

**STATEMENT OF
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DEPARTMENT OF VETERANS AFFAIRS (VA)
BEFORE THE
HOUSE VETERAN'S AFFAIRS COMMITTEE, SUBCOMMITTEE ON
TECHNOLOGY MODERNIZATION
HEARING ON
ELECTRONIC HEALTH RECORD MODERNIZATION (EHRM)**

OCTOBER 26, 2021

Good morning Chairman Mrvan, Ranking Member Rosendale, and distinguished Members of the Subcommittee. Thank you for the opportunity to testify today in support of the VA's initiative to modernize its electronic health record (EHR) through the acquisition and deployment of the Cerner Millennium EHR solution.

The COVID-19 pandemic exposed global and US supply chain weaknesses and we expect the manufacturing and distribution disruptions to extend into Fiscal Year (FY) 2023. As the virus spread, overall consumer demand decreased and industrial activity, in turn, decreased due to the lower consumer demand and effects of COVID-19. With the increasing level of vaccination globally and the end of lockdowns in many nations, consumer demand increased dramatically, while supply chains continue to face big challenges, including worker shortages and limitations in access to raw materials and key components. VA is actively addressing these challenges, implementing near-term methods to ensure internal VA supply chain resiliency, including increased demand signal monitoring, identification of alternatives for preferred products, and treating medical products as enterprise assets. Effective national response requires a resilient public health supply chain, anchored in domestic manufacturing capabilities so that care and preventive measures can reach patients. Sustaining the resilience of the supply chain is critical for national security, and VA is working with the White House and Executive Branch agencies to develop and implement the actions identified in the National Strategy for a Resilient Public Health Supply Chain.

This effort is one of the most complex and transformational endeavors in the Department's history, and VA is committed, in partnership with the Department of Defense (DoD), to realizing the full promise of a modern, fully interoperable, and integrated health record to cultivate the health and well-being of Veterans. Since joining VA in July, I have focused on leading this effort and ensuring transparency with all our Congressional and other stakeholders on the progress and challenges related to our change management strategies and implementation through ongoing conversations.

I want to thank Congress and this Subcommittee for your continued support and shared commitment to Veterans. The resources you have invested in VA's EHRM effort will improve access, outcomes, and experience for Veterans. Successful deployment of a modern EHR is essential in the delivery of lifetime, world-class health care and benefits for Veterans, as well as to set the standard for U.S. health care writ large, and

we will get this right. With unified, seamless, trusted information flow between VA and DoD, we can further empower Veterans and their families, caregivers, and survivors to achieve and sustain health and wellness. In addition, we can enable care teams to deliver best-in-class access and outcomes while enhancing VA's ability to innovate and advance Veteran care and services.

When Secretary McDonough began his tenure as Secretary in February 2021, proactive engagement with Veterans, Veterans Service Organizations (VSOs), VA employees, and members of Congress revealed ongoing concerns with the project. Reports from the Government Accountability Office and Office of Inspector General reflected a range of issues, many of which were previously identified and addressed by VA (e.g. critical and high-test findings were closed prior to Go-Live). Several of the issues were reflected in the press. It troubled the Secretary that multiple stakeholders were citing a perceived lack of transparency on this project. On this basis, he directed a top-to-bottom strategic review of the EHRM program.

In July 2021, VA released the Comprehensive Lessons Learned Report from the strategic review. The findings focused on improving the Veteran experience; ensuring patient safety; providing enhanced training to our frontline employees; building confidence at VA sites; implementing organizational and program improvements; improving operational efficiencies; strengthening the efficacy of governance; and improving data management for employees and Veterans.

To recognize the efforts of our frontline employees, incorporate the wisdom and best practices known in this industry, and most importantly deliver the excellence Veterans expect from VA, we still have work to do. As noted, the strategic review illuminated a broad range of issues, including potential patient safety concerns and increased productivity losses compounded by the COVID-19 pandemic. Additionally, through interviews and feedback from Veterans, VA learned that the patient portal experience was fragmented for Veterans at the Mann-Grandstaff VAMC post-Go-Live, and clinical and interdisciplinary workflows were not tested in a manner that effectively reflected a real-world environment.

