Department of Veterans Affairs

Veterans Health Administration (VHA)

Office of Informatics and Analytics

Innovation Program

OneVA Pharmacy

Lessons Learned Report

(CLIN #0005AA)

Business Information Technology Solutions, Inc.

3190 Fairview Park Drive, Suite 315

Falls Church, VA 22042

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Revision History

The revision history cycle begins with the initial release of the OneVA Pharmacy Lessons Learned. Each time the document is updated, the Title Page lists the new version number and date, and entries are made to the revision history table, which include the description of the changes made.

Table 1: Revision History Table

| **Date** | **Version** | **Description** | **Author** |
| --- | --- | --- | --- |
| 12/09/2015 | 0.1 | Initial Draft | Kathy Coupland |
| 01/06/2016 | 0.2 | December Month End Submission | Kathy Coupland |
| 01/25/2016 | 0.3 | Updated to add new items | Kathy Coupland |
| 01/28/2016 | 1.0 | January Month End Submission | Kathy Coupland |
| 03/02/2016 | 2.0 | February Month End Submission includes updates to the Execution Development and IOC sections. | Kathy Coupland |

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# Purpose and Objectives

Throughout each project life cycle, lessons are learned and opportunities for improvement are discovered. As part of a continuous improvement process, documenting lessons learned helps the project team discover the root causes of problems that occurred and avoid those problems in later project stages or future projects.

The objectives of this report are gathering all relevant information for better planning of later project stages and future projects, improving implementation of new projects, and preventing or minimizing risks for future projects.

The OneVA Pharmacy Lessons Learned Report documents items identified as successes, challenges, or lessons learned that occur throughout the life of a project. Data for this report is applicable for all projects whether maintenance, development, or enhancement and regardless of project management methodology. The Lessons Learned report is a required project artifact and will be maintained in the Project Repository. The Lessons Learned Report will be initiated at the Project New Start state and be updated and reviewed throughout the lifecycle of the project to Project Closure.

# Lessons Learned

| **Project Name:**  **OneVA Pharmacy** | **Project Manager:**  **Cecelia Wray** |
| --- | --- |
| * EPS #: | * 2015-11-03-11:54:05-00-00-00-00-00-000 |

## New Start

### Introduction

Leadership at the VAs Grassroots Innovations Program, a cooperative effort between the Chief Technology Officer, the Health and Medical Informatics Office, and the VAs Office of Information and Technology (OI&T) provided innovators (VA employees) with a forum to propose new opportunities and to develop new ideas into functional prototypes.

There are two (2) separate phases to the Innovations Program. The low bar phase is a proof-of-concept phase where all work is accomplished outside of the VAs network in a VA virtual testing environment (Innovations Sandbox). The high bar phase occurs when a concept is moved to a developmental/production environment after the proof of concept has been developed, tested, and approved for full scale deployment.

In 2014, the VA engaged The Business Information Technology Solutions (BITS) Group to execute the low bar phase for the development of a proof of concept/prototype known as OneVA Pharmacy. OneVA Pharmacy provides the Department of Veterans Health Administration (VHA) the capability to allow Veterans travelling across the United States to refill active VA prescriptions at any VA pharmacy regardless of where the prescription originated.

The OneVA Pharmacy project is the high bar phase of the initiative. The OneVA Pharmacy project modifies the existing proof-of-concept software’s capability by including the requirements contained within its Project Work Statement (PWS), includes integration into VistA, development of documentation, and training to support a national rollout in 2016.

OneVA Pharmacy provides a foundation to build and extend new capabilities to the Veteran, who are better served by integrating virtual care into pharmacies, using technology to close the gap between the previous quality of information, and the Veteran's level of engagement. A well-designed OneVA Pharmacy builds upon the history of the VHA and advances in modern technology, to allow Veterans to take a more active role in their own health care.

### Scope

OneVA Pharmacy provides VistA the functionality to allow pharmacists to refill a prescription originating from any VA facility. One the refill is processed locally, the system decrements the patients number of remaining refills’ balance and updates the last refill date at the originating pharmacy. OneVA Pharmacy also manages controlled substances by displaying a message that a controlled substance cannot be refilled outside of the originating pharmacy. The proof-of-concept software will be modified to integrate with a middleware model that meets One-VA Technical Reference Model (TRM) list of approved technologies.

Project and training documentation will be developed and testing best practices will be executed. Training will be conducted for the product in accordance with an Initial Operating Capability (IOC) delivery. ProPath documents consistent with the identified approach will be delivered to the VA.

### Project Initiation

Project Initiation is the process by which a project transitions from the state of “New Start” into the state of “Planning”. A project “New Start” state is a candidate for “Planning” once the project has been added to the Business Operating Plan and Enterprise Project Structure identifies the finds release by the Information Technology Resource Management (ITRM).

