DEPARTMENT OF VETERANS AFFAIRS (VA)
OFFICE OF INFORMATION AND TECHNOLOGY (OI&T)
ENTERPRISE PROJECT MANAGEMENT OFFICE (EPMO)

REQUEST FOR INFORMATION (RFI) | TAC-17-42242
VISTA ADAPTIVE MAINTENANCE

ABLEVETS®

DUNS: 078393180 CAGE: 6PE96

Service Disabled Veteran Owned Small Business
SDVOSB
cVE

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INTRODUCTION

AbleVets LLC, a Service-Disabled Veteran-Owned Small Business (SDVOSB), is pleased to submit this RFI response, dated July 27, 2017, to the Department of Veterans Affairs (VA) Office of Information and Technology (OI&T) for RFI# TAC-17-42242. This submittal not only expresses our interest in participating in this procurement, but also provides an overview of our capabilities and expertise that we will apply to complete the objectives outlined in the PWS in a timely and efficient manner.

The VA is soliciting interest and vendor capabilities to meet the requirements of providing OI&T with services to including manage, plan, develop, design, integrate, test, and deploy patches that provide the adaptive maintenance required for the selected VistA components such that the net result provides compatibility with other VistA and commercial products.

The VistA Adaptive Maintenance effort will modify select components of VistA to facilitate continued usability in a changed or changing environment. VA requires a contractor to provide backwards and forwards compatibility for selected VistA components and use cases such that VistA's Graphical User Interface (GUI), the Computerized Patient Retrieval System (CPRS), and business functionality are isolated and emulated via a service layer to enable retrieval by CPRS and accessibility to those components via web-friendly interfacing by new clients. Regardless of the path forward for the Digital Health Platform (DHP), Enterprise Health Management Platform (eHMP) and/or possible COTS Electronic Health Record (EHR) acquisition, VA must address outstanding issues with VistA. Addressing the architectural issues identified in the RFI will ensure VA is able to continue to operate VistA systems and infrastructure in a secure, computionally efficient, and cost effective manner.

A. SUMMARY OF TECHNICAL CAPABILITY

As part of the VistA Data Project (VDP), Team AbleVets are securely emulating the CPRS-VistA interface over a model-backed set of VistA Services. Functionality previously realized inside VistA in the MUMPS language is being re-factored into backward-compatible, industry-standard Javascript, running inside node.js.

VistA Services are designed for stepwise deployment where an unchanged CPRS can be seamlessly and incrementally migrated from one of 130 local, MUMPS-based VistAs to modern, secure, VA-wide, centralized services.

The source code, background documentation and project demonstrations are openly available at vistadataproject.info. Specifically:

- CPRS runs unchanged over a secured, model-backed, services-based emulation of its Remote Procedure Call (RPC) interface
- Services are also exposed as REST for direct use by new web-based clients allowing both CPRS and newer clients to run side-by side
- Implementation is in industry-standard Javascript, packaged as node.js modules (No MUMPS)

- A Security module provides for client authentication, auditing and traffic encryption
- RPCs being emulated are from a variety of clinical domains including allergy, vital, problem and pharmacy as well as patient demographics, PCE, TIU documentation and encounters.
- A clear distinction is made between RPCs accessing and changing sensitive Patient data from those accessing the meta-data that drives business logic
- All code, demonstrations and documentation including the VA-mandated project web site (vistadataproject.info) is being developed using Agile methodology and hosted in an open, industry-standard, source code repository.
- Beyond addressing an RPC's interface, emulation involves analyzing and accounting for:
    - inter-domain synchronization issues including the maintenance of TIU Document Macros, Alerts and Reminder Dialogs and the use of common functionality by inter-dependent domains (allergy's use of TIU Document signing)
    - non CPRS user interfaces, specifically the roll and scroll interface built into VistA and its use by Lab Technicians, Pharmacists and Remote Users
    - workload monitoring and other VA business and process management functionality that relies on the clinical data established by CPRS through RPCs
    - third party services used directly or indirectly by RPCs including the MOCHA service used by Pharmacy
- Two deployment scenarios are being provided:
    - In a pure node.js-based cloud-compatible environment of the kind called for in the PWS
    - Within a node.js-enabled VistA system
- Testing involves:
    - a Javascript-based, data-driven regression test suite for all emulated RPCs which ensures that emulation matches expected behavior
    - a fully functional test VistA configured with sample patients, users and system configurations required by RPCs

VDP has established that model-based emulation can allow an unchanged CPRS to run securely alongside newer web-based clients over centralized, easy to manage services. Its lessons and frameworks provide an ideal basis for the VICS required in the draft PWS.