Other concerns that were affirmed included that gaps remain in governing and managing data between the two EHRs and DoD and change management and training were not effective in ensuring interdisciplinary employees understood and had adequate support in completing the key functions of their roles.

While the strategic review highlighted many challenges, it also identified opportunities to build upon, such as the standardization of clinical content developed by the national councils, which included local and national participants; this is a first for VA in moving toward standardization across the VA medical centers (VAMC). As we move forward, we are using the momentum of the strategic review to shift toward a Veteran-centered approach to continue to identify areas of opportunity, make improvements at Mann-Grandstaff VAMC, and continue with deployments to gain more experience while increasing future site readiness.

In addition to the strategic review, during my first 3 months on the job at VA, I have engaged with many of you and your colleagues in Congress, VSOs, executives at Cerner and other private users of Cerner and competitor systems, and my counterparts at the DoD. Most importantly, not a day has gone by when I have not spoken to VA staff about this program.

As I continue to learn the landscape, I have reflected on the findings of the strategic review, incorporated the principles of a high reliability organization and developed my approach to leading this program and pivoting to the future. This approach includes the following:

- First and foremost, we have established a unified, enterprise-wide governance effort—led by me as Deputy Secretary, as is required in appropriations law and given the magnitude and importance of this effort. This governance structure, as well as realignment of staff assignments, will incorporate the perspectives of key clinical, technical, acquisition, and finance leaders—thus my commitment is to receive feedback from as many VA stakeholders as possible, including those who will build the platform, use it, or be affected by it and work in concert with these stakeholders to make a better system from this day forward.
- We are shifting our strategy from a site-by-site deployment of EHRM to an enterprise-wide planning and readiness approach. This means we will deploy the program based on evidence of which VISNs and sites are most ready and lessons learned from previous deployments, therefore setting each new site up for success. We will aim to continue syncing up with DOD deployment efforts at joint sites and areas where synergies are identified.
- We are also enhancing the testing and training environment so that providers can properly evaluate and learn the system before it goes live as well as providing continued user-assistance and support after Go-Live.
- We continue to invest in upgrading our physical and information technology (IT) infrastructure to align with the future deployment schedule to maintain momentum toward deployment to all sites by FY 2028.

Mann-Grandstaff VAMC Deployment Status Update

It has been 1 year since VA's implementation of Cerner Millennium at the first Initial Operating Capability (IOC) site, the Mann-Grandstaff VAMC in Spokane, Washington, on October 24, 2020. I want to recognize the employees who balanced the demands of responding to the COVID-19 pandemic with the work of being our first site to go live with the new EHR. Their commitment to Veterans reflects the values that we as an organization uphold.

As I have learned by talking with technology experts, almost every new deployment of an EHR system has many issues, including our rollout at Mann-Grandstaff VAMC. Those issues have been discussed in prior hearings and we are working diligently with our team on the ground in Spokane to address and remediate them as promptly as possible. VA will continue to assess employee morale to ensure that appropriate support is provided through the facility, VISN, and VA Central Office leadership and staff.

VA's EHRM deployment strategy involves launching the new EHR solution at initial sites, identifying challenges and course-correcting prior to deploying across the enterprise. With this approach, VA can enhance our approach on an ongoing basis, as a learning organization, honing operational governance, identifying efficient strategies and reducing risk to the portfolio. By design, lessons learned from IOC will be applied at future sites. After Go-Live at Mann-Grandstaff VAMC, VA and Cerner aligned with the facility's leadership to facilitate optimization listening sessions and apply tiger teams to resolve an initial set of issues. To date, 146 of the 148 (98.6%) issues identified have since been resolved through training, configuration change, policy change or an enhancement request that fostered user adoption. The remaining two issues continue to be monitored by VA and require joint decisions with DoD. VA continues to prioritize user feedback to inform ongoing evolution of the product and successful rollout at future sites.

VA continues to work with Cerner to release capabilities and configuration changes, in scope of the contract, to the EHR solution at the Mann-Grandstaff VAMC to address challenges regarding people, process, and technology. To further optimize VA's deployment strategy, VA is implementing a more inclusive site readiness approach, and plans to move forward with site deployments to gain momentum and additional lessons learned. As DoD continues to roll out the Cerner EHR to their sites, VA also continues to coordinate closely with DoD to share lessons learned.

