

# ELECTRONIC HEALTH RECORD

## Comprehensive Lessons Learned **Progress Update**

November 2021

**VA**



U.S. Department  
of Veterans Affairs

# Snapshot

- Introducing an EHR training environment (Sim-EHR), formerly known as the “sandbox” to better **train** and familiarize clinicians with the new EHR.
- Enhanced the **readiness checklist** and updated the EHR deployment schedule for FY22-FY24 after assessing risks and determining an optimal deployment site sequence within a VISN.
- Assessing the **Patient Portal** to identify the best approach to improve access, outcomes, and experience for Veterans seeking care and prescription refills.
- Planned a **December 2021** Safety Summit to review VA’s strategy for national/VISN/and local-level clinical and informatics collaboration.
- Addressing issues identified during the Mann-Grandstaff implementation through training, configuration changes, policy changes, or enhancement requests to improve the **Clinician and Veteran Experience**.
- Designed and implementing our new **management and governance structure** to increase collaboration and integration of subject matter expertise across VA.
- Finalized a **data strategy** that implements joint DoD/VA EHR Data Management.
- This progress update outlines the rigorous approach VA is taking to address issues and deliver a modern, fully interoperable, and integrated health record to **support optimal health and well-being of Veterans**.

## Summary

The VA Electronic Health Record (EHR) is one of the most complex and transformational endeavors in the Department’s history. EHR implementation challenges were documented in the Comprehensive Lessons Learned Report submitted to Congress following this year’s Strategic Review.

This update describes the progress that has been made toward 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.

Deploying a new EHR is a clinical and operational transformation that can be highly disruptive. Therefore, under the direction of the Deputy Secretary, VA is refining EHR governance and management structures to establish additional rigor, oversight, and collaboration. A change management strategy combined with organizational restructuring and an enhanced governance model ensures a more collaborative partnership and integration of the EHR deployments. Further details on these refinements are included in this report.

The most significant structural change to date is the increased engagement of the Veterans Health Administration (VHA) through the expansion of the Functional Champion role and its associated team. Going forward, the role of the Functional Champion will be greatly expanded to ensure appropriate and sustained clinical involvement. In addition, the Office of the Functional Champion, along with an expanded and well-trained local informatics staff, will help bridge any divides between IT, the EHR vendor, and the care delivery teams to ensure that the needs of the practicing clinicians and support staff are met.

VA remains committed to the Mann-Grandstaff implementation and leveraging the lessons we learned during Mann-Grandstaff to help us deploy the modern integrated health record system Veterans deserve. In addition, VA continues to develop the EHR long-range deployment schedule using experiential adjustments, readiness assessments, and additional information regarding life cycle costs. Our relationships with DoD and Cerner, of course, are critical to our success.

I appreciate Congress’s continued support and shared commitment to serving Veterans. Successful deployment of a modern EHR is a key component in the continued delivery of lifetime, world-class health care and benefits for Veterans. Moreover, we have an opportunity to set the standard for U.S. health care writ large. With your support, VA, in coordination with DoD and Cerner, as our primary contractor, continues to update and refine the EHR implementation process to ensure it delivers the excellence Veterans expect from VA.

**-Donald M. Remy – Deputy Secretary, Dept of Veterans Affairs**

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# EHRM Status Dashboard: Key Updates

## Improving the Veteran Experience



**Progress:** Streamlined single sign-on handoff between VA.gov and MyVA Health to reduce errors and improve Veteran use. VA launched a flagship mobile application for iOS and Android that allows Veterans to access health and benefits services in a single app and is expanding functionality to include users at Mann-Grandstaff in Spokane.

Added a provider filter to improve Veteran message reminders and restrict erroneous messaging. If a Veteran wants to send a single secure message with multiple Rx's, they can enter Rx information directly in a blank message, as is done in My HealtheVet.

**Way Forward:** Leveraging APIs to improve integration with mobile apps; legacy Rx and Direct Secure Messaging APIs to enable Veterans at EHRM sites to message providers at VistA sites and refill/renew Rx from VistA sites within MyVA Health.

## Providing Extended Training to Frontline Employees



**Progress:** Implemented an EHR training environment designed to optimize the skill of staff using Cerner EHR.

Established robust implementation and engagement strategies designed to increase skill and mastery of staff. Team exercises and Super Users were incorporated. An evaluation framework is in place to continuously assess satisfaction, effectiveness, and outcomes of training. Expanded training curriculum to support revenue cycle training, including diagnostic coding and complete documentation.

