Debunking the myths on VistA

By Deanne Clark

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We need an honest assessment of whether a commercial off-the-shelf electronic health records system can deliver a better result than continued investment in the successful existing platform.

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Veterans Affairs Secretary David Shulkin was recently quoted in Stars and Stripes about negative reports concerning the VA. "I think that it's time to stop beating us up," he said. "I'm disappointed there seems to be an obsession with finding our failings."

The secretary is exactly right with regard to VA's quality of care and health IT, and it is time to separate fact from fiction.

There seems to be a headlong rush to rip out and replace VistA, VA's highly popular and integrated system, with a commercial-off-the-shelf electronic health records solution, without an honest assessment of whether the effort will yield a better result than continued investment in the successful existing platform.

There are a number of myths being advanced by those who favor a total overhaul of the VA's current EHR system. These myths must be debunked so that a positive plan of action for continued innovation can be put in place:

Myth #1: VA's current EHR is obsolete, lags in innovation and does not make use of COTS solutions.

Fact: The VA continues to innovate to extend its platform and rapidly adapt to change with best-of-breed COTS integration.

Despite claims to the contrary, the VA has continued to invest in health IT. Examples of successful programs include the Enterprise Health Management Platform development, pioneering advances in telehealth technology and significant developments of mobile health technology to enhance veteran engagement.

In 2016, VA had five projects named as finalists in the FedHealthIT Innovation awards in four of five categories, including interoperability, data solutions, mobile and cloud. In 2017, VA was ranked #17 in a Thomson Reuters and Clarivate Analytics survey of Global Government Innovators.

technology evolves and veteran population health needs change. Those vendor relationships and toolsets create an ecosystem of options that keep VistA ranked higher by physicians for usefulness as a clinical tool than high-cost COTS systems.

Myth #2: COTS systems are better than the system created by VA.

Fact: COTS EHR systems are expensive, closed and not user-friendly.

Replacing VistA's EHR with a COTS solution means vendor lock-in and a potential loss of access to valuable historical data that may compromise both direct patient care and valuable research. Such a switch also could bring potential patient privacy and data security risks. The nascent Defense Department implementation of COTS resulted first in a $50 million contract change and later in an increase to $74 million to the same vendor to store the data in its proprietary data center with all the military records being accessed exclusively by that one vendor.

The Coast Guard found recently that a COTS EHR system would not meet its needs. In 2015 the implementation of a new EHR system was so poorly executed that the Coast Guard was forced to go back to paper-based medical records. Care delivery was disrupted for more than 50,000 active and civilian members, with $34 million wasted.

This was not a system problem or a client problem -- operations are vastly different in the private sector than they are in government health care, and even an award-winning COTS system could not absorb and accommodate those differences. This is a lesson VA should learn from before a similar decision is made.

COTS EHR solutions are not open source; they are proprietary and closed. There have been major service disruptions from hardware failures, software failures and cybersecurity attacks. According to a 2016 Department of Health and Human Services inspector general's report based on a survey of 400 private sector hospitals, 60 percent of hospitals reported an EHR outage, with 20 percent of those outages lasting longer than eight hours. Clinicians report widespread dissatisfaction with COTS EHRs for not being user friendly, lacking intuitive design and workflows and being time consuming.

Myth #3: VA currently lags behind the private sector in achieving interoperability of health records data.

Fact: Commercial EHRs fail to meet interoperability standards while VA pioneered interoperability and was designed from the beginning to share data.

VA was the first major healthcare agency to understand the need for interoperability, completing a successful pilot for data exchange with Kaiser Permanente in 2009. This was years before interoperability became a federal mandate for health IT under the Meaningful Use section of the American Reinvestment and Recovery Act (ARRA). As of 2014, VA Exchange was available at 121 VA medical center locations nationwide with 14 private partners.

Contrast this proven interoperability success by VA's EHR platform with COTS EHR systems. The interoperability failures have gotten so bad that, in 2016, the Centers for Medicare and Medicaid Services lowered requirements for Stage 2 ARRA Meaningful Use certification for interoperability to view, download, or transmit patient information to a third party during the EHR reporting period from 5 percent of patients to a single patient seen or discharged by the eligible provider during the EHR reporting period.

CMS also reduced the threshold from 5 percent to a single patient to send and receive a secure electronic message during the EHR reporting period. This reduction shows how COTS EHR systems are failing when it comes to interoperability and portability of data, even when standards are defined. On April 11, Healthcare Information and Management Systems Society leaders sent a letter to HHS Secretary Tom requesting a six-month delay for the ARRA Meaningful Use 2015 Stage 3 addition, citing the need for additional time for vendors to complete development, testing and certification of required functionality.

By comparison, VA has had tremendous success in deploying MyHealtheVet personal health record, logging over 1.5 million active users in the first quarter of 2017. Veterans have sent and received over 3 million secure messages, successfully downloaded over 2 million copies of their electronic medical records and refilled over 4.5 million prescriptions using the secure web-based portal. The VA's growing use of community-based resources requires data exchange across virtually all systems in order to keep veteran health record data intact.