As the first VAMC to Go-Live with Cerner Millennium, Mann-Grandstaff VAMC leadership and staff have worked admirably and tirelessly to ensure Veterans are safe during the transition from the legacy VA EHR. In May of this year, in response to safety reports, a multidisciplinary team of experts led by Veterans Health Administration (VHA) patient safety professionals began reviewing potential patient safety concerns raised by Mann-Grandstaff VAMC health care teams and leadership. Potential patient safety concerns have been organized into nine domains. Organizing information into domains enables analysis, monitoring, and development of mitigation strategies. The current nine domains include: Order Management; Administration of Medication; Pharmacy; Behavioral Health Documentation and Suicide Risk Tracking; Identity; Referrals and Consults; Roles, Positions, Privileges; Ambulatory Care; and Unspecified. Education of our health care teams (people) will address knowledge gaps; monitoring clinical workflows and the integration of the EHR (process) is ongoing, and potential configuration changes to the Cerner product (technology) have been identified as VHA's OFC and OEHRM leadership work with recommendations from these teams.

Patient safety concerns are a top priority and they will continue to be closely monitored, with lessons learned applied to future deployments. Reporting and responding to potential patient safety events demonstrates an effective patient safety culture framed by high reliability organizational principles.

Moving Forward

Organizational Construct

As we pivot to the future, I have directed that we utilize a cross-functional engagement approach to address any and all shortcomings identified in the strategic review.

The most significant structure change to date is the increased engagement of VHA through the expansion of the Functional Champion and its associated team. We have expanded the Functional Champion responsibilities in the following areas:

- EHR councils, e.g., on definition and prioritization of requirements;
- Change management;
- Training;
- User role assignments; and
- Functional validation of workflows during build, test, and evaluation.

VHA will be engaged in oversight of the EHRM Councils as well as working with all stakeholders to support change management. VHA will engage facility staff in deliberate change management activities. VHA will continue to deliver a catalog of targeted engagement activities within the facility and VISN that complement the contracted Cerner trainings. Keeping with High Reliability Principles and recognizing the expertise of end users in the field, VHA is coordinating facility and VISN-based governance committees to vet and clearly articulate their functional requirements for EHR governance approval. VHA will assure that through expanded engagement of EHRM Council membership and front end users, the EHR program will remain agile and will continue to be optimized in order to meet the needs of Veterans and VA staff.

Several independent reports have provided clear recommendations on increased or modified roles and responsibilities for VHA, OEHRM and Office of Information and Technology (OIT) in the deployment process, as well as an integrated effort. This is not due to any specific failing of any component of VA, but rather a recognition that in order to advance we must realign our priorities and approach. We are enhancing collaborations and partnerships enterprise-wide within VA, namely across OEHRM, VHA, OIT, Office of Enterprise Integration, Veterans Benefits Administration, the Federal Electronic Health Record Modernization Office (a joint VA/DoD collaboration,) and the other VA offices and stakeholders in support of EHRM with my personal involvement. We are currently in the process of hiring a full-time EHRM executive-in-charge under my direct supervision who will administer and manage the day-to-day integration responsibilities for EHRM. This Executive will be responsible for overseeing

and managing the key stakeholders involved with EHRM through a collaborative process across the enterprise. This necessitates organizational changes in VA as it relates to EHRM that not only better articulate the roles and responsibilities of those involved with EHRM but reflect a more clearly defined governance structure.

In addition to our internal organizational structure, our relationships with DoD and Cerner remain critical to this effort's success. The ongoing work with DoD remains productive and positive. We will remain mindful of joint configuration management and associated interoperability objectives as we solidify our workflow efforts in support of EHR modernization. We continue to be engaged with DoD through our interactions with the Federal Electronic Health Record Modernization Office, through the formal governance of the Joint Executive Committee, and through our routine work on every level of the organization.