The goals of Project Initiation are to determine if the business requirements are sufficient, to identify the project team, identify integrated project team, and identify deliverables to name a few.

| **Type** | **Description** |
| --- | --- |
| * ProPath Process: | * Project Initiation |
| * Project Successes: | * Project documentation stored on BITS Group SharePoint. * ProPath templates being used for VA deliverables. * Rational Tool access provided and requirements, business rules, design constraints, and user stories loaded. * Team resources identified. |
| * Project Challenges: | * No Business Requirements Document (BRD) available * No instructions for engaging the Integrated Project Team (IPT) to request a Field Operations (FO) representative. * Not all prototype artifacts available (e.g., testing) * Three months into the project an additional funding request was discussed. The average cost to take a project from development into production runs around $300,000 and there is the additional sustainment cost of $200,000. * Integration partners HDR/CDS, VAeMI, MVI, eVIP, Section 508 Program Office were not well made aware of the requirement to deliver a National rollout in Spring 2016. |
| * Lessons Learned: | * Using standardized templates is a best practice. * Project artifacts stored on SharePoint is a great value to obtaining current work in progress document and final deliverables. Allows for easier team collaboration on documents. * Many of the VA quality and intake processes requires the ProPath BRD document. It was a challenge to continue to receive an exception as opposed to being able to submit the document. * Add a process that requests a FO to be assigned to a project that will migration into the VA production environment as part of the IPT members criteria. * VA SharePoint should be assigned for every project to safely store all project artifacts, including final deliverables. * Onboard all Integration Partnerships and receive agreement that environments, including servers, software, configuration, and connectivity for all integration points (MVI, HDR/CDS, VistA, VAeMI) are known before project begins; timelines are agreed upon, point of contacts are provided, and accountability is determined. |
| * Process Improvement Recommendations | * Add the process to request a FO during the IPT member selection. * VA SharePoint should be assigned for every project. |

## Planning

### Project Planning

Project Planning is the process which starts the subsequent increments for the project. It includes project transitions to move from the state of Planning into the state of Active or Provisioning. Planning is a continuous process and persists until all project increments are identified and all committed delivery milestones are met.

The goals of Project Planning include developing or updating required artifacts; initiate a project's Initial Release or Subsequent Increment Planning activities; perform Testing Intake Assessment (TIA) and Application Self-Scoring Evaluation Support System (ASSESS) for Capacity Performance Engineering (CPE); initiate System Engineering Design Reviews (SEDR) and Architectural Engineering Review Board (AERB) Reviews; and define product acceptance criteria.

| **Type** | **Description** |
| --- | --- |
| * ProPath Process: | * Project Planning |
| * Project Successes: | * Kick-off meeting, agenda, and meeting notes completed * Team Roster distributed * Monthly Progress Report (MRP) delivered * Daily Stand Up calls & Weekly IPT & VA Stakeholder meetings conducted * SEDR & ASSESS forms submitted for Enterprise System Engineering (ESE) organization |
| * Project Challenges: | * Team VA network and application access * Elevated privileges forms & eToken processes * Development & SQA testing environments |
| * Lessons Learned: | * Kickoff meeting agreement to combine and conduct the IPT and VA Stakeholder meeting together, weekly, to ensure no surprises. * Daily Stand Up calls for team members successful in identifying the risks early on and providing to VA and The BITS Group management. * Timely submission of SEDR & ASSESS on boarded various engineer networks early on. * Obtaining VA access for the team is extremely delayed for this 6-month project. VA escalation process and focus on quickly gaining access for team members would spread the tasks out to team members. * There are no instructions available in ProPath for requesting a development and SQA test environments. |
| * Process Improvement Recommendations | * Add instructions to the ProPath process that allows the Project Manager (PM) to submit for development and testing environments. |

### Project Management

Project Management processes focus on the Project Life Cycle to produce deliverables or artifacts to initiate, plan, and manage the IT project. Project Management processes within ProPath were developed using best practices associated with the Project Management Institute (PMI), Software Engineering Institute (SEI), and Information Technology Infrastructure Library (ITIL).

