Collaborative Terminology Tooling & Data Management (CTT & DM)

Native Domain Standardization (NDS) Medications

PSO_7_0_472 Deployment, Installation,

Back-Out, and Rollback Guide

Version 1.1

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Revision History

Date	Version	Description	Author
04/2017	1.1	Updates per Release Coordinator Request Date changed to April.	<mark>REDACTED</mark>
02/2017	1.0	Delivery to Customer.	<mark>REDACTED</mark>
02/2017	.04	Updates as per Release Coordinator requests.	<mark>REDACTED</mark>
01/2017	.03	Updated Backout section to remove reference to backout patch.	<mark>REDACTED</mark>
12/20/2016	.02	Tech Writer Review.	<mark>REDACTED</mark>
12/18/2016	.01	Initial Draft.	<mark>REDACTED</mark>

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1 Introduction

This document describes how to deploy and install Medications Native Domain Standardization Patch PSO*7*472, as well as how to back-out the product and rollback to a previous version or data set. This document is a companion to the project charter and management plan for this effort.

1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the Medications Native Domain Standardization Patch PSO*7*472 will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan also identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

1.2 Dependencies

The Medications Native Domain Standardization Patch PSO*7*472 possesses a direct application dependency on the VistA Outpatient Pharmacy v.7.0 application.

1.3 Constraints

Medications Native Domain Standardization Patch PSO*7*472 possesses the following constraints:

- The update to files #50.416, #50.6, #50.605, and #50.68 shall not affect the current functionality or conflict with applications that utilize these files.
- The fields being added to these files should only be visible within VistA and to those requesting the information. No GUI applications will be modified or affected in this effort.

2 Roles and Responsibilities

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
1	STS Team	Deployment	Plan and schedule deployment (including orchestration with vendors)	
2	STS Team	Deployment	Develop O&M Plan	
3	FO	Deployment	Test for operational readiness	
4	STS Team / FO	Deployment	Execute deployment	
5	STS Team / FO	Installation	Plan and schedule installation	

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
N/A	Regional PM/FIS/OPP PM	Installation	Ensure authority to operate and that certificate authority (CA)/security documentation is in place	
N/A	Regional PM/FIS/OPP PM/	Installation	Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes	
N/A	Regional PM/FIS/OPP PM/ Nat'l Education & Training	Installation	Coordinate training	

3 Deployment

The deployment is planned as a concurrent online rollout. During IOC testing and after national release, patch PSO*7*472 will be distributed via the FORUM Patch Module, and may be deployed at any site without regard to deployment status at other sites.

3.1 Timeline

The deployment and installation is scheduled to run for a period of thirty days, as depicted in the Master Deployment Schedule.

3.2 Site Readiness Assessment

This section discusses the locations that will receive the CTT & DM NDS Medications Patch PSO*7*472 deployment.

The PSO*7*472 Medications Patch must be manually installed, or manually queued for installation at each VistA instance at which it is deployed, using the standard Kernel Installation Distribution System (KIDS) software. The PSO*7*472 Patch should be installed at all VA VistA instances running Outpatient Pharmacy or any of the VistA Pharmacy applications, and will update the M (Mumps) server software on each VistA server.

3.2.1   Deployment Topology (Targeted Architecture)

The deployment topology for the CTT & DM NDS Medications Patch PSO*7*472, during IOC testing and after national release is described below.

