

Department of Veterans Affairs

Mobile Development (MD)

Requirements Specification Document



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Version 1.1

Revision History

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

Date	Version	Description	Author
03/12/2014	1.1	Tech Writer Review	████
03/11/2014	1.0	Initial Document	████████

Artifact Rationale

The Requirements Specification Document (RSD) records the results of the specification gathering processes carried out during the Requirements phase. The RSD is generally written by the functional analyst(s) and should provide the bulk of the information used to create the test plan and test scripts. It should be updated for each increment.

The level of detail contained in this RSD should be consistent with the size and scope of the project. It is not necessary to fill out any sections of this document that do not apply to the project. The resources necessary to create and maintain this document during the life cycle of a large project should be acknowledged and clearly reflected in project schedules. Do not duplicate data that is already defined in another document or a section in this document; note in the section where the information can be found.

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1. INTRODUCTION

1.1. Purpose

The RSD specifies the functions, user stories, and technology that are to be implemented by the Mobile Development (MD) project. The purpose of the document is to capture and articulate the Functional and Non-Functional Requirements of the web and mobile applications that are part of the MD solution. The intended audience is both the business community, who supplies and approves the requirements, and the developer who will provide the software and hardware that will make up the MD solution. This document serves as the baseline to further define the scope of the project and verify the quality of the solution.

1.2. Scope

The scope of this document is to cover the standard non functional requirements for mobile application software for the MD project. The MD project currently consists of several web and mobile projects. This RSD will focus on the following: MOVE! Coach Mobile (MCM), Exposure Ed (EE) and Information Application (Info App). The functional requirements for each application will be provided as an addendum to this overarching RSD.

1.3. References

- Mobile Development (MD) Project, Mobile Health Applications Program, Business Requirements Document, October 2012, Version 9
- Environmental Exposures Mobile Application, Business Requirements Document, May 2012, Version 1.0
- VA Information Mobile Application, Supplemental to New Service Request #20121006, Business Requirements Change Document, February 2014
- VA Information Mobile Application, Web & Mobile Solutions Tracker #84,218, Business Requirements Document, September 2012

2. OVERALL DESCRIPTION

2.1. Accessibility Specifications

Not applicable at this time.

2.2. Business Rule Specification

Refer to the following locations within this document to view the unique business rule specifications for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

2.3. Design Constraints Specification

ID	Requirement
	Transport Layer Security (TLS) – XML/JSON used. XML provides a

ID	Requirement
	mechanism to impose constraints on the storage layout and logical structure.

2.4. Documentation Specification

	Requirement
	An implementation plan shall be developed for the national deployment of the Environmental Exposures Mobile App. ¹
	Training documentation associated with the training curriculum must be developed for each application.
NONF2228	Updates shall be made, as necessary, to applicable user manuals and other training tools and shall be delivered to all levels of users. If no user documentation exists, it shall be produced.

Refer to the following locations within this document to view the unique documentation specifications for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

2.5. Disaster Recovery Specification

Not applicable at this time.

2.6. Functional Specifications

Refer to the following locations within this document to view the unique functional specifications for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

2.7. Graphical User Interface (GUI) Specifications

Refer to the following locations within this document to view the unique functional specifications for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

¹ The implementation plan should take the required architecture and network capacity into specific consideration, as the response time requirements are highly dependent on the number and types of connections (e.g. mobile carrier and Virtual Private Network (VPN)) required.

2.8. Multi-divisional Specifications

Not applicable at this time.

2.9. Performance, Capacity and Availability Specifications

Refer to the following locations within this document to view the unique performance, capacity and availability specifications for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

2.9.1. Performance

What is the predicted annual growth in the number of application users?
The number of users is expected to significantly increase on an annual basis as mobile devices become more prevalent throughout each medical center.

2.9.2. Capacity

What is the predicted size (average) of a typical business transaction?
This information is not known at this time.
What is the predicted number of transactions per hour (day, or other time period)?
We anticipate that the average user would access the system about 10 times per work day.
Is the transaction profile expected to change (grow) over time?
The size of the transaction profile will change as the capability is expanded to allow for updates to the patient records (part of this BRD) and the nationwide deployment of the mobile application.
What is the process for planning/adjusting capacity?
The process for planning/adjusting capacity cannot be determined at this time.
Does the update require a surge capacity that would be different from the base application?
No.

