

Department of Veterans Affairs

My HealtheVet Capabilities Enhancements MVI/MHV Compliance

Requirements Specification Document Infrastructure & Interfaces Team



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Version 1.0

Revision History

Date	Revision	Description	Author
5/29/2014	1.0	Technical Writer review of updated section, finalize and baseline for 12.9 Release.	
5/21/2014	0.4	Updated section 1.2 Scope for Remote ID Proofing	
4/15/2014	0.3	Initial Technical Writer Review of Sprint 1 updates	
4/14/2014	0.2	First draft for 12.9	
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Table of Contents

1. Introduction	5
1.1. Purpose.....	5
1.2. Scope	5
1.3. Acronyms and Definitions	6
1.3.1. Acronyms.....	6
1.3.2. Definitions	7
1.4. References	8
2. Overall Description	9
2.1. Accessibility Specifications	9
2.2. Business Rules Specifications	9
2.3. Design Constraints Specifications	9
2.4. Disaster Recovery Specifications.....	9
2.5. Documentation Specifications	10
2.5.1. Program Management Accountability System Documentation Compliance standards.....	12
2.6. Functional Specifications.....	12
2.7. Graphical User Interface Specifications.....	13
2.8. Multi-Divisional Specifications.....	13
2.8.1. Interoperability (Executive Order Requirements).....	13
2.9. Performance Specifications	13
2.10. Quality Attributes Specifications	13
2.11. Reliability Specifications	14
2.12. Scope of Integration.....	14
2.13. Security Specifications	14
2.14. System Features.....	15
2.15. Usability Specifications	15
3. Applicable Standards.....	15
3.1. IdM	15
3.2. Health Insurance Portability and Accountability Act Compliance	15
4. Interfaces	15
4.1. Communications Interfaces	16
4.2. Hardware Interfaces	16
4.3. Software Interfaces	16
4.4. User Interfaces	16
5. Legal, Copyright, and Other Notices	16

6. Purchased Components	16
6.1. Defect Source (TOP 5)	16
7. User Class Characteristics	17
8. Estimation.....	17
9. Attachment A - Approval Signatures	20
Appendix A. Use Case Specification	21

1. Introduction

The Capabilities Enhancement project includes enhancements to My HealthVet (MHV) system to ensure that it is in compliance with Identity Services (IdS) Enterprise Requirements. For the compliance, MHV needs to shift from an integration with the Master Patient Index (MPI) to the Master Veterans Index (MVI).

The purpose of this document is to provide high level requirements that the MHV team shall implement in order to comply with the Identity Management requirements.

1.1. Purpose

The purpose of this Requirements Specification Document (RSD) is to outline the requirements for the MVI Compliance enhancements for MHV release 12.9. The intended audience of this document includes programmers, systems analysts, user experience designers, database analysts, and testers. The requirements specified in the following sections will include both functional and non-functional requirements, as well as applicable standards, interfaces, copyrights, and purchased components.

1.2. Scope

The scope of this project for release 12.9 is to provide:

1. For eRAR View and Upgrade Content Changes:
 - User should be able to see all the content updates listed in US01 and US02
2. For US1 Remote ID Proofing:
 - AAL Log entry that correctly identifies where the user is really coming from
 - MHV should handle the VAAFI "Not Found" header ID errors and display user-friendly error message
 - When multiple accounts are returned from MVI, MHV should throw a user friendly error message
 - Fix for SSO First time user coming to MHV with any credential
 - Change the header field name for 1 data item (va_eauth_pnid) and allow gender to be null when calling MVI with user traits. The old field was va_eauth_id.