Figure 1. Deployment Topology (Targeted Architecture)
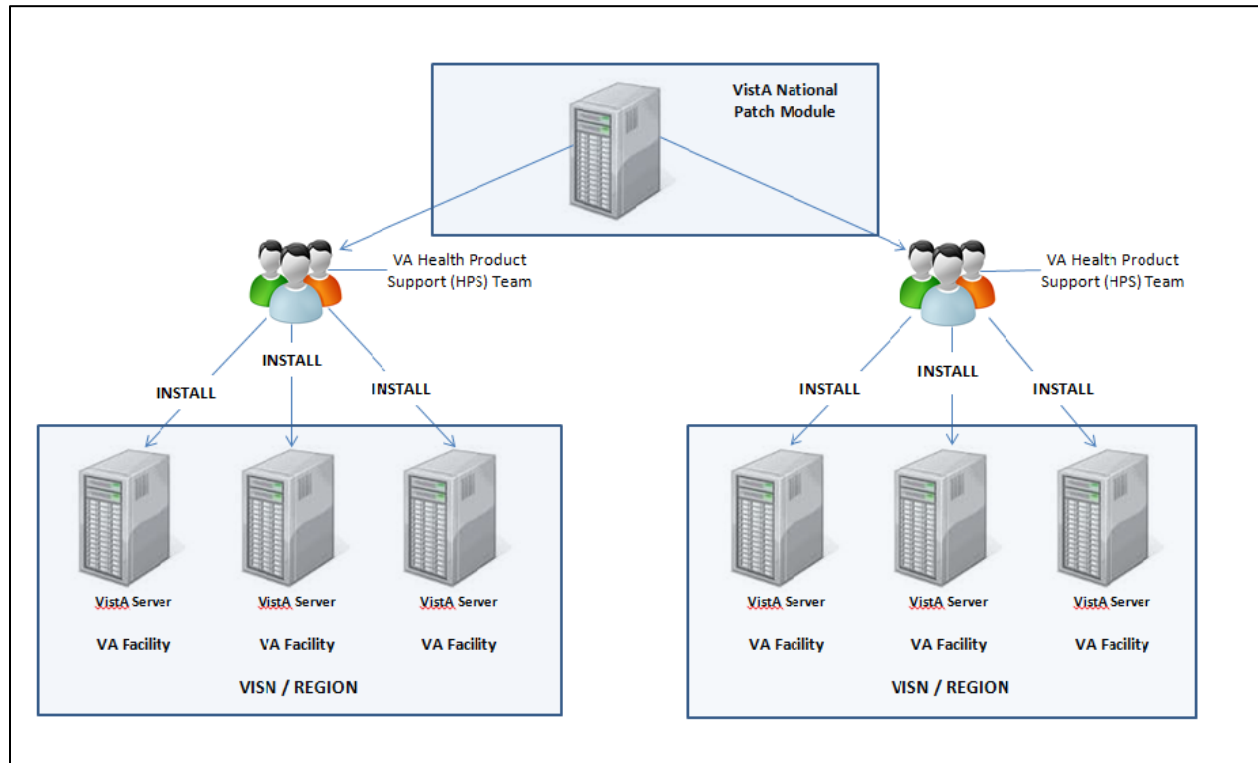
3.2.2   Site Information (Locations, Deployment Recipients)

During IOC testing, CTT & DM NDS Medications Patch PSO*7*472 will be deployed at the following sites:

- Great Plains
- Oklahoma City

After National Release, CTT & DM NDS Medications Patch PSO*7*472 will be deployed at all sites running the Outpatient Pharmacy v.7.0 application.

3.2.3   Site Preparation

No special preparation is required by the site prior to deployment.

3.3 Resources

Deployment of CTT & DM NDS Medications Patch PSO*7*472 requires an up to date VistA environment running the Outpatient Pharmacy v.7.0 application.

3.3.1 Facility Specifics

There are no facility-specific deployment or installation features of CTT & DM NDS Medications patch PSO*7*472.

3.3.2 Hardware

CTT & DM NDS Medications Patch PSO*7*472 requires no site hardware specifications during, or prior to deployment.

3.3.3 Software

The following table describes software specifications required at each site prior to deployment.

Table 2: Software Specifications

Required Software	Make	Version	Configuration	Manufacturer	Other
Outpatient Pharmacy		7.0	Standard	VHA	

Please see the Roles and Responsibilities Table in Section 2 for details about who is responsible for preparing the site to meet these software specifications.

3.3.4 Communications

No notifications are required for deployment of CTT & DM NDS Medications patch PSO*7*472.

3.3.4.1 Deployment/Installation/Back-Out Checklist

Table 3: Deployment/Installation/Back-Out Checklist

Activity	Day	Time	Individual who completed task
Deploy -The Deploy activity is performed when the patch is sent to test site(s) by the development team.	TBD	TBD	TBD
Install - The Install activity is performed when the patch is installed at the test site(s).	TBD	TBD	TBD
Back-Out - The optional Back-Out activity is performed in the event the patch must be uninstalled, or removed, from the test site.	TBD	TBD	TBD

4 Installation

4.1 Pre-installation and System Requirements

4.1.1 Pre/Post Installation Overview

Ordinarily it is recommended that a "Back-up" Local Patch File is created that can be re-installed in the event that a new patch must be backed out. However, this method does not back out Database Definitions (DDs), and as Patch PSO*7*472 contains only DDs; there is no need to create a Back-up Local Patch.

4.1.2 Pre-Installation Instructions

4.2 Platform Installation and Preparation

Patch PSO*7*472 does not require any platform installation or preparation.

4.3 Download and Extract Files

CTT & DM NDS Medications Patch PSO*7*472 is being released as a FORUM Patch via the Patch Module, therefore, the patch must be downloaded from FORUM, and forwarded to the destination site, in the form of a Packman message. There is no new documentation available as this patch does not create any new functionality.

4.4 Database Creation

No new database is required for the CTT & DM NDS Medications patch PSO*7*472.

4.5 Installation Scripts

No installation scripts are required for installation of CTT & DM NDS Medications patch PSO*7*472.