**Way Forward:** Training will incorporate lessons learned from future site visits and includes providing appropriate translational Vista-to-Cerner practices. Developing a sustainment training plan.

## Ensuring Patient Safety



**Progress:** Evaluated all patient safety issues raised during Mann-Grandstaff implementation and identified mitigations to apply in future sites. Drafted a strategy for national/VISN/and local-level clinical and informatics team collaboration on safety incident engagement.

Introducing an enhanced "Sim-EHR" environment that includes expanded team-based exercises in VISN 10 to train and familiarize clinicians with the new EHR.

Handling identity management and data migration issues through the dual EHR data management and analytics strategy.

**Way Forward:** Safety Summit scheduled for December 2021 to review safety incident engagement process.

Expand capabilities in Sim-EHR.

## Building Confidence at VA Sites



**Progress:** VA and Cerner are working together to establish leadership engagement activities that provide awareness of the complexities of transitioning to a new EHR and improve staff guidance. Site readiness decisions are made using a Readiness Checklist with metrics that include leadership, informatics, training, safety processes, high-reliability processes, and infrastructure.

**Way Forward:** Evaluate deployment success at sites using operational metrics such as access times, appointment data, prescription data, revenue collection, clinician productivity, care coordination, system/network performance, and Veteran Portal usage. Establish a centralized document repository for training and change management artifacts. Build a comprehensive communication strategy for facilities, VISNs, and VHA.

# EHRM Status Dashboard: Key Updates

## Implementing Organizational & Program Improvements



**Progress:** VA is implementing a new management structure that provides integration, improved communications, and clear roles and responsibilities for all stakeholders.

**Way Forward:** The schedule and risk management processes are under review, and improvements identified. The new governance will provide requisite oversight.

We are using a site readiness risk profile to determine sequencing of facilities within a VISN and to anticipate and be better prepared to address issues, while aggressively working to revise the full deployment schedule.

VA contracted with the Institute for Defense Analyses to prepare an independent life cycle cost estimate. Kick-off meeting was October 13, 2021. The full report is due NLT 12 months after kick-off.

## Making Governance Effective



**Progress:** Established unified governance through an EHRM Integration Council combined with existing VA governance structure. The Council will provide an integrated voice for data-driven and time-sensitive decision making to support EHRM goals and objectives. This includes integration with other priority initiatives.

Applying an enterprise integrated strategic management framework to conduct Operational Management Reviews chaired by the Deputy Secretary.

**Way Forward:** The EHRM Integration Council will approach acquisition, finance, functional, technical, and change management holistically and will make sure that all key stakeholder views are captured, increase accountability and transparency, and promote data-driven decision making.

## Improving Operational Efficiencies



**Progress:** Conducted current-state end-to-end process and workflow assessments for a comprehensive set of clinical and business domains, at sites in VISNs 10, 12, and 20. Enhanced bidirectional interface between Cerner Remedy and VA ServiceNow to include incident and change tickets. Process is in place to receive, categorize, analyze root causes, implement sustainable solutions, and prioritize with clinical inputs.

**Way Forward:** Codify an enterprise operating model with standard roles, role and team-based testing, training, and change management. Reduce redundancy at sites by streamlining user role assignment processes. Evaluate deployment success such as access times, appointment data, prescription data, revenue collection, clinician productivity, care coordination, system/network performance, and Veteran Portal usage.

## Centralizing Data Management for Frontline Workers & Veterans



**Progress:** Published a data strategy. Finalized a Common Operating Platform acquisition. Initiated a comprehensive peer review and joint data management planning via FEHRM with DoD/DHA. Developed Veteran Object Model, Business Information Model, and Patient Object Model (as a precursor to the Veteran Object). The Post Migration Data Analytics team finalized peer review of the immunization sprint, completed medication data assessment, and is finalizing peer review.

**Way Forward:** Establish Joint VA/DoD Data Governance Council to manage and oversee implementation of recommendations of data policy review.

The Joint Data Analytics Executive Advisory Council, using the joint VA/DoD Data Analytics Strategy, will create an Implementation Roadmap and set a framework to create a single authoritative instance of Veteran data.

# Implementing Organizational & Program Improvements

## Establishing effective management and program oversight to optimize cost, schedule, programmatic performance, and governance.