1.3. Acronyms and Definitions

1.3.1. Acronyms

Please refer to the IdM Glossary for the Acronyms and Definitions located on the following links:

[http://\[REDACTED\]](http://[REDACTED])

[http://\[REDACTED\]](http://[REDACTED])

Acronym	Definition
AITC	Austin Information Technology Center
C&A	Certification and Accreditation
CCHIT	Commission of Health Information Technology
CIO	Chief Information Officer
ERR	Enterprise Requirements Repository
GUI	Graphical User Interface
HIM	Health Information Management
HIPAA	Health Insurance Portability and Accountability Act
HRA	Health Risk Assessment
IdM	Identity Management
ISO	Information Security Officer
IT	Information Technology
MHV	MyHealtheVet
MPI	Master Patient Index
MVI	Master Veterans Index
NwHIN	Nationwide Health Information Network
OIT	Office of Information & Technology
PEMS	Patient Education Management System
PMAS	Program Management Accountability System
ROI	Release of Information
RSD	Requirements Specification Document

Acronym	Definition
SDLC	system development life cycle
SQA	Software Quality Assurance
TES	Test Evaluation Summary
VA	Department of Veterans Affairs
VDD	Version Description Document
VHA	Veterans Health Administration
VLER	Virtual Lifetime Electronic Record

The above table contains acronyms and definitions.

1.3.2. Definitions

The table below provides definitions for terms relevant to the content presented in this document and other documents that define the MHV compliance to MVI.

Term	Definition
Accessibility	In software development, accessibility is a term used to describe the degree to which people with disabilities can use the features and functions of an application.
Business Rule	A business rule defines or constrains some aspect of the business. Business rules can apply to people, processes, corporate behavior, and computing systems in an organization and are put in place to help the organization achieve its goals.
Functional requirement	A functional requirement is a description of the behavior of a system or component of the system; a set of inputs, behavior, and output.
ICN	Internal Control Number used as an Enterprise Identifier
MHV eVault	MHV eVault is the MHV's data store for each user that constrains their personal health records. Self-entered goal data is stored in the MHV eVault.
Non-functional requirement	A non-functional requirement is criterion that can be used to determine how a system operates, rather than a specific behavior. Non-functional requirement categories include: usability, reliability, performance, supportability

Term	Definition
ProPath	ProPath is the front-end tool to a VA process asset library containing information regarding standard processes. It provides critical links to the formal approved processes, artifacts, and templates.
Section 504	Section 508 of the Rehabilitation Act requires that no qualified individual with a disability in the United States shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under a program or activity receiving Federal financial assistance or conducted by any Executive agency or by the United States Postal Service.
Section 508	Section 508 of the Rehabilitation Act requires that when Federal agencies develop, procure, maintain, or use electronic and IT, they shall ensure that this technology allows individuals with disabilities, who are members of the public seeking information or services from a federal agency, to have access to and use of information and data that is comparable to that provided to the public who are not individuals with disabilities.
Source ID	Used by MVI to correlate all systems. Typically consists of the submitting facility ID_unique ID for patient on that system. MHV will use the MHV_Profile_ID as the Source ID.
Usability	In software development, usability is a term used to describe the extent to which the application can be used by the target user population to achieve their goals with effectiveness, efficiency and satisfaction.
User Story	A user story is a software development tool used to document an application's behavior as it responds to user input. In other words, it is used to capture a system's behavioral requirements by detailing all aspects of the functional requirements.

1.4. References

The following documents are available via TSPR:

MHV/MVI Integration Requirements:

[http://\[REDACTED\]](http://[REDACTED])

The following documents are available via SharePoint:

Business Use Cases:

[SP link](#)

2. Overall Description

2.1. Accessibility Specifications

MHV Capabilities Enhancements for MVI compliance will adhere to Section 508 Compliance Requirements. The Veterans Health Administration (VHA) recognizes that these are Enterprise cross-cutting legal requirements for all developed Electronic & Information Technology (IT). Enterprise-level requirements maintained by VHA Health IT, Software Engineering and Integration, and Enterprise Requirements Management ensure the compliance of these requirements.

2.2. Business Rules Specifications

The User Story documents define the business rules specifications and reference the relevant flows. Business rules specifications define constraints that directly affect how the system user story will be carried out.

