

# **Department of Veterans Affairs**

## **VistA Scheduling Enhancements (VSE): High Priority/Urgent Enhancements**

### **Requirements Specification Document**



**July 2014  
Version 1.0**

## Revision History

Note: The revision history cycle begins once changes or enhancements are requested after the Requirements Specification Document has been baselined.

Date	Description	Author
Aug. 8, 2014	Final edits	[REDACTED]
Aug. 7, 2014	Changed diagram on p. 1	[REDACTED]
Aug. 6, 2014	First TW revisions	[REDACTED]
July 8, 2014	Initial Draft	[REDACTED]

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# 1. Introduction

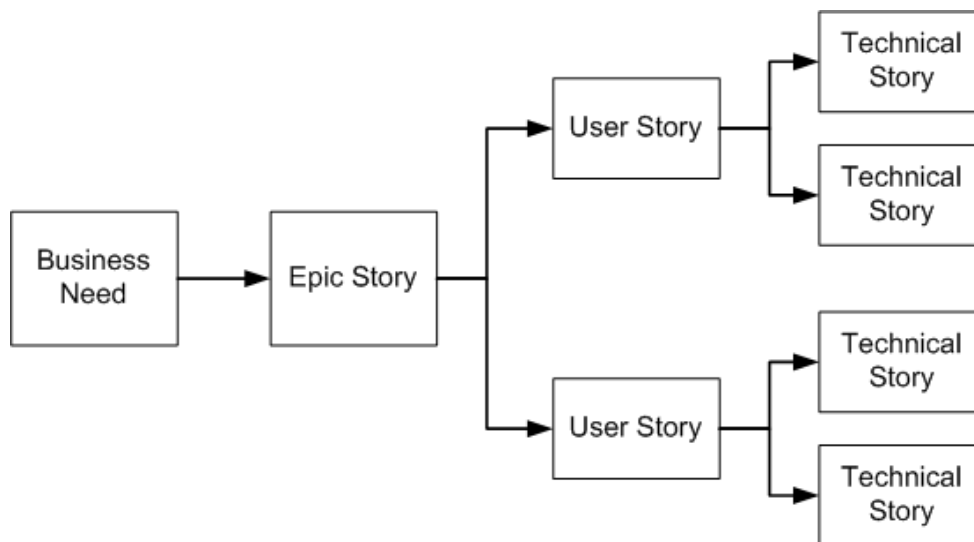
Veterans Health Administration (VHA) Access and Clinic Administrative Program (ACAP) is responsible for defining, standardizing, and coordinating system-wide administrative clinic operations and management. ACAP requests enterprise enhancements that will reduce operating cost for VHA, and improve operational efficiencies, resulting in patient centered access to care, coordinated care, increased customer satisfaction, and the reduction of excessive cycle/wait time used for scheduling patients.

## 1.1 Purpose

The purpose of this Requirements Specification Document (RSD) is to outline the functional requirements for the VistA Scheduling Enhancements (VSE) project Enhancement 4: High Priority/Urgent Enhancements.

The VSE project utilizes the Agile development methodology; in doing so, the requirements gathering process results in creation of Agile stories such as Epic, User, and Technical stories versus Use Cases.

In order to efficiently document the entire specification processes, artifacts are referenced. This allows this RSD to serve as a living document and route the reader to the specification documentation stories. As more User Stories are developed, they will be documented and referenced in a separate document. Epic and User Stories are refined and developed within the framework of the Agile methodology, which is based on a series of sprints. Within the Agile methodology, each business need documented in the VSE Backlog is mapped to one or more Epic Stories, User Stories or Technical Stories. Each Epic Story is broken down into the appropriate User Stories, which are then further developed into Technical Stories. The following graphic depicts the breakdown:



**Figure 1: Business Needs Broken Down to Technical Stories**

## 1.2 Scope

### Background:

The Department of Veterans Affairs (VA), Veteran's Health Administration (VHA) is one of the world's largest health care delivery organizations. The VHA is responsible for providing exceptional patient centered health care to America's Veterans. This care is delivered by engaged, collaborative teams in an integrated environment. VA depends on Information Management/Information Technology (IM/IT) systems to meet mission goals. To meet these goals, the Office of Information Technology (OI&T) strives to provide needed technology solutions in a high quality, effective, and efficient manner.

