

OI&T RFI supporting Digital Health Platform Strategy

Title: Industry Feedback on Concepts for an Open Digital Health Platform – Request for Information.

This is a Request for Information (RFI) to conduct market research for information and planning purposes only. It does not constitute a Request for Proposal (RFP) or a promise to issue a RFP in the future. This RFI does not commit the Government to contract for any supply or service whatsoever. Further, the Department of Veterans Affairs is not at this time seeking proposals. In accordance with FAR 15.201(e), responses to this notice are not offers and cannot be accepted by the Government to form a binding contract. Any contract that might be awarded based on information received or derived from this market research will be the outcome of a competitive process. Responders are advised that the Government will not pay for any information or administrative costs incurred in response to this RFI. Not responding to this RFI does not preclude participation in any future RFP, if any is issued. However, these results will be used to satisfy the requirements of 38 U.S.C. 8127. Please ensure your company name, address, main point of contact, socioeconomic status, and capability to comply with any limitation of subcontracting/non-manufacturer rule clauses/provisions are provided. Please ensure any proprietary information submitted as part of your response is appropriately marked as such.

In order to support the transformational agenda set out in the Blueprint of Excellence and executed through MyVA strategies, the Veterans Health Administration (VHA) desires a Next Generation Digital Health Platform that is integrated, future-proof and optimizes the cost of operations. To achieve these goals, VA is considering establish an interoperable digital health platform that leads to Easier Access to Care for the Veteran, Better Outcomes for the Veteran and more efficient operations for the VHA. The platform needs to seamlessly support key processes in the following core business areas:

- ✓ Veteran Engagement
- ✓ Clinical Care Management
- ✓ Healthcare Operations Management
- ✓ Health and Operational Analytics

Addressing only one part of the problem such as establishing an Electronic Health Record for the Clinical Care Management process without accounting for its relationship with other systems such as a Supply Chain system will have but only a limited impact to the problem VA aspires to solve. VA anticipates a need to adopt a platform approach to accomplish this objective. The proposed architecture for the Next Generation Digital Health Platform takes this into account and goes beyond the Electronic Health Record and includes five strategic, integrated components:

- One Electronic Health Record system (EHR),
- One Operation Management Platform consisting of one resource allocation, financial, supply chain, and human resources system that are integrated seamlessly with the EHR,
- One Customer Relationship Management (CRM) system,
- One Analytics system,
- One Open Application Programming Interface (API) Framework that provides seamless interoperability with internal and external systems

Successfully put together, the platform, should enable real-time, enterprise wide visibility into operations, patients, resources and analytics — to eliminate waste, reduce latencies out of workflows, accelerate business processes, and maximize the use of assets and human resources. A broad range of industries from commerce, to education, to transportation are revolutionizing their areas by leveraging the nexus of technologies such as mobility, internet, cloud, analytics & API's. The Open Digital Health platform proposes to leverage a similar nexus of technologies to bring revolutionary changes to healthcare – chronic care management, preventive care, care coordination, personalized therapies, and remote care delivery. The platform will support the MyVA framework for modernizing VHA's culture, processes, and capabilities to allow VA to continue to put the needs, expectations, and interests of Veterans and their families first, and put Veterans in control of how, when, and where they wish to be served.

The VA has been at the forefront of conceptualizing, developing and adopting a variety of innovative services and technologies related to care delivery for many decades. By creating an Open Digital Health Platform, VA can once again lead the nation in transformative health technology while meeting the health and healthcare needs of our Veterans. It would foster a "Learning Health System" (LHS) that connects the medical system with broader societal inputs, creating important links between health, wellness, and health care. The strategic focus of developmental efforts by the VA Office of Information and Technology (OI&T) and VHA to create an open digital health platform considers not only the internal operations of VHA programs and initiatives but also services and capabilities that extend into communities throughout the United States.

This RFI solicits input on the software, architecture & infrastructure changes and solutions necessary to design and implement the vision of an Open Digital Health platform and includes: IT and industry standards for interoperability and integration (i.e. widely adopted industry standards, standards supported by Office of National Coordinator for Health Information Technology such as Fast Healthcare Interoperability Resources (FHIR), standards supported by the Food and Drug Administration etc.) that are critical to this transformational change, best of breed options for COTS systems for Enterprise Resource Planning (ERP), CRM and EHR, hybrid approaches to utilizing a combination of cloud technologies (Software-as-a-Service (SaaS), Platform-as-a-Service (PaaS), Infrastructure-as-a-Service (IaaS)) and/or data centers to create VA's own private Digital Health Platform that, for all practical purposes, operates as a SaaS for users within and outside of VA . Of particular interest are industry partners with prime contractor experience in supporting development and implementation of concepts for large integrated systems of operations and innovation.

Specific guidance and suggestions could include but are not limited to addressing the following areas:

1. What experience do you have and how would you assemble, architect and establish an integrated platform that is cloud native, secure and scalable that seamlessly supports key processes across four core business areas:
 - a. Veteran Engagement
 - b. Clinical Care Management
 - c. Healthcare Operations Management
 - d. Health and Operational Analytics

2. What experience do you have and how would you architect such a solution so that each core component has the following characteristics:
 - a. One Logical Database system: The core system (e.g. the Clinical Care Management component) needs to have an underlying database that has one data model. This means:
 - i. VA will always be on one version of the data

- ii. VA is using the same, up-to-date nomenclature (for e.g. clinical terms & concepts)
 - iii. There is no requirement of synchronization of the data at the application level (i.e. a transaction made in the system is available VHA wide immediately and enabled by the internal architecture, an update (i.e., Medication updates from RxNorm database), will be instantly be available to everyone).
 - b. One Application Codebase: To ensure that all providers at VHA have access to the same software capability and are able to use common and consistent processes, the application should be on only one live version of running code. Upgrades to code will be accessible to all providers at the same time. The architecture should allow for scale-out of the application tier to provide a high performance user experience.
 - c. One Set of Workflows: In order to have consistent business processes, workflows should be established that are VHA specific and that allow best practices to be disseminated across VHA consistently. Setup of one set of workflows in one logical instance, will ensure that policy compliance is simplified.
 - d. One Gateway for Data: Given the critical need of data exchange between multiple care settings, within and outside VHA, there needs to be a single, authoritative gateway for exchange of data between the EHR and the outside world. The data exchange will need to support semantic interoperability between Department of Defense systems and Care in the Community provider’s system.
3. What experience do you have and how would you incorporate real-time analytics that is embedded and connected across the four core business processes (Veteran Engagement, Clinical Care Management & Healthcare Operations Management, and Health and Operational Analytics) to continuously monitor and observe the process and interactions that will help VHA deliver the next generation of healthy living and care models that are more precise, personalized, outcome-based, evidence-based, tiered and connected across the continuum of care regardless of where and how care is delivered.
 4. What experience do you have in ensuring that data systems will be designed to support patient-centered outcomes, translational, health services, basic science, and health economics research?
 5. What experience do you have in ensuring that systems will be designed to support the educational mission of the VA, i.e. training the next generation of health care providers?
 6. What experience do you have and how would you move to the “Buy” concept from the “Build” concept in establishing this VA platform?
 7. What experience do you have and how would you ensure that the VA “Bought” components, i.e. the various commercial off the shelf solutions that may be part of the platform, will continue to remain integrated over the life of ownership, kept evergreen and synchronized among the various release calendars of these components with minimal coordination overhead from VA?
 8. What experience do you have and how would you ensure that the VA Platform is future-proof, in other words, the platform will continue to evolve with the evolution in technology, is self-healing (for e.g. if one of the component solution is not adapting to change in technology or is not meeting quality standards, the problem is easily replaced with imperceptible disruption to the operations of VHA).
 9. What experience do you have and how would you ensure that long-term total cost of ownership is optimized by having the flexibility to have the choice of best of breed cloud infrastructure providers in the mix for the platform?
 10. What experience do you have and how would you ensure that VA, through the Open Digital Health Platform, can foster open, interoperable, open standards compliant, active, innovation ecosystem of solutions and services, where no partner can restrict or create barriers to the adoption of new technology or innovation, and new solutions can be rapidly deployed across the organization?

11. What experience do you have and how would you ensure the VA security and privacy of the data and operations of the platform without compromising on the usability of the platform or its ability to use the cloud as the core architectural strategy?
12. What experience and specific definitions of interoperability, scenarios and solutions would you incorporate to facilitate seamless operations between VA, Department of Defense and Community providers?
13. What experience do you have and how would you minimize the risk of transition to the new platform and ensure that risk and responsibility for the transition is owned among the partners.
14. What kind of public-private-partnership models would you use to implement and operate this VA platform?
15. What would be the best way you would create such a system? Please provide insights on models of creation of such systems.

Vendors may also submit additional information not specifically requested, above, which would provide value and insight to the Government however; responses will be limited to 15 pages. Please do not submit general capability statements, marketing materials, or other nonspecific information.

It is requested that interested contractors submit a response (electronic submission) of no more than 15 pages in length, single spaced, 12 point font minimum that addresses the above information. In response to the RFI, interested contractors shall submit the above information by **12:00PM (Noon) ET on October 1, 2016**, via the Virtual Office of Acquisition (VOA). The web address for the VOA site is <https://www.voa.va.gov/>. Vendors must be registered users on the VOA website in order to submit responses; registration can be done through the VOA site. Once Vendors are registered, Vendors can click on the Proposal Dashboard link and within that link click on Add Proposal to open the form to upload files. The Proposal Type dropdown field should be changed to 'RFI: Industry Feedback on Concepts for an Open Dig(ital Health Platform)' to reflect the RFI being responded to. For registration or technical issues concerning submission, contact VA.Acquisition.Systems@va.gov. Questions and Answers shall be submitted by close of business **September 9, 2016**, via email to michael.weckesser@va.gov.

Responses are due by October 1, 2016. Questions, or other correspondence shall be submitted via email to Michael Weckesser at michael.weckesser@va.gov.