

**Written Testimony before U.S. Senate Committee on Appropriations,  
Subcommittee on Military Construction and Veterans Affairs**

**Hearing on VA's Electronic Health Record Modernization: An Update on Rollout,  
Cost, and Schedule**

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Chairman Heinrich, Ranking Member Boozman, and distinguished Members of the Committee: thank you for the opportunity to testify today.

The Department of Veterans Affairs (VA) announced in 2017 that it would pursue an Electronic Health Record Modernization (EHRM) program to replace elements of its current aging system, the Veterans Health Information System and Technology Architecture (VistA). In 2022, VA asked the Institute for Defense Analyses (IDA) to develop an independent life-cycle cost estimate (LCCE) for the EHRM program.

IDA produced an independent life-cycle estimate for all of the costs attributable to the EHRM program—that is, costs that are incurred only due to the existence of the EHRM program. IDA's cost estimate includes all costs of the program over its full life cycle, from program inception through design, development, deployment, operations and maintenance, and disposal. Thus, all relevant acquisition and sustainment costs are included in the LCCE. The IDA LCCE covers the implementation phase and 15 years of operations after the system is fully deployed to all sites.

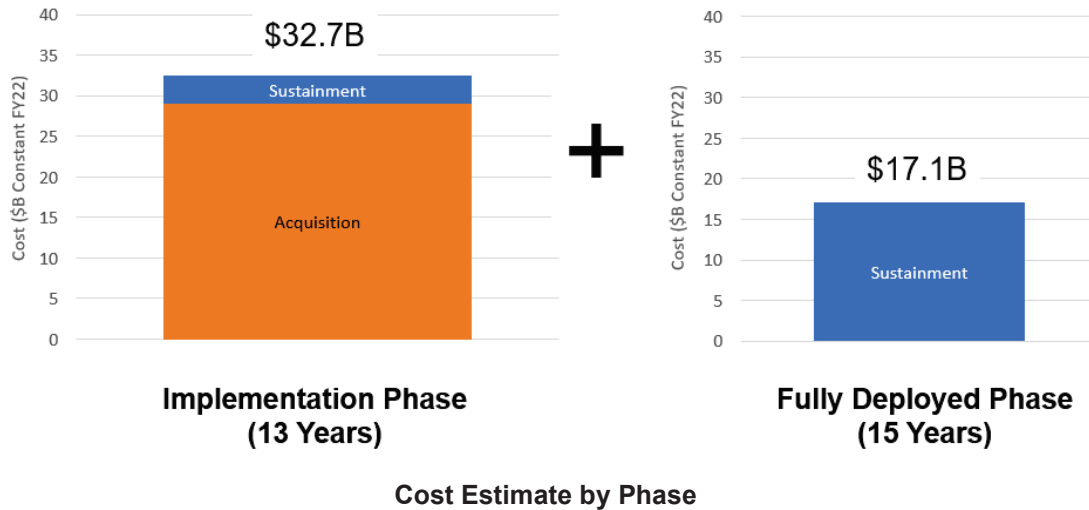
It is worth noting some items not in scope for the IDA independent cost estimate. One main item is benefits. The EHRM program has many potential benefits (e.g., improved healthcare delivery and reduced costs for legacy systems). The estimated benefits of the program, however, are out of scope for this study. Moreover, IDA's cost estimate is solely for the EHRM program. It does not include the cost of (or savings from) legacy electronic health record (EHR) systems.

## **Results**

IDA estimates the EHRM LCCE to be \$49.8 billion (in constant Fiscal Year 2022 dollars). The conversion to constant dollars normalizes inflation to 2022 levels; actual future expenditures will be higher. Overall, this estimate consists of \$32.7 billion during the implementation phase over 13 years and an additional \$17.1 billion in sustainment costs over the following 15 years.

The following figure shows acquisition and sustainment costs for the LCCE during the implementation and fully deployed phases. We note that some sustainment costs are required during the implementation phase as sites start to use the new system.