2.9.3. Availability

Describe when the envisioned system will need to be available (business hours only, weekends, holidays, etc.) to support the business.
The application must be available on a 23-hour-a-day/7-day-a-week basis.

2.10. Quality Attributes Specifications

Refer to the following locations within this document to view the unique quality attributes specifications for each application:

- Exposures Ed – Appendix A

- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

2.11. Reliability Specifications

Refer to the following locations within this document to view the unique reliability specifications for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

2.12. Scope of Integration

Refer to the following locations within this document to view the unique scope of integration content for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

2.13. Operational Specifications

ID	Requirement
	Applications must be capable of being deployed via the VA Enterprise App Store.
	The system shall respond to user actions in 10 seconds or less in 80% of the attempts and never more than 20 seconds.
	Maintenance, including maintenance of externally developed software incorporated into the Environmental Exposures Mobile application(s), shall be scheduled during off peak hours or in conjunction with relevant Veterans Health Information Systems and Technology Architecture (VistA) maintenance schedules.
	Mobile applications shall be capable of being rendered on multiple platforms, including smart phones, tablets, and computer workstations.

2.14. Usability/User Interface Specifications

ID	Requirement
	User acceptance testing personnel shall include Office of Public Health staff that is able to confirm acceptable changes to their workflow.
NONF2227	The application shall include user prompts to guide the use of the application so that minimal technical support is needed by the user.
NONF2352	The system shall provide context sensitive help.
NONF2353	The system shall provide meaningful prompts and error messages to aid in completing a specific task.

2.15. Implementation Specifications

ID	Requirement
	An implementation plan shall be developed for all aspects of the Environmental Exposures Mobile Application.
	Technical Help Desk support for the application shall be provided for users to obtain assistance with using the Mobile Application.
NONF1614	The IT solution shall be designed to comply with the applicable approved Enterprise Service Level Agreements (SLA).
	Mobile devices must have network safeguards, such as Mobile Device Management (MDM) policies and Virtual Private Network (VPN) capabilities, applied before they are allowed to interface to the VA network.
	Applications must undergo a review and vulnerability scanning in order to be given the Authority to Operate (ATO). The ATO must be provided to the Certification Program Office in OIT.

2.16. User Access/Security Specifications

ID	Requirement
	Applications must meet VA's mobile guidelines in place at the time of the development/deployment.
NONF1616	Due to patient safety considerations, data protection measures such as backup intervals and/or redundancy shall be consistent with systems categorized as critical.
NONF1617	Ensure the proposed solution meets all VHA Security, Privacy, and Identity Management requirements including VA Handbook 6500 (See Enterprise Requirements Appendix).

2.17. Compliance Specifications

ID	Requirement
	The system shall enable developed mobile applications in compliance with all VA information security and privacy standards and policies (e.g., Federal Information Processing Standard 140-2, the government benchmark for cryptography published by the National Institute of Standards and Technology).

2.18. Security Specifications

ID	Requirement
ENTR25	<p>All VA security requirements will be adhered to. Based on Federal Information Processing Standard (FIPS) 199 and National Institute of Standards and Technology (NIST) SP 800-60, recommended Security Categorization where PII/PHI is used (Pre-Production and Production) is HIGH.</p> <p>The Security Categorization will drive the initial set of minimal security controls required for the information system. Minimum security control requirements are addressed in NIST SP 800-53 and VA Handbook 6500, Appendix D.</p>

2.19. Privacy

ID	Requirement
ENTR10	All VA Privacy requirements will be adhered to. Efforts that involve the collection and maintenance of individually identifiable information must be covered by a Privacy Act system of records notice.

2.20. 508 Compliance

ID	Requirement
ENTR95	All Section 508 requirements will be adhered to.

2.21. Identity/Management Specification

ID	Requirement
ENTR8	All Enterprise Identity Management requirements will be adhered to. These requirements are applicable to any application that adds, updates, or performs lookups on persons.
ENTR991	Application/services shall reference the Standard Data Services (SDS) as the authoritative source to access non-clinical reference terminology.
ENTR1092	Application/Services shall use the VA Enterprise Terminology Services (VETS) as the authoritative source to access clinical reference terminology.
ENTR1847	Applications recording the assessments and care delivered in response to an Emergency Department visit shall conform to standards defined by the VHA-endorsed version of C 28 – Health Information Technology Standards Panel (HITSP) Emergency Care Summary Document Using Integrating the Healthcare Enterprise (IHE) Emergency Department Encounter Summary (EDES) Component.
ENTR1848	Applications exchanging data summarizing a patient’s medical status shall conform to standards defined by the VHA-endorsed version of C 32 – HITSP Summary Documents Using Health Level Seven (HL7) Continuity of Care Document (CCD) Component.

