CRS Insights

When Will DOD Modernize its Electronic Health Records Systems?
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In January 2013, the Departments of Defense (DOD) and Veterans Affairs (VA) announced that they would no longer pursue a joint single integrated electronic health record or iEHR. Instead, in a move described as a "U-Turn," DOD announced it would pursue an "off-the-shelf" acquisition (i.e., solicit bids for a system already available in the commercial marketplace) and VA announced it would pursue an "open-source" strategy (i.e., use a development model that promotes a universal access via a free license to a product's design or blueprint, and universal redistribution of that design or blueprint, including subsequent improvements to it by anyone).They are pursuing these strategies with the stated goals of (1) providing seamless, integrated sharing of standardized health data among DOD, VA, and private sector health care providers, and (2) modernizing the electronic health record (EHR) software and systems supporting DOD and VA clinicians.

DOD arrived at its decision after performing an analysis of alternatives for modernizing its EHR systems and is now comparing bids received in order to award a contract for a new, off-the-shelf EHR system. The effort is known as the DOD Healthcare Management System Modernization or "DHMSM."

On August 25, 2014, DOD issued a request for proposals for a new EHR system to replace many of its current legacy systems. Responses were due October 31, 2014, and DOD is currently reviewing these responses. An award announcement is expected to be made in the third quarter of FY2015. Initial testing and fielding of the new system at selected locations is planned by December 31, 2016. A target date for full implementation will be determined based upon the proposals received. During this process, the VA will proceed with its strategy and work with DOD to improve existing systems.

Will the new system be interoperable with Veterans Health Administration electronic health records?

The request for proposals by DOD requires certification from the Office of the National Coordinator (ONC) that the offeror's proposals have ONC Certified Health IT Product List certification for demographics, clinical decision support, computerized provider order entry, and transitions of care. This is expected to increase the interoperability of DOD EHR not only with the VA; but, also with private health care providers. DOD purchases approximately $16 billion worth of health care from private providers annually and current systems record minimal health care information about those transactions.

How much will it cost?

Cost will not be known until after an award and completion of the system. One estimate put the cost at $11 billion over the entire life cycle through 2030. Increased efficiencies from retiring legacy EHR may offset some of the costs.

What could go wrong?

Contract award protests and appeals could potentially delay the start of implementation.

A failure to deliver as promised in the contract award could potentially delay initial fielding of the new system. This risk is mitigated by a contract "gate" requirement that the bidding team have experience in deploying off the shelf EHR capabilities.

In providing seamless, integrated sharing of standardized health data, DOD currently shares millions of records with VA and interoperability is progressing at a level that is as capable as the standards and practices set by ONC enable. DOD and VA continue to work with private sector health care providers to

further expand health data sharing. However, this data sharing requires partners at both ends to have functioning EHRs. Delays in using ONC certified EHRs by any partner may impede other partners' ability to maximize data sharing.

What will be done in the meantime?

As the two Departments work to fully modernize their respective EHRs, a process estimated to take ten years, they will deploy systems with functionality to share coded, computable data with each other and the private sector so that a patient's full health history and experience can be built into clinical decision support tools, including their allergies, medications, and clinical problems. The Departments have plans to improve on current data sharing. Starting in 2013, DOD developed a series of data federation accelerators in collaboration with VA. These accelerators included improvements in health care data sharing between the Departments toward national standards-based computable data formats. Additional accelerators included the deployment of a Joint Legacy Viewer (JLV) as a common viewer used by both DOD and VA clinicians, as well as upgrades to the Blue Button application that provides patients access to their own medical data.

Throughout FY2014, the Departments have continued to build upon existing interoperability capabilities accessible through the JLV. The JLV offers four major improvements over older viewers. First, JLV combines data from both Departments pertaining to the same domain into a single viewer with integrated items arranged in chronological order. This allows users to scan the results and identify trends, such as whether blood pressure control is improving or whether medication doses are increasing or decreasing. Second, JLV allows the user to configure tables of data to support various workflows. For example, the user can create and save a view with tables of labs and medications side-by-side to evaluate the effectiveness of medications. Third, JLV incorporates semantically normalized data into a viewer. This means JLV displays certain data, such as lab tests or medications, with national standard codes and makes it easier to compare data between systems, identify trends, and develop a more complete picture of a patient's history. Finally, JLV presents the same record appearance to both DOD and VA users, facilitating dialogue between providers when discussing a case.

In FY2015, the Departments plan to continue to expand the deployment of JLV to additional users and sites. Additional medical data domains will be incorporated into JLV, and overall improvements will be made to the interoperability infrastructure to take on additional user capacity, as well as to improve systems reliability and availability.