STATEMENT OF ACTING INSPECTOR GENERAL DAVID CASE
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BEFORE THE
US HOUSE OF REPRESENTATIVES COMMITTEE ON VETERANS' AFFAIRS
SUBCOMMITTEE ON TECHNOLOGY MODERNIZATION,
HEARING ON
"FROM RESET TO ROLLOUT: CAN THE VA EHRM PROGRAM FINALLY DELIVER?"
FEBRUARY 24, 2025

Chairman Barrett, Ranking Member Budzinski, and Subcommittee members, thank you for the opportunity to discuss the independent oversight conducted by the Office of Inspector General (OIG) regarding the development and deployment of VA's new electronic health record (EHR) system. Since April 2020, the OIG has released 22 oversight reports on VA's rollout of the new EHR system that identified critical missteps and a lack of remediation for identified failings.[1] Of the 93 recommendations issued to date, 32 have not yet been fully implemented—with eight open for more than three years. Failure to satisfactorily complete the corrective actions associated with these recommendations can increase risks to patient safety and VA's ability to provide timely, high-caliber care at the new EHR sites. Fully addressing oversight recommendations could also help minimize considerable cost escalations and delays in the upcoming deployments.[2]

The OIG recognizes the enormity and complexity of the work being carried out by the Electronic Health Record Modernization Integration Office (EHRM IO) and other VA entities to deploy the new EHR system for the millions of veterans receiving VA care. In addition, OIG staff have been engaging with VA personnel for more than five years at the main EHR deployment sites in Washington, Oregon, Ohio, Illinois, as well as other support locations, and have observed their unwavering commitment to prioritizing the care of patients while mitigating implementation challenges.

The statement that follows emphasizes the need to not only implement recommendations but sustain change by fully addressing the underlying problems identified in OIG reports. While some of these reports reflect work from several years ago, they are still relevant given their unimplemented recommendations—reflecting deficiencies that have not been remedied during the nearly two-year-long reset pause and could affect future deployments. For example, an April 2020 report is highlighted to

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[1] OIG reports may be found on the website at All Reports, with those related to just the new health record system filtered to this list of EHR reports.

[2] While the OIG follows up with VA on open recommendations every 90 days, VA program officials can submit evidence of sustained progress or the completion of corrective actions at any time to facilitate closing recommendations.

demonstrate that VA needs to do more work to ensure its facilities and leaders receive guidance and resources prior to going live to minimize impacts on VA provider and other personnel's productivity as well as veteran safety.[3] The OIG remains concerned about the unimplemented recommendations from that April 2020 report related to ongoing development and deployment operations. Additionally, while some identified problems from OIG reports have been resolved by VA, there is the risk that similar or new issues could emerge as the system is deployed at much larger, more complex medical facilities. With four facilities in Michigan anticipated to receive the new EHR system next year, VA will still need to deploy it to over 100 other VA medical facilities with hundreds of thousands of users. As the recently concluded reset has led to new and updated system functionalities, leaders must be prepared to train and retrain staff on the system and swiftly manage any consequences from these updates that result in compromised patient care and safety.

Though far from exhaustive, this testimony highlights several OIG reports with unimplemented recommendations designed to enhance patient safety and the health care that veterans receive from providers using the new EHR. Remedying these issues, particularly in appointment scheduling and pharmacy operations, is foundational to ensuring that users accept the system and VA can deliver care safely and efficiently. It also stresses the need for VA to make certain that the system is stable and can handle future growth without the kind of outages and service degradations previously experienced. Finally, it spotlights long-term open recommendations regarding the lack of a master project schedule as well as undefined infrastructure and deployment costs.

THE OIG DETERMINED UNRESOLVED SCHEDULING PACKAGE PROBLEMS MAY NEGATIVELY AFFECT PATIENT EXPERIENCES AND FUTURE DEPLOYMENTS

For many veteran patients, their first and often most frequent experience at a medical facility involves appointment scheduling. Ensuring a smooth experience with appointment scheduling is a great way for VHA to build trust with veterans, and giving its staff effective, modern scheduling software can facilitate a more efficient workforce. For those reasons, in 2021 and 2022, the OIG reported on difficulties that employees experienced when using the patient appointment scheduling package at the Mann-Grandstaff VA Medical Center in Spokane, Washington, and the VA Central Ohio Healthcare System in Columbus.[4] Among the findings were that VHA and EHRM-IO did not fully resolve known limitations in the scheduling system before and after deployment, leading to reduced effectiveness and increased risk of patient care delays. Schedulers were forced to develop work-arounds for unresolved issues and inaccurate data migrated from legacy systems. EHRM-IO leaders did not provide scheduling

[3] VA OIG, *Review of Access to Care and Capabilities During VA's Transition to a New Electronic Health Record System at the Mann-Grandstaff VA Medical Center in Spokane, Washington*, April 27, 2020. This report focused on the EHR's initial capabilities and the potential impact on patients' access to cares.