Cerner also remains engaged and enthusiastic in their work with us. As the prime contractor for this historic endeavor, we are encouraged by their new Chief Executive Officer and will continue to hold them accountable for their performance, while we recognize our own responsibility to provide them with all the information, access, and direction required to enable our partnership to succeed for the Veterans in our care.

Future Site Readiness

To enable a clear view of enterprise readiness for transition to the new EHR, VA will concurrently conduct enterprise-wide Current State Reviews (CSR), both technically and qualitatively, of all facilities. This strategic shift from our previous plan to complete the CSRs on a site-by-site basis will assist in establishing an evidence-based view of enterprise site readiness and inform the best deployment schedule for facilities beyond VISN 10 and VISN 20. This new approach will result in a shift from sequential site engagements, to integrated enterprise readiness and planning.

We will continue to advance IT infrastructure readiness in accordance with the identified technical requirements well in advance of the establishment of scheduled Go-Live dates and will maintain the modernized infrastructure as part of VA's drive to eliminate technical debt through our Infrastructure Readiness Program (IRP).

Readiness Checklist

VHA's OFC is working with OEHRM, field operational leaders, and Cerner to enhance an integrated readiness checklist to support medical centers and VISNs for EHRM deployment. The checklist reflects key site-specific characteristics and action areas, and it incorporates performance measures aligned to phases of VAMC preparedness. VHA is relying heavily on input and experiences from sites already preparing for deployment in order to evolve this tool. As we continue to incorporate the lessons learned with successive deployments, the integrated readiness checklist will change and improve over time resulting in tangible improvements applicable to the rest of our health care system.

VHA and OEHRM will further deploy readiness assessment criteria in coordination with clinical and administrative subject matter experts. This is to evaluate site readiness across a wide array of factors including staffing, infrastructure, clinical measures, and employee engagement. We will engage with VA facilities to address local concerns from this assessment related to these areas and support proactive resolutions prior to Go-Live.

Together with Cerner, VA deployed a readiness checklist for use at VAMCs during the Mann-Grandstaff VAMC deployment. After deployment at Mann-Grandstaff VAMC, VA incorporated lessons learned that include the broader concepts of readiness which go beyond the technological factors. With each deployment, lessons learned will be incorporated to promote successful deployment and improved outcomes for Veterans and VA.

Trainings

While Cerner has provided a baseline of training, we envision an evolution of training activities beyond Cerner functionality as well as more hands-on individual and team-based exercises that focus on broader workflows. We will evaluate and practice high risk workflows as well as day-to-day activities. The goal is to create a robust end-user experience that enables staff to be confident in their ability to safely care for Veterans at Go-Live and beyond.

Site Communications

Communication plans are in place for both facility staff and Veterans. Coordinated and targeted communication will precede scheduled activities in the implementation timeline and will continue throughout sustainment. Recognizing that the end-user experience does not end with the completion of Go-Live, VHA is developing a post-implementation communication strategy to help keep staff informed of changes to policy and the system.

A key component of the change management plan is to focus on configuration and not customization, which is consistent with EHRM's guiding principles. These critical messages will be communicated to end users via the delivery of change management activities, including training, and materials across multiple site stakeholders such as the Director of Informatics, Super Users, and Service Chiefs.

Change Management

To prepare each site for the Cerner EHR and the workflow changes that will accompany the technology, VA has engaged facility staff in deliberate change management activities. We will deliver a catalog of targeted engagement activities

within the facility and VISN that complement the contracted Cerner activities; develop a Leadership Academy that prepares facility and VISN leaders to manage the complex change of an EHR installation; and integrate on the Super User orientation program that builds the necessary competencies to support peers and escalate concerns. All change management activities are designed prepare staff for a successful transition to sustainment of the EHR and its workflows. VA is assuring broader change management in both legacy and Cerner EHR in order to close the gap between the current state and future state.

Infrastructure

VA continues to upgrade our physical and IT infrastructure to the maximum extent possible to maintain momentum. VHA, OIT, and OEHRM are sharing responsibility for facility infrastructure readiness and IT infrastructure readiness based on readiness schedules and associated risks. This information is being communicated and made available throughout the organization in order to fully inform deployment schedule decisions. Over the next 30 days, we will complete a validation of the site self-assessments performed by each VAMC in 2020. Based on these site validations, VHA will be able to forecast facility infrastructure readiness dates for each VAMC to support integrated planning efforts.

