Department of Veterans Affairs

**Parking a Prescription Initiative**

Requirements Specification Document



May 2012

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Revision History

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# Introduction

In 1996, the Chief Information Office introduced VistA, which is the Veterans Health Information Systems and Technology Architecture. It is a rich, automated environment that supports day-to-day operations at local Department of Veterans Affairs (VA) health care facilities.

VistA is built on a client-server architecture, which ties together workstations and personal computers with graphical user interfaces at Veterans Health Administration (VHA) facilities, as well as software developed by local medical facility staff. VistA also includes the links that allow commercial off-the-shelf software and products to be used with existing and future technologies.

The Computerized Patient Record System (CPRS) v. 1.0 is a VistA software application. CPRS enables clinicians, nurses, clerks, and others to enter, review, and continuously update all information connected with any patient.

VistA Pharmacy Benefits Management (PBM) package replaced the Drug and Pharmaceutical Products management (D&PPM) application. The software extracts medication dispensing data elements from the Outpatient Pharmacy, Inpatient Medications IV and Unit Dose, Automatic Replenishment/Ward Stock, and Controlled Substance modules; Procurement information from Drug Accountability, Integrated Funds Control, Accounting and Procurement (IFCAP); and a limited amount of Laboratory data on a monthly basis.

AudioCARE AudioREFILL is an automated system that calls to remind Veterans of scheduled appointments. It allows Veterans to call in to verify or cancel an appointment and to refill or check on a prescription refill status. Some VA Butler Healthcare clinics were not using this system for their appointment reminder calls. The team worked with O&IT to activate this feature with additional clinics. Veterans are educated on the use of AudioCare when they check in for their appointment.

## Purpose

The purpose of the Parking a Prescription Initiative (PaPI) is to enhance the functionalities of the three existing applications and deliver prototype applications to the VA Innovations Lead and the Contracting Officer’s Technical Representative (COTR) to meet the functional requirements identified below.

## Scope

The VA Information Technology Innovation Program, sponsored by the Veterans Health Administration (VHA) Office of Information and Technology (OI&T), has identified 26 innovation prototypes to undergo evaluation for possible further development and VA-wide deployment.  The ‘Parking Outpatient Rx to Prevent Waste’ is one of the 26 innovations selected for prototype and evaluation.

Currently, there are limitations in the prescription ordering and dispensing functions of the VA’s VistA. These limitations impact health care providers’ medication ordering practices for recurring medications.  When the Veteran (patient) is seen by a physician and a medication is ordered or renewed, the VistA medication ordering and dispensing system currently generates a fill order for the prescription even if the Veteran’s old prescription is not due for a refill.  This creates unnecessary multiple dispensing of medications, additional expense, confusion for the Veteran (multiple prescriptions for the same medication) and co-pay fees for medicines that were not requested.

The PaPI innovation will develop a method for prescribers to “park” a prescription by placing it in a “hold until requested” status.  This added functionality will improve quality of care, patient satisfaction, medication safety, and efficiency, as well as offering cost savings.

## Acronyms and Definitions

### Acronyms

| Term | Definition |
| --- | --- |
| C1 | Class 1 |
| CPRS | Computerized Patient Record System |
| GUI | Graphical User Interface |
| IT | Information Technology |
| MUMPS | Massachusetts General Hospital Utility Multi-Programming System |
| OI&T | Office of Information Technology |
| PaPI | Parking a Prescription Initiative |
| RPC | Remote Procedure Call Broker |
| RSD | Requirements Specification Document |
| SACC | Standards and Conventions Committee |
| SDD | System Design Document |
| TRM | Techinical Reference Manual |
| VA | Department of Veterans Affairs |
| VHA | Veterans Health Administration |
| VistA | Veterans Health Information Systems and Technology Architecture |

### Definitions

| Term | Definition |
| --- | --- |
| AudioCARE AudioREFILL | An automated system that calls to remind Veterans of scheduled appointments. It allows Veterans to call in to verify or cancel an appointment and to refill or check on a prescription refill status. |

## References

# Overall Specifications

The PaPI innovation will develop a method for prescribers to “park” a prescription by placing it in a “hold until requested” status.  This added functionality will improve quality of care, patient satisfaction, medication safety, and efficiency, as well as offering cost savings.

## Accessibility Specifications

The applications that are being modified under the PaPI contract are all section 508 Compliant.

## Business Rules Specifications

## Design Constraints Specifications

* GUI SACC (Standards and Conventions Committee).
* VA Programming Standards (SACC Coding standards and SACC UI Standards.
* MUMPS
* Comply to Delphi Industry Standards

## Disaster Recovery Specifications

The data used by PaPI is stored in VistA. The same disaster recovery procedures apply as they do for VistA applications.

## Documentation Specifications

Prototype Demonstrations Report:

* A comprehensive prototype demonstrations report shall accompany the prototype applications and source codes. The report shall document the work performed, and results obtained. The report shall present conclusions and recommendations for the PaPI system.
* At project completion all sections shall be combined with conclusions and recommendations to form the report.

## Functional Specifications

### The functionality of the existing CPRS shall be enhanced to support the following requirements:

|  |  |
| --- | --- |
| ID | Requirement |
|  | The CPRS application shall provide a routing of “Park” when ordering a new medication, copying an order to new, changing an order to new or renewing an order. |
|  | The CPRS application shall provide the ability to place a current order into a status of “Active Park”. |
|  | The CPRS application shall provide the ability to “UNPark” a current order in an “Active Parked” status. At the time the order is “UNParked”, the provider shall have the option to send a fill of the order by mail or window or to not send a fill but to place the order in an active status. |
|  | The CPRS application shall provide the ability to reflect a new status of “Active Park” on both the meds tab of CPRS and the orders Tab of CPRS. |
|  | The CPRS application shall show a definition of the status, when a mouse is hovering over the status of an application. |
|  | The CPRS application shall provide the ability that any activity (discontinue, flag, transfer etc.) that is currently done to an active prescription can be performed on an “Active Parked” prescription. |
|  | The CPRS application shall provide the ability that any report that currently includes active prescriptions will also include an “Active Parked” prescription. |
|  | The CPRS application shall provide the ability that a site parameter will allow a default setting for new, renewed or copied to new prescriptions to default to window/mail/park. |
|  | The CPRS application shall provide the ability that current order check functionality is performed on an Active Parked medication order. |

### The functionality of the existing VistA Pharmacy application shall be enhanced to support the following functional requirements:

|  |  |
| --- | --- |
| ID | Requirement |
|  | The VistA Pharmacy application shall provide the routing of “PARK” when finishing a new medication order or a renewed order. |
|  | The VistA Pharmacy application shall provide the ability to place a current prescription into a status of “Active Park”. |
|  | The VistA Pharmacy application shall provide the ability to “UNPark” a current prescription in an “Active Parked” status. At the time the order is “unparked”, the pharmacist shall have the option to send a fill of the order by mail or window or to not send a fill but to place the order in an active status. |
|  | The VistA Pharmacy application shall provide the ability to reflect a new status of “Active Park” on the pharmacy VistA Medication Profile. |
|  | The VistA Pharmacy application shall provide the ability that any activity (discontinue, remote, edit, etc.) that is currently done to an active prescription can be performed on an “Active Parked” prescription. |
|  | The VistA Pharmacy application shall provide the ability that any report that currently includes active prescriptions will also include an “Active Parked” prescription. |
|  | The VistA Pharmacy application shall provide the ability so that a mailed in refill request slip for a prescription in an “active parked” status can be bar-coded and placed in suspense file (similar to current active prescriptions). |
|  | The VistA Pharmacy application shall provide the ability so that a new prescription finished by the pharmacist and placed in a parked status is NOT sent to automated dispensing equipment. |
|  | The VistA Pharmacy application shall provide the ability so that current order check functionality is performed on an Active Parked medication order. |
|  | The VistA Pharmacy application shall provide the ability so that activity that occurs on an Active Parked prescription is documented in the activity log of that prescription. |

### The functionality of the existing proprietary Massachusetts General Hospital Utility Multi-Programming System (MUMPS) AudioFax Telephone Refill System, now called the AudioCARE AudioREFILL System, shall be enhanced to support the following functional requirements:

|  |  |
| --- | --- |
| ID | Requirement |
|  | TheAudioCARE AudioREFILL System shall provide that the activities performed for an active prescription are also performed for a parked prescription.Note: (This requires interfacing with the Audio Care vendor to facilitate code changes in Audicare MUMPS routines that access”pateient medication profile – FILE 52”, so that when these routines extract data corresponding to patient’s social security number and prescription ID, activities performed for an Active prescription are also performed for a PARKED prescription.) |
|  | Coding changes shall be provided for the VistA receipt of requests from AudioCARE AudioREFILL System so that when a patient requests a refill for a prescription that has been associated with a newer prescription that is in the parked state, the refill is processed as if the newer prescription was requested. |

## Graphical User Interface (GUI) Specifications

The Graphical User Interface (GUI) will be specified during the design phase in the PaPI Version 1.0 System Design Document (SDD).

## Multi-Divisional Specifications

N/A – Each of the three PaPI applications are all C1 Nationally Released applications.

## Performance Specifications

No significant change to the existing system response time.

## Quality Attributes Specifications

The coding standards, naming conventions, along with the standard set of class libraries in the Information Technology (IT) Technical Reference Model (TRM) will be used in this development effort.

The features in this RSD are written to ensure testability. Additionally, the Requirements Traceability Matrix ensures that each functional requirement is mapped to a system design requirement, as well as a specific test script(s). The mapping of a functional requirement to a system requirement and to a test script(s) ensures complete testing coverage.

## Reliability Specifications

The uptime for the three PaPI applications is in large part based on the uptime of VistA and that of the local web server used by the local VA sites. If VistA is down, the three PaPI applications will not be able to read or display the data from VistA.

## Scope of Integration

The user interface for the three applications is written in Delphi; the middleware is predominantly in MUMPS.

## Security Specifications

The interface shall use existing CPRS, VistAPharmacy and AudioCARE AudioREFILL and VistA security.

## System Features

The PaPI innovation will develop a method for prescribers to “park” a prescription by placing it in a “hold until requested” status.

## Usability Specifications

Basic computer skills: Be able to type, as well as use a mouse to point and click. Knowledge of VistA fundamentals such as logging on, logging off, accessing help functions, performing searches, entering and editing data. the VistA configuration file as well as patient administrative data.

# Applicable Standards

The PaPI enhancement will comply with the standards of the VA Information Technology Innovation Program.

# Interfaces

## Communications Interfaces

No new interfaces will be introduced with the PaPI enhancements.

## Hardware Interfaces

No changes to existing hardware required.

## Software Interfaces

* Remote Procedure Call Broker (RPC)
* AudioCARE AudioREFILL System – There must be coordination with the vendor who owns the AudioCARE system and modifying the AudioCAREAudioREFILL system.

## User Interfaces

* PaPI has a point and click interface.
* Basic computer skills: Be able to type, as well as use a mouse to point and click.
* Knowledge of VistA fundamentals such as logging on, logging off, accessing help functions, performing searches, entering and editing data. the VistA configuration file as well as patient administrative data.

# Legal, Copyright, and Other Notices

The AudioCARE AudioREFILL System is proprietary to AudioCARE Systems., and is not owned by the VA.  The Government is not responsible for any costs that may be incurred by the contractor to gain access to the AudioCARE AudioREFILL System.

# Purchased Components

There shall be no additional components purchased for implementation of the PaPI enhancements.

# User Class Characteristics

The user community will not change with this release.

# Estimation

NA

# 

# Attachment A - Approval Signatures

This section is used to document the approval of the Requirements Specification Document during the Formal Review. The review should be ideally conducted face to face where signatures can be obtained ‘live’ during the review however the following forms of approval are acceptable:

1. Physical signatures obtained face to face or via fax

2. Digital signatures tied cryptographically to the signer

3. /es/ in the signature block provided that a separate digitally signed e-mail indicating the signer’s approval is provided and kept with the document

The Chair of the governing Integrated Project Team (IPT), Business Sponsor, IT Program Manager, and the Project Manager are required to sign. Please annotate signature blocks accordingly.

REVIEW DATE: *<date>*

SCRIBE: *<name>*

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Signed: Date:

*< Integrated Project Team (IPT) Chair>*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed: Date:

*<Business Sponsor>*

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Signed: Date:

*<IT Program Manager>*

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Signed: Date:

*<Project Manager>*