VA is restructuring its approach to management and governance of the EHRM program. This new direction introduces a new EHRM management structure to address previously identified organizational challenges with limited stakeholder inputs in decision making, accountability, and information sharing transparency. In addition, lessons learned from the EHR system implementation at the Mann-Grandstaff medical center indicate that cross-organizational and cross-functional coordination across technical, clinical, and program management activities is required. Furthermore, the need to foster communication, clarify roles and responsibilities for all stakeholders, and integrate dependent tasks is critical to achieving this program's outcomes for Veterans and their supporters.

The new EHRM management structure will be streamlined and supported by a revised program management approach that incorporates best practices in communication, risk management, business process, system development lifecycle management, and customer experience. In addition, VA is maturing integrated plans, strategies, and tools to ensure the inclusion of all stakeholders in EHRM execution. The new management structure will also ensure active participation in the decision-making process by all stakeholders. It will have controls in place to prevent silos that occurred in the past. When disagreements occur, the governance bodies, EHRM Integration Council; VA Operations Board (VAOB); and VA Executive Board (VAEB), will provide requisite oversight and enable collaborative decision-making. These changes will enable the successful development of VA's capabilities to achieve the full promise of a joint record between VA and DoD that enhances care and services for Servicemembers and Veterans.

Consistent with Congressional requirements and expectations, this new management structure retains the accountability and oversight of the EHRM program with the DEPSECVA. Among the critical changes in the management of the EHRM program is the establishment of a Program Executive Director (PED) for EHRM Integration. The PED shall be responsible for cross-organizational and cross-functional coordination of communication strategies, including functional, technical, and program management. In close synchronization with the Veterans Health Administration (VHA) and Office of Information and Technology (OIT), the PED will have operational control over the Office of Functional Champion (OFC), the EHRM Deputy Chief Information Officer, and the Program Management Office (PMO), all dedicated to the success of the EHRM effort. Valuable input will be provided by VHA and OIT given dedicated personnel placement within those components and engagement of unit leadership.

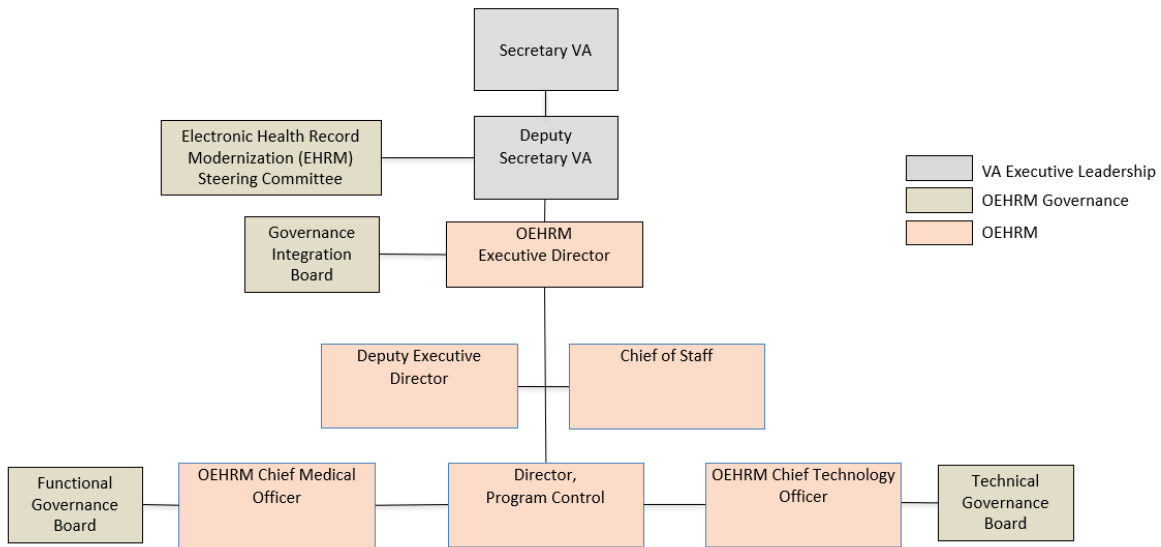
The OFC, led by an Executive Director (ED), will consolidate functions from the former OEHRM Chief Medical Officer and the functions of the VHA Functional Champion. The OFC will be responsible for coordination, integration, and oversight of all functional components of clinical and business process re-engineering, interoperability, clinical informatics, quality and patient safety, user testing, training, change management, and deployment to VA Medical Centers. The establishment of the OFC is a significant structural change for this new approach will significantly increase VHA's engagement and expand the Functional Champion role and its associated team. Additionally, the OFC will ensure appropriate clinical involvement and help bridge any divides between IT, the EHR vendor, and the care delivery teams to ensure that the needs of the practicing clinicians and support staff are met.