Myth #4: Commercial providers have experience providing solutions with the scalability required by the VA.

Fact: No commercial provider has any track record in providing an EHR system on the scale of the VA.

The VistA platform powers the largest EHR system implemented in the world, encompassing 17,000 facilities and 15 million veterans' records. Nothing close to this size has ever been implemented by any COTS EHR contractor, many of whom have had notable service interruptions in single facilities or moderately sized hospital networks.

The pilot implementation of Cerner Millennium in DOD already has a backlog of more than 2,000 suggested workflow modifications with only one facility live for only a few short weeks after the schedule was delayed. The scope was scaled back to a single pilot facility from the three originally planned. Even that project, which is slated to take years to complete, will be significantly less complex than VA with fewer facilities, fewer patients and no migration of previous medical data.

The operational challenge of a "rip and replace" project cannot be overestimated and is something COTS EHR contractors are ill equipped to deliver. With more than 30 years' worth of electronic health data that must be preserved and migrated to any new system, VA's complexity is greater than any other vendor-supported health care network.

While COTS systems make headlines for costly new implementations, nearly half of all U.S. hospitals that have a complete inpatient/outpatient enterprisewide implementation of an EHR are VA hospitals using VistA. Additionally, many commercial implementations were delayed and beleaguered with cost overruns and have had security breaches that to date, VA technology and process have kept at bay.

Myth #5: VistA is not user friendly, nor is it popular with healthcare users.

Fact: VistA has been the highest-ranked EHR for five consecutive years, and the same database technology used in VA's VistA is used by other COTS EHRs.

According to a 2016 Medscape survey and going back at least five years, VistA's EHR is ranked higher by more than 20,000 physicians than any of the likely COTS EHR replacement candidates in multiple categories, including usefulness as a clinical tool, reliability, ease of use and support. This ranking has been steady despite the negative press that has circulated about VistA for some time, and in the face of the hundreds of millions of dollars spent each year on marketing and development of COTS solutions.

Although VistA in various forms has been in use for over 30 years, VistA's EHR runs on the same operating platform (InterSystems Cache) as many industry-standard COTS EHR systems, including Epic. Originally released in 1979, the Cerner database is Oracle. The notion that any COTS replacement option is more modern is quickly debunked when the underlying technology is examined. Innovation and investment in the technology allows for extension and modernization of all of these platforms. In terms of scalability, performance, integration and evidence-based clinical decision support, VistA does not lag behind.

No one would suggest that the VA doesn't face challenges meeting the needs of our country's veterans or that continued investment in health IT isn't needed to continue to provide the "best care anywhere." The fact is that despite these challenges, VistA is not the problem, and it is performing better than private-sector health care systems in general.

Current estimates to replace VistA run upwards of $16 billion -- significantly more expensive than the maintenance and development of VistA, which includes the cost of providing end-user hardware; servers; LAN and WAN networks; operating system, security, and database software; and specialty clinical and administrative software -- without evidence that the outcome would be as successful as the incumbent solution. That amount does not include end-user support costs, or the fact that even if the VA choses a rip-and-replace approach, VistA would have to run in parallel with a replacement COTS EHR for up to 10 years, requiring maintenance and support of both systems and significantly increasing costs and resources.

A full analysis of the facts is critical -- this decision is too important to be made based on myths.

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CMS goes all-in on agile

By Sara Friedman

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The Centers for Medicare and Medicaid Services will integrate agile methodologies across the entire agency to better manage software development in the rapidly evolving health care environment.

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The Centers for Medicare and Medicaid Services plans an enterprisewide push to adopt and integrate agile methodologies so it can better address the agency's changing IT needs in the evolving health care environment.

CMS will work with Octo Consulting on an Agile Center of Excellence, which will help CMS share agile best practices, provide a strategic framework for agile adoption and offer training and advisory support for the entire agency.

Through the Agile Center of Excellence, CMS IT leaders will learn to leverage agile methodologies by incrementally implementing agile practices at the team, program and portfolio levels. Octo will create action plans and training specifically designed to help CMS mature its agile processes, company officials said.Rather than the traditional waterfall approach to systems development that defines requirements up front and is built out over a long period of time, agile development relies on building software in two- to four-week sprints while gathering hands-on customer feedback to inform each iteration.

"Agile methods focus around engaging the user much more often … to make sure that they like what you are building so that when you are done with it they are happy with the product," Jay Shah, Octo executive vice president, told GCN.

Octo will be working with CMS's Office of Information Technology on a strategy that fits in with the agency's existing programs and missions. While bringing agile development to smaller projects is easier to implement, Shah said the adoption at CMS requires a larger-scale approach.

"We are looking at more of the enterprise, big-picture thinking that the CIO has to do," Shah said. Octo will take agile concepts "that might not have previously worked for large enterprise-scale systems and figure out how it can all work together."

Over the past 10 years, Octo has worked to bring the agile best practices to the U.S. Patent and Trademark Office, the Centers for Disease Control and Prevention, the National Institutes of Health and the General Services Administration.

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