4.6 Cron Scripts

No Cron scripts are required for installation of CTT & DM NDS Medications Patch PSO*7*472.

4.7 Access Requirements and Skills Needed for the Installation

Access to National VA Network, as well as the local network of each site to receive CTT & DM NDS Medications patch PSO*7*472 is required to perform the installation, as well as authority to create and install patches.

Knowledge of, and experience with, the Kernel Installation and Distribution System (KIDS) software is required. For more information, see Section V, Kernel Installation and Distribution System, in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide.

4.8 Installation Procedure

Installation Instructions:

The installation of Patch PSO*7*472 will modify the DRUG INGREDIENTS file (#50.416), the VA GENERIC (#50.6) file, the VA DRUG CLASS file (#50.605), and the VA PRODUCT (#50.68) File.

1. Choose the PackMan message containing this patch.
2. Choose the INSTALL/CHECK MESSAGE PackMan option.
3. From the Kernel Installation and Distribution System Menu, select the Installation Menu. From this menu, you may elect to use the following options. When prompted for the INSTALL NAME enter the Patch #, PSO*7*472.
4. Backup a Transport Global - This option will create a backup message of any routines exported with this patch. It will not backup any other changes such as DDs or templates.
5. Compare Transport Global to Current System - This option will (allow you to view all changes that will be made when this patch is installed. It compares all components of these patch routines, DDs, templates, etc.).
6. Verify Checksums in Transport Global - This option will allow you to ensure the integrity of the routines that are in the transport global.
7. From the Installation Menu, select the Install Package(s) option and choose the patch to install.
8. When prompted 'Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//' respond NO.
9. When prompted 'Want KIDS to INHIBIT LOGONs during the install? NO//' respond NO.
10. When prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//' respond NO.
11. If prompted 'Delay Install (Minutes): (0 - 60): 0//' respond 0.

4.9 Installation Verification Procedure

Installation of CTT & DM NDS Medications Patch PSO*7*472 may be verified by running global listings from the VistA server command line after installation:

```
D ^%G
```

Global listings should be performed for the following global nodes:

```
Global ^DD(50.416,4,0

Global ^DD(50.6,5,0

Global ^DD(50.605,5,0

Global ^DD(50.68,43,0
```

Example:

```
D ^%G

Device:

Right Margin:

Screen size for paging (0=nopaging)? =>

Global ^DD(50.416,4,0 -- NOTE: translation in effect

^DD(50.416,4,0)="CODING SYSTEM^50.4164^^4;0"

Global ^DD(50.6,5,0 -- NOTE: translation in effect

^DD(50.6,5,0)="CODING SYSTEM^50.65^^5;0"

Global ^DD(50.605,5,0 -- NOTE: translation in effect

^DD(50.605,5,0)="CODING SYSTEM^50.6055^^5;0"

Global ^DD(50.68,43,0 -- NOTE: translation in effect

^DD(50.68,43,0)="CODING SYSTEM^50.6843^^11;0"
```

4.10   System Configuration

No system configuration is required before or after deployment of CTT & DM NDS Medications Patch PSO*7*472.

4.11   Database Tuning

No database tuning is required before or after deployment of CTT & DM NDS Medications Patch PSO*7*472.

5 Back-Out Procedure

NOTE: Due to the complexity of this patch (because of the data dictionary changes), it is not recommended for back-out. However, in the event that a site decides to back-out this patch, the site should contact the National Service Desk (NSD) to submit a CA SDM ticket; the development team will assist with the process.

The Backout Procedure consists of individually removing each new Data Definition (DD) introduced by the Patch PSO*7*472. Since there are no other software components (routines, templates, etc.) contained in the patch, there is no 'restore' or backout process involving Kernel Installation and Distribution System (KIDS).

The backout is to be performed by persons with programmer-level access, and in conjunction with the STS Team.

5.1 Back-Out Strategy

The Backout Strategy is to manually delete the new Data Definitions (DDs) introduced with this patch.

5.2 Back-Out Considerations

The backout should only be done in the event that the facility systems management determines that the Patch PSO*7*472 is not appropriate for that facility, and should only be done as a last resort. HPS Clinical 1 team may be consulted if needed.

5.2.1 Load Testing

No load testing is required for patch PSO*7*472.

5.2.2 User Acceptance Testing

5.3 Back-Out Criteria

Facility Systems Management would need to determine patch PSO*7*472 is not appropriate for their facility. HPS Clinical 1 team may be consulted if needed.

5.4 Back-Out Risks

By backing out PSO*7*472, the local facility will not be able to use the Adverse Reaction Tracking package to update VistA allergies and allergy symptoms with standard terminology codes from the respective Standards Development Organizations. HPS Clinical 1 team may be consulted if needed.