The VHA serves an estimated 8.5 million enrolled Veterans and employs over 250,000 staff, including more than 1,500 physicians. Over 50,000 employees use the Veterans Health Information Systems and Technology Architecture (VistA) scheduling capability to make approximately 81 million outpatient appointments each year. As the health care industry changes for Veterans, the VHA must be able to adapt quickly to the changing needs of the environment by monitoring patient demand, resource supply drivers, and operational efficiency indicators.

VA has a need to improve the efficiencies of the outpatient medical scheduling processes through improved visibility of information. Over the next few years, VA will create a comprehensive scheduling solution that will modernize VistA scheduling. In order to facilitate transition to the new business processes, VA requires enhancements to the current VistA scheduling system.

### Scope of Change:

VHA ACAP identified these major enterprise needs (business justifications) that must be addressed to achieve these goals:

- High Priority/Urgent Enhancements
  - Review its backlog of service request (enhancements) to determine if any of pending enhancements could provide immediate assistance to the field.

The following group of high priority enhancements were identified:

1. Appointment Management – When scheduling an appointment, VistA Scheduling currently prompts the clerk to pick “next available date.” The to-be process shall prompt the clerk to enter the patient's desire date and only display “next available” option if the clerk selects that option.
2. Clinic Set Up Redesign
  - a) Add clinic location and default provider to the Scheduling Letters.
  - b) Expand the Clinic Profile Name from 30 characters to 45 characters.
  - c) Increase Clinic Name Field to 45 characters on the Un-Reviewed Clinic Report.
3. Clinic Inactivation Date Prompt – When setting a Clinic to Inactive, create a reminder prompt to remove the inactive clinic from the active database.
4. Auto-Generate Appointment Letter – In the Appointment Manager Package, create an option to allow the user to auto-generate and print a letter when making an appointment for the patient within the Appointment Manager Package.
5. Ensure correct entry of desire date when creating appointments in a series – When creating a series of appointments, currently the desire date entered is assigned to all subsequent

appointments. In the to-be solution, the desire date should only populate the first appointment in the series and the all subsequent appointments should be adjusted accordingly

6. Telephone Number Extension Field – Create a new 26 character alpha-numeric field in the Clinic Profile entitled Clinic Extension.
7. Add Provider Name column to the Scheduling Letters.

## **1.3 References**

The following document is referenced for the performance of this effort:

- Department of Veterans Affairs, Office of Information and Technology, Transformation Twenty-One Total Technology (T4) Performance Work Statement (PWS) TAC-14-15100 Task Order PWS Version Number 2.6, June 2014.



## **2. Overall Description**

Not Applicable

### **2.1 Accessibility Specifications**

Not Applicable

### **2.2 Business Rules Specification**

Not Applicable

### **2.3 Design Constraints Specification**

Not Applicable

### **2.4 Disaster Recovery Specification**

Not Applicable

### **2.5 Documentation Specifications**

VA requires that Operating Units (Program Managers, Project Managers, and Analysts) maintain, protect (when required), and distribute adequate documentation for VA information systems and its constituent components to authorized personnel. Office of Information and Technology (OI&T) system managers and the OI&T 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.

All documentation created will comply with existing PMAS policies and utilize ProPath templates.

### **2.6 Functional Specifications**

The functional specifications for the VSE project are captured as user stories.

#### **2.6.1. Requirement: Appointment Management**

When scheduling an appointment, VistA Scheduling currently prompts the clerk to pick "next available date." The to-be process shall prompt the clerk to enter the patient's desire date and only display the "next available" option if the clerk enters NEXT at the patient's desired date prompt.

### **2.6.2. Requirement: Clinic Set Up Redesign**

1. Create a 45-character clinic profile name field
2. Add the expanded clinic profile name and the default providers to the following letters:
  - 1) appointment canceled
  - 2) clinic canceled
  - 3) no show
  - 4) pre-appointment
3. Use the expanded clinic profile name on the un-reviewed clinic report

### **2.6.3. Requirement: Clinic Inactivation Date Prompt**

When setting a Clinic to Inactive, schedule a mailman message to the user group as a reminder of the date the clinic becomes inactive.