2.22. Terminology/Services

ID	Requirement
ENTR991	Application/services shall reference the Standard Data Services (SDS) as the authoritative source to access non-clinical reference terminology.
ENTR1092	Application/Services shall use the VA Enterprise Terminology Services (VETS) as the authoritative source to access clinical reference terminology.
ENTR1847	Applications recording the assessments and care delivered in response to an Emergency Department visit shall conform to standards defined by the VHA-endorsed version of C 28 – Health Information Technology Standards Panel (HITSP) Emergency Care Summary Document Using Integrating the Healthcare Enterprise (IHE) Emergency Department Encounter Summary (EDES) Component.
ENTR1848	Applications exchanging data summarizing a patient’s medical status shall conform to standards defined by the VHA-endorsed version of C 32 – HITSP Summary Documents Using Health Level Seven (HL7) Continuity of Care Document (CCD) Component.

2.23. System Features

A list of system features and their descriptions will be described in the SDD.

2.24. Usability Specifications

Refer to the following locations within this document to view the unique usability specifications for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

3. APPLICABLE STANDARDS

Not applicable at this time.

4. INTERFACES

4.1. Software Interfaces

Refer to the following locations within this document to view the unique software interfaces for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

4.2. User Interfaces

Refer to the following locations within this document to view the unique user interfaces for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

5. LEGAL, COPYRIGHT, AND OTHER NOTICES

Not applicable at this time.

6. PURCHASED COMPONENTS

Not applicable at this time.

7. USER CLASS COMPONENTS

Refer to the following locations within this document to view the general characteristics of the intended users for each application:

- Exposures Ed – Appendix A
- MOVE! Coach Mobile – Appendix B
- VA Information Application – Appendix C

8. APPENDIX A – EXPOSURES ED (EE)

Exposures Ed Mobile Application provides Department of Veterans Affairs (VA) and non-VA healthcare providers with access to environmental exposures information and resources through the use of mobile technology.

8.1. Business Rule Specification

The link below contains the Business Rules for the Exposures Ed application:

[REDACTED]

8.2. User Stories and Acceptance Criteria

The link below contains the User Stories and Acceptance Criteria for the Exposures Ed application:

[REDACTED]

8.3. Graphical User Interfaces (GUI) Mockups

The link below contains the GUI mockups for the Exposures Ed application:

[REDACTED]

8.4. User Class Characteristics

Not applicable at this time.

9. APPENDIX B – MOVE! COACH MOBILE

MOVE! Coach Mobile allows self-managed, weight management allowing Veterans to monitor, track, and receive tailored feedback regarding their progress with weight and exercise goals while controlling relapse triggers and forming coping plans.

9.1. Business Rule Specification

The links below contains the Business Rules for the MOVE! Coach Mobile application:

[REDACTED]

9.2. User Stories and Acceptance Criteria

The link below contains the User Stories and Acceptance Criteria for the MOVE! Coach Mobile application:

[REDACTED]

9.3. Graphical User Interfaces (GUI) Mockups

Not applicable at this time.

9.4. User Class Characteristics

Not applicable at this time.

10. APPENDIX C – VA INFORMATION APPLICATION(INFO APP)

VA Information Application will provide Veterans and Caregivers the capability to receive information about VA and non-VA resources, locate VA services and easily track benefits deadlines in a mobile-friendly format that is quick and easy to use..

10.1. Business Rule Specifications

The links below contain the Business Rules for the VA Information Application:

[REDACTED]

10.2. User Stories and Acceptance Criteria

The link below contains the User Stories and Acceptance Criteria for the VA Information Application:

[REDACTED]

10.3. Graphical User Interfaces (GUI) Mockups

The link below contains the GUI mockups for the VA Information Application:

[REDACTED]

10.4. Scope of Integration

The links below contains the software interfaces for the VA Information Application:

[REDACTED]

10.5. Software Interfaces

The links below contains the software interfaces for the VA Information Application:

[REDACTED]

10.6. User Class Characteristics

Not applicable at this time.

11. APPROVAL SIGNATURES

REVIEW DATE: *<date>*

SCRIBE: *<name>*

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