# STATEMENT OF MR. KURT DELBENE ASSISTANT SECRETARY/CHIEF INFORMATION OFFICER OFFICE OF INFORMATION AND TECHNOLOGY DEPARTMENT OF VETERANS AFFAIRS (VA) BEFORE THE

## COMMITTEE ON VETERANS' AFFAIRS SUBCOMMITTEE ON TECHNOLOGY MODERNIZATION U.S. HOUSE OF REPRESENTATIVES

### "ELECTRONIC HEALTH RECORD MODERNIZATION DEEP DIVE: SYSTEM UPTIME"

#### **WEDNESDAY, NOVEMBER 15, 2023**

Good afternoon, Chairman Rosendale, Ranking Member Cherfilus-McCormick and distinguished Members of the Committee. Thank you for the opportunity to testify today in support of VA's initiative to modernize its electronic health record (EHR) system. I am accompanied by Ms. Laura Prietula, Deputy Chief Information Officer, Electronic Health Record Modernization-Integration Office.

I want to begin by thanking Congress and this Committee for your continued support and your shared commitment to Veterans and, more specifically, for your support of VA's EHR modernization efforts. For VA, the successful deployment of the Federal EHR system will facilitate seamless health care transitions for Service members and Veterans across health care settings. The Federal EHR will provide an accurate, lifetime health record for Veterans among partners using the Federal EHR. For the newest members of the military, this EHR will serve them from the day they begin their military service through the rest of their lives.

The new Federal EHR system integrates with other health information technologies and will ultimately simplify the experience for Veterans and for VA staff, enhance standardization across the VA enterprise, and improve VA and the Department of Defense's (DoD) interoperability with the rest of the United States health care system. Moreover, the adoption of a product used by VA and DoD will help to simplify health care delivery by providers in both Departments, benefitting patients who receive care in both systems or who are transitioning from DoD to VA for care. It will also enable VA to deliver and optimize a unified and seamless trusted information flow between VA, DoD, the U.S. Coast Guard and community providers.

Since the initial go-lives of the Federal EHR in VA, we have been listening to Veterans and clinicians, and it is clear that the system is not yet fully meeting their expectations. As part of an Electronic Health Record Modernization (EHRM) Program Reset (Reset) announced in April 2023, VA halted work on future deployments of the Federal EHR, with the exception of our planned joint deployment with DoD at the Captain James A. Lovell Federal Health Care Center (FHCC), while the Department

prioritizes improvements at the five sites that currently use the Federal EHR. The purpose of the Reset is to closely examine and address the issues that clinicians and other end users are experiencing with the current Federal EHR, and position VA for future deployment success.

During this Reset, VA is addressing the issues with the Federal EHR and redirecting resources from deployment activities other than Lovell FHCC to work on optimizing the Federal EHR at the sites where it is currently in use. The area of technical system performance is one of several areas that is receiving dedicated attention and needs resolution before deployments can resume at full pace.

VA has an obligation to Veterans and taxpayers to get this correct. We understand the concerns of this Committee regarding the Federal EHR system and its impact on the Veterans and VA staff who rely on it. We are committed to full transparency, and we appreciate your oversight. We look forward to further engagement with you and your staffs to ensure that this modernization effort and related health information technology modernization efforts are successful.

#### **EHR System Changes**

VA is on a journey to implement a large system transformation. The Federal EHR system is a highly complex software environment composed of the core medical records system and several other connected systems that together deliver the overall EHR experience to clinical providers and patients.

In February 2022, VA established a Performance Excellence Program to improve the overall system performance, resiliency, capacity, and reliability of the Oracle Health system. Due to this systematic approach, we have seen the core system stabilize over time, resulting in improvements to the user experience. As of November 8, 2023, there have been 185 consecutive days without an outage, and 100% system availability in 10 out of the last 12 months.

However, we are still experiencing partial system failures that impact end users. We capture these failures in our incident free time (IFT) metric, which measures the time that the system performs without a significant end-user problem. While our IFT metric has slightly improved from last year, it is not yet meeting the Service Level Agreement (SLA) of 95% IFT on a regular basis. As of September 30, 2023, Oracle Health has reached this metric for only 4 of the last 10 months.