2.3. Design Constraints Specifications

Any proposed solution needs to meet all Department of Veterans Affairs (VA) and VHA Security, Health Information Management (HIM), Privacy, and Identity Management (IdM) guidelines. MHV will have the ability to require an end-user to affirm a dialog box containing privacy policy or Health Insurance Portability and Accountability Act (HIPAA) requirements prior to proceeding to steps that involve sensitive information. Front end applications will be designed to be run from an Oracle Weblogic server. Backend applications will be diagnosed to be run on an Oracle 11g server.

2.4. Disaster Recovery Specifications

MVI Compliance project will take advantage of the Disaster Recovery Mechanism currently in place at the Austin Information Technology Center (AITC).

2.5. Documentation Specifications

VA requires that Operating Units (Program Managers, Project Managers, Analysts) maintain, protect (when required), and distribute adequate documentation for VA information systems and its constituent components to authorized personnel. Office of Information & Technology (OIT) system managers and the OIT Chief/Chief Information Officer (CIO) in conjunction with the Information Security Officer (ISO) must ensure that sufficient documentation is developed and maintained to formalize security and operational procedures for the Operating Unit's information systems.

Security Documentation Compliance Standards include the following:

- Mandatory control enhancements for MODERATE and HIGH-impact systems:

The Operating Unit includes documentation describing the functional properties of the security controls employed within the information system with sufficient detail to permit analysis and testing of the controls.

- Mandatory control enhancements for HIGH-impact systems:

The Operating Unit includes documentation describing the design and implementation details of the security controls employed within the information system with sufficient detail to permit analysis and testing of the controls (including functional interfaces among control components).

The minimum VA requirements for System Documentation are as follows:

- System documentation must contain descriptions of the system hardware, software, policies, standards, procedures, and approvals related to the system life cycle and formalize the system's security controls
- VA requires that Operating Units ensure that sufficient documentation exists to provide an operating reference to effectively use software/hardware, and that formal security and operational procedure documentation, including the adequate completion of Certification and Accreditation (C&A) processes. Documentation must include, but not limit itself to, all documentation of the security planning, C&A process, and the configuration management of the hardware and software associated with the system.
- In addition, the Operating Unit must maintain supporting system development documentation, including the following:
 - User manuals for software
 - In-house application documentation (application requirements/program documentation, specifications/change control recommendations)
 - Any vendor-supplied documentation

- Standard operating procedures
- Network diagrams and documentation on setups of routers and switches
- Software and hardware testing procedures and results
- System interconnection agreements
- Hardware replacement agreements
- Vendor maintenance agreements and maintenance records

The ISO conducts annual reviews of security documentation with system owners, system managers, and other OIT personnel.

VA requires that mechanisms to control changes to system security documentation address revisions to all system security planning system documentation (such as, security plans and contingency plans). The system owner ensures that a table of changes describing the brief nature of significant changes requiring revision to the document.

Information System Documentation compliance standards include the following:

- The Operating Unit will provide documentation to authorized personnel as indicated above
- The Operating Unit's documentation/records must ensure that administrator and user guides include information on the following elements:
 - Configuring, installing, and operating the information system
 - Effectively using the system's security features
- The Operating Unit must maintain records/documents that show the assignment of the information system documentation control responsibility and specific actions taken to ensure the implementation of this control. The Operating Unit accomplishes this through the following items:
 - Records/documents show that the Operating Unit consistently provides, protects, and distributes information system documentation on an ongoing basis
 - When the Operating Unit encounters anomalies or problems in the implementation of the information system documentation control, they document them, and use the resulting to improve the control
 - If available from the vendor, the documentation should describe the functional properties of the security controls employed within the system with sufficient detail to permit analysis and testing of the controls
 - If available from the vendor, the documentation should describe the design and implementation details of the security controls employed within the system with sufficient detail to permit analysis and testing of the controls (including functional interfaces among control components)

2.5.1. Program Management Accountability System Documentation Compliance standards

The Regulatory Program Management Accountability System (PMAS) sets a standard that the Operating Unit must uphold throughout the duration of this project. According to the CIO, this process intends to promote near-term visibility into troubled programs, allowing the department to take corrective actions earlier and avoid long-term project failures. The VA expects PMAS to improve oversight of IT projects through strict adherence to project milestones and imposing strong corrective measures if a project misses multiple milestones.