We estimate an additional \$5.2 billion of common infrastructure costs in addition to the LCCE. These costs would be needed without the EHRM program, but EHRM also requires these investments.

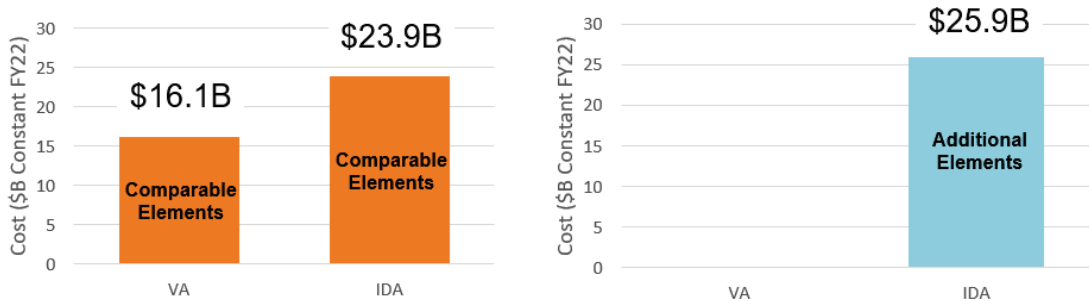


IDA provided a point estimate representing the 50 percent risk-adjusted cost. That is, the cost will be less than the point estimate with a likelihood of 50 percent. IDA also conducted a risk analysis to quantify the risk and uncertainty, estimating a range of \$46–\$54 billion for the 20–80 percent cost range.

## Comparison

We compared the IDA estimate to the VA 2019 program office estimate of \$16.1 billion (represented in constant Fiscal Year 2022 dollars). We note several differences in scope and comparable elements between the VA and IDA estimates. First, the VA estimate is for 10 years of implementation, whereas IDA’s life-cycle estimate spans 28 years. Second, the IDA team includes sustainment and productivity loss during rollout as additional cost elements in its LCCE, in accordance with Government Accountability Office (GAO) and VA Office of Inspector General (OIG) guidance to include all costs, but these elements are not included in the VA estimate. The productivity loss cost corresponds to the supplemental staffing and additional community care for Veterans needed to mitigate the disruption in care when rolling out the system to facilities. The revenue loss from the disruption is also included. The following figure shows the costs for the VA estimate, the comparable costs for the IDA estimate, and the costs of additional elements in the IDA

estimate. IDA’s LCCE includes an additional \$25.9 billion beyond the scope of the VA estimate. These additional elements account for about 75 percent of the cost difference from the VA’s estimate (\$16.1 billion) to IDA’s estimate (\$49.8 billion).



**Comparison of VA and IDA Estimates**

The costs for comparable elements differ by \$7.8 billion. About \$5.1 billion of this difference is implied by actual costs from the first 4 years of the program. The factors contributing to the remaining difference are an IDA-estimated 3-year schedule adjustment based on experience in other programs and additional cost risks (e.g., additional development). We also note that the IDA LCCE includes \$1.2 billion less in infrastructure than the VA’s estimate because IDA defines some costs as common infrastructure.

Cost increases are common in programs of this complexity. Enterprise resource planning programs have typically had similar cost increases in acquisition.

**Path Forward**

Our analysis estimates the cost ranges for risks associated with EHRM. VA has an opportunity to mitigate some of the risks associated with the cost drivers. For example, productivity loss associated with deployments is a cost element with substantial risk. VA can manage this risk and seek ways to improve the efficiency of deployments.

Going forward, information emerging from upcoming deployments will provide additional insights regarding risk and uncertainty in the cost estimate. Developing measures to assess progress in key risk areas will allow VA leadership to monitor uncertainty and understand the implication for the total life-cycle cost of this program.

Thank you for the opportunity to discuss our cost estimate, and I look forward to your questions.