# PX*1.0*234

# Deployment, Installation, Back-Out, and Rollback Guide

## Patient Care Encounter (PCE)

## Patches PX*1*234



**Version 1.0**

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**Department of Veterans Affairs**
**Office of Information and Technology (OI&T)**

# Revision History

| Date | Version | Description | Author |
|------|---------|-------------|--------|
| January 2023 | 1.0 | Initial Draft | CPRS Development Team |
| April 2023 | 1.0 | Replace ITOPS with HISM | CPRS Development Team |
| June 2023 | 1.0 | Updated spelling and dates | CPRS Development Team |

# Table of Contents

# 1    Introduction

This document describes how to install the PX*1.0*234 build as well as how to back-out the product and rollback to a previous version. This document is a companion to the project charter and management plan for this effort.

There was a bug introduced in PX*1.0*211 where for health factors that had a measurement defined, when one of those health factors was given to a patient, the UCUM CODE was stored in the V HEALTH FACTORS entry even though a measurement was not being recorded. The bug was fixed by PX*1.0*217.

The purpose of this emergency patch: PX*1*234, is to repair the corrupted measurements. When this patch is installed, it will automatically repair as many of those entries as it can. It will do this by examining the COMMENTS field and if a numeric value, that meets the criteria of the measurement definition in the health factor, can be extracted from the COMMENTS field, that numeric value will be stored in the MAGNITUDE field.

For the two LCS health factors: LCS PACKS/DAY and LCS YEARS SMOKED, this process will be carried out even if the UCUM CODE field is empty. If the MAGNITUDE can be set, then the UCUM CODE will also be set to the UCUM CODE in the corresponding health factor.

A list of all the V HEALTH FACTORS entries where a MAGNITUDE could not be automatically extracted from the COMMENTS will be built and sent to the members of the PCE Management Mail group. The COMMENTS can be manually reviewed and determine if a valid MAGNITUDE can be extracted and set. Details of this process are given in the post-installation steps.

The purpose of this guide is to provide a single, common document that describes how to install PX*1.0*234, as well as how it is to be backed out and rolled back, if necessary. The guide also identifies resources and communications plan. Specific instructions for installation, back-out, and rollback are included in this document.

## 1.1    Dependencies

Required builds:

- PX*1.0*217

## 1.2    Constraints

N/A

# 2 Roles and Responsibilities

No single entity oversees decision making for deployment, installation, back out and rollback of the PX*1.0*234 build. Application Coordinators approve deployment from an OIT perspective. If an issue with the software arises that would require a rollback, the site leadership will meet along with input from development, Patient Safety and Health Product Support to initiate a back out and rollback decision of the software along with Health Infrastructure and Systems Management (HISM) and Local sites. The following table provides PX*1.0*234 project information.

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

| ID | Team | Phase / Role | Tasks | Project Phase (See Schedule) |
|---|---|---|---|---|
| | Site personnel in conjunction with IT support – which may be local or HISM | Deployment | Plan and schedule installation | After national release |
| | Site personnel in conjunction with IT support – which may be local or HISM | Deployment | Determine and document the roles and responsibilities of those involved in the installation | After national release |
| | Site personnel | Deployment | Test for operational readiness | After national release |
| | Site personnel in conjunction with IT support – which may be local or HISM. The IT support will need to include person(s) to install the KIDS builds for all packages involved. Even though installed in a single install session, the other IT support personnel need to be aware | Installation | Plan and schedule installation | After national release |
| | Site personnel | Installations | Coordinate training | |
| | Facility Area Manager and IT support – which may be local or regional | Back-out | Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out) | After national release |
| | Hardware and System support – no changes. Software support will be the Development Team during the compliance period. At the end of the compliance period, support will be transitioned to sustainment | Post Deployment | Hardware, Software and System Support | After national release |

# 3   Deployment

This is a patch release for patches PX*1*234 to local sites.

## 3.1   Timeline

This is an emergency patch so site installation should take place within seven days of release.

## 3.2   Site Readiness Assessment

This section discusses the locations that will install the PX*1.0*234 build.

### 3.2.1   Deployment Topology (Targeted Architecture)

VistA

### 3.2.2   Site Preparation

All required patches must be installed, see 1.1.

Make sure the MANAGEMENT MAIL GROUP, field #650, in the PCE PARAMETERS file, #815, is defined. Use the option PX Site Parameter Menu then PX Site Parameters Edit to edit this field.

```
Select OPTION NAME: PX SITE PARAMETER MENU        PCE Site Parameter Menu

   SITE    PCE Site Parameters Edit
   RPT     PCE HS/RPT Parameter Menu ...
```

The mail group can be any established mail group, or you can create a new mail group for this purpose. If a new mail group is needed a suggested name is PCE MANAGEMENT. The members of mail group will receive the MailMan messages that are generated during the installation of this patch.

## 3.3   Related Documentation

**Table 3: Documentation**

| Documentation | Documentation File name |
|---|---|
| Deployment, Installation, Back-Out, and Rollback Guide<br>PCE Health Factors Measurements Repair Release Notes<br>Patient Care Encounter Technical Manual | px_1_0_234_dibr.docx<br>px_1_0_234_dibr.pdf<br>px_1_0_234_rn.docx<br>px_1_0_234_rn.pdf<br>pxtm.docx<br>pxtm.pdf |

> **NOTE:** *In this document, you will see references to both PX\*1\*234 and PX\*1.0\*234. The difference is that PX\*1\*234 is the name of the patch and PX\*1.0\*234 is the name of the build.*

# 3.4 Related Web Sites

**Table 4: Related Web Sites**

| Site | URL | Description |
|------|-----|-------------|
| VA Software Document Library | https://www.va.gov/vdl/ | This is the VistA documentation library; all the PCE manuals can be found here. |

## 3.4.1 Hardware

PX\*1.0\*234 will not replace or modify the existing VistA Architecture; therefore, no hardware changes are required.