[4] VA OIG, *Care Coordination Deficiencies after the New Electronic Health Record Go-Live at the Mann-Grandstaff VA Medical Center in Spokane, Washington*, March 17, 2022; VA OIG, *New Patient Scheduling System Needs Improvement as VA Expands Its Implementation*, November 10, 2021.

staff with adequate chances to identify limitations in the new scheduling system before implementation, nor did leaders develop an efficient and transparent method of handling requests for help and complaints (trouble tickets).

While these very specific problems have been remediated, similar problems could reemerge once VA begins large-scale deployments of the system at new facilities. In 2024, the OIG alerted VA to the potential that systemic, facility-level scheduling problems may be exacerbated at larger, more complex VHA medical facilities.[5] Among the issues raised were the need for additional staffing and overtime, displaced appointment queue functionality (described below), challenges related to providers and schedulers sharing information, inaccurate patient information, difficulties changing appointment types, and the inability to automatically mail appointment reminder letters. Consequently, at future go-live facilities, assessing staffing levels and overtime usage before deployment and preparing staff with approved workflow best practices may help to reduce employee stress and facilitate successful adoption of the system.

The Displaced Appointment Queue's Issues Can Impede Rescheduling

According to a March 2024 OIG publication, schedulers using the new EHR are experiencing difficulties with what is termed "the displaced appointment queue," which at times resulted in patients not getting rescheduled.[6] That queue is used by scheduling staff to identify appointments needing to be rescheduled if a healthcare provider has a schedule change. Staff reported that the new EHR does not always route appointments to the queue and that properly routed appointments sometimes disappeared from the queue. EHRM-IO told the OIG it was aware of the defects in the operation of the displaced appointment queue and that updates in 2024 were intended to address them. EHRM-IO staff stated that medical facilities received guidance informing schedulers how to reschedule patients without using the queue and that the queue was intended as a safety net. However, the OIG reported that the defects in the operation of the displaced appointment queue made it an unreliable safety net. The OIG oversight team could not definitively identify how many patients were affected. However, because the problems were not resolved, they could be amplified at larger VHA facilities, given more staff will have more schedule changes requiring rescheduling.[7]

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[5] VA OIG, *Scheduling Challenges Within the New Electronic Health Record May Affect Future Sites*, March 21, 2024.

[6] VA OIG, *Scheduling Challenges Within the New Electronic Health Record May Affect Future Sites*.

[7] A separate issue affecting schedulers and care providers is that they cannot easily share information about appointments, such as notes explaining why an appointment was canceled, which was a function in the legacy EHR system.

Some Previously Documented Scheduling Inefficiencies and Errors Persist in Changing Appointment Types and Sending Appointment Reminders

OIG field work revealed that schedulers still face ongoing difficulties in changing appointment types, and barriers remain in automatically mailing appointment reminder letters. These deficiencies may have been exacerbated by staffs' perception that training was inadequate.

Changing Appointment Types. The OIG's 2021 scheduling report found that VHA and EHRM-IO had not resolved many of the system and process weaknesses identified by pre-implementation assessments and workshops.[8] One system weakness identified was the new EHR's inability to change the appointment type (face-to-face, VA Video Connect, or telehealth) for an existing appointment without cancelling the appointment and reordering a new appointment.[9] This process inevitably led to more burdensome work for schedulers and providers. In 2022, VHA planned on fixing this issue through a system update and was finalizing guidance for schedulers' mitigation strategies. However, in 2024, schedulers from all five new EHR facilities confirmed that they still need to cancel existing appointments and manually create new ones when changing the type of appointment. Using manual processes could have a much more significant impact at larger medical facilities.

Appointment Reminders. Another weakness the OIG previously identified in its November 2021 review was that the new EHR could not automatically send reminder letters to patients for upcoming appointments. While not required, veterans were accustomed to and relied on these letters from the legacy EHR. The letters also reduced "no shows" and missed appointments.[10] The automated mailing of reminder letters is not a function within the new EHR, and during the OIG's March 2024 review, the team determined that this system limitation still existed. In November 2023, EHRM-IO had planned to release an interface that would allow schedulers to automatically generate the letters; however, the OIG understands the interface had not been deployed as of February 2025 at the Captain James A. Lovell Federal Health Care Center in North Chicago, Illinois, following that facility's March 2024 implementation of the new EHR.

As of March 2024, facilities that continued to mail appointment reminder letters had to manually print and mail them to patients, a time-consuming process for staff. One facility with the new EHR is estimated to have manually printed and mailed nearly 195,000 reminder letters for its appointments in fiscal year 2023.[11] The three facilities using the new EHR have undertaken different solutions to address this system limitation. Some now rely instead on other methods, such as autogenerated text messages and emails or phone calls. VA should expedite the release of the interface to all medical facilities that

[8] VA OIG, *New Patient Scheduling System Needs Improvement as VA Expands Its Implementation*.
[9] VA OIG, *Scheduling Challenges Within the New Electronic Health Record May Affect Future Sites*.
[10] VA OIG, *New Patient Scheduling System Needs Improvement as VA Expands Its Implementation*.
[11] VA OIG, *Scheduling Challenges Within the New Electronic Health Record May Affect Future Sites*.

are or will use the new EHR for those facilities wishing to continue mail reminders, whether alone or in addition to other options.