| **Type** | **Description** |
| --- | --- |
| * ProPath Process: | * Project Management |
| * Project Successes: | * Staff Onboarding – appropriate resources obtained; solid team * Work Breakdown Structure (WBS) and Project Schedule released * Risk Management Plan, Issues Log, and Risk Log developed * Requirements Traceability Matrix (RTM) initial development * Requirements Specification Document (RSD) delivered and signed * Systems Design Document (SDD) baseline delivered * Rational entries for entered for requirements, business rules, design constraints, and user stories. |
| * Project Challenges: | * Although appropriate resources were obtained for the project, access to VA systems were not timely. |
| * Lessons Learned: | * Successful onboarding of staffing resources and team members shared and trained those to quickly bring everyone current with knowledge. * RSD & SDD updates made to the Word document but Rational updates were not made timely as a result of a team member losing VA access and other members not having access. |
| * Process Improvement Recommendations | * No changes necessary to the ProPath process. |

## Active

### Project Execution – Development

| **Type** | **Description** |
| --- | --- |
| * ProPath Process: | * Project Execution – Development |
| * Project Successes: | * Master Test Plan (MTP) initially baseline delivered * Create VistA Path Numbers * Update SDD * Evaluation existing VistA code and modify for new requirements * Review and set up existing test scripts |
| * Project Challenges: | * No VistA development environment available, initially. Once made available it was placed on Linux server environment. Expectation was that MUMPS developer would be the system administrator of the development servers but the MUMPS developer was not an expert in Linux systems server administration. * Rational Functional Tester (RFT) software not available on VA CAG Standard Desktop. Testers required CAG Developer Desktops to use RFT. CAG Developers Desktops no longer being released due to the Citrix upgrade therefore testers require Government Furnished Equipment (GFE). To obtain GFE requires contract modification. * Middleware developer requires installation of various software (e.g. Java, Integrated Developer Environment, etc.) which requires a VA CAG Developer Desktop or GFE. To obtain a GFE, a contract modification is required. * OneVA Pharmacy development and integration environments required the Master Veteran Index (MVI) connectivity to be available. * VAeMI Integration direction changed from self-service model to full-service which transitioned the workload from the OneVA Pharmacy Middleware Developer to the VAeMI Integration team, 4-months into the project. |
| * Lessons Learned: | * Master Test Plan delivered but delay in knowing the development and testing environments contributed to many TBD comments. * Assessment of the following resources should have been performed and agreed upon at Project Start with the individual point of contacts lined up and made available to the project:   + Development environment for VistA instances   + Integration environment for VistA instances   + MVI availability in both development and integration   + HDR/CDS set up for VIE configuration in both development and integration   + eMI development and integration environments available for OneVA Pharmacy within time frame   + VAeMI team commitment on self-service model vs. full-service model. |
| * Process Improvement Recommendations | * No changes necessary to the ProPath process. * Receive agreement from all parties that environments, including servers, software, configuration, and connectivity for all integration points (MVI, HDR/CDS, VistA, VAeMI) are known before project begins; timelines are agreed upon, point of contacts are provided, and accountability is determined. |

### User Functional Testing

| **Type** | **Description** |
| --- | --- |
| * ProPath Process: | * User Functional Testing |
| * Project Successes: |  |
| * Project Challenges: |  |
| * Lessons Learned: | * Provide a full explanation of the lessons learned, (e.g. from both successes and challenges) of each project state. Include items that should have been done differently; were done per compliance/governance, but proved no value added; identify effort that should have been accomplished, but was not and why. |
| * Process Improvement Recommendations | * No changes necessary to the ProPath process. |

### Enterprise Testing Services/Operational Readiness Review

| **Type** | **Description** |
| --- | --- |
| * ProPath Process: | * Enterprise Testing Services/Operational Readiness Review |
| * Project Successes: |  |
| * Project Challenges: |  |
| * Lessons Learned: | * Provide a full explanation of the lessons learned, (e.g. from both successes and challenges) of each project state. Include items that should have been done differently; were done per compliance/governance, but proved no value added; identify effort that should have been accomplished, but was not and why. |
| * Process Improvement Recommendations | * No changes necessary to the ProPath process. |

### Initial Operating Capability (IOC)

| **Type** | **Description** |
| --- | --- |
| * ProPath Process: | * Initial Operating Capability (IOC) |
| * Project Successes: | * Delivered and received sign-off of the IOC Memorandum of Understand (MOU) from all 3-sites. |
| * Project Challenges: | * No challenges. |
| * Lessons Learned: | * No issues. |
| * Process Improvement Recommendations | * No changes necessary to the ProPath process. |

### Project Closeout

| **Type** | **Description** |
| --- | --- |
| * ProPath Process: | * Project Closeout |
| * Project Successes: |  |
| * Project Challenges: |  |
| * Lessons Learned: | * Provide a full explanation of the lessons learned, (e.g. from both successes and challenges) of each project state. Include items that should have been done differently; were done per compliance/governance, but proved no value added; identify effort that should have been accomplished, but was not and why. |
| * Process Improvement Recommendations | * No changes necessary to the ProPath process. |