Under PMAS, the VA expects projects to deliver smaller, more frequent releases of new functionality to customers, meaning that all documentation associated with the product delivery must be completed, reviewed, and signed off.

PMAS requires specific program resources and documentation before development begins and the use of approved processes during the system development life cycle (SDLC). These approach intendeds to ensure that customers, project members, and vendors working on a project align, made accountable, and have access to the resources necessary to succeed before work begins. For a program to be approved for investment under PMAS, the program requires an established customer sponsor, a qualified incremental program plan, requirements for three delivery milestones, and documented success criteria.

2.6. Functional Specifications

The functional specifications for the project for Release 12.9 are captured as user stories. These user stories can be located on SharePoint in the following link:

1. eRAR View and Upgrade Content Changes

[REDACTED]

2. US1 Remote ID Proofing:

[REDACTED]

3. Requirements Specification Document

[REDACTED]

2.7. Graphical User Interface Specifications

MVI Compliance will comply with VHA style guides and existing MHV requirements for cross-browser and cross platform compatibility. It will comply with the Graphical User Interface (GUI) Specifications as outlined in the MHV existing HealthVet 8.0 Style Guide.

2.8. Multi-Divisional Specifications

The following section covers elements included in the multi-divisional specifications.

2.8.1. Interoperability (Executive Order Requirements)

In keeping with the President's Executive Order: *Promoting Quality and Efficient Healthcare in Federal Government Administered or Sponsored Healthcare Programs*, the VHA OHI must promote quality and efficient delivery of Healthcare through the use of Healthcare IT, transparency regarding Healthcare quality and price, and incentives to promote the widespread adoption of health IT and quality of care. To support this mission to the greatest extent possible, any new IT system development or acquisition of commercial system shall:

1. Use interoperability standards recognized by the Secretary of Health and Human Services or the appropriate designated body at the time of the system update, acquisition, or implementation, in all relevant information technology systems.
2. Ensure interoperability with the Nationwide Health Information Network (NwHIN).
3. Comply with certification standards released through the Certification Commission of Health Information Technology (CCHIT).

2.9. Performance Specifications

There is no Performance Specification available at this time for MVI Compliance.

2.10. Quality Attributes Specifications

A suite of unit tests and repeatable system test cases will be made available as part of the Software Quality Assurance (SQA) process. The details are provided in the Quality Assurance (QA) Plan.

2.11. Reliability Specifications

There is no Reliability Specification available at this time for MVI Compliance.

2.12. Scope of Integration

For Release 12.9, MHV will continue to use the existing MPI Integration. Integration to MVI will be done as part of future releases.

MHV has planned integration points with the following known projects. A description of project integration scope can be found in the project charter:

- eBenefits
- Health Risk Assessment (HRA)
- Virtual Lifetime Electronic Record (VLER)
- MHV Patient Education Management System (PEMS) (integrates DoD MHS Learn)
- My Recovery Plan
- eMove!
- Mobile Applications
- Veterans Health Library Computerized Patient Record System
- VHA Point of Service (kiosks)

For detailed information on scope of integration for particular modules please refer to the module's associated Software Design Document.

2.13. Security Specifications

MHV VHI Compliance adheres to all VA and VHA security requirements will be adhered to. Cross-cutting security requirements are contained in the VA Enterprise Requirements Repository (ERR). The system shall comply with all applicable VA and VHA security requirements.

2.14. System Features

The MVI compliance, described by sequences of inputs and outputs, are outlined in the system user stories described in the Functional Specifications, section 2.6.

2.15. Usability Specifications

MVI Compliance adheres to the MHV Style Guide standards and global requirements including look and feel, browser compatibility, and other standard behavior such as paging, sorting, printing, and error messaging standards as documented in the My HealthVet 8.0 Style Guide.