Training. The OIG team in March 2024 also identified issues with schedulers feeling that training provided by Oracle Health was inadequate.[12] Some schedulers at new EHR sites rely on their own local practices and guidance to supplement that given by Oracle Health, and VA has provided facilities feedback on the supplemental training. However, some of the facilities' locally developed work-arounds do not adhere to VA's approved scheduling workflow processes, which can contradict VA processes meant to standardize scheduling processes.

The New EHR's Scheduling Errors May Have Contributed to a Patient Death

The OIG confirmed in a March 2024 report that a system error in the new EHR resulted in staff's failure to complete the minimally required scheduling efforts following a patient's missed mental health appointment.[13] While a letter was sent and calls were made on the day of the missed appointment, staff did not complete the telephone calls on separate days as directed. The OIG found that the patient's missed appointment, although updated in the new EHR to no-show status, was not routed to a "request queue." As a result, schedulers were not prompted by the system to conduct the mandated rescheduling efforts meant to maximize opportunities to engage patients and not let them slip through the cracks. The OIG concluded that the lack of follow-up contact may have contributed to the patient's disengagement from mental health treatment and, ultimately, the patient's substance use relapse and death.

On a larger scale, the OIG found that VHA was requiring mental health staff at new EHR sites to make fewer attempts to contact no-show patients than at legacy EHR sites. The standard operating procedure for minimum scheduling efforts establishes a different standard of care based on which EHR system is in use at a facility, which could result in disparities affecting veterans' access to care. Scheduling is a foundational element of any system that is designed to provide patients with timely access to quality care. Yet the recommendation to the then deputy secretary to monitor the new EHR's scheduling functionality, as well as the recommendation directed to the then under secretary for health to evaluate minimum scheduling effort requirements, are not yet fully implemented. In sum, the new EHR's operation does not comply with VHA's appointment scheduling policy.

THE NEW EHR HAS LONGSTANDING, UNRESOLVED PHARMACY-RELATED PATIENT SAFETY ISSUES

In May 2021, after VA's first deployment of the new EHR at the Mann-Grandstaff VA Medical Center, a pharmacy patient safety team under the VA National Center for Patient Safety (NCPS) identified pharmacy-related patient safety issues and staff concerns regarding the system's usability. For example,

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[12] VA OIG, Scheduling Challenges Within the New Electronic Health Record May Affect Future Sites.

[13] VA OIG, *Scheduling Error of the New Electronic Health Record and Inadequate Mental Health Care at the VA Central Ohio Healthcare System in Columbus Contributed to a Patient Death*, March 21, 2024.

updates to a patient's active medication list were not routinely reflected at the patient's next appointment. The OIG found that, despite being aware of users' ongoing challenges in 2021, VA leaders elected to deploy the new EHR at four more VA medical centers.[14] Following subsequent deployment of the new EHR in April 2022 (more than a year later) at the VA Central Ohio Healthcare System in Columbus, the OIG determined that patient safety and usability issues identified by NCPS were still a factor in many of Columbus's pharmacy-related patient safety incident reports.[15] Although Oracle Health and VA have since resolved some of those issues, the OIG remains concerned, as described below, that the new EHR will continue to be deployed at larger, more complex medical facilities before resolving myriad known issues that remain related to prescribing medications and medication safety.[16]

Software Coding Errors Created Patient Safety Issues

EHR information is communicated between VHA facilities through different channels, including the Joint Longitudinal Viewer (JLV) and the Health Data Repository (HDR).[17] For patients who receive care at a legacy-EHR medical facility, the JLV application allows healthcare providers to access a "read only" version of a patient's medical record from both the legacy EHR, Veterans Health Information Systems and Technology Architecture (VistA), and the new EHR.[18] The HDR is a database that stores patients' clinical information, including medications and allergies, creating a common repository of information from both VistA and the new EHR.[19] Every medication used in VHA is assigned a distinct number, a VA Unique Identifier (VUID). The accuracy and completeness of VUIDs and medication allergy information contained in these systems is critical to supporting individual patient treatment decisions.

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[14] VA OIG, *Electronic Health Record Modernization Caused Pharmacy-Related Patient Safety Issues Nationally and at the VA Central Ohio Healthcare System in Columbus*, March 21, 2024.

[15] VA OIG, *Electronic Health Record Modernization Caused Pharmacy-Related Patient Safety Issues Nationally and at the VA Central Ohio Healthcare System in Columbus*.

[16] Oracle acquired Cerner in June 2022, changing the name of the entity to Oracle Cerner and again to Oracle Health. The statement uses Oracle Health for readability, while some events occurred under prior business names.

[17] JLV is a read-only web-based application for viewing patient electronic health records from VA and community partners through a customizable interface. JLV plays an important role in VA's transition to the new EHR, as it allows users to see EHR data at other sites regardless of the system in place. Because veterans are eligible to receive health care at any VA facility, providers at all facilities need accurate medication information. When a patient is prescribed a medication at a new EHR site, that medication's unique identifier is sent to the HDR. If that same patient seeks care from a facility provider using the old system, and this provider enters a medication order, a system software interface from the old system accesses the medication's VA Unique Identifier from the HDR database to perform a safety check. This process, which relies on the accuracy of the information in the HDR, verifies the medication being prescribed is safe and compatible with any medications and allergies previously documented in the patient's record.

[18] The OIG uses the term "legacy EHR" to refer to Veterans Health Information Systems and Technology Architecture (VistA), the system used prior to the Oracle Health EHR product.

[19] Va.gov, *VistA Monograph*, July 18, 2023. The VA Health Data Repository (HDR) is "a national, clinical data storehouse that supports integrated, computable and/or viewable access to the patient's longitudinal health record."

A 2024 OIG report affirmed that an error in Oracle Health's software coding resulted in the widespread transmission of incorrect VUIDs from new EHR sites to legacy EHR sites.[20] The OIG learned these unique identifiers became inaccurate during their transmission to the HDR when fills for certain prescriptions were processed through the VHA's Consolidated Mail Outpatient Pharmacy (referred to as the mail order pharmacy).[21] In short, this error, now rectified, created the potential for medication-related patient safety issues for patients from any new EHR site who also received care at a legacy EHR site.

Medication-Related Data Transmission Issues Pose Threats to Patient Safety

The OIG learned that research into the cause of the VUID error led to the discovery of other problems associated with the transmission of medication and allergy information from the new EHR to the HDR. On June 15, 2023, the NCPS alerted VHA staff to data transmission issues and errors, including missing, duplicate, or incorrect medication and allergy information being transmitted. The consequences of inaccurate medication information transmission to the HDR include

- patients' medications that have been discontinued or stopped by new EHR-site providers appear in the legacy EHR as active and current prescriptions;
- allergy warning messages not appearing when intended or inappropriately appearing for the wrong medication;
- duplicate medication order checks not appearing when intended or inappropriately appearing for the wrong drug; and
- patients' active medication lists having incomplete or inaccurate information, such as missing prescriptions, duplicate prescriptions, or incorrect medication order statuses.

VHA staff were told to remain aware that legacy EHR sites may have inaccurate medication information for patients treated at both legacy and new EHR sites. An EHRM-IO data leader told the OIG that EHRM-IO and Oracle Health's original testing focused on data transmission from the new EHR to the HDR, but no entity verified the data's accuracy when accessed by legacy EHR users. Within the June 15 NCPS patient safety alert, a series of mitigations were described to be employed by frontline clinical staff at all legacy EHR sites and required that all legacy EHR site leaders have medical providers perform these multistep manual medication safety checks when prescribing new drugs for all

[20] VA OIG, Electronic Health Record Modernization Caused Pharmacy-Related Patient Safety Issues Nationally and at the VA Central Ohio Healthcare System in Columbus.

[21] The Consolidated Mail Outpatient Pharmacy is a centralized automated pharmacy system comprised of seven pharmacies that provide mail order medications to VHA patients. The OIG did not find any errors on the part of mail order pharmacy staff or operations, and patients received their correct medications.

patients who had received care at a new EHR site at any time. These manual safety checks are complex, time-consuming, and rely on the vigilance of patients, pharmacists, and frontline staff.

Further, at the time of the June 15 notice, VHA could not determine which patients were at risk of a patient safety event from the data transmission errors, and therefore determined that all patients who had been prescribed any medications at a new EHR site or had medication allergies documented at a new EHR site were "at risk." Per VHA data, as of September 2023, approximately 190,000 patients had a medication prescribed and 126,000 patients had an allergy documented at a new EHR site. Approximately 68,000 patients were in both groups, totaling about 250,000 unique patients.[22] In response to an OIG recommendation, VHA has notified all patients affected by inaccurate medication data transmitted to the HDR and informed them of the potential risk of harm due to possible inaccuracies of their medication and allergy information within the new EHR. However, patients have been advised to bring their medications to each VHA visit so their providers have an accurate inventory of current medications.

Despite these efforts, the OIG remains concerned that patients served by a new EHR site who also receive care at a legacy EHR site may still be prescribed contraindicated medications and that healthcare providers at legacy sites are making clinical decisions based on inaccurate data. For example, during the review of the HDR issues described above, the OIG learned of a new EHR site patient with posttraumatic stress disorder and traumatic brain injury with adrenal insufficiency whose care was negatively influenced by inaccurate medication data transfer from their new EHR site to the HDR, contributing to the patient not being prescribed a critical lifesaving therapy on admission to a residential rehabilitation treatment program at a legacy EHR site.[23] The legacy EHR site pharmacist's data from the prescribing new EHR site did not include the patient's most recent prednisone prescription. The patient realized they needed prednisone after they began exhibiting unusual behaviors, but the nurse said there was no prednisone on the patient's medication list. Eventually, the patient was transferred to a local emergency room for care and prednisone treatment was re-initiated. This example shows the difficulty with completing numerous, accurate manual reconciliations, particularly for patients with impaired cognition.

The OIG continues to review VHA's efforts to comply with the recommendation that they ensure legacy-site-EHR providers are aware of mitigations needed for patients previously treated at a new EHR site, as well as their efforts to monitor compliance with those mitigations.

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[22] VA OIG, Electronic Health Record Modernization Caused Pharmacy-Related Patient Safety Issues Nationally and at the VA Central Ohio Healthcare System in Columbus. The data represent the most recent update received by OIG from VHA of the number of unique patients who have had any medication prescribed or any allergy documented at a new EHR through September 29, 2023.

[23] VA OIG, Electronic Health Record Modernization Caused Pharmacy-Related Patient Safety Issues Nationally and at the VA Central Ohio Healthcare System in Columbus.

The New EHR's Negative Effect on VHA Pharmacy Staff

The OIG determined that Columbus's chief of pharmacy prepared for challenges during the system transition, such as the pharmacy staff's increased workload due to the new EHR's operational inefficiencies. One mitigation was to hire nine full-time clinical pharmacists, which represented a 62 percent staffing increase, in order to reduce the backlog and maintain timely prescription processing needs following the April 2022 deployment.[24]

A VHA leader stated that challenges with the new EHR's usability also led to the creation of dozens of national and facility-level work-arounds and educational materials for pharmacy personnel. Facility pharmacy leaders also developed approximately 25 educational materials, such as tip sheets, reference guides, and job aids, to further support Columbus pharmacy staff. The OIG is concerned that the continued use of numerous work-arounds and educational materials is overwhelming for pharmacy staff to implement and may give rise to inconsistent practices, which increase risks to patient safety. In addition, the new EHR's usability issues contributed to staff stress about making errors that could result in patient harm—concerns linked to pharmacy staff burnout, low morale, and decreased job satisfaction. The OIG found that following implementation of the new EHR, burnout symptoms for pharmacy staff increased and the Best Places to Work score for pharmacy staff decreased from the previous fiscal year.[25] VHA pharmacy and patient safety leaders told the OIG of a need for increased staff vigilance to avoid patient harm. OIG oversight personnel believe this increased vigilance is unsustainable by pharmacists and staff responsible for clinical decision-making and may lead to increases in burnout and medication-related patient safety events.

The OIG's recommendations from this March 2024 report to ensure pharmacist staffing levels are addressed and to evaluate and remediate the various technical and functional issues resulting from all these work-arounds remain open as of February 20, 2025.

MAJOR PERFORMANCE INCIDENTS MAY HINDER USER ADOPTION AND TIMELY, COST-EFFICIENT FUTURE DEPLOYMENTS

While the above reports describe the impacts of failings with the system's programming and functions, the OIG is also concerned that the contract between VA and Oracle Health and VA procedures do not have sufficient controls to prevent, respond to, and mitigate the impact of major performance incidents affecting the new EHR.[26] Since 2020, the system experienced hundreds of major performance incidents

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[24] VA OIG, *Electronic Health Record Modernization Caused Pharmacy-Related Patient Safety Issues Nationally and at the VA Central Ohio Healthcare System in Columbus*.

[25] The OIG compared 2021 and 2022 facility All Employee Survey (AES) results. A Columbus leader informed the OIG that VA launched the 2022 AES on June 6, 2022, 37 days after the new EHR's implementation at the facility. "Best Places to Work" is a summary measure produced by the Partnership for Public Service and is a weighted average of job and organization satisfaction and likelihood to recommend VA as a good place to work.

[26] VA OIG, *VA Needs to Strengthen Controls to Address Electronic Health Record System Major Performance Incidents*, September 23, 2024.

affecting the medical facilities where the system was initially deployed. VA lacked adequate controls to prevent system changes from causing major incidents, to respond to those incidents uniformly and thoroughly, or to mitigate their impact by providing standard procedures for outages and interoperable downtime equipment. Further, although major performance incidents can delay care to veterans, VA had no formal process to link reports of these delays to these incidents. Ultimately, the weak controls for handling major incidents stemmed from the original May 2018 contract.

In May 2023, VA modified the contract with Oracle Health to strengthen some requirements for addressing major incidents, but more work is needed. These new requirements include a metric that outlines monthly target percentages for the system to be free of incidents other than outages, an increase in the target monthly uptime for the system, and strengthened requirements for financial credits when problems have not resolved within established time frames. Reliable system performance and preventing incidents from happening were some of VA's primary reset goals.

The OIG made nine recommendations, including for real-time data-sharing related to potential problems in system operations, prioritizing major performance incident response in a clear and consistent manner, developing and enforcing response and other performance metrics to hold the contractor accountable, requiring sufficient detail in post-resolution reports, raising staff awareness of procedures, acquiring appropriate backup systems for downtime, and better identifying and addressing major performance incidents linked to negative patient outcomes. The nine recommendations are currently open, and the OIG has begun the follow-up process to assess VA's progress in implementation.

Although the OIG recognizes VA's improving system reliability, there are still incidents occurring every month. Separate from these requirements, in August 2023, VA contracted with Oracle Health to obtain a downtime viewer to provide an additional tool for clinicians when the system is unavailable. Still, VA has opportunities to make future contract changes that could help improve its management of major incidents. Oracle Health could share real-time EHR incident data to provide VA with greater awareness and enable quicker oversight action. Detailed incident reporting would also help VA determine root causes and prevent similar incidents from occurring. This is particularly important as the new EHR system may be stressed by deployment in larger and more complex medical facilities. Indeed, the planned 2026 deployments in Michigan will include, for the first time, simultaneous deployments to complexity level 1 facilities.[27]

INCOMPLETE INFRASTRUCTURE ASSESSMENTS AND COST ESTIMATES CANNOT BE REMEDIED WITHOUT A RELIABLE, HIGH-QUALITY PROJECT SCHEDULE

The OIG's oversight, which began before the system's initial deployment at the Mann-Grandstaff VA Medical Center, focused on the condition of VA's physical and information technology (IT) infrastructure before system deployment. Two 2021 reports (published in May and July) resulted from

[27] VA, Diffusion Marketplace, accessed February 18, 2025.

audits that examined cost estimates for needed physical and IT-related infrastructure upgrades nationwide. For the new EHR system to operate as intended, VHA facilities need these infrastructure upgrades, but they are generally funded from different sources. Because the life-cycle cost estimates for infrastructure upgrades did not account for costs from all VA components' budgets, some estimated costs were not included in mandated reports to Congress from 2018 and 2020.[28] Transparent and reliable cost estimates are critical for Congress to make informed budgeting decisions. VA senior leaders also depend on these cost estimates to plan program budgets, approve acquisitions, and monitor program execution. The OIG determined that both the existing physical and IT infrastructures were inadequate for the new system at initial deployment sites. Pertinent life-cycle cost estimates for infrastructure upgrades were also unreliable and likely underreported by approximately $5 billion. However, these cost estimates will not be reliable if VA does not develop and maintain an integrated master schedule projecting the detailed activities needed to bring the new EHR to its facilities.

VA Has Not Developed a Reliable Schedule Enabling Deployment Planning

The OIG's 2022 audit of the EHRM program's master schedule found VA lacked a reliable integrated master schedule consistent with their adopted scheduling standards, which increased the risk of missing milestones and delaying the delivery of the system.[29] At the time of publication, the OIG estimated that schedule delays could result in about $1.95 billion in cost overruns per year and would undermine VA's other modernization efforts on supply chain and financial management systems. Given various inflationary pressures and the two-year pause on deployments, that figure may understate the impact of cost overruns.

To implement the program successfully within any proposed time frame, it is imperative that VA develop a reliable integrated master schedule. GAO guidance, which the EHRM program office adopted in its internal plans, states that a high-quality, reliable schedule should be comprehensive, credible, well-constructed, and controlled.[30] This schedule is designed to cover the entire required scope of work needed to successfully complete the program from start to finish, including both government and contractor work. It is intended to provide VA personnel with a road map to completion, track progress, help identify potential problems and track their resolutions, and promote accountability for assigned tasks. Further, it will help determine more precisely the sum of financial resources Congress must provide for project completion.

Simply put, VA never completed a baseline schedule or an overall schedule that fully integrated individual portions of the project. The audit team found known tasks were not reflected on schedules

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[28] VA OIG, *Deficiencies in Reporting Reliable Physical Infrastructure Cost Estimates for the Electronic Health Record Modernization Program*, May 25, 2021.

[29] VA OIG, *The Electronic Health Record Modernization Program Did Not Fully Meet the Standards for a High-Quality, Reliable Schedule*, April 25, 2022.

[30] GAO, Schedule Assessment Guide, GAO-16-89G, December 2015.

and longer-term actions had not been scheduled. Given the approach VA was using in planning when the OIG completed this audit, VA would not have a high-quality, reliable integrated master schedule until it starts deploying the system to the very last facilities. While there may be precise scheduling items for a facility that are not set until closer to the actual deployment, there are many tasks and interdependencies that VA can plan for currently.

Moreover, VA could not have relied upon any scheduling effort it had conducted, since it did not engage in a risk analysis, which shows how events would impact the likelihood the schedule could be met. Given VA's announced intention to deploy the new EHR to larger facilities next year, it must have contingency plans given that VA has experienced numerous unexpected problems with the new EHR's functionality and sustained drops in productivity requiring ongoing, resource-intensive mitigations at new EHR sites.

Four of the OIG's six recommendations to EHRM-IO remain open. At the time of this hearing, VA has not yet complied with internal guidance by developing an integrated master schedule that meets standards and makes certain that activities from all relevant VA entities are included in the schedule. The department has also failed to implement procedures for performing schedule risk analyses and make contract language and program office plans (or other guidance) consistent to confirm the appropriate individual is responsible for developing and maintaining the integrated master schedule.

The two reports on physical and IT infrastructure recommended that VA obtain an independent cost estimate for the EHR program's life-cycle costs, which VA received from the Institute for Defense Analyses. In September 2022, the Institute reported a cycle cost estimate of $49.8 billion, including $32.7 billion for a 13-year implementation phase (including a three-year schedule adjustment reflecting the low likelihood the new EHR would be deployed system-wide on schedule), and the rest for sustainment.[31] While the OIG has now closed those recommendations related to obtaining the estimate, VA's stakeholders should recognize that the Institute's cost estimates are not likely to still be reliable given the delays and system changes of the intervening years. Additionally, the Institute itself acknowledged that its estimate did not have a high degree of certainty given the many risks and uncertainties in the deployment schedule.

Deficiencies in Reporting Reliable Physical Infrastructure Cost Estimates for the EHRM Program

This audit examined whether VHA's cost estimates met VA standards and were comprehensive, well documented, accurate, and credible, and whether they were reported to Congress. Some VHA medical facilities may require significant physical infrastructure upgrades, such as electrical work, cabling, heating, ventilation, and cooling to successfully deploy the new EHR system.

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[31] GAO, *ELECTRONIC HEALTH RECORD MODERNIZATION: VA Needs to Address Change Management Challenges, User Satisfaction, and System Issues*, March 15, 2023.

VHA and the then Office of Electronic Health Record Management (OEHRM) shared responsibilities for estimating and reporting physical infrastructure upgrade costs.[32] VHA developed the physical infrastructure upgrade cost estimates, while OEHRM was responsible for reporting all program life-cycle cost estimates to Congress in accordance with the Veterans Benefits and Transition Act of 2018.[33] It required quarterly reporting on the EHRM program's status, including annual and life-cycle cost estimates and defined the program as any activities to procure or implement the new EHR system. In early 2019, VA's Office of General Counsel determined that physical infrastructure upgrades must be funded from accounts specifically available for construction-type purposes, such as VHA's nonrecurring maintenance and minor construction funds. Given the pause of the program for the last two years and the lack of a more specific deployment schedule, VA has not yet produced evidence of sufficient progress to close the OIG recommendation that VA disclose accurate costs for physical infrastructure upgrades in program life-cycle cost estimates to Congress.

The EHRM Program Did Not Have Reliable IT Infrastructure Cost Estimates

In 2021, VA estimated the total program cost of $16.1 billion would include $4.3 billion in IT infrastructure upgrades.[34] Like the work on physical infrastructure, the related IT infrastructure audit examined whether OEHRM-developed cost estimates from 2018 and 2020 were well-documented, comprehensive, credible, and accurate, and whether OEHRM reported to Congress all IT infrastructure upgrade costs, including future technology updates. The audit team found VA did not include costs for critical program-related IT infrastructure upgrades in the estimates reported to Congress during that period, effectively underreporting program cost estimates by nearly $2.5 billion for IT infrastructure upgrades that VA's Office of Information and Technology (OIT) and VHA were expected to fund.[35] Also like the physical infrastructure costs, OEHRM officials stated they felt the omitted costs were outside their scope of responsibility, but neither OIT nor VHA reported these costs to Congress, despite VA and Government Accountability Office (GAO) guidance requiring life-cycle cost estimates to include all costs, regardless of source. The costs should have been disclosed by OEHRM. VA did make changes to projected costs starting in the November 2021 report to Congress, but because VA was still developing the independent cost estimate, there was no certainty the updates were reliable. Without all critical IT infrastructure upgrade costs accurately presented, Congress lacks the comprehensive picture of total program costs needed to make informed oversight and investment decisions. Subsequently,

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[32] In 2021, VA transitioned EHRM program management from the Office of Electronic Health Record Modernization (OEHRM) to the EHRM Integration Office (EHRM IO). EHRM IO has responsibility for all recommendations originally assigned to OEHRM.

[33] Public Law 115-407.

[34] VA OIG, *Unreliable Information Technology Infrastructure Cost Estimates for the Electronic Health Record Modernization Program*, July 7, 2021.

[35] OIT is expected to fund some upgrades for the local area network, end-user devices, phones, and Wi-Fi, while VHA is expected to fund upgrades mostly for medical devices.

based on the OIG's audit, VA's reporting requirements were updated by the VA Electronic Health Record Transparency Act of 2021.[36] As of February 21, 2025, the recommendations ensuring that (1) cost estimates align with VA policy, (2) VA maintains full and complete cost accounting, and (3) complete and updated costs are conveyed transparently to Congress remain open because VA has not been able to identify all of the program's costs.

Facility and Staff Deployment Support Have Unidentified Costs and Risks That May Continue in Future Deployments

Each VA medical facility that has deployed the new EHR has experienced sustained drops in productivity and throughput.[37] According to VA, its facilities have used strategies like temporary staffing, increased use of community care, and finding efficiencies in operations.[38] The challenges associated with mitigating the productivity drops at facilities during the training periods and after deployment will be magnified at the larger, more complex deployments in 2026. In April 2020, before the first deployment, the OIG called on VA to evaluate the impact on productivity during a deployment and provide facility leaders with operational guidance and required resources.[39] The recommendation remains open, as VA has not yet made sufficient progress on this effort. The same is true of the OIG's recommendation that VA minimize the number of mitigation strategies that facility staff must employ to deal with decreased capabilities during the deployment. Increased hiring efforts, temporary staff, and community care utilization all have significant financial impacts that VHA facilities must navigate. As discussed previously, the number of additional pharmacy staff handling manual pharmacy operations at new EHR sites has increased VA's payroll. There is likely to be an even greater financial impact as VA may need to hire thousands of employees to mitigate the drops of productivity at future deployment sites. Without having finalized plans to deal with these issues, VA cannot reasonably estimate deployment costs in addition to physical and IT infrastructure needs.

Other OIG reports have discussed issues impacting user acceptance of the system from inadequate or insufficient training on the new EHR to concerns with the process for resolving problems and requesting assistance through "tickets."[40] These challenges impaired the ability of contractor support staff to address end users' problems, led to end users' disengagement, and increased patient safety risks. The

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[36] Public Law 117-154.

[37] VA OIG, *Electronic Health Record Modernization Caused Pharmacy-Related Patient Safety Issues Nationally and at the VA Central Ohio Healthcare System in Columbus*.

[38] VA OIG, *Review of Access to Care and Capabilities During VA's Transition to a New Electronic Health Record System at the Mann-Grandstaff VA Medical Center in Spokane, Washington.*

[39] VA OIG, *Review of Access to Care and Capabilities During VA's Transition to a New Electronic Health Record System at the Mann-Grandstaff VA Medical Center in Spokane, Washington.*

[40] VA OIG, *Ticket Process Concerns and Underlying Factors Contributing to Deficiencies after the New Electronic Health Record Go-Live at the Mann-Grandstaff VA Medical Center in Spokane, Washington*, March 17, 2022; VA OIG, *Training Deficiencies with VA's New Electronic Health Record System at the Mann-Grandstaff VA Medical Center in Spokane, Washington,* July 8, 2021.

OIG generally found that EHR usability problems, training deficits, interoperability, the need for post-go-live fixes and refinements, and problem-resolution process challenges complicated VHA providers' work. While these specific issues have been resolved, VA should be sure it carefully monitors these points during future deployments. Further, as the reset has led to new and updated system functionality, leaders must be prepared to swiftly manage any consequences from these updates that result in compromised patient care and safety. As the changes employed during the reset are made to the entire new EHR system, this increased alertness is vital not only at newly deploying sites but at all sites that have deployed the new EHR to date.

CONCLUSION

The OIG will continue to conduct rigorous oversight of VA's efforts as it restarts deployments of the new EHR system with a keen focus on patient care and safety, VA staff's ability to efficiently do their jobs, and making the most effective use of taxpayer dollars. The OIG is committed to providing impactful and practical recommendations that flow from its oversight work to help VA efficiently deploy the new EHR in a manner that improves veterans' safety, care, and experiences. As our reports and testimonies over the last five years demonstrate, the OIG has identified significant, unresolved deficiencies that have thwarted progress on the new EHR and have contributed to patient harms.

It is incumbent on EHRM-IO, VHA and facility leaders, VA leaders, and Oracle Health to ensure they are providing full transparency in their communications with the veteran community, frontline VA staff, and Congress. Effective program management is critical to the successful deployment of the new EHR. Accountability established through clear roles and responsibilities, meaningful metrics, and close oversight with transparent reporting and swift remediation of any identified issues will all need to be firmly integrated into future efforts. Failures in any of these areas chance cascading problems that put patients at risk, make it more difficult for VA personnel to do their jobs, and perpetuate cost overruns and delays. Chairman Barrett, this concludes my statement. I would be happy to answer any questions you or other members may have.