The EHRM Deputy Chief Information Officer (DCIO) for EHRM is a new role and will assume all technology integration functions in OEHRM. The DCIO will ensure that there is close bidirectional communication with technical staff at local sites. The PMO, led by an Executive Director (ED), will be responsible for program

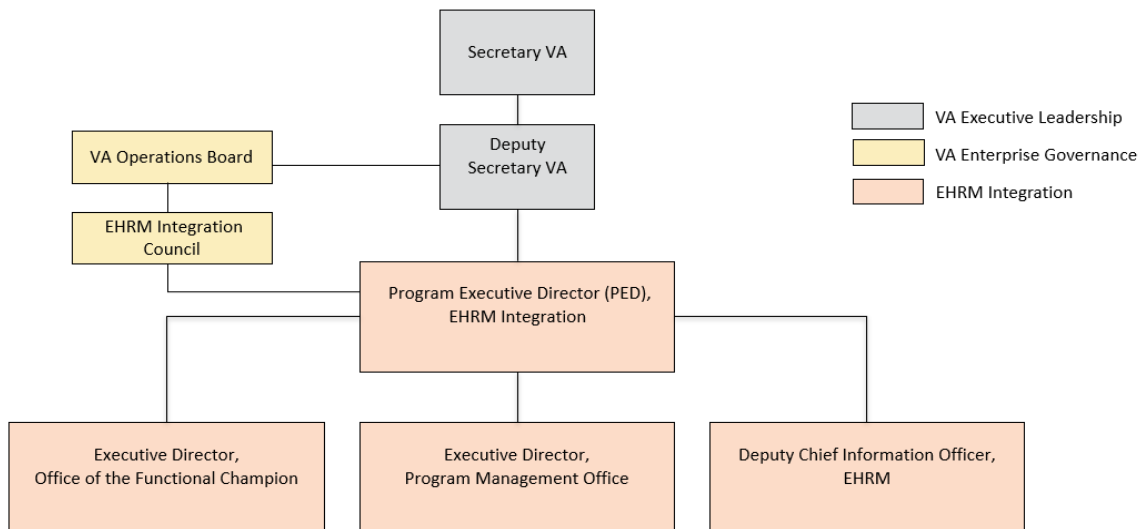
management activities, including integrated scheduling, cost estimates, contract management, and risk management.

While the OFC, DCIO, and PMO ED will report to the PED, they will seek guidance and expertise from the Under Secretary for Health and the Chief Information Officer to adhere to VHA and OIT policies. In addition, to ensure adherence to the "need for the best industry standards" in management, VA policies and processes, the PMO ED will seek concurrence and expertise on matters related to program management and contract management through the Office of Acquisition, Logistics, and Construction and with the Office of Management on budget formulation and execution, cost estimates, audits, etc.

### Current Management Structure



### Future Management Structure



# Making Governance Effective

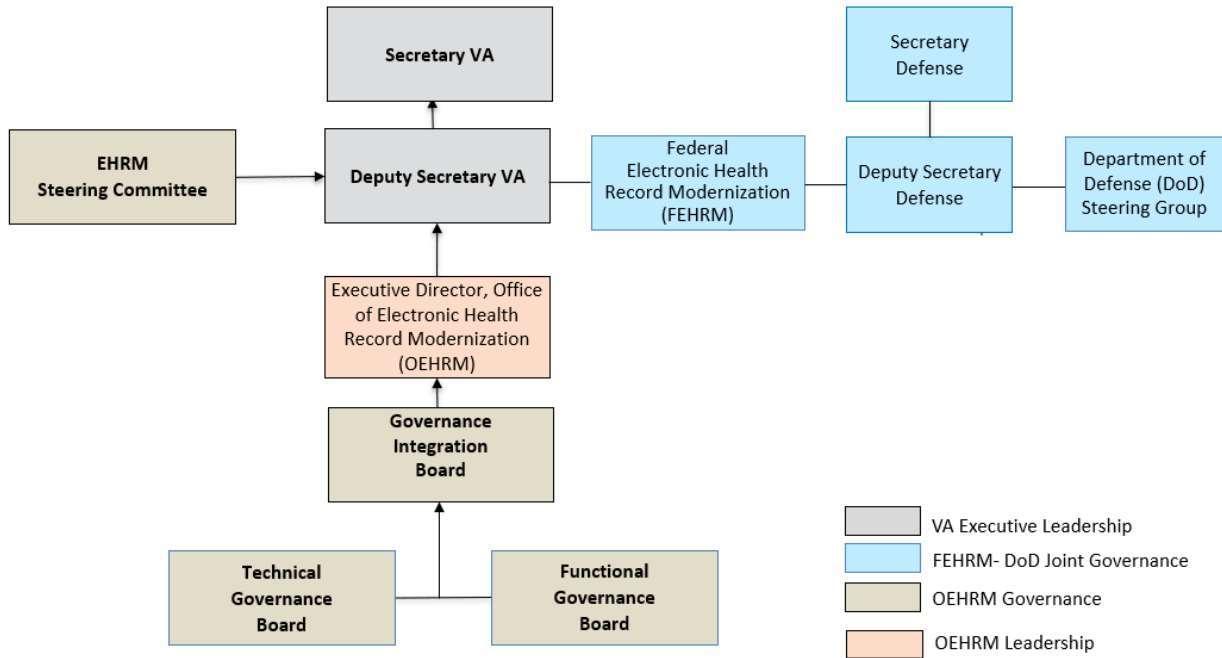
**Channeling data-driven decisions through a single governance body, incorporating stakeholder inputs and ensuring increased transparency, risk-management is rigorous and the application of good management discipline.**

During the Strategic Review, an urgent need to focus on governance emerged. Findings from the Strategic Review identified a need for greater clarity of responsibilities and empowerment of a governance structure to ensure stakeholder input and enable timely decision making. As a result, VA has prioritized resolving these issues to make EHRM's governance more effective and is establishing a new EHRM Integration Council. This Council dedicated to the EHRM effort will report to the VA Operations Board (VAOB), the Deputy Secretary, and the VA Executive Board (VAEB) chaired by the Secretary, and will ensure that all technical, health care policy, operational, and business stakeholders are included in decision-making.

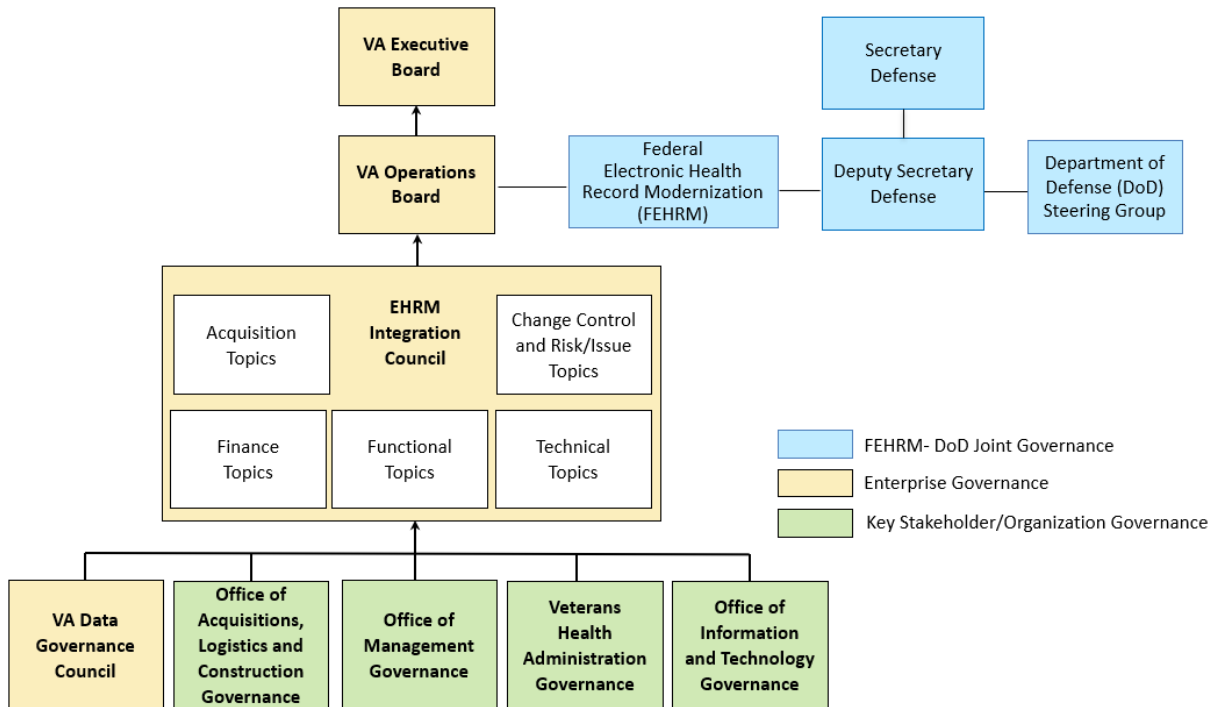
The Council, chaired by the PED, will ensure that decisions are fully coordinated and made timely while addressing the need for an operational decision layer at the enterprise level below the VAOB and VAEB. The Council will also holistically address acquisition, finance, functional, technical, and change control issues, capturing all key stakeholder views. Additionally, the Council will subsume other documented and undocumented EHRM governance structures, unifying governance and increasing transparent data-driven decision-making to ensure that decisions are communicated to end user stakeholders with a single voice. Lastly, the Council shall support synchronization and integration with other priority initiatives, such as Financial Management Business Transformation, VA Logistic Redesign, and Veteran/Employee experience.