B. SUMMARY OF CORPORATE EXPERIENCE

Corporate Background. Founded in 2012, AbleVets is a customer-centric, IT consulting and engineering firm that partners with federal and commercial healthcare organizations to achieve measurable improvements in health IT. Our staff is comprised of medical doctors, Veterans, and IT subject matter experts who specialize in VA and DoD implementations. We actively recruit and hire talented Veterans to bring their invaluable experience and diverse skill sets to AbleVets and are led by Wyatt Smith (Medical Doctor, Veteran and former MHS Deputy CIO) and backed by a highly-experienced leadership team comprised of Fortune 100 senior leaders. Headquartered in Chantilly, Virginia, AbleVets has already delivered significant results for both commercial entities and large-scale federal government agencies, including the VA, WellPoint Military Care (WMC), and TriWest Healthcare Alliance.

Skilled Staff. AbleVets provide staff with decades of experience supporting VA and DoD-specific health systems with a deep understanding of the challenges that must be considered in undertaking a transformational effort of this magnitude. Examples of specific positions held include:

- Previous Executive and Commanding Officer for the Navy's medication information technology command
- Previous VA Chief Information Strategy Officer / Senior Advisor to the Under Secretary for Health
- Previous Medical Director for US Navy Forces Central Command and Public Health Senior Leader for the Defense Health Agency (DHA).

Relevant Experience. Team AbleVets' engineering and development expertise related to this RFI includes several of the leading VistA experts in the world, including engineers and architects who have led both production development, and R&D efforts to evolve VistA significantly beyond its historical capabilities. As a subcontractor to Accenture Federal Services (AFS), AbleVets has also provided critical engineering support (greater than one third of the current staff resources) throughout the Period of Performance (PoP) of the Scheduling Enhancements project in the following areas, all of which have deep VistA integration and interface requirements:

- **VAR Interface Enhancements** – enhancing the front-end to provide a more appealing and intuitive user interface.
- **VAR Appointment Request Functionality** – expanding the types of VA clinical services for which a Veteran may request an appointment.
- **VAR Direct Scheduling Functionality** - providing a direct booking process that confirms successful bookings, retains data if a booking is unsuccessful and allows users to request an appointment without re-entering information, tracks metrics on successful bookings, supports appointment reminder setup, email, print, and export functions.
- **Scheduling Administration Utility / Appointment Management Console** - Allow Veteran to view, cancel (and receive cancelation confirmation) for existing appointments.
- **App Development / Enhancement Lifecycle** – requirements elaboration; app development, integration, and testing within the VA Mobile Framework and with VA data sources, documentation support, etc

Table 1 provides a list of other examples of the Team's specific experiences relevant to this engagement.

Project Title	Description	Relevance to the Requirements
HealtheDialog Applications	Automation of clinical best practices and research protocols with text message language processing—patient engagement and clinical staff efficiency.	• Integration with VA Mobile Framework and backend services and systems (e.g., authentication, metrics, MVI, CDW, etc.)