VHA engineers and facilities managers are currently managing more than 900 construction projects supporting EHRM facility infrastructure readiness improvements and previously deferred facility maintenance. VHA will have facility infrastructure projects initiated at each VAMC by November 1, 2021 to resolve deficiencies that may impact deployment and sustainment of the EHR.

VA's OIT has also instituted an IRP identifying the current state of the IT infrastructure across the enterprise and providing analysis to support a synchronized strategy with the EHRM project, refreshing and modernizing IT infrastructure assets at each of the sites well in advance of scheduled Go-Lives. The IRP is part of VA OIT's ongoing modernization effort, mitigating technical debt across the enterprise and enhancing VA's information security posture and response to vulnerabilities. These infrastructure upgrades, a collaborative effort between EHRM and OIT, are providing immediate value to the network and end-users today, addressing common core technologies such as desktops/laptops, wi-fi capabilities, telephony and network infrastructure, and preparing a site for successful EHRM modernization efforts.

Deployment Schedule

VA continues to examine the long-range future deployment schedule for the entirety of the effort, utilizing a current tentative plan to restart deployments of the EHR solution at the Chalmers P. Wylie VA Ambulatory Care Center in Columbus, Ohio, in fiscal year (FY) 2022 quarter 2 and then continue in VISNs 10 and 20. Based on the lessons learned from Mann-Grandstaff VAMC and the VISN 10 and 20 deployments, we will assess and ensure readiness for all future deployments, while aggressively working

to meet the 10-year deployment schedule. With each iterative deployment we will improve and become more efficient. We also know that each VA site has unique opportunities and challenges. While we continue to assess the overall deployment schedule, we will follow VISNs 10 and 20 with VISNs 12 and 23.

Improving Financial Controls and Cost Estimates

VA is assessing opportunities to improve how we identify and track funding within our legacy and new financial management systems. Tracking funding through our financial management systems will assist VA in ensuring funds are executed in support of EHRM deployment activities and if changes occur, accurately determine the reasons for the variances. This process will require defining the EHRM program activities across VA organizations and appropriations, to include those EHRM program activities currently funded within OEHRM's existing base appropriations in addition to those physical and IT infrastructure activities that are funded through current VHA and OIT appropriations, respectively.

VA currently is conducting a comprehensive historical review of non-OEHRM costs and resources available that will be included as part of the EHRM life cycle cost estimate. In addition, VA has contracted with the Institute of Defense Analyses to complete an independent cost estimate (ICE). Both efforts will inform which OEHRM, OIT and VHA costs should be included and reported as part of the EHRM total cost. These reviews must be completed to allow VA to provide concrete information for future reporting. We plan to complete the historic review by November 2021 and the ICE will be completed in approximately 12 months.

In examining our current position with the program post strategic review, we made a fiscally prudent determination to delay obligating funds originally slated for FY 2021 for the next tranche of sites. This created a higher-than-expected carryover to allow implementation of the recommendations from the strategic review and the shift to the CSRs to evaluate the next most ready sites for deployment. The FY 2021 carryover totaled approximately \$720.5 million. We have executed \$52.9 million of these funds in the first weeks of the new fiscal year and plan to execute the remaining FY 2021 funds in the first and second quarters of FY 2022 for the next most ready sites just in advance of the next deployment activities. The plans are predicated on the success at our next Go-Live, planned for Columbus, Ohio.

Our FY 2022 budget request for the EHRM program remains unchanged. We intend to continue investing in infrastructure readiness and preparing for the next wave of site deployments.

Closing

I again extend my gratitude to Congress for your continued support and shared commitment to serving Veterans with excellence. Because of your support, VA, in coordination with DoD and Cerner, as our primary contractor, will realize the full promise

of a modern integrated health record to cultivate the health and well-being of the Veterans in our care.

Chairman Mrvan, Ranking Member Rosendale, and Members of the Subcommittee, thank you for the opportunity to testify today to discuss our deployment of the EHR solution. I am happy to respond to any questions that you may have.