5.5 Authority for Back-Out

The Facility Systems Management has the authority to back-out patch PSO*7*472. HPS Clinical 1 team may be consulted if needed.

5.6 Back-Out Procedure

The backout is to be performed by persons with programmer-level access, and in conjunction with the STS Team. File Manager should be used to delete the new CODING SYSTEM multiple added with PSO*7*472, which will automatically also remove sub-fields and data.

NOTE: Due to the complexity of this patch (because of the data dictionary changes), it is not recommended for back-out. However, in the event that a site decides to back-out this patch, the site should contact the National Service Desk (NSD) to submit a CA SDM ticket; the development team will assist with the process.

The following will need to be executed from the programmers prompt (User input depicted below in ***bold italicized*** font):

Delete CODING SYSTEM multiple and data from DRUG INGREDIENTS (#50.416) file:

```
D P^DI

Select OPTION: MODIFY FILE ATTRIBUTES

Do you want to use the screen-mode version? YES// NO

MODIFY WHAT FILE: HDIS FILE/FIELD// 50.416   DRUG INGREDIENTS
                                    (4951 entries)

Select FIELD: CODING SYSTEM      (multiple)

LABEL: CODING SYSTEM// @

     SURE YOU WANT TO DELETE THE ENTIRE 'CODING SYSTEM' FIELD? Y (Yes)

OK TO DELETE 'CODING SYSTEM' FIELDS IN THE EXISTING ENTRIES? Yes// Y (Yes).....
```

Delete Coding System multiple and data from VA GENERIC (#50.6) file:

```
D P^DI

Select OPTION: MODIFY FILE ATTRIBUTES

Do you want to use the screen-mode version? YES// NO

MODIFY WHAT FILE: HDIS FILE/FIELD// 50.6   VA GENERIC
                                    (4948 entries)

Select FIELD: CODING SYSTEM      (multiple)

LABEL: CODING SYSTEM// @

     SURE YOU WANT TO DELETE THE ENTIRE 'CODING SYSTEM' FIELD? Y  (Yes)

OK TO DELETE 'CODING SYSTEM' FIELDS IN THE EXISTING ENTRIES? Yes// Y  (Yes).....
```

Delete Coding System multiple and data from VA DRUG CLASS (#50.605) file:

```
D P^DI

Select OPTION: MODIFY FILE ATTRIBUTES

Do you want to use the screen-mode version? YES// NO

MODIFY WHAT FILE: HDIS FILE/FIELD// 50.605   VA DRUG CLASS
                                    (579 entries)

Select FIELD: CODING SYSTEM      (multiple)
```

```
LABEL: CODING SYSTEM// @

    SURE YOU WANT TO DELETE THE ENTIRE 'CODING SYSTEM' FIELD? Y  (Yes)

OK TO DELETE 'CODING SYSTEM' FIELDS IN THE EXISTING ENTRIES? Yes// Y  (Yes).....
```

Delete Coding System multiple and data from VA PRODUCT (#50.68) file:

```
D P^DI

Select OPTION: MODIFY FILE ATTRIBUTES

Do you want to use the screen-mode version? YES// NO

MODIFY WHAT FILE: HDIS FILE/FIELD// 50.68  VA PRODUCT

                                   (27332 entries)

Select FIELD: CODING SYSTEM    (multiple)

LABEL: CODING SYSTEM// @

    SURE YOU WANT TO DELETE THE ENTIRE 'CODING SYSTEM' FIELD? Y  (Yes)

OK TO DELETE 'CODING SYSTEM' FIELDS IN THE EXISTING ENTRIES? Yes// Y  (Yes).....
```

5.7 Back-out Verification Procedure

After backing out Patch PSO*7*472, back-out of CTT & DM NDS Medications Patch
PSO*7*472 may be verified by running a global listings from the VistA server command line
after installation. Global listings should be performed for the following global nodes, after which
nothing should be listed if back-out was successful:

    Global ^DD(50.416,4,0

    Global ^DD(50.6,5,0

    Global ^DD(50.605,5,0

    Global ^DD(50.68,43,0

Example:

```
D ^%G

Device:

Right Margin:

Screen size for paging (0=nopaging)? =>

Global ^DD(50.416,4,0 -- NOTE: translation in effect

<nothing should print>

Global ^DD(50.6,5,0 -- NOTE: translation in effect

<nothing should print>

Global ^DD(50.605,5,0 -- NOTE: translation in effect

<nothing should print>

Global ^DD(50.68,43,0 -- NOTE: translation in effect

<nothing should print>
```

6 Rollback Procedure

N/A

6.1 Rollback Considerations

N/A

6.2 Rollback Criteria

N/A

6.3 Rollback Risks

N/A

6.4 Authority for Rollback

N/A

6.5 Rollback Procedure

N/A

6.6 Rollback Verification Procedure

N/A