Experience
• Cloud & Data Platforms
• Modern Software Development
• Large Scale Program Management

CYBER
• Cyber Risk
• Cyber Intelligence
• Cyber Solutions
• Cyber Operations

ENGINEERING
• Directed Energy
• Systems Engineering & Integration
• C4ISR and Networks
• Sustainment Engineering

Booz | Allen | Hamilton
OUR PURPOSE AND VALUES

EMPOWER PEOPLE TO CHANGE THE WORLD

COLLECTIVE INGENUITY

CHAMPION’S HEART

PASSIONATE SERVICE

UNFLINCHING COURAGE

FEROCIOUS INTEGRITY
OUR CUSTOMERS

DEFENSE
- Air Force
- Army
- Joint Combatant Commands
- Navy/Marine Corps

GLOBAL / COMMERCIAL
- Commercial: Financial services, utilities, energy, retail, manufacturing, healthcare
- International: Middle East, North Africa region, and select Asian markets

INTEL
- Military Intelligence Agencies: Defense Intelligence Agency, Service Intelligence Centers, intelligence surveillance reconnaissance units

CIVIL
- Homeland Security
- Health & Human Services
- Veterans Affairs
- Treasury
- Justice
# BOOZ ALLEN & VETERANS

**Booz Allen was** 
**FOUNDED BY A VETERAN**
and has continuously supported the DoD since 1940 – over 79 years

**One-third of our workforce**
**ARE VETERANS**
(over 7,000 employees)

**Booz Allen has been**
supporting VA since 1952:
**OVER 66 YEARS**
of continuous support

**Booz Allen is currently**
involved in **85+ programs**
supporting OIT, VBA, and VHA

<table>
<thead>
<tr>
<th>#10</th>
<th>8th Straight Year</th>
<th>#4</th>
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<tbody>
<tr>
<td>On <em>Military Times</em> “Best for Vets Employers” list. We’ve been ranked in the top 10 for the last 4 years.</td>
<td>Named Champion of Veteran Enterprise by the National Veteran Small Business Coalition for 21.6% subcontracting to VOSBs and 14.5% to SDVOSB’s</td>
<td>On Monster and Military.com’s 2018 “Best Companies for Veterans” list</td>
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</table>

**ABOVE AND BEYOND**
**Awarded to Booz Allen in 2014 by Employer Support of the Guard and Reserve (ESGR) for the firm’s best in class support of its Guard and Reserve employees.**

**FOUNDRING MEMBER**
**Selected as a founding member of VETS Index based on veteran hiring and financial health.**

**VETERAN FRIENDLY**
**Named "Best of the Best" Veteran Employer by U.S. Vets Magazine and Military Friendly Company by GI Jobs**

**Major Contract Vehicles with Veterans Affairs**
- Transformation Twenty-One Total Technology (T4) Information Technology - 2011
- Transformation Twenty-One Total Technology Next Generation (T4NG) Information Technology - 2016

**Booz Allen Supports**
- VA Office of Electronic Health Record Modernization
- VA Office of Information Technology (OIT)
- Veterans Health Administration (VHA)
- Veterans Benefits Administration (VBA)
- National Cemetery Administration (NCA)
Booz Allen provides critical program management, administrative, and technical support to OEHRM to support the deployment of Cerner while focusing on maximizing clinical value and enabling continuous improvements in patient safety, quality of care, patient and family engagement, and operational efficiency throughout VA.

<table>
<thead>
<tr>
<th>Contract Overview</th>
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<tbody>
<tr>
<td><strong>Contract Award Date</strong></td>
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<tr>
<td><strong>Contract Identification</strong></td>
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<td><strong>Contract Type</strong></td>
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<td><strong>Base Period of Performance and Option Years</strong></td>
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<tr>
<td><strong>Base Period:</strong></td>
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<td><strong>Option Period 1:</strong></td>
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<td><strong>Option Period 2:</strong></td>
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<tr>
<td><strong>Option Period 3:</strong></td>
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<tr>
<td><strong>Option Period 4:</strong></td>
</tr>
<tr>
<td><strong>Scope</strong></td>
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OVERSIGHT SUPPORT

- Project Management Support, such as:
  - Strategic Planning
  - Quality Assessment
  - Risk Management
  - Documentation
  - Technical Writing
  - Meeting Facilitation
  - Requirements Management
  - Capital Planning
  - Clinical Expertise

- Technical Support, such as:
  - Enterprise Architecture
  - Data Architecture
  - Change Management/Training Oversight Support
SUMMARY

• Booz Allen Hamilton is honored to support OEHRM’s efforts to improve health care for our Veterans
• Booz Allen Hamilton is proud to work as the Program Management Support contractor
• Industry partners can support OEHRM by providing technical, functional, and program management skills
HOW TO CONTACT US

For more information about how to partner with Booz Allen Hamilton, see us during the upcoming networking hour.

After today, contact us via EHRM_Partners@bah.com.

For more information about Booz Allen Hamilton, visit www.BoozAllen.com.
Question and Answer

Moderated by COL Michael “Mike” Rutkowski, OEHRM Deputy Executive Director

Participants

• Mr. John H. Windom, OEHRM Executive Director
• Dr. Laura Kroupa, OEHRM Chief Medical Officer
• Mr. John Short, OEHRM Chief Technology Integration Officer
• Mr. Travis Dalton, Cerner Government Services President
• Mr. Kevin O’Connor, Booz Allen Hamilton Vice President

For additional questions, visit/contact:

Cerner: cerner.cvent.com/VAIndustryDay
Booz Allen Hamilton: EHRM_Partners@bah.com