### **2.6.4. Requirement: Auto-Generate Appointment Letter**

In the Appointment Manager Package, allow the user to auto-generate and print a letter when making an appointment for the patient within the Appointment Manager Package (similar to when cancelling an appointment). Provide the clerk a “yes or no” option to print an appointment letter upon making the patient appointment.

### **2.6.5. Requirement: Ensure Correct Entry of Desire Date When Creating Appointment in a Series**

When creating a series of appointments, currently the desire date entered is assigned to all subsequent appointments. In the to-be solution, the desire date should only populate the first appointment in the series and the all subsequent appointments should be adjusted accordingly.

For multiple appointments:

The desired date for the first appointment will be based on the original desired date; for subsequent appointments, the desired dates will be calculated from the initial desired date plus the interval.

### **2.6.6. Requirement: Telephone Number Extension Field**

- The VistA Scheduling package shall add a new field to the Set Up a Clinic option.
  - Field Name = Clinic Extension
  - Up to 26 character alpha-numeric field
- The VistA Scheduling package shall add a new field to the Clinic Profile option.
  - Field Name = Clinic Extension
  - Up to 26 character alpha-numeric field

## **2.7 Graphical User Interface Specifications**

The enhancements described in this document does not contain any specification for functionality that uses a Graphical User Interface (GUI) front end.

## **2.8 Multi-divisional Specifications**

The enhancements described in this document will preserve the multi-divisional functionality that currently exists.

## **2.9 Performance Specifications**

No performance specifications have been defined for this enhancement.

## **2.10 Quality Attributes Specification**

The project team will adhere to the standards set forth in The Department of Veterans Affairs M Programming Standards and Conventions.

## **2.11 Reliability Specifications**

Patch will meet the reliability requirements of Legacy VistA

**Table 1: Reliability Specifications**

## **2.12 Scope Integration**

Not Applicable

## **2.13 Security Specifications**

The project team will adhere to all applicable VA and VHA security requirements

## **2.14 System Features**

Refer to Section 2.6 on Functional Specifications for system feature information

## **2.15 Usability Specifications**

Not Applicable

### **3. Applicable Standards**

Applicable standards are the Department of Veterans Affairs M Programming Standards and Conventions.

### **4. Interfaces**

Interfaces will not be developed or modified to satisfy the enhancements described in this document.

#### **4.1 Communications Interfaces**

Communications Interfaces will not be affected by the enhancements described in this document.

#### **4.2 Hardware Interfaces**

Existing hardware interfaces will not be affected by the enhancements described in this document.

#### **4.3 Software Interfaces**

GUI interfaces will not be affected by enhancements.

#### **4.4 User Interfaces**

No changes to the UI for this enhancement.

## **5. Legal, Copyright, and Other Notices**

This section is not applicable. The enhancements described in this document do not require notices such as legal disclaimers and copyright notices.

## **6. Purchased Components**

The enhancements described in this document do not require purchased components.

### **6.1 Defect Source (TOP 5)**

Not Applicable

## **7. User Class Characteristics**

Not Applicable

## **8. Estimation**

The following placeholders for the Function Point Analysis Results Table will be replaced with actual functional point analysis data if and when that data becomes available.

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

Not applicable.

## 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 2: Cumulative Probability (“S-curve”) Chart**

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

## 9. Approval Signatures

REVIEW DATE:

SCRIBE:

Signed:

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	Date
Executive Director, ACAP Business Sponsor	

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	Date
Director, Scheduling Program, Product Development	

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	Date
Integrated Project Team (IPT) Co-Chair / Project Manager	

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	Date
Integrated Project Team (IPT) Co-Chair	



## A. Acronym List and Glossary

### Glossary

Term	Meaning
ACAP	Access and Clinic Administrative Program
CIO	Chief Information Officer
GUI	Graphical User Interface
HIM	Health Information Management
ISO	Information Security Officer
OI&T	Office of Information and Technology
PMAS	Program Management Accountability System
RSD	Requirements Specification Document
VA	Department of Veterans Affairs
VHA	Veterans Health Administration
VistA	Veterans Health Information System and Technology Architecture
VSE	VistA Scheduling Enhancements