This is due in part to the number of changes still being introduced. These changes are made to improve the performance, system functionality, and user experience. It is a well-established axiom of software development that systems stabilize when the rate of changes made to the system decrease. The rate of change is still high, and as a result, we are still seeing more incidents than we would like.

While we have been able to improve the stability of the core product, we continue to make regular changes to the environment to achieve the functional capabilities needed for VA. Though system change may bring different and improved experiences to the users of the system, it also introduces the possibility of unintended consequences or system instability.

In some cases, VA has requested functionality from Oracle Health that has never been deployed by Oracle Health commercially, such as an integration with the VA Consolidated Mail Outpatient Pharmacy, making VA the first user of the functionality, which also increases incident risk.

We have seen suboptimal and/or inconsistent end-user responsiveness of the system. We measure both the mean responsiveness as well as the 90th and 95th percentile response times. The core system is becoming more stable, and the mean user responsiveness is improving. While Oracle Health has met the SLA for these metrics, we are refining these metrics based on user feedback and will likely seek to tighten these for option year 2 of the contract. We are also measuring performance in areas that are not currently on contract, but still of interest to VA. For example, the time to recover from an incident remains at around 2 hours. Faster incident resolution times are better.

Regarding user support, we have improved the processing of tickets. Oracle Health met all four ticket management SLAs in July, August, and September 2023. Every critical or high severity incident has a root cause analysis performed and a preventive action identified. These reports are also integrated now into the VA Office of Information and Technology daily operational status reviews.

Ultimately, we anticipate that the system's performance will improve when the change velocity decreases, and enough time has passed to enable unanticipated defects to be addressed. From a technical perspective, one of the advantages of the Reset is providing time for optimization of the system and associated technical processes.

#### **Block and Cube Releases**

Blocks 8 and 9 were deployed in February and August 2023, respectively, and provided enhanced functionality to the field. A total of 47 system performance improvements and enhancements were pushed into production as part of the Block 9 release, which resulted in a 24% decrease in user interruptions and a 24% reduction in application freezes for all users.

Just last week, we deployed our November 2023 cube release, which fixed some bugs in the system and enhanced existing interfaces and capabilities. In February 2024, we plan to release Block 10, with more than 20 different enhancements and improvements being deployed across the enterprise. Each one of these releases has a planned improvement to the system performance and resiliency.

#### Accountability

Improving system reliability, resiliency, and availability remains a critical focus for our program. VA continues to monitor and enforce contractual SLAs. As part of the contract renegotiation in May 2023, VA increased the SLAs tied to concrete financial consequences related to technical performance and user experience. The renegotiated performance metrics include reliability, responsiveness, interoperability with other health care systems, and interoperability with other applications. There are now 22 SLAs and 6 service level obligations in place to hold Oracle Health accountable. As a result, VA has seen improvement to those metrics. VA expects to refine and potentially expand the SLAs in the upcoming option year 2 negotiations.

#### **Lessons Learned from DoD**

VA works collaboratively with DoD and the Federal Electronic Health Record Modernization Office to improve operations based on lessons learned and to collaboratively address issues with interfaced non-Federal EHR systems and networks that can impact system performance. Based on our shared learning, we have applied improvements where possible, such as improving certificate management, establishing Citrix Pods for increased flexibility and system performance, and optimizing virtual private network setup for laptop computers.

#### Conclusion

Veterans remain the center of everything we do. They deserve high-quality health care that is safe, secure, timely, Veteran-centric, equitable, evidence-based, and efficient. As improvements continue to be made through the duration of this Reset, VA will continually evaluate the readiness of sites and the Federal EHR system to ensure success and patient safety.

With the activities and improvements that are now underway, VA leaders are optimistic about the eventual success of the current program Reset, the deployment at Lovell FHCC in March 2024, and the future full implementation of the Federal EMR throughout VA. Having said that, we will not do this until the system is ready to provide a good quality experience to our users.

I again extend my gratitude to Congress for your commitment to serving Veterans with excellence. With your continued oversight and support, VA will realize the full promise of a modern integrated health record to cultivate the health and well-being of Veterans. We are happy to respond to any questions that you may have.