## Current Governance Structure



## Future Governance Structure



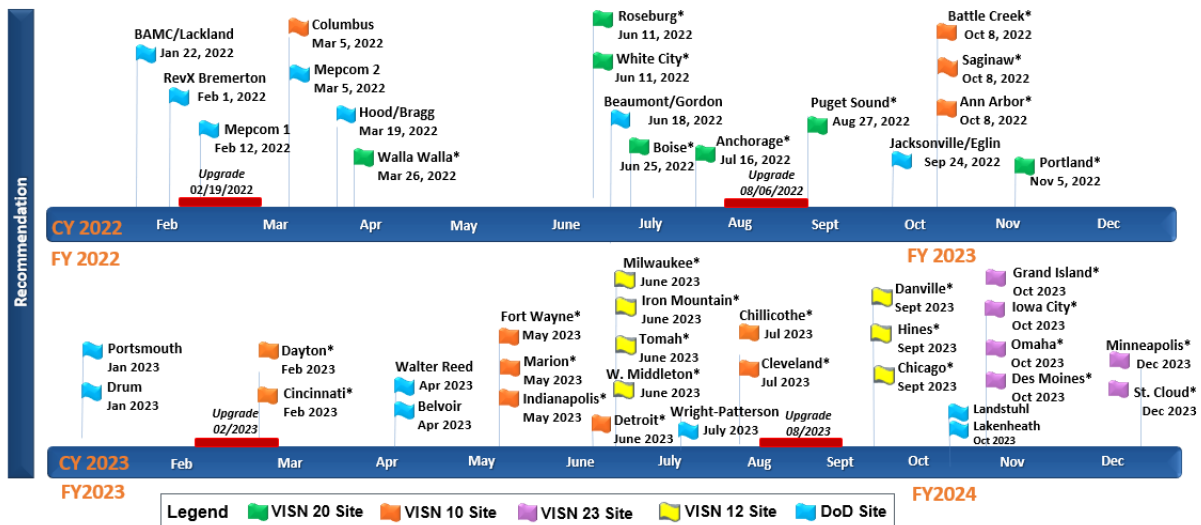
# Deployment Schedule

VA facilitated engagements between VA stakeholders and Cerner and developed a revised deployment schedule, which leverages the lessons learned from VA's initial operating capability sites and incorporates feedback from facility end-users, VISN leadership, and VHA program offices, including future sites. Pre-deployment activities are underway in VISNs 10 and 20 while preparing for future fiscal year site deployments in VISNs 12 and 23. VISN 12 includes the joint VA-DoD site in North Chicago, where coordination activities have begun.

The schedule was developed based on current information. Adjustments and/or modifications to the schedule will be made based on any additional clinical and technical findings. Therefore, the dates shown are estimates and subject to change pending Task Order Award, Authority to Proceed, and considering any potential regional COVID surges.

## FY 2022, 2023, and 2024 Timeline

### FY 2022, 2023, and 2024 Timeline (updated November 19, 2021)



\* Dates shown are estimates and subject to change pending Task Order Award and ATP, and considering any potential regional COVID surges