

Renton Nip  
Program Manager, Hokukahu, LLC



# VA VistA Metadata

## Project Overview

The Project will provide a single comprehensive security enabled read/write data model for all VA VISTA data across all VA VISTA operational systems, establishing a common technical foundation for master data management and computable data representation and exchanging between VA and DoD clinical information systems.

May 11, 2016



***“Medically Ready Force . . . Ready Medical Force”***



# Project Information

- ❖ Organization: Hokukahu, LLC
- ❖ Award #: HT0011-16-C-0007
- ❖ Functional Sponsors: Rafael Richards, MD, and Reese Omizo, MD
- ❖ Total \$ Amount: \$ 2,059,012.76
- ❖ Period of Performance: Dec 31, 2015 – Dec 30, 2016
- ❖ Contract Officer Representative: Alan Furuno
- ❖ Contract Specialist: Erwin Riviera
- ❖ Vendor Contact Information: Renton Nip, [rnip@hawaiiirg.com](mailto:rnip@hawaiiirg.com) 808-927-0999



# Overview of the Research Project

## Project Overview

The Project will provide a single comprehensive security enabled read/write data model for all VA VISTA data across all VA VISTA operational systems, establishing a common technical foundation for master data management and computable data representation and exchanging between VA and DoD clinical information systems.

## Project Objectives

- Provide comprehensive always-up-to-date, machine-processable exposure and definition of complete operational VISTA data model (VDM), based on all data dictionaries from all active VISTA instances in standard machine-processable, exchangeable form, supported by off-the-shelf tools.
- Create a fully audited and normalized VISTA data model (MVDM) with no redundancy.
- Enhance FileMan data to allow management (query, security, read/write) of Patient, Institutional, Knowledge, and Systems data as distinct entities and to enable patient-centric security.

# Overview of the Research Project

*continued...*



## The Project addresses the following functional gaps:

- Permits analysis and enhancement of the true operational VISTA data models and provide a data- and metadata-centric roadmap for auditing VISTA data. This automation creates a sustainable, continuously repeatable process across all systems going forward rather than a single snapshot in time.
- Provides the foundation for enterprise-centric Master Data Management for VISTA. This is the foundation for code reduction and elimination of multiple overlapping extraction methods.
- Enables highly contextualized and personalized patient data enrichment and patient-centric security.



# Project Status-at-a-Glance

As of: 03/30/2016

Metric	Assessment	Rationale
Overall	Green	Project is moving forward as scheduled, for a firm fixed price with no identified issues to date.
Cost	Green	Contract is FFP for a 12 month period of performance.
Schedule	Green	Project is on schedule.
Performance	Green	Project performance is on schedule.
Stakeholder Satisfaction	Green	No issues raised by stakeholders as of 3/30/2016.

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# Results to Date – Accomplishments

1. Developed the first version of the VDM and MVDM modules for both reading and writing data
2. Created VDM prototypes for the Vital, Allergy, Document and Visit domains. All prototypes included Jasmine-based RPC regression tests.
3. Created an MVDM prototype for the Allergy domain
4. Created the first version of the VDM's formal definition along with its supporting artifacts, rpc.jsonld and dd.jsonld
5. Scoped the RPCs used by CPRS, VISTA's official client
6. Established an easily installable test VISTA, nodeVISTA, that allows for Node.js development against OSEHRA VISTA
7. Delivered the first version of the Project's Technical Report - final version due 6/30.
8. Established the Project's web site, [vistadata.info](http://vistadata.info)
9. Began "Prod Clone" analysis based on an official VA Test VISTA, "AINA"



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Conclusion of Project Overview

Next – Contractual Overview

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# VistA Metadata Project

## Contractual Overview

May 11, 2016



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# Tasks & Milestone Update

	FY16				FY17			
	1	2	3	4	1	2	3	4
<i>Milestones &amp; Phases</i>		Information Gathering						
		Analysis & Synthesis						
Programmatic Deliverables		▲	▲	▲	▲			
Technical Deliverables					▲			

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# Barriers / Issues

- Issues that have had impact on progress:
  - None to date



# Issues

#	Issue	Potential Impact	Mitigation Activities
High			
1	None		
Moderate			
2	None		
3	None		
Low			
4	None		

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# Risks & Risk Mitigation Plan

- ❖ High risk areas
  - ❖ Not applicable
  
- ❖ Identify Project Risks in at least three areas:
  - ❖ Not applicable



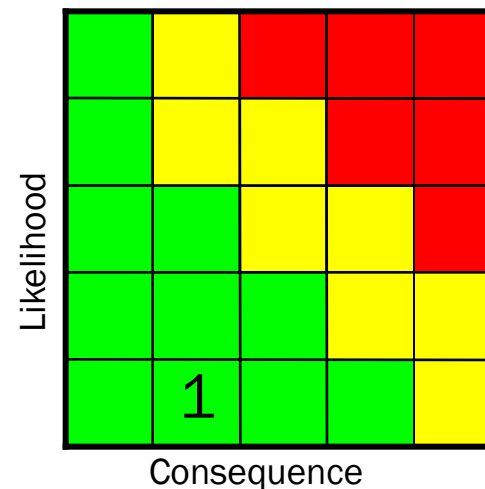
# Risks

## Risk 1:

The required GFE/GFI to be provided by Government within 30 DACA is not provided.

## Mitigation:

- Use open source OSEHRA VISTA images and resources.
- Use test VISTAs from JLV





# GFI Status & Project Impact

Identified GFI	Date Need was Identified	Resolution Status	Project Impact
Data Dictionary (DD) extracts	<i>DACA</i>	<i>Open</i>	Image is neither a current nor a true VA VISTA image.
Current authoritative Master version of VISTA	<i>DACA</i>	<i>Open</i>	Same
VISTA with test patients	<i>DACA</i>	<i>Open</i>	Same
Real operational VISTA	<i>DACA</i>	<i>Open</i>	Same
VISTA with real but de-identified patient data.	<i>DACA</i>	<i>Open</i>	Same

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# Anticipated Value

## as an Outcome of Research



- Provide comprehensive always-up-to-date, machine-processable exposure and definition of complete operational VISTA data model (VDM), based on all data dictionaries from all active VISTA instances in standard machine-processable, exchangeable form, supported by off-the-shelf tools.
- Create a fully audited and normalized VISTA data model (VDMN) with no redundancy.
- Enhance FileMan data to allow management (query, security, read/write) of Patient, Institutional, Knowledge, and Systems data as distinct entities and to enable patient-centric security.

# Assistance/ Decisions Needed

(NOTE: this slide may change if we don't have access to Mr. Carter's lab - by the time of this presentation on May 11<sup>th</sup>)



- Assistance/Decision needed from the Pacific JITC Program Office:
  - None
- Assistance/Decision needed from Functional SMEs:
  - None
- Assistance/Decision needed from DHA HIT Directorate or other Program Offices:
  - None





# Conclusions

A successful Project will address the following functional gaps:

- Analysis and enhancement of the true operational VISTA data models and a data- and metadata-centric roadmap for auditing VISTA data. Automation creates a sustainable, continuously repeatable process across all systems going forward rather than a single snapshot in time.
- Foundation for enterprise-centric Master Data Management for VISTA. This is the foundation for code reduction and elimination of multiple overlapping extraction methods.
- Highly contextualized and personalized patient data enrichment and patient-centric security.