3. Applicable Standards

3.1. IdM

MHV MVI Compliance will adhere to all Enterprise IdM standards. VHA recognizes these Enterprise requirements for all developed Electronic & IT products. These requirements apply to any application that adds, edits, or performs lookups on persons (patients, practitioners, employees, IT users) to systems within the VHA. To ensure that MHV MVI Compliance meets these requirements, addresses through the Enterprise-level requirements maintained by VHA Health IT, Software Engineering & Integration, and Enterprise Requirements Management.

3.2. Health Insurance Portability and Accountability Act Compliance

The system shall comply with Health Insurance Portability and Accountability Act (HIPAA).

4. Interfaces

The project manager updates this document which describes the interfaces the application will support, including adequate specificity, protocols, ports, and logical addresses for the development and verification of the software against the interface requirements. The project manager will include user, hardware, software, and communications interfaces in this section.

4.1. Communications Interfaces

Communications interfaces conform to the HL7 specifications.

4.2. Hardware Interfaces

MVI Compliance hardware interfaces will comply as specified in the My Health~~e~~Vet Integration Framework Interface Control Document.

4.3. Software Interfaces

The MVI Compliance project will rely exclusively on the MHV application development, database, compiler, utility, operating system, and communications software.

4.4. User Interfaces

All MHV user interaction is via the MHV production web browser. MVI Compliance project will support the same browsers as supported by MHV. Visual Design and Coding should adhere to standards that are defined by the [REDACTED]

5. Legal, Copyright, and Other Notices

MVI compliance shall follow VHA's Release of Information (ROI) regulations.

6. Purchased Components

The MHV team purchased no components as part of MVI compliance development.

6.1. Defect Source (TOP 5)

For the number of defects discovered by component, please refer to MHV 12.9 Version Description Document (VDD) and the MHV 12.9 Test Evaluation Summary (TES) documents. These documents can be located at below location:

[REDACTED]

7. User Class Characteristics

The MVI compliance will affect the users that registered as “Veterans” or “VA Patients”. The MVI Compliance team designs all enhancements specifically to support a user community of Veterans both young and old, each with varying levels of computer proficiency and education level.

8. Estimation

Function Point Analysis fails to apply to MVI Compliance. For each enhancement change request, the development team estimates the level of effort required to complete the change.

Project Software Functional Size and Size-Based Effort and Duration Estimate

Application

Item	A	B	C	D	E	Total
Counted Function Points						
Estimated Scope Growth						
Estimated Size at Release						

Size-Based Effort Estimates	Labor Hours	Probability
Low-Effort Estimate – With indicated probability, project will consume no more than:		
High-Effort Estimate – With indicated probability, project will consume no more than:		

Size-Based Duration Estimates	Work Days	Probability
Low-Duration Estimate – With indicated probability, project will consume no more than:		
High-Duration Estimate -- With indicated probability, project will consume no more than:		

Figure 1: Cumulative Probability (“S-curve”) Chart

N/A

Function Point Analysis Results Table

N/A

Project Software Functional Size and Size-based Effort and Duration Estimate						
	Application					
Item	A	B	C	D	E	Total
Counted Function Points						
Estimated Scope Growth						
Estimated Size At Release						
Size-based Effort Estimates					Labor Hours	Probability
Low Effort estimate – with indicated probability, project will consume no more than:						
High Effort estimate -- with indicated probability, project will consume no more than:						
Size-based Duration Estimates					Work Days	Probability

Low Duration estimate – with indicated probability, project will consume no more than:		
High Duration estimate -- with indicated probability, project will consume no more than:		

[Insert Cumulative Probability (“S-curve”) Charts here]

N/A

9. Attachment A - Approval Signatures

The signatures below are an acknowledgement that the signatory understands and agrees to the purpose and content of this document.

Signed: Date:



OIT MHVCE Project Manager

Signed: Date:



Director, Veterans Health Administration, V/CHIO Business Sponsor

Signed:

Date:



Program Manager, My HealthVet

Appendix A. Use Case Specification

MHV utilizes User Stories in place of Use Cases. The user stories for MVI 12.9 release can be found at the below SharePoint links:

1. eRAR View and Upgrade Content Changes



2. US1 Remote ID Proofing:

