Pharmacy Reengineering  
Pharmacy Product System – National  
(PPS-N) v3.0

Requirements Specification Document



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Revision History

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

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| 07/23/2015 | 1.11 | Updates to Section 2.6.1.7.1 to add approved requirements. | B |
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| 07/07/2015 | 1.9 | Update to Section 2.10 to add PMAS/ProPath Requirement. | W. |
| 06/19/2015 | 1.8 | Updates to Section 2.6.1.5.2 to add approved VistA requirements. | W. |
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| 3/30/2015 | 0.5 | Additional Updates to reflect PPS-N 3.0 | C. |
| 3/25/2015 | 0.4 | Rewrote the Functional Requirements section. | J. |
| 03/24/2015 | 0.3 | Updates to reflect PPS-N 3.0 | C. |
| 03/09/2015 | 0.2 | Conversion to new RSD ProPath template | J. |
| 03/02/2015 | 0.1 | Initial draft for UFT Increment Milestone 1 review | J. |

*ProPath Template v1.4, December 2014*

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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# Introduction

Pharmacy applications and systems are some of the oldest technologies in the Veterans Health Information Systems and Technology Architecture (VistA) system. The Veterans Health Administration (VHA) has identified system limitations and cumbersome, inconsistent pharmacy processes as a weakness in its ability to provide efficient pharmaceutical services across the VHA continuum. In 2001, First Consulting Group, an external contractor, conducted a functionality assessment of pharmacy applications and operations to determine the viability of maintaining the status quo of current technology supporting VHA Pharmacy operations, taking into account agency goals and priorities. This analysis, presented in the Final Report of the VA Pharmacy Application Assessment Project (dated July 20, 2001), identified several fundamental problems with the current system and recommended that VHA Pharmacy Systems technology and operational processes change from a dispensing and labeling focus to a patient-centric care focus. A proposal to proceed with the VHA Pharmacy Reengineering (PRE) project was presented to VHA and subsequently approved on April 16, 2002.

The Future Business Process Model (FBPM), published in September 2004, presents the overall operational concept for the pharmacy processes which the overall PRE project supports. The design of the operational concept presented in the FBPM focuses on achieving an enterprise-wide patient-centric pharmacy care system. The operational concept includes:

* Integrating Inpatient and Outpatient Pharmacy Care – This results in a single, combined view of a patient’s healthcare. The combined view provides the caregiver with quick access to pertinent information about a patient’s outpatient and inpatient medications.
* Integrating On-Site and Off-Site Pharmacy Care – This addresses a new capability to access and incorporate pertinent healthcare information from VHA and non-VHA healthcare facilities, providing the caregiver a complete picture of the Patient’s Medication Profile.
* Integrating Pharmacy into the Patient Care Team – This specifically addresses the vision of fully integrating pharmacy operations with the various other operations dealing with patient care, such as order entry, administration, and clinical monitoring.
* Integrating Inventory and Supply Management in Patient Healthcare – This incorporates inventory and supply concepts (e.g., par levels, reorder points, usage data, forecasting) to ensure that required medical supplies are available in the right form, at the right time, and in the right place.
* Integrating Process Management into Patient Healthcare – This provides the capability to assess the status of pharmacy operations and to make improvements continuously based on evidence garnered throughout the pharmacy processes.

Implementing the operational concept outlined above will help transform the current pharmacy from a supply-fill-deliver organization to an OneVA Pharmacy (providing world-class service to Veterans and their families through the effective management of people, technology, process, and financial resources) that is a valued member of the VHA’s patient-care team.

The objective of the Pharmacy Product System (PPS) project is to facilitate the improvement of pharmacy operations, customer service, and patient safety for the VHA. The PPS project will help address the identified goals and vision for the VHA Pharmacy System.

The goal for the overall PPS project is a seamless and integrated nationally supported system that is an integral part of the One-VA Technical Reference Manual (TRM) compliant environment. To meet this goal, the PPS project will enhance pharmacy data exchange, as well as clinical documentation capabilities, in a truly integrated fashion to improve operating efficiency and patient safety. Additionally, it will provide a flexible technical environment to adjust to future business conditions and to meet patient needs in the clinical environment. Achieving this goal will enable resolution of current pharmacy issues, improve patient safety, and facilitate long-term process stability.

## Purpose

The PPS versions have the following main goals.

PPS-N Version 1.0 & PPS-N Data Migration Version 1.0: These efforts began the process to perform drug data management in the reengineered environment while maintaining continuity with the legacy National Drug File Management System (NDFMS). These efforts focused on migrating the 12 national Pharmacy Drug files into the national enterprise level product system and constructed tools to manage and update the system.

PPS-N Version 2.0: This effort was focused on constructing functionality to update the local copy of the NDF VistA files directly from PPS-N data, eliminating the need for NDFMS to produce the monthly update patches. Processes were created within PPS to assemble the data updates on a weekly basis and produce an update file that could be distributed to Local VistA sites. This new functionality will increase the timeliness of updates to the local copy of the NDF Vista files, and increase the efficiency of the NDF/local drug file (#50) matching process.

PPS-N Version 3.0: This increment will complete the development of the updates to the Local site VistA NDF files that was started in PPS-N v2.0 while continuing to improve operations and to correct anomalies, defects, and user interface issues that exist in the PPS-N system. In addition, this effort will augment product types and track hazardous waste thus adding functionality needed for the next generation electronic health record. Additional product types include compound, investigational, partial dose, unit dose, IV, IV additive, IV solution, and electrolyte.

PPS-N Version 4.0: This increment will provide local PPS authorized users the ability to submit an automated request for addition or modification of National Products, NDCs, and orderable items. This increment will also identify any additional local data elements that are currently not supported at the national level in order to determine and implement an appropriate path to support these elements. The national data fields that are not currently populated will be populated with the local site’s data based on rules determined for accepting this information for each of the fields to be populated.

PPS-L Version 1.0 Analysis and Tools: This effort focused on a complete review of components within the PPS application, and how they were positioned to support the addition of Local VistA site Dispense Drug data. This effort produced a PPS-L Analysis Findings Report, detailing differences between the current PPS application and database, and what was needed to support the addition of Local VistA Dispense Drug data (Drug file #50 and related data). Additionally this effort produced a set of VistA utilities that could be run at local VistA sites to begin a review of their local Drug data to facilitate a seamless transition to PPS-L at a future date.

This document will cover both the functional and technical requirements for the Pharmacy Product System - National effort.

This document is intended for the users who will verify the requirements are correct, the developers who will be creating the system and the testers who will be validating the requirements are met.

## Scope

PPS is based on a service-oriented architecture and differs significantly from that of the legacy M-based VistA system. PPS has a three-tiered architecture that distinctly identifies a Presentation Tier (responsible for user interactions), a Business Logic Tier (where the business logic presides), and a Data Persistence Tier (responsible for short-term and long-term data persistence).

The PPS environment provides for the ability to manage pharmacy-specific data across the enterprise, ensuring that all facilities are using the same base data for their operations. The advantages of PPS over the legacy system are numerous. The new system will reduce the redundancy of information stored within legacy Pharmacy components by making use of enterprise services that provide access to authoritative sources of data, such as a Commercial-Off-The-Shelf (COTS) database. PPS will ease system implementation and maintenance, improve system performance, promote vendor independence, and provide for a pharmacy system that is scalable within the VA enterprise.

The PPS-N v3.0 effort will be covered in this document. Refer to the References ([Section 1.3](#_References)) for additional documents.

## References

The following relevant system documentation can be found on the Technical Services Project Repository (TSPR) in the [PPS-N Notebook](http://your_srver.domain.ext/warboard/anotebk.asp?proj=1471&Type=Active):

* PPS-N v1.0 RSD
* PPS-N v1.0 SDD
* PPS-N v1.0 ICD
* PPS-N v1.0 Data Migration RSD
* PPS-N v1.0 Data Migration SDD
* PPS-N v1.0 DMG

The following relevant system documentation can be found on the Pharmacy SharePoint Site under the [PPS link](http://vaww.yourserver.domain/projects/pre/PRE_PPS/SitePages/Home.aspx) for each version:

* PPS-N v3.0 RSD
* PPS-L v1.0 RSD
* PPS-L v2.0 RSD

The following relevant system documentation can be found on the Pharmacy SharePoint Site in the [PPS Product Level Documents folder](http://vaww.yourserver.domain/projects/pre/PRE_PPS/PPS%20OverArching%20Documents/Forms/AllItems.aspx):

* PRE Security Plan
* PRE Coding Standards
* PRE v1.0 SRS
* PRE v1.0 SDD1
* PRE v1.0 SDD2
* PRE v1.0 SDD3

The following relevant reference materials can be found on the Pharmacy SharePoint Site in the [March 2009 PRE v1.0 Additional Types Workshop folder](http://vaww.yourserver.domain/projects/pre/PRE_PPS/PPS%20OverArching%20Documents/Forms/AllItems.aspx?RootFolder=%2Fprojects%2Fpre%2FPRE%5FPPS%2FPPS%20OverArching%20Documents%2FMarch%202009%20PRE%20v1%2E0%20Additional%20Types%20Workshop&FolderCTID=0x012000226937279A64A8488F83F13A4655DDE3&View=%7b6D5F59FE-2CB1-46FE-9FD1-792E6B3F46D3%7d&InitialTabId=Ribbon%2EDocument&VisibilityContext=WSSTabPersistence):

* Compound\_Storyboards\_v1.0.pptx
* Investigational\_Storyboards\_v2.0.pptx
* IV\_Storyboards.pptx
* MAD\_Compounds.doc
* MAD\_IV.doc
* MAD\_Non\_Primary.doc
* MAD\_Supply\_Investigational\_Other\_Types.doc
* Non-Primary\_Storyboards.pptx

The following relevant Program Level reference materials can be found on the Pharmacy SharePoint Site in the [Over-Arching Documents folder](http://vaww.yourserver.domain/projects/pre/OverArching%20Documents/Forms/AllItems.aspx):

* PRE Style Guide

Additional references include:

* [PMAS Portal](http://vaww.yourserver.domain/pmas/Pages/default.aspx)
* [ProPath Site](http://vaww.oed.wss.domain/process/Library/propath_process_home.pdf)
* [TSPR Project Repository](http://your_srver.domain.ext/tspr/index.asp)
* [One-VA Technical Reference Model](http://www.domain/trm/)
* [Rational ClearQuest](http://server_1234.vha.domain.ext:81/cqweb/)
* [Release Management](http://vaww.eie.domain/lifecycle/default.aspx)
* [Requirements Management Repository Program](http://sharepoint.vista.domain.ext/sites/enterprise_requirements_management/default.aspx)
* [VA Section 508 Site](http://www.section508.domain)

# Overall Description

The functional and non-functional specifications for the PPS-N product are described in the sections which follow.

## Accessibility Specifications

This application must comply with the [Section 508 Technical Standards checklist](http://vaww.section508.domain/Section_508_Checklist_and_CVS.asp)s. In addition to the Accessibility Specifications listed in the checklists, the application must pass an inspection by the VA 508 compliance group and get their certification. This application will not make use of the Clinical Context Object Workgroup (CCOW) interfaces and has no requirements for the CCOW standards.

## Business Rules Specification

Known business rules are documented in PPS-N v1.0 RSD.

Additional business rules will need to be defined for the Functional Specifications listed in [Section 2.6](#_Functional_Specifications). Rules were documented in PRE v1.0 SRS. This document was an earlier attempt to explore the requirements for PPS-N and PPS-L and offers insight when refining the current requirements.

## Design Constraints Specification

System constraints fall into two categories, approved tools and pre-existing system architecture. PPS will only use tools that have been pre-approved and are on the TRM approved tool list. (**RM #512292)** The sections below discuss some of the major tools and components that comprise the system.

### Approved Tools

PPS tools are from the list of approved tools provided in the TRM. The list includes but is not limited to the following:

* WebLogic
* Java version
* Oracle version
* Spring Framework
* J2EE
* RoboHelp
* Hibernate
* Caché

### Pre-existing Architecture

The PPS system shall be constrained by the TRM compliant architecture to ensure system compatibility with other TRM compliant applications. The libraries and applications used include but are not limited to the following:

* KAAJEE
* VistALink
* NDFMS
* VistA

## Disaster Recovery Specification

The PPS-N system is architected to fit within the overall PRE architecture. A program-level disaster recovery plan is being written that includes PPS-N, PECS, MOCHA, and DATUP. The plan will need to be reevaluated for updates throughout the lifecycle of the project.

|  |  |
| --- | --- |
| SUP93 | While PPS is only accessed by national level pharmacy managers, in the event of a disaster, the business customer expects PPS to be restored within 3 days or less. When PPS becomes accessed by local site level pharmacy managers, in the event of a disaster, the business customer expects PPS to be restored within 24 hours or less. |
| Elaboration | None. |

## Documentation Specifications

Documentation will include all PMAS required IT Project Artifacts for Milestones 1 & 2, Assessment & Authorization, Operational Readiness Review, Independent Testing, and National Release. PMAS documentation is updated regularly and the project will comply with all updates based on the PMAS guidelines. In addition to the PMAS required IT project artifacts, the documentation will include the Project Schedule, Quality Assurance Plan, and Customer Acceptance Form. Finally, the system shall provide context-sensitive help on each screen.

The PPS project is part of the overall PRE series of projects. It will not have a separate Security Plan Document that is specific to PPS. The PPS security will follow all the same processes and procedures that the other PRE applications use.

As the PRE program continues to move forward with enhancement to the applications (PECS and PPS), the changes will be documented and their effect on the security profile of the system will be evaluated. The PPS system will follow the some evaluation process as the other application in the PRE program. This is to ensure that PPS does not do anything that would cause the ATO to become null and void. The PRE program uses the SRR/Security Checklist while working with the security teams to obtain proper signatures prior to each new increment/enhancement being released.

The creation of a Release and Testing Plan to Retire NDFMS will be developed as part of the release of PPS-N v3.0. This plan will detail how the PPS-N Update File process will be rolled out while keeping data synchronized between sites, regardless of whether they have implemented the PPS-N Update File process or are still using NDFMS. **(BRD #2, RM #509463, RTC #161921, RTC #161923, RTC #161924)** This plan will be developed in four stages: 1) Analyze the solution for retiring NDFMS, 2) Create a draft of the plan, 3) Update the plan as needed, and 4) Finalize the plan. The plan shall cover the following topics:

* The Release and Testing Plan to Retire NDFMS shall describe how a phased roll-out will take place, in which some sites will implement the PPS-N Update File process while other sites continue to use NDFMS. **(RM #509464, RTC #161921, RTC #161923, RTC #161924, RTC #190344, RTC #190345)**
* The Release and Testing Plan to Retire NDFMS shall describe how the system will synchronize the new Internal Entry Numbers (IENs) assigned by PPS-N and the old IENs assigned by NDFMS, during a phased rollout. **(RM #509465, RTC #161921, RTC #161923, RTC #161924, RTC #190340, RTC #190345)**
* The Release and Testing Plan to Retire NDFMS shall describe how to verify that the same results will be in NDF tables regardless of whether the data update was created by the PPS-N Update File process or NDFMS. **(RM #509466, RTC #161921, RTC #161923, RTC #161924, RTC #190340, RTC #190343, RTC #190345)**
* The Release and Testing Plan to Retire NDFMS shall describe how to verify that Consolidated Mail Outpatient Pharmacy (CMOP) operations will not be interrupted during the roll-out of the PPS-N Update File process. **(RM #509467, RTC #161921, RTC #161923, RTC #161924)**

## Functional Specifications

The following list of Requirement Specification Documents (RSD) and System Design Documents (SDD) provides an overall view of the PPS system. The RSDs work in concert to give an overall view of the planned system. The PPS versions build off each other to produce an overall PPS system. Requirements in PPS-N v1.0 will continue to apply to the future PPS system except where modifications are needed to meet the additional requirements.

* PPS-N v1.0 RSD
* PPS-N v1.0.10 SDD
* PPS-N v1.0 Data Migration RSD
* PPS-N v1.0 Data Migration SDD
* PPS-N v3.0 RSD
* PPS-L v1.0 RSD
* PPS-L v2.0 RSD

The Data Mapping Guide (DMG) in addition to giving a view of the data for PPS-N v1.0 also provides initial listings of local data fields for PPS-L:

* PPS-N v1.0 DMG

The Software Requirements Specification (SRS) document and SDD were an earlier attempt to explore the requirements for PPS-N and PPS-L and offer insight when elaborating the current requirements.

* PRE v1.0 SRS
* PRE v1.0 SDD1
* PRE v1.0 SDD2
* PRE v1.0 SDD3

Lessons learned found on [Rational ClearQuest](http://server_1234.vha.domain.ext:81/cqweb/) will help give guidance when elaborating requirements.

In earlier phases of the PRE program, Change Requests (CRs) and Code Change Requests (CCRs) were hosted in the [Rational ClearQuest](http://server_1234.vha.domain.ext:81/cqweb/) repository. This repository has been replaced by the Product and Release Backlogs in the Rational Team Concert (RTC)/Configuration Management module. This repository shall be updated throughout the lifecycle of the project.

Requirements will be refined and modified during the increments. The development team will work with the customer using tools such as User Stories and Epics to further elaborate requirements. These tools are to be included in updated versions of this document.

### Functional Requirements

Note: These are the Requirements that were originally in scope for PPS-N v3.0. The requirements that were de-scoped have been annotated. See [Appendix B](#B) for a complete list of PPS-N requirements that were NOT delivered in PPS-N v3.0.

The requirements listed below are documented in the PPS-N v3.0 folder in the Requirements Management (RM) module in RTC. In accordance with Agile principles, they are linked to User Stories as appropriate to accommodate their implementation during a single Sprint. Prior to their implementation, these detailed requirements were also be included as part of a User Story elaboration that is also linked to the appropriate User Stories in the Change and Configuration Management (CCM) module in RTC. *Italicized requirements indicate they were changed or added after this document was sent out for signature April 21, 2015.*

#### Update File Process Enhancements

##### The System shall provide the ability for a user to specify when the update to the local site NDF files is performed. (BRD #17, RM #509468, RTC #161178)

The System shall allow the Update File Process to be scheduled to run at regular intervals, such as daily or weekly (RM #509469, RTC #161925)

The System shall allow the Update File Process to be run on demand (RM #509470, RTC #161925)

*The VistA System shall allow the local sites to schedule the process to apply the update to their NDF file. (RM #634996, RTC #196505)*

* *The VistA System shall allow the local sites to apply the update to their NDF file on demand.* *(RM #634997, RTC #196505)*

##### The System shall automatically move the update files to where the local sites can install without manual intervention. (BRD #13, RM #509471, RTC #161179)

The System shall automatically move the Update file from the Pending Review directory on the FTP server to the National VistA Test Account (RM #509472, RTC #161179)

The System shall automatically move the Update file from the Approved directory on the FTP server to the VistA Production Accounts (The production account at each VistA instance. (RM #509473, RTC #161179)

##### The System shall provide the ability to monitor whether the update occurred at both local and national level sites. (BRD #11 & BRD #14, RM #509474, RTC #161181)

The System shall provide a report call the “Data Update Compliance Report” that provides information on which update files have been installed at each local and national site. (RM #509475, RTC #162334, RTC #162336)

The Data Update Compliance Report shall be available to users of PPS-N, both National and Local. (RM #509476, RTC #162334, RTC #162336)

##### The System shall provide ability to send messaging to coordinate and ensure that local VistA systems are paused until the updates is processed. (BRD #10, RM #509477, RTC #161243)

*The System shall automatically disable the following options at the start of an update file installation:*

* + - *Print a PMI Sheet*
    - *Patient Prescription Processing*
    - *Release Medication*
    - *Reprint an Outpatient Rx label (RM #616480, RTC #161243)*
  + *The System shall automatically enable the following options after update file installation is complete:*
    - *Print a PMI Sheet*
    - *Patient Prescription Processing*
    - *Release Medication*
    - *Reprint an Outpatient Rx label (RM #616481, RTC #161243)*
  + *The System shall update the CONF option (Setup directory and version # of PPS-N file) to be able to add additional Scheduled Options, Menu Options or Protocols that need to be paused during the update file install. (RM #616485, RTC #161243)*
  + *The System shall display the text “4) The Scheduled Options, Menu Options, and Protocols that should be paused while the PPS-N update file is processed.” when the CONF option is selected. (RM #616486, RTC #161243)*
  + *The System shall allow deletion of Scheduled Options, Menu Options, or Protocols that are defined by a user. (RM #616487, RTC #161243)*
  + *The System shall not allow deletion of the following predefined options:*
    - *Print PMI Sheet*
    - *Patient Prescription Processing*
    - *Release Medication*
    - *Reprint an Outpatient Rx label (RM #616488, RTC #161243)*
  + *The System shall update the notification that is sent when the Update file is ready for Local VistA installation as follows:*
    - *“The NDF Update file [File Name & File Size] is ready for Local VistA installation via the scheduled or manual process utilized at your site. The following VistA options will be placed out of order while the NDF Update file is installed: Print PMI Sheet, Patient Prescription Processing, Release Medication, and Reprint an Outpatient Rx label.” (RM #616489, RTC #161243)*
  + *The System shall update the notification that is sent when the Update file has been installed as follows:*
    - *“The NDF Data Update file [File Name & File Size] has been installed successfully. All VistA options placed out of order are now available.” (RM #616490, RTC #161243)*

##### Functionality in the VistA System shall be tested to verify that the message that should fire after an update file is processed and that the VistA files are updated. (BRD #18, RM #509478, RTC #161257)

##### The VistA System shall provide notification to PPS Managers and local system Automated Data Processing Applications Coordinators (ADPAC) and other designated users if the system is unable to install current or previous updates. (BRD #13, RM #509479, RTC #190544)

*The system shall provide the ability to identify email groups that will receive update file emails specific to a local VistA in the “CONF” options. (RM #619419, RTC #190544)*

*The system shall send Update File error message through mailman and Outlook. (RM #619425, RTC #190544)*

*The System shall provide the following information (if available/defined) in all Update File error messages:*

* + - *.DAT file name being processed*
    - *Error Date/Time*
    - *Global (VistA file being processed when the error occurred)*
    - *IEN – (IEN being processed when the error occurred)*
    - *Update File Section (.DAT file section being processed when the error occurred)*
    - *Error Message*
    - *Steps to Correct the Error (RM #619427, RTC #190544)*
  + *The System shall produce the following error message and send to all subscribed email addresses when the local VistA site is unable to download an update file.*

*Subj: PPSN NDF UPDATE ERROR - PPS\_{DAT\_FILE\_NAME} [#163063] mm/dd/yyyy@hh:mm [# of lines} lines*

*From: NDF\_MANAGER In 'IN' basket. Page 1*

*-----------------------------------------------------------------------------*

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*\*\*\* An error occurred during install of the following Update file(s): \*\*\**

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*The following file(s) could not be installed:*

*Update file Name*

*-------------------*

*DAT\_FILE\_NAME*

*An error occurred for:*

*File:*

*IEN:*

*Entry Name:*

*Update file section:*

*Error Message: Unable to download and install the update file.*

*How to correct your error:*

*1. Validate that the CONF settings are correct.*

*2. Validate that PRV version matches the entries in the Update Control File (57.23).*

*3. Rerun the UPDT option to re-attempt retrieval.*

*4. Contact the National Help Desk (self-server CA Ticket)*

*Further details can be found on the Update Control File (57.23) by selecting the UCF option in the National Drug File Menu Inquiry Options. (RM #619433, RTC #190544)*

* *The System shall produce the following error message and send to all subscribed email addresses when the update file stops processing on the local VistA site because of missing or incomplete data.*

*Subj: PPSN NDF UPDATE ERROR - PPS\_{DAT\_FILE\_NAME} [#163063] mm/dd/yyyy@hh:mm [# of lines} lines*

*From: NDF\_MANAGER In 'IN' basket. Page 1*

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*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*\*\*\* An error occurred during install of the following Update file(s): \*\*\**

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*The following file(s) could not be installed:*

*Update file Name*

*-------------------*

*DAT\_FILE\_NAME*

*An error occurred for:*

*File: {Global File Number being processed}*

*IEN: {IEN number being processed}*

*Entry Name: {Entry Name being processed}*

*Update file section: {DAT file section being processed}*

*Error Message: Missing or Incomplete data in the Update file.*

*How to correct your error:*

*1. Contact the National Help Desk (self-server CA Ticket)*

*Further details can be found on the Update Control File (57.23) by selecting the UCF option in the National Drug File Menu Inquiry Options. (RM #619451, RTC #190544)*

* *The System shall produce the following error message and send to all subscribed email addresses when the National Report Messages (Update for NDF Report or Updated Interactions and FDA Med Guides) cannot be generated or sent:*

*Subj: PPSN NDF UPDATE ERROR - PPS\_{DAT\_FILE\_NAME} [#163063] mm/dd/yyyy@hh:mm [# of lines} lines*

*From: NDF\_MANAGER In 'IN' basket. Page 1*

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*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*\*\*\* An error occurred during install of the following Update file(s): \*\*\**

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*The following file(s) were installed but one or messages did not generate:*

*Update file Name*

*-------------------*

*{DAT FILE\_NAME}*

*Error Message: The system was unable to read or create a national report.*

*1. UPDATE FOR NDF REPORT or*

*2. UPDATED INTERACTIONS AND FDA MED GUIDES*

*How to correct your error:*

*1. Contact the National Help Desk (self-server CA Ticket)*

*Further details can be found on the Update Control File (57.23) by selecting the UCF option in the National Drug File Menu Inquiry Options. (RM #619465, RTC #190544)*

* *The System shall produce the following error message and send to all subscribed email addresses when the Local Report Messages (Interactions and Allergies, Drugs Unmatched from NDF, or Local Drugs Rematched to NDF) cannot be generated or sent:*

*Subj: PPSN NDF UPDATE ERROR - PPS\_{DAT\_FILE\_NAME} [#163063] mm/dd/yyyy@hh:mm [# of lines} lines*

*From: NDF\_MANAGER In 'IN' basket. Page 1*

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*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*\*\*\* An error occurred during install of the following Update file(s): \*\*\**

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*The following file(s) were installed but one or messages did not generate:*

*Update file Name*

*-------------------*

*{DAT\_FILE\_NAME}*

*Error Message: The system was unable to create local reports.*

*1. INTERACTIONS AND ALLERGIES or*

*2. DRUGS UNMATCHED FROM NDF or*

*3. LOCAL DRUGS REMATCHED TO NDF*

*How to correct your error:*

*1. Contact the National Help Desk (self-server CA Ticket)*

*Further details can be found on the Update Control File (57.23) by selecting the UCF option in the National Drug File Menu Inquiry Options. (RM #619474, RTC #190544)*

* *The System shall produce the following error message and send to all subscribed email addresses when the local VistA site encounters an unknown error while process the Update File.*

*Subj: PPSN NDF UPDATE ERROR - PPS\_{DAT\_FILE\_NAME} [#163063] mm/dd/yyyy@hh:mm [# of lines} lines*

*From: NDF\_MANAGER In 'IN' basket. Page 1*

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*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*\*\*\* An error occurred during install of the following Update file(s): \*\*\**

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*The following file(s) could not be installed:*

*Update file Name*

*-------------------*

*{DAT\_FILE\_NAME}*

*An error occurred for:*

*File:*

*IEN:*

*Entry Name:*

*Update file section:*

*Error Message: Unknown Error. The update file stopped processing in the above listed section.*

*How to correct your error:*

*1. Contact the National Help Desk (self-server CA Ticket)*

*Further details can be found on the Update Control File (57.23) by selecting the UCF option in the National Drug File Menu Inquiry Options. (RM #619476, RTC #190544)*

* *The System shall produce the following message and send to all subscribed email addresses when the local VistA site update file processing was stopped and restarted.*

*Subj: PPSN NDF UPDATE RESTART – PPS\_ \_{DAT\_FILE\_NAME} [#163063] mm/dd/yyyy@hh:mm [# of lines} lines*

*From: NDF\_MANAGER In 'IN' basket. Page 1*

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*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*\*\*\* An update file stopped processing and was restarted: \*\*\**

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*The following file Installation was stopped and restarted:*

*Update file Name*

*-------------------*

*{DAT\_FILE\_NAME}*

*An error occurred for:*

*File: {Global file being processed when error occurred}*

*IEN: {IEN being processed when error occurred}*

*Entry Name: {Product Entry Name when error occurred}*

*Update file section: {DAT section being processed when error occurred}*

*Restart Information:*

*Restart IEN: {IEN where restart began}*

*File: {Global File where restart began}*

*Restart Date/Time: {mm/dd/yy@hh:mm restart began}*

*Restart Completion Date/Time: {mm/dd/yy@hh:mm restart completed}*

*Further details can be found on the Update Control File (57.23) by selecting the UCF option in the National Drug File Menu Inquiry Options. (RM #619477, RTC #190544)*

* *The system shall provide the following details about the update file or update file error condition in the Update Control File (GLOBAL MAP DATA DICTIONARY #57.23):*
* *Name*
* *Directory Path*
* *Version*
* *Email Group Name*
* *Install in Progress – Flag indicating install is in progress.*
* *Current Global – Vista file currently being updated (i.e. 50.416, 50.68)*
* *Current IEN – The current IEN being processed*
* *Current Update File Section – The section of the .DAT currently being processed (i.e. PMIDATA, DATANT, DATAN, MESSAGE)*
* *DAT file Name – The name of the .DAT being processed.*
* *Install Begin Date/Time – Date/Time the .DAT file processing began*
* *Restart Date/Time – Date/Time a restart began. (if restarted)*
* *Restart Completion Date/Time – Date/Time restart completed (if restarted)*
* *Beginning IEN – initial IEN to install*
* *Beginning Update File Section – initial .DAT file section to install*
* *Error Date/Time – Date/Time of error*
* *Global – Vista file being processed when error occurred*
* *IEN – IEN being processed when error occurred*
* *Update File Section - .DAT file section processing when error occurred*
* *Error Message – Descriptive text of the error condition*
* *File Number – NDF File Number (50.68, 50.605, etc.)*
* *Completion Date/Time – Date/Time update completed (RM #619479, RTC #190544)*

*The System shall no longer have the Enable Auto Update and Enable system parameters in the PPS-N Update Control File (#57.23). (RM #619480, RTC #190544)*

* + *The System shall provide the ability to set the “Update Process” system parameter in the System Parameter file with the values of:*
    - *On = Able to receive and process PPS-N Update Files (.DAT)*
    - *Off = Not able to receive or process PPS-N Update Files (.DAT) must use KIDS for updates. (RM #619483, RTC #190544)*

*The System shall provide the ability to set the “Enable” system parameter in the System Parameter file with the values of:*

* + - *On = PPS-N Update File auto processing enabled*
    - *Off = PPS-N Update File auto processing disabled (RM #619484, RTC#190544)*

*The system shall display the message “Not Authorized” when the CONF, UPDT or SDPT options are attempted in VistA and the Update Process system parameter is set to “Off” (RM #619485, RTC #190544)*

*The system shall provide a Summary inquiry screen to view a list of .DAT files by name with install begin and completion dates. (RM #619486, RTC #190544)*

*The system shall allow a user to select a .DAT file from the Summary inquiring screen to view details of the .DAT file. (RM #619487, RTC #190544)*

*The system shall provide the following .DAT file information on the detail screen:*

* + - *Name*
    - *Directory Path*
    - *Version*
    - *Email Group Name*
    - *Install in Progress – Flag indicating install is in progress.*
    - *Current Global – Vista file currently being updated (i.e. 50.416, 50.68)*
    - *Current IEN – The current IEN being processed*
    - *Current Update File Section – The section of the .DAT currently being processed (i.e. PMIDATA, DATANT, DATAN, MESSAGE)*
    - *DAT file Name – The name of the .DAT being processed.*
    - *Install Begin Date/Time – Date/Time the .DAT file processing began*
    - *Restart Date/Time – Date/Time a restart began. (if restarted)*
    - *Restart Completion Date/Time – Date/Time restart completed (if restarted)*
    - *Beginning IEN – initial IEN to install*
    - *Beginning Update File Section – initial .DAT file section to install*
    - *Error Date/Time – Date/Time of error*
    - *Global – Vista file being processed when error occurred*
    - *IEN – IEN being processed when error occurred*
    - *Update File Section - .DAT file section processing when error occurred*
    - *Error Message – Descriptive text of the error condition*
    - *File Number – NDF File Number (50.68, 50.605, etc.)*
    - *Completion Date/Time – Date/Time update completed (RM #619488, RTC #190544)*

*The system shall provide information about all restarts related to the .DAT file being viewed on the detail screen to include:*

* + - *Restart IEN*
    - *Restart VistA File*
    - *Restart Date/Time*
    - *Restart Completion Date/Time (RM #619489, RTC #190544)*

*The System shall provide the ability to identify that an update file could not be installed.*

* + - *Add a menu item to the PSNMGR National Drug File Menu “Unable to Install Update File”*
    - *When the user choses to view the option help, the following text displays:*
      * *This option is used to identify installation problems in the National VistA Account. Local VistA users should NOT use this option.*
    - *When the user enters the option, the following warning message displays to explain who should use this option:*
      * *WARNING: This option should only be used to identify installation problems in the National VistA Account. Local VistA users should NOT use this option.*
    - *The user will enter the update file name that cannot be installed and answer yes to confirm at the “Are you sure?” prompt. (RM #619490, RTC #190544)*

*The VistA system shall message PPS-N with the following information when the user has saved a Update File name to the “Unable to Install Update File” option:*

* + - *Status\_ID = 98*
    - *Status\_Name = NDF Update Process Error in VistA*
    - *Status\_Description = Unable to Install Update File in the Test Account (This should display in the comments field) (RM #619491, RTC #190544)*

##### The System shall provide notification of update files after installation. (BRD #13, RM #509568, RTC #162367, RTC #218625)

*The System shall display the new Update File status in the Manage Update Files History section. (RM #604563, RTC #177235)*

* + *If the Update File cannot be created, the System shall make the following updates:*
    - *Status: NDF Update Process Error in PPS-N*
    - *Comments: PPS-N/NDF Update Test File Creation Failed. Log a CA ticket. (RM #509601, RTC #177235)*
  + *When the Update File has been placed in the QA test directory, the System shall make the following updates:*
    - *Status: PPS-N/NDF Update Test File Transmitted to the test sFTP (RM #509602, RTC #177235)*
  + *If the Update File cannot be transmitted to the QA test directory, the System shall make the following updates:* 
    - *Status – NDF Update Process Error in PPS-N*
    - *Comments – PPS-N/NDF Update Test File Transmission Failed. Log a CA ticket. (RM #509603, RTC #177235)*
  + *When the Update File has been installed in the National Test account, the System shall make the following updates:* 
    - *PPS-N/NDF Update Test File Install Successful (RM #619492, RTC #177235)*
  + *If the Update File cannot be installed in the National Test account and PPS-N receives “NDF Update Process Error in VistA” status from VistA, the System shall automatically reject the Update File with the comment “Automatically Rejected: Unable to Install Update File in the Test Account” if the current file status is “PPS‑N/NDF Update Test File Transmitted to the test sFTP” or “Start of National VistA Processing. (RM #619495, RTC #177235)*
  + *If PPS-N receives the status “NDF Update Process Error in VistA” from VistA, and the current file status is not “PPS-N/NDF Update Test File Transmitted to the test sFTP” or “Start of National VistA Processing”, the System shall ignore the status update sent from VistA. (RM #619497, RTC #177235)*
  + *If the Update File cannot be installed in the National Test account and PPS-N receives “NDF Update Process Error in VistA” status from VistA, the System shall enable the Create Update File button on the Manage Update Files page. (RM #619499, RTC #177235)*
  + *When the Update File has been approved, the System shall make the following updates:* 
    - *Status: PPS-N/NDF Update Test File Approved By PBM” (RM #619500, RTC #177235)*
  + *If the Update File is rejected, the System shall make the following updates:* 
    - *Status: PPS-N/NDF Update Test File Rejected By PBM (RM #619502, RTC #177235)*
  + *If the Approved Update File cannot be moved to the approved directory in the FTP Server, the System shall make the following updates:* 
    - *Status – NDF Update Process Error in PPS-N*
    - *Comments – PPS-N/NDF Update Production File Transmission Failed. Log a CA ticket. (RM #619504, RTC #177235)*

*The System shall provide more than 10 Data Update File records on the Manage Update Files page. (RM #509604, RTC #162370)*

* + - *The System shall display Update File records in a grid format with the most current file displayed at the top and subsequent records in descending order by file name. (RM #604537, RTC #162370)*
    - *The System shall display the Update File records in multiples of 10 records. (RM #604538, RTC #162370)*
    - *The System shall allow the user to select a specific page of Update File records to view, view the previous page of Update File records, or view the next page of Update File records. (RM #615128, RTC #162370)*
    - *The System shall allow the user to filter which Update File records to display by specifying a range of dates, where any record whose status change date is greater than or equal to the Beginning Date Range or Less than or equal to the Ending Date Range will display in the results grid. (RM #615129, RTC #162370)*
    - *The System shall allow the user to filter which Update File records to display by specifying a status, where any record whose status matches the status specified will display in the results grid. (RM #615130, RTC #162370)*
    - *The System shall allow the user to export the records into an Excel spreadsheet. (RM #621392, RTC #162370)*

*VistA and PPS-N Outlook Mail Groups will be defined so that PPS-N, VistA, Production support, IT Staff, External Site (IHS/FOIA) and Local Site Users get the notifications as the Update File moves through the automated process. (RM #636730, RTC #162367, 218625)*

* + *PPS-N Mail groups to be sent notifications will be configurable in the PPS-N Environment Property File (not Hardcoded). It will consist of the Mail Group Distribution Lists identified by PBM and maintained by the PPS-N System Administrator. (RM #614402, RTC #162367)*
  + *VistA Mail groups to be sent notifications will be configurable in the VistA Mailman Package. Mail groups will be defined in the CONF option and Specific instructions will be made available in the Installation Guide to the User Groups on how to set this up in the VistA Mailman Package. (RM #614404, RTC #218625)*
  + *E-Mail Notifications shall be formatted as follows:*

*(RM #614281, RTC #162367, 218625)*

* + - *From: @domain*
    - *Sent: Date (Day of the Week, Month Day, Year Time Stamp)*
    - *To: Will contain the e-mail groups that should receive notification of the Data Update File Status*
    - *Subject: Will contain a summary specific to the Update file status*
    - *Message/Body of E-mail: Will contain the information specific to the Update file status and required actio*n (if needed)
    - *1 - Message Trigger (PPS-N): Update File is created in PPS-N and is sent to the FTP Server. PPS-N shall send the following E-Mail notifications to the appropriate User Groups, as configured in the PPS-N Properties File. (RM #614284, RTC #162367)*
    - *Subject: PPS-N/NDF File [File Name] CREATED FOR QA*
    - *Message/Body of E-mail: The PPS-N/NDF File [File Name & Size] has been CREATED and TRANSMITTED to the test sFTP. It is now ready to be DOWNLOADED and INSTALLED.*
      * *2 - Message Trigger (VistA): Test File has been retrieved by the VistA QA Test System. VistA shall send the following E-Mail notifications to the appropriate User Groups, as configured in the VistA Test Account Mailman Package. (RM #614285, RTC #218625)*
    - *Subject: PPS-N/NDF File [File Name] DOWNLOADED FOR QA*
    - *Message/Body of E-mail: The PPS-N/NDF File [File Name & File Size] has been DOWNLOADED and is available for installation via the scheduled or manual process utilized at your site.*
      * *3 - Message Trigger (VistA): The Update File has been installed in VistA QA Test System. VistA shall send the following E-Mail notifications to the appropriate User Groups, as configured in the VistA Test Account Mailman Package. (RM #614286, RTC #218625)*
    - *Subject: PPS-N/NDF File [File Name] INSTALLED FOR QA*
    - *Message/Body of E-mail: The PPS-N/NDF File [File Name & File Size] Installed successfully.*
      * *4 - Message Trigger (VistA): Report email messages are sent for QA account. VistA shall send the following Reports in the QA account after they install the Update File. (RM #614287, RTC #218625)*

1. *Data Update For NDF*
2. *Updated Interactions*
3. *Interactions and Allergies*
4. *Drugs Unmatched from NDF*
5. *Local Drugs Rematched to NDF*

*Each Report Name will be specified in the in the Subject Line of each Report E-Mail accordingly*

* + - * *5 - Message Trigger (PPS-N): PBM Approves the Update File, PPS-N Shall send the following E-Mail notifications to the appropriate User Groups, as configured in the PPS-N Properties File, that the Update File has been approved. (RM #614288, RTC #162367)*
    - *Subject: PPS-N/NDF [File Name] Released NATIONALLY*
    - *Message/Body of E-mail: The PPS-N/NDF [File Name & File Size] has been Nationally Released to the Production sFTP and is available to be DOWNLOADED and INSTALLED at the local sites.*
      * *6 - Message Trigger (PPS-N): PBM Rejects Update File. If PBM Rejects the Update file PS-N, PPS-N System shall initiate the following E-Mail notification to the appropriate User Groups, as configured in the PPS-N Properties File. (RM #614289, RTC #162367)*
    - *Subject: PPS-N/NDF File [File Name] REJECTED*
    - *Message/Body of E-mail: The PPS-N/NDF Update Test File [File Name & File Size] has been REJECTED by the PPS-N Manager.*
      * *7- Message Trigger (VistA): Released Update file has been retrieved by the VistA local Site, VistA will send the following E-Mail notifications to the appropriate User Groups, as configured in the VistA Test Account Mailman Package upon retrieval of the released Update file. (RM #614290, RTC #218625)*
    - *Subject: PPS-N/NDF [File Name] DOWNLOADED*
    - *Message/Body of E-mail: The PPS-N/NDF [File Name & File Size] has been DOWNLOADED and is available for installation via the scheduled or manual process utilized at your site.*
      * *8. Message Trigger (Vista): The Update File has been installed in the VistA local Site(s) VistA shall send an E-Mail notification to the local sites, as configured in the VistA Mailman Package, that the Update File has been installed. (RM #614292, RTC #218625)*
    - *Subject: PPS-N/NDF [File Name] Installed*
    - *Message/Body of E-mail: The PPS-N/NDF [File Name & File Size] installed successfully.*
      * *9. Message (VistA): Production Reports to Local sites, VistA will send the following Reports to the Local Sites after they install the Update File (see appendix for examples of existing reports): (RM #614296, RTC #218625)*

*1. Data Update for NDF*

*2. Updated Interactions*

*3. Interactions and Allergies*

*4. Drugs Unmatched from NDF*

*5. Local Drugs Rematched to NDF*

*Each Report Name will be specified in the in the Subject Line of each Report E-Mail accordingly*

##### The System shall provide ability to include Patient Medication Information/Warning labels in update file. (BRD #20, RM #509607, RTC #161255)

##### The System shall prevent the manual or scheduled initiation of the Update File Process until the previously initiated Update File Process has been successfully applied to the NDF files in the National VistA Test Account. (BRD #13, RM #509608, RTC #161259)

The System shall inform the user if the Update File Process is not available for initiation when the user attempts to run the process on demand. (RM #509610, RTC #161259)

##### The System shall retransmit unsuccessful email notifications from the Update File Process every five minutes until either the message is transmitted successfully or one hour has elapsed without a successful transmission. (BRD #19, RM #509612, RTC #161263)

#### Enhancements to provide Update File to Organizations outside VA

##### Create a workflow for outside organizations such as IHS and other open source organizations to receive PPS updates. (BRD #13, BRD #38, RM #509614, RTC #165455)

##### This workflow must include the ability to eliminate proprietary data from the update file for non-VA open source users. (BRD #13, BRD #38, RM #509615, RTC #163798)

#### Enhancements to Complete the Retirement of NDFMS

##### CMOP shall continue to Work with New Update File Process. (BRD #12, RM #509616, RTC #161200)

There shall be no disruption in CMOP operations while using the new database update file process. (RM #509617, RTC #161200)

##### Internal Entry Numbers (IEN) shall be synchronized during implementation roll-out (BRD #2, RM #509618, RTC #195939, 195941, 195959, 195961, 222072)

During implementation roll-out, the System shall maintain synchronization of the new Internal Entry Numbers (IENs) assigned by PPS-N and the old IENs assigned by NDFMS. (RM #509619, RTC #195939, 195941, 195959, 195961)

*The VistA System shall generate a KIDS build containing the data that is included in the PPS-N update file.* *(RM #635006, RTC #195939, 195941, 195959, 195961)*

*The VistA System shall allow the site to specify whether the site will load the PPS-N update file or the KIDS build. (RM #635045, RTC #195939, 195941, 195959, 195961)*

##### The System shall provide functionality to run a report to preview the update file. (BRD #8, RM #612695, RTC #217378)

*The System shall generate the report in the background. (RM #612887, RTC #217378)*

*The report format shall be made up of messages that make up the Data Update for NDF Report. (RM #612888, RTC #217378)*

*The report shall include changes that have been made since the update file was last generated. (RM #612889, RTC #217378)*

*The System shall allow the report to be opened as a Word doc. (RM #612890, RTC #217378)*

*The System shall allow the report to be saved as a Word doc. (RM #612891, RTC #217378)*

#### Rematch Enhancements

The requirements in Section 2.6.1.4 were de-scoped for PPS-N v3.0. See [Appendix B](#B) for a full listing of all requirements de-scoped for PPS-N v3.0.

##### and 2.6.1.4.2 When editing a product in PPS-N causes a potential un-match at the local level due to Inactivation, Proposed Inactivation or “Other” modification, the System shall update the workflow process to provide the ability for PPS-N users to select products as suggestions or automatic rematches to replace the edited product. (BRD #15, BRD #16, RM #509620, RTC #161268, RTC #162662)

When editing a product in PPS-N causes a potential un-match at the local level due to Inactivation, Proposed Inactivation or “Other” modification, the System shall update the workflow process to display possible rematch products to replace the product that was inactivated. (RM #509622, RTC #161268, RTC #162662)

When editing a product in PPS-N causes a potential un-match at the local level due to Inactivation, Proposed Inactivation or “Other” modification, the System shall update the workflow process to provide the ability for PPS-N users to use simple search criteria to search for products to be selected as suggestions or automatic rematches to replace the edited product. (RM #509623, RTC #161268, RTC #162662)

When editing a product in PPS-N causes a potential un-match at the local level due to Inactivation, Proposed Inactivation or “Other” modification, the System shall update the workflow process to provide the ability for PPS-N users to select multiple products as suggestions or a single product as an automatic rematch to replace the edited product. (RM #509621, RTC #161268, RTC #162662)

When editing a product in PPS-N causes a potential un-match at the local level due to Inactivation, Proposed Inactivation or “Other” modification, the System shall allow the user to submit the product edit without performing a rematch to replace the edited product. (RM #509624, RTC #161268, RTC #162662)

The System shall provide the ability to display the suggested or automatic rematch(es) selected during the edit workflow on the Modification Summary for Product page during the edit workflow. (RM #606262, RTC #161268, RTC #162662)

The System shall not include the proposed inactivation and its associated rematch in the update file process until the proposed inactivation has been approved. (RM #606263, RTC #161268, RTC #162662)

The System shall include the proposed inactivation and any associated rematch(es) on the Data Update for NDF Report when the proposed inactivation is defined. (RM #606264, RTC #161268, RTC #162662)

* + - The System shall display the following message text on the Data Update for NDF Report for Future Inactivation/Automatic Rematches:

The following VA Product(s) WILL be inactivated on the date listed. All local DRUG file (#50) entries match to the VA Product(s) will be unmatched and automatically rematched to the VA Product listed. (RM #606265, RTC #161268)

The System shall provide the ability to display the suggested or automatic rematch(es) selected during the edit workflow on the Pending Modification tab during the approval workflow. (RM #606266, RTC #161268, RTC #162662)

The System shall provide the ability to display the suggested or automatic rematch(es) selected during the edit workflow on the Summary for Product page during the approval workflow. (RM #606267, RTC #161268, RTC #162662)

The System shall include the proposed inactivation and its associated rematch in the update file process once the proposed inactivation has been approved. (RM #606268, RTC #161268, RTC #162662)

The System shall no longer include a separate Rematch tab. (RM #606269, RTC #161268, RTC #162662)

The System shall update the workflow process to allow the user to execute the rematch workflow without performing a corresponding inactivation or proposed inactivation modification. (RM #606270, RTC #161268, RTC #162662)

The System shall include a rematch modified without a corresponding inactivation in the update file process without requiring any further action. (RM #606271, RTC #161268, RTC #162662)

The System shall permit only those users who can edit products, Manager, Second Approver, or Supervisor roles, to perform rematch functionality. (RM #606272, RTC #161268, RTC #162662)

###### 2.6.1.4.3 The System shall capture and populate the Automated and Suggested products that were approved during the Inactivation process on the PPS-N History Tab. (BRD #15, BRD #16, RM #509625, RTC #162889)

The System shall capture and display the following fields in the existing History tab. (RM #509626, RTC #162889)

* Automated
* Suggested (multiples that were picked)
* Inactivation Date
* Drug Name
* Second approvals
* More to be identified by PBM

#### Enhancements to Add and Maintain New Fields

##### The System shall allow the addition and maintenance of the following fields to monitor the hazardous waste status of a VA product (EPL-N Products table) and include the addition of these fields to VistA file #50.68. (BRD #36, RM #507175, RTC #162541, RTC #162543)

**PPS-N Requirements**

* The System shall allow the addition and maintenance of the following fields on the Administration Data tab and the A-Z tab to monitor the hazardous waste status of a VA product (EPL-N Products table): (RM #509627, RTC #162541, RTC #162543)
* HAZARDOUS TO HANDLE (Already Exists)
* HAZARDOUS TO DISPOSE (Already Exists)
* PRIMARY EPA (New)
* WASTE SORT CODE (New)
* DOT SHIPPING NAME (New)
  + - * *The System shall allow only Manager, Second Approver, or Supervisor roles to edit these fields. (RM#590333, RTC #162541)*
      * *The Hazardous to Dispose shall be a Boolean field. (RM#590334, RTC #162541, RTC #162543)*
      * *The Hazardous to Handle field shall be a Boolean field. (RM#590335, RTC #162541, RTC #162543)*
      * *The Primary EPA shall be a text field of up to 50 characters. (RM#590336, RTC #162541, RTC #162543)*
      * *The Waste Sort Code shall be a text field of up to 50 characters. (RM#590337, RTC #162541, RTC #162543)*
      * *The DOT Shipping Name shall be a text field of up to 200 characters. (RM#590338, RTC #162541, RTC #162543)*
      * *When a product is changed to not Hazardous to Dispose after previously being defined as Hazardous to Dispose with values for Primary EPA, Waste Sort Code, and/or DOT Shipping Name, the values for Primary EPA, Waste Sort Code, and/or DOT Shipping Name shall remain, but the fields shall be grayed out and unable to be edited. (RM#590339, RTC #162541)*
      * *When a product is changed to Hazardous to Dispose after previously being defined as not Hazardous to Dispose with values for Primary EPA, Waste Sort Code, and/or DOT Shipping Name, the values for Primary EPA, Waste Sort Code, and/or DOT Shipping Name shall be available for editing. (RM#590340, RTC #162541)*
      * *The Hazardous to Handle and Hazardous to Dispose fields shall be initially populated at the Product level based on the following algorithm: (RM#590341, RTC #162547)*
        + *The system shall use the spreadsheet “VA Product information full file with Hazardous waste fields” to determine which products in the PPS-N database should be populated with Hazardous to Handle and Hazardous to Dispose data.*
        + *The VUID in column A of the spreadsheet shall be used to find the product in the PPS-N database with the same VUID.*
        + *If a corresponding product in the PPS-N database is not found, the record from the spreadsheet (ie the entire row) shalll be logged to the Output Exception file.*
        + *The value of the VA\_PRODUCT\_NAME field from the spreadsheet (column E) shall be compared to the value of the VA Product Name for the product retrieved from the PPS-N database.*
        + *If the value of the VA\_PRODUCT\_NAME field from the spreadsheet does not match the value of the of the VA Product Name for the product retrieved from the PPS-N database, the record from the spreadsheet (ie the entire row) shall be logged to the Output Exception file.*
        + *If the value of the VA\_PRODUCT\_NAME field from the spreadsheet does match the value of the of the VA Product Name for the product retrieved from the PPS-N database, the system shall determine if there are values for any of the Hazardous to Dispose sub-fields in the spreadsheet.*

*The Hazardous to Dispose sub-fields in the spreadsheet shall be defined as:*

*PRIMARY\_EPA in column K*

*WASTE\_SORT\_CODE in column L*

*DOT\_SHIPPING\_NAME in column M*

* + - * + *If there are no values for the Hazardous to Dispose sub-fields in the spreadsheet, the values of entire Hazardous Waste record from the spreadsheet, including blanks, shall be loaded into the Hazardous Waste Status fields for the corresponding product in the PPS-N database.*

*The entire Hazardous Waste record from the spreadsheet shall consist of the following fields:*

*HAZARDOUS\_TO\_HANDLE in column I*

*HAZARDOUS TO DISPOSE in column J*

*PRIMARY\_EPA in column K*

*WASTE\_SORT\_CODE in column L*

*DOT\_SHIPPING\_NAME in column M*

* + - * + *If there are values for any of the Hazardous to Dispose sub-fields in the spreadsheet, the system shall determine if the value of the HAZARDOUS TO DISPOSE field in column J is “Y”.*
        + *If the value of the HAZARDOUS TO DISPOSE field is “Y”, the values of the entire Hazardous Waste record from the spreadsheet, including blanks, shall be loaded into the Hazardous Waste Status fields for the corresponding product in the PPS-N database.*
        + *If the value of the HAZARDOUS TO DISPOSE field is not “Y”, the record from the spreadsheet (ie the entire row) shall be logged to the Output Exception file..*
      * *The population process shall be able to be run multiple times so that the entire file or a portion of the entire file can be imported. (RM#590342, RTC #162547)*
      * The System shall include the hazardous waste status fields in the update file. (RM #509628, RTC #162555)

**VistA Requirements**

* The System shall store in file 50.68 a new field called HAZARDOUS TO HANDLE. This field will be populated with values from the NDF Update file. (RM #509629, RTC #162537)
* The HAZARDOUS TO HANDLE field shall be a Boolean field that displays a value of YES or NO. (RM #540699, RTC #162537)
* The System shall store in file 50.68 a new field called HAZARDOUS TO DISPOSE. This field will be populated with values from the NDF Update file. (RM #509630, RTC #162537)
* The HAZARDOUS TO DISPOSE field shall be a Boolean field that displays a value of YES or NO. (RM #540700, RTC #162537)
* The System shall store in file 50.68 a new field called PRIMARY EPA. This field will be populated with values from the NDF Update file. (RM #509632, RTC #162537)
* The PRIMARY EPA field shall be a text field that does not exceed 50 characters. (RM #540701, RTC #162537)
* The System shall store in file 50.68 a new field called WASTE SORT CODE. This field will be populated with values from the NDF Update file. (RM #509638, RTC #162537)
* The WASTE SORT CODE field shall be a text field that does not exceed 50 characters. (RM #540702, RTC #162537)
* The System shall store in file 50.68 a new field called DOT SHIPPING NAME. This field will be populated with values from the NDF Update file. (RM #509639, RTC #162537)
* The DOT SHIPPING NAME field shall be a text field that does not exceed 200 characters. (RM #540703, RTC #162537)
* When these fields are edited by the Update file process, VistA shall capture the date of change using the same audit tracking process in place for changes to other fields in VistA file 50.68. (RM #540704, RTC #162537)
* These fields shall display in VistA options Inquire to VA Product Info for Local Drug [PSNLOOK], Inquire to National Files [PSNACT], and Inquire to National Files [PSS LOOK]. (RM #540706, RTC #162537)
* VistA shall not display the field label for a field that is not populated with data. (RM #540707, RTC #162537)

##### The System shall provide new fields for “CLINICAL EFFECT OF DRUG” in PPS and VA PRODUCT file (#50.68). (BRD #30, RM #509461, RTC #162613, RTC #162615, RTC #162617)

The requirements in Section 2.6.1.5.2 were de-scoped for PPS-N v3.0. See [Appendix B](#B) for a full listing of all requirements de-scoped for PPS-N v3.0

**PPS-N Requirements**

* The System shall store in EPL-N Products table and allow edit via PPS-N Product maintenance, a field called **Clinical Effect of Drug**. This field indicates whether or not expired or recently discontinued orders containing this product should be included in the Order Checks. (RM #509684, RTC #162613, RTC #162615)
* The System shall store in EPL-N Products table and allow edit via PPS-N product maintenance, a field called **Inpatient Expiration Limit**. This field indicates the duration, in hours, that an expired or recently discontinued order should be included in Order Checks (RM #509686, RTC #162613, RTC #162615)
* The System shall store in EPL-N Products table and allow edit via PPS-N product maintenance, a field called **Outpatient Expiration Limit**. This field indicates the duration, in days, that an expired or recently discontinued order should be included in Order Checks. (RM #509687, RTC #162613, RTC #162615)
* The System shall include the Clinical Effect of Drug, Inpatient Expiration Limit, and Outpatient Expiration Limit fields on the **NDF Update File**. (RM #509698, RTC #162620)

**VistA Requirements**

* The VistA system shall be modified to include a new file multiple named “CLINICAL EFFECT DURATION” in VA PRODUCT file (#50.68). This is a Yes or No field. (RM #509703, RTC #162612)
* The VistA system shall provide a sub-file with three new fields:
  + - The first field is PACKAGE for which the values are “I” for Inpatient, “O” for Outpatient, and “IO” for Both Inpatient and Outpatient.
    - The second field is OMIT EXP/DC ORDER CHECK. This is a Yes or No field.
    - The third field is DURATION LIMIT. The DURATION LIMIT value will not display if the value for OMIT EXP/DC ORDER CHECK is “Yes.” (RM #509704, RTC #162612)
* The system shall provide a time period field that represents the number of days or hours to look back for expired or discontinued drugs, such as 96D or 96H. The format shall be 99999x, where 99999 represents the days or hours, and x represents the D or H; D for days, and H for hours. (RM #509705, RTC #162612)
* The Clinical Effect Duration fields shall be populated in VistA with values from the NDF Update file. (RM #543931, RTC #162612)
* When these fields are edited by the Update file process, VistA shall capture the date of change using the same audit tracking process in place for changes to other fields in VistA file 50.68. (RM #543932, RTC #162612)
* These fields shall display in VistA options Inquire to VA Product Info for Local Drug [PSNLOOK], Inquire to National Files [PSNACT], and PSS DRUG DOSING LOOKUP. (RM #543933, RTC #162612)
* If the value for “CLINICAL EFFECT DURATION” is No, the designated VistA options shall display only this field and its corresponding value. (RM #543934, RTC #162612)
* If the value for “CLINICAL EFFECT DURATION” is Yes and “BOTH INPATIENT AND OUTPATIENT DURATION LIMIT” is populated, the designated VistA options shall display only the fields “CLINICAL EFFECT DURATION”, “BOTH INPATIENT AND OUTPATIENT DURATION LIMIT” and “OMIT EXP/DC ORDER CHECK” and their corresponding values. (RM #543935, RTC #162612)
* If the value for “CLINICAL EFFECT DURATION” is Yes and “BOTH INPATIENT AND OUTPATIENT DURATION LIMIT” is not populated, the designated VistA options shall display only the fields “CLINICAL EFFECT DURATION”, INPATIENT DURATION LIMIT”, “OUTPATIENT DURATION LIMIT” and “OMIT EXP/DC ORDER CHECK” and their corresponding values. (RM #543932, RTC #162612)

#### Workflow Enhancements

The requirements in Section 2.6.1.6 were de-scoped for PPS-N v3.0 except [Section 2.6.1.6.7](#S26167), which was included in PPS-N v3.0. See [Appendix B](#B) for a full listing of all requirements de‑scoped for PPS-N v3.0.

**2.6.1.6.1 The System shall allow multi-select requests for approval on the Requests and PPS Data Requests pages. (BRD #1, RM #509649, RTC #161202)**

The System shall allow the ability on the Requests page to display records Pending 2nd Approval Modification and/ or Pending Modification, or All Requests in which the same field or combination of fields has been modified. (RM #590343, RTC #161202)

The System shall not allow the ability to display records Pending 2nd Approval Modification and/ or Pending Modification, or All Requests in which only the VA Print Name field has been modified or is part of the combination of fields that have been modified. (RM #590502, RTC #161202)

The System shall allow multiple request records to be selected at once for approval by allowing the user to select individual request records, select a range of request records, or select all request records. (RM #509958, RTC #161202)

The System shall allow the user to approve each selected request record individually. (RM #590344, RTC #161202)

* The System shall allow the user to approve multiple requests at the same time if the following is true of all selected requests:
  + - Item is the same type
    - Request Type is Modification
    - Modified Field Name(s) are the same
    - VA Print Name is not one of the Modified Field Name(s) (RM #590345, RTC #161202)
* The System shall apply the comment entered on the summary page to all request records that are approved at that time. (RM #590346, RTC #161202)

**2.6.1.6.2 The System shall correct the function of the Backspace key to clear a character in the field only instead of functioning like a back arrow in the browser. (BRD #1, RM #509650, RTC #162623)**

The entry of a backspace shall delete the character to the left of the cursor when used in a text field. (RM #509651, RTC #162623)

The entry of a backspace shall work as the browser back button when used in any field that is not a text field (e.g. a drop down list). (RM #509652, RTC #162624)

**2.6.1.6.3 The System shall correct the navigation between tabs to require only a single click. (BRD #1, RM #509653, RTC #161205)**

The System shall load a page based on a single click on a tab. (RM #509656, RTC #161205)

**2.6.1.6.4 The System shall allow a NDC to be added to, or removed from, a pending product. (BRD #1, RM #509658, RTC #161206)**

A product shall be defined as pending if there is no status (i.e. the product is new from scratch but has not yet been saved) or is a pending status. (RM #509659, RTC #161206)

A NDC shall be added to or removed from a pending product only if that NDC has already been assigned to an existing PPS product. (RM #509660, RTC #161206)

A NDC shall be moved from one pending product to another. (RM #509663, RTC #161206)

**2.6.1.6.5 The System shall provide functionality to show existing VA product matches on the FDB Search results page. (BRD #3, RM #509665, RTC #161207)**

If an NDC has no VA product match, the System shall display a blank to indicate there is no VA product match. (RM #509666, RTC #161207)

The System shall allow the Manager, Second Approver, or Supervisor role to perform edits on the associated product displayed on the FDC Search results page. (RM #509667, RTC #161207)

**2.6.1.6.6 When looking up an NDC in COTS search, the System shall allow the user to drill into associated PPS product and be able to edit fields. (BRD #3, RM #509668, RTC #162891, RTC #162892)**

The System shall display the associated product, if it exists, on the Details page. (RM 606465, RTC #162891, RTC #162892)

The System shall allow the Manager, Second Approver, or Supervisor role to perform edits on the associated product displayed on the Details page. (RM #606467, RTC #162891, RTC #162892)

##### 2.6.1.6.7 The System shall allow submission of a new product with a pending ingredient and generic without receiving a marshalling error. (BRD #1, RM #509669, RTC #161213)

The System shall allow the submission of a new product with pending ingredients without generating any errors. (RM #509670, RTC #161213)

##### 2.6.1.6.8 The System shall increase the number of items that can be edited at one time in both simple search & advanced search. (BRD #1, RM #509671, RTC #165447)

When editing CMOP DISPENSE NATIONAL, the System shall allow the user to check or uncheck up to 100 products. (RM #509672, RTC #165447)

The System shall allow the user to add 100 FDA MED GUID text to up to 100 products. (RM #509673, RTC #165447)

The System shall allow the user to check NATIONAL FORMULARY INDICATORs for up to 100 products. (RM #509674, RTC #165447)

##### 2.6.1.6.9 The System shall display results navigation details and the export button above and below the results grid on the following pages: (BRD #4, RM #509675, RTC #165450)

Simple Search

Advanced Search

NDCs tab

PPS Data Elements

Requests

Saved Work in Progress

PPS Data Requests

FDB Search

FDB Add

FDB Update

Added Report

Updated Report

User Roles

The results navigation details shall include the following features:

* The total number of items found
* The number of items displaying on the current page of results
* The ability to display the first page of results when not on the first page
* The ability to display the previous page of results when not on the first page
* The ability to display a specific page of results
* The ability to display the next page of results when not on the last page
* The ability to display the last page of results when not on the last page (RM #509676, RTC #165450)

If the results display on a single page, the message, “XX items found, displaying all items.”, where XX is the total number of items found, shall display instead of the navigation details. (RM #509677, RTC #165450)

The standard template of columns shall be exported into an Excel spreadsheet, regardless of how the personal settings for the column display are defined. (RM #556619, RTC #165450)

The export spreadsheet shall not include a background color (fill) in the header row. (RM #556626, RTC #165450)

The export spreadsheet shall not include the multi-select column that may display on the result grid. (RM #556627, RTC #165450)

The export spreadsheet shall not automatically resize the columns. (RM #556628, RTC #165450)

##### 2.6.1.6.10 The System shall allow the synonym field to be cleared when associated NDC is moved to another product. (BRD #1, RM #509678, RTC #161219)

When a NDC is moved from one product to another, the trade name of the NDC which populates the original product synonym field shall be able to be removed if the synonym is unique to the moved NDC. (RM #509679, RTC #161219)

When a NDC is moved from one product to another, the trade name of the NDC which populates the original product synonym field shall not be able to be removed if there are multiple NDCs with that trade name associated to that product. (RM #509680, RTC #161219)

##### 2.6.1.6.11 The System shall allow the synonym field to be updated when new/moved NDC is associated with the product. (BRD #1, RM #509681, RTC #161226)

When a NDC is moved from one product to another, the trade name of the NDC shall populate the synonym field of the destination product if that product does already have that same NDC trade name listed. (RM #509682, RTC #161226)

#### Reporting Enhancements

##### The message header verbiage, wrapping, and message sequencing in the DATA UPDATE FOR NDF report shall be modified to increase readability. (BRD #9, RM #509683, RTC #162900)

*The DATA UPDATE FOR NDF report shall only display message text for actions that are included in the update. (RM #555571, RTC #162900)*

*The DATA UPDATE FOR NDF report shall display message text in the following order using the following Verbiage Keys (only displayed when the update contains the action): (RM #555572, RTC #162900)*

*MESSAGE\_ADDEDPRODUCT\_TEXT*

*MESSAGE\_INACTIVATEDCMOP\_TEXT*

*MESSAGE\_PROPOSEDINACTIVATEDWSUGG\_TEXT*

*MESSAGE\_FUTUREINACTIVE\_TEXT*

*MESSAGE\_INACTIVATEDREMATCHED\_TEXT*

*MESSAGE\_INACTIVATEDWSUGG\_TEXT*

*MESSAGE\_INACTIVATEDPRODUCT\_TEXT*

*MESSAGE\_REACTIVATEDPRODUCT\_TEXT*

*MESSAGE\_NATIONALFORMULARY\_TEXT*

*MESSAGE\_GENERICNAMECHANGE\_TEXT*

*MESSAGE\_PRINTNAMECHANGE\_TEXT*

*MESSAGE\_CMOPCHANGE\_TEXT*

*MESSAGE\_STRENGTH\_TEXT*

*MESSAGE\_DRUGUNITCHANGE\_TEXT*

*MESSAGE\_DISPENSEUNITCHANGE\_TEXT*

*MESSAGE\_SCHEDULECHANGEALL\_TEXT*

*MESSAGE\_POSSIBLEDOSAGE\_TEXT*

*MESSAGE\_OVERRIDEDOSECHECK\_TEXT*

*MESSAGE\_DOSAGEFORMCHANGE\_TEXT*

*MESSAGE\_OTHERREMATCHED\_TEXT*

*MESSAGE\_OTHERREMATCHSUGG\_TEXT*

*MESSAGE\_OTHERNOREMATCH\_TEXT*

*MESSAGE\_VACLASSCHANGE\_TEXT*

*MESSAGE\_NEWVADRUGCLASS\_TEXT*

*The DATA UPDATE FOR NDF report shall display the following text message for added product(s): (RM #555573, RTC #162900)*

*The following VA Product(s) have been added to the National Drug File.|*

*You may wish to review, then match or unmatch local DRUG file (#50)|*

*entries based on this updated information.*

*The DATA UPDATE FOR NDF report shall display the following text message for products Unmarked for CMOP: (RM #555574, RTC #162900)*

*The following active VA Product(s) are no longer marked for CMOP. All|*

*local DRUG file (#50) entries matched to the VA Product(s) will be|*

*UNMARKED for CMOP. In order to have these entries dispensed by CMOP,|*

*any local DRUG file (#50) entries matched to these products must be|*

*re-matched to another VA product that is marked for CMOP dispensing.*

*The DATA UPDATE FOR NDF report shall display the following text message for products that are planned for Future Inactivation/Suggested Rematch: (RM #555575, RTC #162900)*

*The following VA Product(s) WILL be inactivated on the date listed.|*

*All local DRUG file (#50) entries matched to the VA Products will be|*

*unmatched once the product is inactivated. In order to continue to|*

*use the product(s), it is suggested the local site rematch the local|*

*DRUG file (#50) entry(ies) to the listed VA Product.*

*The DATA UPDATE FOR NDF report shall display the following text message for products that are planned for Future Inactivation/No Suggested Rematch: (RM #555576, RTC #162900)*

*The following VA Product(s) WILL be inactivated on the date listed. No|*

*alternative VA Product(s) have been found.*

*The DATA UPDATE FOR NDF report shall display the following text message for products that are planned for Inactivation/Automatic Rematch: (RM #555577, RTC #162900)*

*The following VA Product(s) have been inactivated. All local DRUG|*

*file (#50) entries matched to the VA Product(s) will be unmatched and| automatically rematched to the VA Product listed.*

*The DATA UPDATE FOR NDF report shall display the following text message for products that are planned for Inactivation/Suggested Rematch: (RM #555578, RTC #162900)*

*The following VA Product(s) have been inactivated. All local DRUG|*

*file (#50) entries matched to the VA Products will be unmatched.|*

*In order to continue to use the product(s), it is suggested the local|*

*site rematch the local DRUG file (#50) entry(ies) to the listed|*

*VA Product.*

*The DATA UPDATE FOR NDF report shall display the following text message for products that are planned for Inactivation/No Rematch: (RM #555579, RTC #162900)*

*The following VA Product(s) have been inactivated.|*

*No alternative VA Product(s) have been found.*

*The DATA UPDATE FOR NDF report shall display the following text message for products that Reactivate an Inactive Product: (RM #555580, RTC #162900)*

*The following VA Product(s) have been reactivated.|*

*The DATA UPDATE FOR NDF report shall display the following text message for products with a change to the Change National Formulary Indicator: (RM #555581, RTC #162900)*

*The National Formulary Indicator has changed for the following|*

*VA Products. The National Formulary Indicator will automatically be|*

*changed in your local DRUG file (#50). Please review the local|*

*DRUG file (#50) Formulary designations of these products and make|*

*appropriate changes.*

*The DATA UPDATE FOR NDF report shall display the following text message for products with Generic Name(s) Change: (RM #555582, RTC #162900)*

*The following VA Generic Name(s) have been added or edited.|*

*The DATA UPDATE FOR NDF report shall display the following text message for products with Print Name(s) Change: (RM #555583, RTC #162900)*

*The following VA Print Name(s) have been added or edited.|*

*The DATA UPDATE FOR NDF report shall display the following text message for products with a VA Product Identifier(s) Change: (RM #555584, RTC #162900)*

*The following VA Product Identifier(s) (CMOP ID) have been added or|*

*edited.*

*The DATA UPDATE FOR NDF report shall display the following text message for products with a Strength Change: (RM #555585, RTC #162900)*

*Strength(s) have been added or edited for the following VA Product(s).|*

*The DATA UPDATE FOR NDF report shall display the following text message for products with a Unit Change: (RM #555586, RTC #162900)*

*Unit(s) have been added or edited for the following VA Product(s).|*

*The DATA UPDATE FOR NDF report shall display the following text message for products with VA Dispense Unit(s) Change: (RM #555587, RTC #162900)*

*The following VA Dispense Unit(s) have been added or edited.|*

*The DATA UPDATE FOR NDF report shall display the following text message for products with CS Federal Schedule(s) Change: (RM #555588, RTC #162900)*

*CS Federal Schedule(s) have been added or edited for the following|*

*VA Product(s). Please review the local DEA special handling field|*

*and make required edits.*

*The DATA UPDATE FOR NDF report shall display the following text message for products with an “auto-create Possible Dosages” Change: (RM #555589, RTC #162900)*

*The Auto-Create Possible Dosages settings have been edited for the|*

*following VA Product(s). Please review your local dosages for|*

*products matched to these entries. Edits to your site's possible|*

*dosages or local possible dosages may be needed.*

*The DATA UPDATE FOR NDF report shall display the following text message for products with an Override Dose Form Checks Change: (RM #555590, RTC #162900)*

*The OVERRIDE DF DOSE CHK EXCLUSION(#31) field in the VA PRODUCT|*

*file(#50.68) has changed for the following VA Products.*

*The DATA UPDATE FOR NDF report shall display the following text message for products with a Dosage Form Change: (RM #555591, RTC #162900)*

*The following VA Dosage Form(s) have been edited.|*

*The DATA UPDATE FOR NDF report shall display the following text message for products with an Unmatched for reason “other”/auto rematched in pps-n change: (RM #555592, RTC #162900)*

*The following VA Product(s) have been edited. All local DRUG file|*

*(#50) entries matched to the VA Product(s) will be unmatched and|*

*automatically rematched to the VA Product listed.*

*The DATA UPDATE FOR NDF report shall display the following text message for products with an Unmatched for reason "other"/suggested rematch in pps-n change: (RM #555593, RTC #162900)*

*The following VA Product(s) have been edited. All local DRUG file|*

*(#50) entries matched to the VA Products will be unmatched. In order|*

*to continue to use the product(s), it is suggested the local site|*

*rematch the local DRUG file (#50) entry(ies) to the listed VA Product.*

*The DATA UPDATE FOR NDF report shall display the following text message for products with an Unmatched for reason "other"/no rematch in pps-n change: (RM #555594, RTC #162900)*

*The following VA Product(s) have been edited. All local DRUG file|*

*(#50) entries matched to the VA Products will be unmatched. No| alternative VA Product(s) have been found.*

*The DATA UPDATE FOR NDF report shall display the following text message for products with Add/Edit VA Drug Class(es) changes: (RM #555595, RTC #162900)*

*The following VA Drug Class(es) have been added or edited. The VA Class|*

*for this VA Product will be automatically updated in the local|*

*DRUG file (#50).*

*The DATA UPDATE FOR NDF report shall display the following text message when new VA Drug Class(es) have been added: (RM#608710 RTC#162900)*

*The following VA Drug Class(es)have been added.*

*The UPDATED INTERACTIONS report shall display message text in the following order using the following Verbiage Keys (only displayed when the update contains the action): (RM #612800, RTC #162900)*

*MESSAGE2\_MEDGUIDE\_TEXT*

*MESSAGE2\_DDI\_TEXT*

*MESSAGE2\_EXCLUEDEDDDI\_TEXT*

*MESSAGE2\_PREVEXCLUEDEDDDI\_TEXT*

*The UPDATED INTERACTIONS report shall display the following text message for products with a Change FDA Med Guide Change: (RM #555596, RTC #162900)*

*The FDA Med Guide for the following VA Product(s) has been changed.|*

*The UPDATED INTERACTIONS report shall display the following text message for products with an Edit Drug-Drug Interaction Change: (RM #612803, RTC #162900)*

*The following interactions have been added, edited or inactivated.|*

*These changes are the result of review and recommendations from the|*

*NDF support group.*

*The UPDATED INTERACTIONS report shall display the following text message for products with a Mark “exclude from Drug-Drug Interaction” Change: (RM #612805, RTC #162900)*

*The following VA Product(s) have been flagged for exclusion from|*

*drug-drug interaction checks.*

*The UPDATED INTERACTIONS report shall display the following text message for products with an Unmark “exclude from Drug-Drug Interaction” Change: (RM #612806, RTC #162900)*

*The following VA Product(s), previously flagged for exclusion from|*

*drug-drug interaction checks, have been changed to be included in|*

*drug-drug interaction checks.*

*Line breaks for all message headers shall break correctly and consistently in all places where messages are displayed (e.g., screen, Mailman, etc.). Lines shall be full with no artificial breaks. (RM #555601, RTC #162900)*

*The VistA system shall produce the UPDATED INTERACTIONS E-Mail report with a subject line of “UPDATED INTERACTIONS and FDA MED GUIDES” (RM #612894, RTC #162900)*

##### 2.6.1.7.2 The System shall provide the ability for PPS-N users to add and/or remove sites from the Data Update Compliance Report (BRD #14, RM #509685, RTC #162898)

The requirements in Section 2.6.1.7.2 were de-scoped for PPS-N v3.0. See [Appendix B](#B) for a full listing of all requirements de-scoped for PPS-N v3.0

#### Online Help Enhancements

##### The System shall include existing and new items in the help file for PPS-N. (BRD #1, RM #509646, RTC #162894, 162901, 190470, 190473, 190478, 190479, 190480, 190482, 190485, 190486, 196385, 196386, 196387, 196388, 196389, 196390, 196391, 196392, 196393, 196394, 196395, 196396, 196397, 196398, 199217)

The existing PPS-N v1.0 help file shall be recreated in new help source code. (RM #509647, RTC #162894, 162901, 190470, 190473, 190478, 190479, 190480, 190482, 190485, 190486)

Help text for functionality created in PPS-N v2.0 and PPS-N v3.0 shall be added to the current help source code. (RM #509648, RTC #162901,190470,190473, 190478, 190479, 190480, 190482, 190485, 190486, 196385, 196386, 196387, 196388, 196389, 196390, 196391, 196392, 196393, 196394, 196395, 196396, 196397, 196398, 199217)

#### Stand Alone Stories

##### The System shall provide the ability to update the RxNorm Concept Unique Identifier update so that it is a regularly scheduled process at time intervals to be determined by business owners. (BRD #24, RM #509688, RTC #165367)

The RxNorm Concept Unique Identifier update shall be a scheduled process. (RM #509689, RTC #165367)

*The System shall no longer provide the ability for the Update RxNorm process to be run manually. (RM #597042, RTC #165367)*

*The System shall not update the RxNorm data in PPS-N if the call to NLM doesn’t find an RxCUID or doesn’t return any data. (RM #509691, RTC #165367)*

*The System shall change the RxNorm Suppress field from a Boolean field to a text field that will be populated with the value returned from the RxNorm Update process. Possible values are N, O, Y, or E. (RM #606791, RTC #165367)*

*The System shall populate the Last RxNorm Update field with the date the RxNorm data is updated for a product. (RM #606794, RTC #165367)*

*If a product is marked to Exclude from AutoUpdate, the System shall skip the product during the RxNorm Update process. (RM #606796, RTC #165367)*

*The System shall provide error handling capabilities so that a user can determine if the RxNorm Update process errored before completion. (RM #606798, RTC #165367)*

*The System shall send no more than 20 requests for RxNorm updates per second to the National Library of Medicine (NLM). (RM #606800, RTC #165367)*

*The System shall display the associated description in the RxNorm Suppress field on the RxNorm tab. The values and associated descriptions are:*

* + - *N – Not Suppressible*
    - *O – Obsolete*
    - *Y - Suppressed*
    - *E – Editor-Assigned Suppressiblity (RM #606802, RTC #165367)*

*The System shall display the Last RxNorm Update field as a read-only field on the RxNorm tab. The date shall display in the format specified in the user preferences. (RM #606805, RTC #165367)*

*The System shall provide the ability for a Manager, Second Approver, or Supervisor role to mark the product to Exclude from AutoUpdate on the RxNorm tab. (RM #606807, RTC #165367)*

*The System shall change the shading of the active tab on the Quick Actions tab to white instead of blue so that the text of the tab is visible. For example, when one of the sub-tabs (CMOP Mark / Unmark, Enter / Edit Dosages, Print PMI, Print Warning Labels, or RxNorm) is clicked, the tab background color will change from gray to white. (RM #606809, RTC #165367)*

##### The System shall improve the COTS add process to increase the number of successful NDC matches by looking at the unit dose status of the COTS NDC and the unit dose status of the VA Product. (BRD #29, RM #509693, RTC #161235)

The requirements in Section 2.6.1.9.2 were de-scoped for PPS-N v3.0. See [Appendix B](#B) for a full listing of all requirements de-scoped for PPS-N v3.0.

The System shall automatically add the NDC if there is one and only one GCN sequence code match to the VA Product. (RM #509695, RTC #161235)

If there are two VA products in the NDF found that contain the same GCN sequence number, NDC’s with a UD indicator shall be assigned to the VA Product that has the last three characters of “,UD”, and NDC’s with no UD indicator will be assigned to the product without “,UD” in the name. (RM #509696, RTC #161235)

If there are three VA Products found, the NCD is assigned to the FDB update queue. (RM #509697, RTC #161235)

##### The System shall provide the ability to update the VA Product Identifier numbering sequence to add more numbers (aka – CMOP ID). (BRD #27, RM #509699, RTC #161197)

The requirements in Section 2.6.1.9.3 were de-scoped for PPS-N v3.0. See [Appendix B](#B) for a full listing of all requirements de-scoped for PPS-N v3.0.

When the VA Product Identifier (aka CMOP ID) reaches XH999, the System shall roll the numbering sequence to XA###, where ### represents three digits, including leading zeros, not currently assigned by the system. (RM #509700, RTC #161197)

As the VA Product Identifier (aka CMOP ID) is incremented, the System shall not assign a number that is currently in use. (RM #509701, RTC #161197)

When the sequence of VA Product Identifier (aka CMOP ID) numbers is exhausted, the System shall roll the numbering sequence to X@###, where @ represents the next letter in the alphabet and ### represents three digits, including leading zeros, not currently assigned by the system. For example, once XA999 is reached, if XB001 is unassigned, then the sequence would roll to XB001. If, however, XB001 has already been assigned but XB002 is unassigned, the sequence would roll to XB002. (RM #509702, RTC #161197)

## Graphical User Interface (GUI) Specifications

This section describes the standard that the GUI for the PPS effort needs to support. The system will comply with Section 508 guidelines as specified in [Section 2.1](#_Accessibility_Specifications). The PPS user interface will also follow the guidelines in the PRE Style guide.

|  |  |
| --- | --- |
| SUP88 | The System shall be designed to work in a screen resolution of 1280 X 1024. |
| Elaboration | None. |
| RM510918  RTC #165423 | The System shall be designed to work with the version of Internet Explorer that is TRM compliant at the beginning of the UFT Increment. |
| Elaboration | Note that Browser settings may affect how font and graphics are displayed. |

## Multi-divisional Specifications

The system shall:

* Allow a user to create, read, update, and delete data across location domains according to the user’s permissions.
* Filter data according to a user’s permissions (e.g., display only data for a site, all sites, national level data, etc.).
* Support multi-site operations where VA may be sharing the instance with a non-VA entity such as Department of Defense (DoD) or the Indian Health Service (IHS).
* Not bind the allowable health care entities to be only VA (remember, VA pharmacy systems will be used by other entities through the Freedom of Information Act and the package must support the continued functionality through OSEHRA).

## Performance Specifications

Performance software requirements specify how quickly or efficiently something must occur in the system. It is expected that this version of PPS will have several performance requirements relating to system performance. These may include performance related to the searching of items, adding or removing items, data updates, and retrieval of drug item information and returning it to a source outside of PPS. These requirements will be detailed in a future version of this document.

The PPS system will need to adhere to the general 2-3 second load characteristics of web page applications.

|  |  |
| --- | --- |
| SUP90 | The simple search page shall respond in less than two seconds for at least 90% of the simple searches when a single user is accessing the system. |
| Elaboration | None. |
| RM510919 | The system shall allow the ability to update the FDA Med Guide field for 100 products in less than 2 minutes. |
| Elaboration | None. |
| RM510919 | The system shall allow the ability to complete the approval step of the update file process in less than 2 min. |
| Elaboration | None. |

## Quality Attributes Specification

The supportability, maintainability, portability, testability, and reusability specifications of the system are being developed.

The system will comply with the PRE Coding Standards document. The project will utilize PMD and CheckStyle automated tools to ensure compliance to the defined standards referenced in this document.

The system will comply with PMAS/ProPath product component testing. (RM #553363, RTC #165285, 165286, 186676, 18677, 186678, 186679, 186680, 186681, 186682, 186683, 186684, 186685, 186686, 186687, 186688, 186689)

## Reliability Specifications

The system shall be available 24/7, with exception made for required system maintenance activities. Required maintenance activities shall be scheduled for known periods of decreased system utilization.

Additional specifications will be determined as requirements are elaborated with the advice of SDE.

## Scope Integration

Interfaces include but are not limited to those detailed below.

The PPS code will interact with NDFMS, the VHA Enterprise Terminology Service (VETS) Standard Medication Route retrieval web service, and the FSS pricing information via a Java Database Connectivity JDBC connection. This document and the corresponding Interface Control Document and System Design Document will include the NDFMS RPC information.

The interface with the VETS web service will be through the specification published by the VETS application. A Memorandum of Understanding (MOU) or Inter-service Agreement (ISA) will need to be written to cover this agreement.

The interface with the FSS database will be through a JDBC connection setup on the PPS WebLogic server. An SQL statement will be written to retrieve FSS data directly from the FSS database. A MOU or ISA will need to be written to cover this agreement.

The interface with VistA functionality is touched upon in the PRE v1.0 SRS which can be used as a starting point in determining the requirements.

## Security Specifications

The PPS Code will use the KAAJEE software for authentication and authorization. During PPS-N v3.0, the PPS-N team will work toward a solution for compliance with One VA ETA,implement available Identity and Access Management (IAM) options. However, if it is determined that the implementation of this solution is not feasible during PPS-N v3.0 UFT, the implementation will take place in a future increment.

In NDFMS, the PPS‑N System User will be given access to the PPS MUMPS RPCs.

Additional specifications will be determined as requirements are elaborated with the advice of Service Delivery and Engineering (SDE).

|  |  |
| --- | --- |
| SUP32 | The system shall grant access to service component functions and data only to authorized service users. |
| Elaboration | None. |
| SUP34 | The system shall time out when a user has been inactive for the time configured during the WebLogic installation. |
| Elaboration | Set a default time of ten minutes. |
| SUP37 | The system shall use KAAJEE for user authentication and authorization. |
| Elaboration | Note KAAJEE relies on an SDS database being available. |

## System Features

System features will be developed through elaborating the Functional Requirements in [Section 2.6](#_Functional_Requirements).

## Usability Specifications

This section composes the usability requirements for the system. Usability requirements are different from the accessibility requirements, which are represented in [Section 2.1](#_Accessibility_Specifications). These requirements are for the ‘convenience’ of the user to make the application more intuitive. They do not represent features of the system, instead they represent items that are in place to make the system easier to use.

Usability requirements can be subjective and not objective and therefore, can be very difficult to pass in a verification test. These requirements will not be tested in the Acceptance Test but will be deferred and tested as part of the user functional testing.

Additional requirements will be added as the requirements are elaborated.

|  |  |
| --- | --- |
| SUP81 | The system shall identify the user location in the application by providing descriptive location names on the focus screens. |
| Elaboration | None. |
| SUP82 | The system shall provide a breadcrumb path to track and identify the user's location within the application. |
| Elaboration | The beginning position of the breadcrumb is the functional item selected using the menu or the start of a new functional flow. Every page that is visited during that functional flow is recorded. For display purposes, only the beginning position and the last five pages visited are shown. If the user clicks one of the items in the breadcrumb, that page will become the current page and the breadcrumb will reset accordingly to display once again the beginning position and the most recent five pages. |
| SUP83 | The system shall provide buttons consistent within the context of the application. |
| Elaboration | None. |
| SUP85 | The system shall provide notification when a timed response is required and provide sufficient time for the user to respond. |
| Elaboration | Note: This is only related to the system logging the user out of the system. The sufficient time is described as one minute. |

# Applicable Standards

The system will be required to meet all applicable Enterprise Level Requirements as noted by the [Requirements Management Repository Program](http://sharepoint.vista.domain.ext/sites/enterprise_requirements_management/default.aspx) and documents as noted in [Section 2](#_Overall_Description) of the T4 Basic PWS.

This system does not contain any patient or provider information so compliance with directives related to safeguarding patient and privacy information do not apply. Access to the system is provided by the VA produced KAAJEE application and therefore, this application will only show that it is using the KAAJEE application for access control as proof of adhering to Security standards. During PPS-N v3.0, the PPS-N team will work toward a solution for compliance with One VA ETA, implement available Identity and Access Management (IAM) options. Comply with Homeland Security Presidential Directive 12 (HSPD-12) a strategic initiative intended to enhance security, increase government efficiency, reduce identity fraud, and protect personal privacy.

# Interfaces

PPS-N’s known interfaces are detailed in the PPS-N v1.0 Interface Control Document. Additional interface details will be determined as requirements are elaborated.

## Communications Interfaces

N/A

## Hardware Interfaces

N/A

## Software Interfaces

N/A

## User Interfaces

N/A

# Legal, Copyright, and Other Notices

Legal, copyright, and other notices are still under development.

PPS currently does make use of open source code libraries and must adhere to the standards defined for using open source code files such as not modifying the open source code classes without giving credit in the class header for the source of the class.

# Purchased Components

Components purchased for PPS are being prepared at the program level and are not recorded in this document.

## Defect Source (TOP 5)

N/A

# User Class Characteristics

The user community at the national level that will be accessing this system is composed of those who have significant domain knowledge of drug based management systems.

The system at the local level is targeted for Pharmacy ADPACs.

# Estimation

The specific details regarding the estimations are still under development.

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 : Cumulative Probability (“S-curve”) Chart

[Insert Cumulative Probability (“S-curve”) Charts here] – to be filled in later by the function point counters

# Approval Signatures

This section is used to document the approval of the RSD 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:

* Physical signatures obtained face to face or via fax
* Physical signature obtained in person or via fax
* Digital signature tied cryptographically to the signer

/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.

REVIEW DATE: 12/11/2015

SCRIBE:

***See PDF for Signatures***

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*OIT PD PRE, Integrated Project Team (IPT) Chair & IT Program Manager*

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**Lynn C.**

*VHA PBM, Associate Chief Consultant, Business Sponsor*

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**Robert Longo**

*OIT PD PRE, Project Manager*

1. Acronym List and Glossary

The following acronyms are used in this Document.

| Term | Definition |
| --- | --- |
| ADPAC | Automated Data Processing Application Coordinator |
| BCMA | Bar Code Medication Administration |
| CCOW | Clinical Context Object Workgroup |
| CCRs | Code Change Requests |
| CMOP | Consolidated Mail Outpatient Pharmacy |
| COTS | Commercial-Off-The-Shelf |
| CPRS | Computer-based Patient Record System |
| CRs | Change Requests |
| CRUD | Refers to the database operations of create, read, update and delete |
| DATUP | Data and Table Update Process |
| DMG | Data Mapping Guide |
| DoD | Department of Defense |
| EPL | Enterprise Product List |
| EPL-L | Enterprise Product List-Local |
| EPL-N | Enterprise Product List-National |
| FBPM | Future Business Process Model |
| FDB | First DataBank |
| FSS | Federal Supply Schedule |
| GUI | Graphical User Interface |
| IAM | Identity and Access Management |
| ICD | Interface Control Document |
| IEN | Internal Entry Number |
| IHS | Indian Health Service |
| IPT | Integrated Project Team |
| ISA | Inter-Service Agreement |
| J2EE | Java 2 Enterprise Edition |
| JDBC | Java Database Connectivity |
| KAAJEE | Kernel Authentication and Authorization for J2EE |
| MOCHA | Medication Order Check Healthcare Application |
| MOU | Memorandum of Understanding |
| MUMPS | Massachusetts General Hospital Utility Multi-Programming System |
| NLM | National Library of Medicine |
| NDC | National Drug Code |
| NDF | National Drug File |
| NDFMS | National Drug File Management System |
| NDF-RT | National Drug File-Reference Terminology |
| NIOSH | National Institute for Occupational Safety and Health |
| PBM | Pharmacy Benefits Management |
| PDM | Pharmacy Data Management |
| PECS | Pharmacy Enterprise Customization Service |
| PPS | Pharmacy Product System |
| PPS-L | Pharmacy Product System - Local |
| PPS-N | Pharmacy Product System - National |
| PRE | Pharmacy Reengineering |
| RPC | Remote Procedure Call |
| RSD | Requirements Specification Document |
| RTC | Rational Team Concert |
| RxNorm | Normalized naming system for generic and branded drugs |
| SDD | System Design Document or Software Design Documents |
| SDE | Service Delivery and Engineering |
| SDS | Standard Data Service |
| SQL | Standard Query Language |
| SRS | Software Requirements Specification |
| STS | Standards and Terminology Services |
| SwRI | Southwest Research Institute |
| TBD | To Be Determined |
| TRM | Technical Reference Manual |
| TSPR | Technical Services Project Repository |
| UD | Unit Dose |
| VA | Department of Veterans Affairs |
| VETS | VHA Enterprise Terminology Service |
| VHA | Veterans Health Administration |
| VUID | VHA Unique Identifier |

1. Requirements Not Delivered in PPS-N v3.0

This section contains the functional requirements that were not delivered as part of PPS-N v3.0. The requirements listed below are documented in the PPS-N Backlog folder in the Requirements Management (RM) module in RTC. In accordance with Agile principles, they have been linked to User Stories as appropriate to accommodate their implementation in a future release.

#### 2.6.1.4 Rematch Enhancements

##### 2.6.1.4.1 and 2.6.1.4.2 When editing a product in PPS-N causes a potential un-match at the local level due to Inactivation, Proposed Inactivation or “Other” modification, the System shall update the workflow process to provide the ability for PPS-N users to select products as suggestions or automatic rematches to replace the edited product. (BRD #15, BRD #16, RM #509620, RTC #161268, RTC #162662)

When editing a product in PPS-N causes a potential un-match at the local level due to Inactivation, Proposed Inactivation or “Other” modification, the System shall update the workflow process to display possible rematch products to replace the product that was inactivated. (RM #509622, RTC #161268, RTC #162662)

When editing a product in PPS-N causes a potential un-match at the local level due to Inactivation, Proposed Inactivation or “Other” modification, the System shall update the workflow process to provide the ability for PPS-N users to use simple search criteria to search for products to be selected as suggestions or automatic rematches to replace the edited product. (RM #509623, RTC #161268, RTC #162662)

When editing a product in PPS-N causes a potential un-match at the local level due to Inactivation, Proposed Inactivation or “Other” modification, the System shall update the workflow process to provide the ability for PPS-N users to select multiple products as suggestions or a single product as an automatic rematch to replace the edited product. (RM #509621, RTC #161268, RTC #162662)

When editing a product in PPS-N causes a potential un-match at the local level due to Inactivation, Proposed Inactivation or “Other” modification, the System shall allow the user to submit the product edit without performing a rematch to replace the edited product. (RM #509624, RTC #161268, RTC #162662)

The System shall provide the ability to display the suggested or automatic rematch(es) selected during the edit workflow on the Modification Summary for Product page during the edit workflow. (RM #606262, RTC #161268, RTC #162662)

The System shall not include the proposed inactivation and its associated rematch in the update file process until the proposed inactivation has been approved. (RM #606263, RTC #161268, RTC #162662)

The System shall include the proposed inactivation and any associated rematch(es) on the Data Update for NDF Report when the proposed inactivation is defined. (RM #606264, RTC #161268, RTC #162662)

* + - The System shall display the following message text on the Data Update for NDF Report for Future Inactivation/Automatic Rematches:

The following VA Product(s) WILL be inactivated on the date listed. All local DRUG file (#50) entries match to the VA Product(s) will be unmatched and automatically rematched to the VA Product listed. (RM #606265, RTC #161268)

The System shall provide the ability to display the suggested or automatic rematch(es) selected during the edit workflow on the Pending Modification tab during the approval workflow. (RM #606266, RTC #161268, RTC #162662)

The System shall provide the ability to display the suggested or automatic rematch(es) selected during the edit workflow on the Summary for Product page during the approval workflow. (RM #606267, RTC #161268, RTC #162662)

The System shall include the proposed inactivation and its associated rematch in the update file process once the proposed inactivation has been approved. (RM #606268, RTC #161268, RTC #162662)

The System shall no longer include a separate Rematch tab. (RM #606269, RTC #161268, RTC #162662)

The System shall update the workflow process to allow the user to execute the rematch workflow without performing a corresponding inactivation or proposed inactivation modification. (RM #606270, RTC #161268, RTC #162662)

The System shall include a rematch modified without a corresponding inactivation in the update file process without requiring any further action. (RM #606271, RTC #161268, RTC #162662)

The System shall permit only those users who can edit products, Manager, Second Approver, or Supervisor roles, to perform rematch functionality. (RM #606272, RTC #161268, RTC #162662)

###### 2.6.1.4.3 The System shall capture and populate the Automated and Suggested products that were approved during the Inactivation process on the PPS-N History Tab. (BRD #15, BRD #16, RM #509625, RTC #162889)

The System shall capture and display the following fields in the existing History tab. (RM #509626, RTC #162889)

* Automated
* Suggested (multiples that were picked)
* Inactivation Date
* Drug Name
* Second approvals
* More to be identified by PBM

#### 2.6.1.5 Enhancements to Add and Maintain New Fields

##### 2.6.1.5.2 The System shall provide new fields for “CLINICAL EFFECT OF DRUG” in PPS and VA PRODUCT file (#50.68). (BRD #30, RM #509461, RTC #162613, RTC #162615, RTC #162617)

**PPS-N Requirements**

* The System shall store in EPL-N Products table and allow edit via PPS-N Product maintenance, a field called **Clinical Effect of Drug**. This field indicates whether or not expired or recently discontinued orders containing this product should be included in the Order Checks. (RM #509684, RTC #162613, RTC #162615)
* The System shall store in EPL-N Products table and allow edit via PPS-N product maintenance, a field called **Inpatient Expiration Limit**. This field indicates the duration, in hours, that an expired or recently discontinued order should be included in Order Checks (RM #509686, RTC #162613, RTC #162615)
* The System shall store in EPL-N Products table and allow edit via PPS-N product maintenance, a field called **Outpatient Expiration Limit**. This field indicates the duration, in days, that an expired or recently discontinued order should be included in Order Checks. (RM #509687, RTC #162613, RTC #162615)
* The System shall include the Clinical Effect of Drug, Inpatient Expiration Limit, and Outpatient Expiration Limit fields on the **NDF Update File**. (RM #509698, RTC #162620)

**VistA Requirements**

* The VistA system shall be modified to include a new file multiple named “CLINICAL EFFECT DURATION” in VA PRODUCT file (#50.68). This is a Yes or No field. (RM #509703, RTC #162612)
* The VistA system shall provide a sub-file with three new fields:
  + - The first field is PACKAGE for which the values are “I” for Inpatient, “O” for Outpatient, and “IO” for Both Inpatient and Outpatient.
    - The second field is OMIT EXP/DC ORDER CHECK. This is a Yes or No field.
    - The third field is DURATION LIMIT. The DURATION LIMIT value will not display if the value for OMIT EXP/DC ORDER CHECK is “Yes.” (RM #509704, RTC #162612)
* The system shall provide a time period field that represents the number of days or hours to look back for expired or discontinued drugs, such as 96D or 96H. The format shall be 99999x, where 99999 represents the days or hours, and x represents the D or H, D for days, and H for hours. (RM #509705, RTC #162612)
* The Clinical Effect Duration fields shall be populated in VistA with values from the NDF Update file. (RM #543931, RTC #162612)
* When these fields are edited by the Update file process, VistA shall capture the date of change using the same audit tracking process in place for changes to other fields in VistA file 50.68. (RM #543932, RTC #162612)
* These fields shall display in VistA options Inquire to VA Product Info for Local Drug [PSNLOOK], Inquire to National Files [PSNACT], and PSS DRUG DOSING LOOKUP. (RM #543933, RTC #162612)
* If the value for “CLINICAL EFFECT DURATION” is No, the designated VistA options shall display only this field and its corresponding value. (RM #543934, RTC #162612)
* If the value for “CLINICAL EFFECT DURATION” is Yes and “BOTH INPATIENT AND OUTPATIENT DURATION LIMIT” is populated, the designated VistA options shall display only the fields “CLINICAL EFFECT DURATION”, “BOTH INPATIENT AND OUTPATIENT DURATION LIMIT” and “OMIT EXP/DC ORDER CHECK” and their corresponding values. (RM #543935, RTC #162612)
* If the value for “CLINICAL EFFECT DURATION” is Yes and “BOTH INPATIENT AND OUTPATIENT DURATION LIMIT” is not populated, the designated VistA options shall display only the fields “CLINICAL EFFECT DURATION”, INPATIENT DURATION LIMIT”, “OUTPATIENT DURATION LIMIT” and “OMIT EXP/DC ORDER CHECK” and their corresponding values. (RM #543932, RTC #162612)

#### 2.6.1.6 Workflow Enhancements

##### 2.6.1.6.1 The System shall allow multi-select requests for approval on the Requests and PPS Data Requests pages. (BRD #1, RM #509649, RTC #161202)

The System shall allow the ability on the Requests page to display records Pending 2nd Approval Modification and/ or Pending Modification, or All Requests in which the same field or combination of fields has been modified. (RM #590343, RTC #161202)

The System shall not allow the ability to display records Pending 2nd Approval Modification and/ or Pending Modification, or All Requests in which only the VA Print Name field has been modified or is part of the combination of fields that have been modified. (RM #590502, RTC #161202)

The System shall allow multiple request records to be selected at once for approval by allowing the user to select individual request records, select a range of request records, or select all request records. (RM #509958, RTC #161202)

The System shall allow the user to approve each selected request record individually. (RM #590344, RTC #161202)

* + - The System shall allow the user to approve multiple requests at the same time if the following is true of all selected requests:
* Item is the same type
* Request Type is Modification
* Modified Field Name(s) are the same
  + - * VA Print Name is not one of the Modified Field Name(s) (RM #590345, RTC #161202)
    - The System shall apply the comment entered on the summary page to all request records that are approved at that time. (RM #590346, RTC #161202)

##### 2.6.1.6.2 The System shall correct the function of the Backspace key to clear a character in the field only instead of functioning like a back arrow in the browser. (BRD #1, RM #509650, RTC #162623)

The entry of a backspace shall delete the character to the left of the cursor when used in a text field. (RM #509651, RTC #162623)

The entry of a backspace shall work as the browser back button when used in any field that is not a text field (e.g. a drop down list). (RM #509652, RTC #162624)

##### 2.6.1.6.3 The System shall correct the navigation between tabs to require only a single click. (BRD #1, RM #509653, RTC #161205)

The System shall load a page based on a single click on a tab. (RM #509656, RTC #161205)

##### 2.6.1.6.4 The System shall allow a NDC to be added to, or removed from, a pending product. (BRD #1, RM #509658, RTC #161206)

A product shall be defined as pending if there is no status (i.e. the product is new from scratch but has not yet been saved) or is a pending status. (RM #509659, RTC #161206)

A NDC shall be added to or removed from a pending product only if that NDC has already been assigned to an existing PPS product. (RM #509660, RTC #161206)

A NDC shall be moved from one pending product to another. (RM #509663, RTC #161206)

##### 2.6.1.6.5 The System shall provide functionality to show existing VA product matches on the FDB Search results page. (BRD #3, RM #509665, RTC #161207)

If an NDC has no VA product match, the System shall display a blank to indicate there is no VA product match. (RM #509666, RTC #161207)

The System shall allow the Manager, Second Approver, or Supervisor role to perform edits on the associated product displayed on the FDC Search results page. (RM #509667, RTC #161207)

##### 2.6.1.6.6 When looking up an NDC in COTS search, the System shall allow the user to drill into associated PPS product and be able to edit fields. (BRD #3, RM #509668, RTC #162891, RTC #162892)

The System shall display the associated product, if it exists, on the Details page. (RM #606465, RTC #162891, RTC #162892)

The System shall allow the Manager, Second Approver, or Supervisor role to perform edits on the associated product displayed on the Details page. (RM #606467, RTC #162891, RTC #162892)

##### 2.6.1.6.8 The System shall increase the number of items that can be edited at one time in both simple search & advanced search. (BRD #1, RM #509671, RTC #165447)

When editing CMOP DISPENSE NATIONAL, the System shall allow the user to check or uncheck up to 100 products. (RM #509672, RTC #165447)

The System shall allow the user to add 100 FDA MED GUID text to up to 100 products. (RM #509673, RTC #165447)

The System shall allow the user to check NATIONAL FORMULARY INDICATORs for up to 100 products. (RM #509674, RTC #165447)

##### 2.6.1.6.9 The System shall display results navigation details and the export button above and below the results grid on the following pages: (BRD #4, RM #509675, RTC #165450)

Simple Search

Advanced Search

NDCs tab

PPS Data Elements

Requests

Saved Work in Progress

PPS Data Requests

FDB Search

FDB Add

FDB Update

Added Report

Updated Report

User Roles

The results navigation details shall include the following features:

* The total number of items found
* The number of items displaying on the current page of results
* The ability to display the first page of results when not on the first page
* The ability to display the previous page of results when not on the first page
* The ability to display a specific page of results
* The ability to display the next page of results when not on the last page
* The ability to display the last page of results when not on the last page (RM #509676, RTC #165450)

If the results display on a single page, the message, “XX items found, displaying all items.”, where XX is the total number of items found, shall display instead of the navigation details. (RM #509677, RTC #165450)

The standard template of columns shall be exported into an Excel spreadsheet, regardless of how the personal settings for the column display are defined. (RM #556619, RTC #165450)

The export spreadsheet shall not include a background color (fill) in the header row. (RM #556626, RTC #165450)

The export spreadsheet shall not include the multi-select column that may display on the result grid. (RM #556627, RTC #165450)

The export spreadsheet shall not automatically resize the columns. (RM #556628, RTC #165450)

##### 2.6.1.6.10 The System shall allow the synonym field to be cleared when associated NDC is moved to another product. (BRD #1, RM #509678, RTC #161219)

When a NDC is moved from one product to another, the trade name of the NDC which populates the original product synonym field shall be able to be removed if the synonym is unique to the moved NDC. (RM #509679, RTC #161219)

When a NDC is moved from one product to another, the trade name of the NDC which populates the original product synonym field shall not be able to be removed if there are multiple NDCs with that trade name associated to that product. (RM #509680, RTC #161219)

##### 2.6.1.6.11 The System shall allow the synonym field to be updated when new/moved NDC is associated with the product. (BRD #1, RM #509681, RTC #161226)

When a NDC is moved from one product to another, the trade name of the NDC shall populate the synonym field of the destination product if that product does already have that same NDC trade name listed. (RM #509682, RTC #161226)

#### 2.6.1.7 Reporting Enhancements

##### 2.6.1.7.2 The System shall provide the ability for PPS-N users to add and/or remove sites from the Data Update Compliance Report (BRD #14, RM #509685, RTC #162898)

#### 2.6.1.9 Stand Alone Stories

##### 2.6.1.9.2 The System shall improve the COTS add process to increase the number of successful NDC matches by looking at the unit dose status of the COTS NDC and the unit dose status of the VA Product. (BRD #29, RM #509693, RTC #161235)

The System shall automatically add the NDC if there is one and only one GCN sequence code match to the VA Product. (RM #509695, RTC #161235)

If there are two VA products in the NDF found that contain the same GCN sequence number, NDC’s with a UD indicator shall be assigned to the VA Product that has the last three characters of “,UD”, and NDC’s with no UD indicator will be assigned to the product without “,UD” in the name. (RM #509696, RTC #161235)

If there are three VA Products found, the NCD is assigned to the FDB update queue. (RM #509697, RTC #161235)

##### 2.6.1.9.3 The System shall provide the ability to update the VA Product Identifier numbering sequence to add more numbers (aka – CMOP ID). (BRD #27, RM #509699, RTC #161197)

When the VA Product Identifier (aka CMOP ID) reaches XH999, the System shall roll the numbering sequence to XA###, where ### represents three digits, including leading zeros, not currently assigned by the system. (RM #509700, RTC #161197)

As the VA Product Identifier (aka CMOP ID) is incremented, the System shall not assign a number that is currently in use. (RM #509701, RTC #161197)

When the sequence of VA Product Identifier (aka CMOP ID) numbers is exhausted, the System shall roll the numbering sequence to X@###, where @ represents the next letter in the alphabet and ### represents three digits, including leading zeros, not currently assigned by the system. For example, once XA999 is reached, if XB001 is unassigned, then the sequence would roll to XB001. If, however, XB001 has already been assigned but XB002 is unassigned, the sequence would roll to XB002. (RM #509702, RTC #161197)