VA Video Connect	Integration of a COTS solution that provides a virtualized scalable teleconferencing platform in support of providing telehealth services for clinical care access.	• Application of Agile Scrum Methodology within VA VIP framework • Use of Fortify scanning tool, Jenkins CI tool for automated builds, and Atlassian Wiki JIRA tool suite for project application lifecycle management • Familiar with interfacing with external testing bodies (e.g., V&V, SQA, 508, etc.) and governance bodies (CCB)
Virtual Care Remediation Services	Mobile app enhancement, remediation, testing and release support for apps supporting both the VA caregiver community and the external Veteran community	
Cloud Computing / Mobile Device Management / Mobile Applications Environment	Provided, operated and maintained an overall cloud solution including public and private cloud Infrastructure as a Service (IaaS)/Platform as a Service (PaaS) hosting of four (4) separate enclaves required to support VA mobile operations.	• Understanding of Continuous Integration environment and automated build pipeline for mobile application deployments • Familiarity with app hosting environments and system configurations • Understanding of full stack architecture, including IaaS and PaaS components
Joint Legacy Viewer	JLV provides clinicians in the VA and DoD access to medical records across both Enterprises. Its capability has made significant progress towards meeting Presidential, NDAA and VA CIO objectives.	• Familiarity and integration expertise with VistA and other VA services and systems • Familiarity and integration expertise with CHCS and other DoD services and systems
TAPS	A series of prototypes and specifications to enable the Department of Defense to migrate from their CHCS EHR to a commercial alternative	• CHCS, like VistA, is built around FileMan and this DoD system covers many of the same clinical domains • The approaches and tooling used in TAPS are directly applicable to VistA
FileMan Query Language (FMQL)	A plugin for FileMan-based systems including VistA, CHCS and RPMS that exposes all data as a graph and data definitions as machine-readable data models	• Expose the native data model for FileMan-based systems in a mainstream data format • Render all VistA data, clinical and non-clinical in a easy to process and analyze format
VistA Meta Data project	Prototype and demonstrate a data-model driven interface to VistA for use by existing (CPRS) and new clients	• Establish a machine-processable Master Data Model for the clinical workflow and content of VistA • Decompose, quantify and re-implement the RPC interface into VistA
Simple Knowledge Service	Represent medical knowledge schemes such as RxNORM, SNOMED and LOINC in a graph-based network service for use by EHRs and clinical data gateways	• Portable meta-data representation is key for VistA standardization

Voldemort	VA sponsored research to isolate differences in data models and code between VistA instances	• Differentiating VistA instances is a requirement for VistA standardization

Table 1 - Team AbleVets Relevant Experience

C. MEET SET-ASIDE REQUIREMENTS, PROPOSED TEAM COMPOSITION AND ALLOCATION OF WORK

Meet Set-Aside Requirements. AbleVets is a Service-Disabled Veteran-Owned Small Business (SDVOSB) registered in the United States Federal System for Award Management (SAM) and the Department of Veterans Affair's Vendor Information Pages (VIP) database. We possess the breadth of experience and understanding required to provide exceptional management, and both technical and functional expertise. As an SDVOSB, AbleVets intends to and can meet the set-aside requirements in performance of this contract.

Proposed Team Composition and Allocation of Work. AbleVets' capabilities and service offerings align with and support VA in the achievement of the specific goals referenced in this RFI. We provide a dynamic and innovative blend of resources who all have proven to be successful in bringing fresh ideas and effective changes to Federal Agencies. Since the tasks will be primarily fulfilled by a SDVOSB, we are motivated, flexible, efficient, and lack overhead and bureaucracy, enabling us to be agile as needed within our proven, CMMI Level 3 compliant processes.

AbleVets has the expertise and experience to achieve VA's goals. The following Exhibit includes our team and our intent and ability to meet small business set-aside requirements for performance of this effort.

Exhibit 1: Team Composition

Company/Role	Work Share	PWS Alignment
AbleVets	At Least 51%	PWS 5.1 – 5.7
HRG	TBD	PWS 5.2 – 5.7
Caregraf	TBD	PWS 5.2 – 5.7

Our primary goal in this RFI response is to clearly communicate our technical capability, targeted approach, and qualified team, establishing the lowest possible risk for VA and the assurance that the contract requirements will be ***met or exceeded*** with both ***quality*** and ***efficiency***.

Cost of Performance. AbleVets LLC is a Service-Disabled Veteran-Owned Small Business (SDVOSB), and at least 50% of the cost of performance incurred is planned to be expended by AbleVets employees.