## 3.4.2 Software

PX\*1.0\*234 will not replace or modify the existing VistA Architecture.

## 3.4.3 Communications

The Project Manager will communicate with Release Agent, OIT Program Manager, and other stakeholders as needed.

### 3.4.3.1 Deployment/Installation/Back-Out Checklist

**Table 5: Deployment/Installation/Back-Out Checklist**

| Activity | Day |
|----------|-----|
| Release to Field | TBD |
| Install By | TBD |
| Back-Out | TBD |

# 4 Installation

## 4.1 Pre-installation and System Requirements

**Mail Group Review/Setup**

Prior to the patch installation the site should carry out the following steps:
Make sure the MANAGEMENT MAIL GROUP, field #650, in the PCE PARAMETERS file, #815, is defined. Use the option PX SITE PARAMETER MENU then select SITE to review and if necessary, edit this field.

Select OPTION NAME: PX SITE PARAMETER MENU       PCE Site Parameter Menu


  SITE   PCE Site Parameters Edit
  RPT    PCE HS/RPT Parameter Menu ...

Select PCE PARAMETERS ONE: 1
STARTUP VIEW: APPOINTMENT//
BEGINNING PATIENT DATE OFFSET: -30//
ENDING PATIENT DATE OFFSET: 1//
BEGINNING HOS LOC DATE OFFSET: -7//
ENDING HOS LOC DATE OFFSET: 0//
RETURN WARNINGS: YES//
MULTIPLE PRIMARY DIAGNOSES: RETURN WARNING//
NO PRIMARY DIAGNOSIS:
SD/PCE SWITCH OVER DATE: AUG 23,1996//
HEALTH SUMMARY START DATE: AUG 23,1996//
MANAGEMENT MAIL GROUP:

If the MANAGEMENT MAIL GROUP is not already set, you can use an existing mail group or you can create a new mail group for this purpose. The members of the mail group will receive the MailMan messages that are generated during the installation of this patch. If you need to create a new mail group a suggested name is PCE MANAGEMENT.


**Back out preparation**

These steps are taken in case the patch needs to be backed out.

- Backup files ^AUTTHF, and ^AUPNVHF using your site's policy for backing up data.

- If the steps are unknown, here is a way it can be done, using ^AUTTHF as an example:

  - Go to the Iris programmer mode command prompt.

  - At the prompt, enter D GOGEN^%ZSPECIAL.

- At the device prompt, enter the directory and file name where the global backup is to be stored.
- At the Parameters? Prompt, press <enter>.
- At the Global prompt, enter ^AUTTHF.
- Verify that the file was created and exists in the directory specified.

**Example**

```
DEV5A4:DVFDEV>D GOGEN^%ZSPECIAL
Device: [Local Directory]AUTTHF_BACKUP.GBL
Parameters? ("WNS") =>
Warning:  Use a "V" format to avoid problems with control characters.
Global ^AUTTHF
Global ^
```

## 4.2 Platform Installation and Preparation

N/A

## 4.3 Download and Extract Files

N/A

## 4.4 Database Creation

N/A

## 4.5 Installation Scripts

N/A

## 4.6 Cron Scripts

N/A

## 4.7 Access Requirements and Skills Needed for the Installation

The installation should be performed by a user with programmer access and knowledge of installing host files using Kernel Installation and Distribution System [XPD MAIN].

## 4.8 Installation Procedure

This section describes how to install the PX*1.0*234 build.

This patch can be loaded with users on the system, but it should be done during off-hours. Estimated installation time is less than 15 seconds.

Install the patch first in a training or test account. Installing in a non-production environment will give you time to get familiar with new functionality.

## 4.9 Installation Instructions

1. Choose the PackMan message containing this build. Then select the INSTALL/CHECK MESSAGE PackMan option to load the build.

2. From the Kernel Installation and Distribution System Menu, select the Installation Menu. From this menu,

   A. Select the Verify Checksums in Transport Global option to confirm the integrity of the routines that are in the transport global. When prompted for the INSTALL NAME enter the patch or build name. PX*1.0*234

   B. Select the Backup a Transport Global option to create a backup message. You must use this option and specify what to backup; the entire Build or just Routines. The backup message can be used to restore the routines and components of the build to the pre-patch condition.

      i. At the Installation option menu, select Backup a Transport Global
      ii. At the Select INSTALL NAME prompt, enter your build PX*1.0*234
      iii. When prompted for the following, enter "R" for Routines or "B" for Build.

         Select one of the following:

            B       Build
            R       Routines

         Enter response: Build

      iv. When prompted "Do you wish to secure this message? NO//", press <enter> and take the default response of "NO".
      v. When prompted with, "Send mail to: Last name, First Name", press <enter> to take default recipient. Add any additional recipients.
      vi. When prompted with "Select basket to send to: IN//", press <enter> and take the default IN mailbox or select a different mailbox.

C. You may also elect to use the following options:
    i.  Print Transport Global – This option will allow
       you to view the components of the KIDS build.
    ii. 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 of the components of this patch, such as
       routines, DDs, templates, etc.

D. Select the Install Package(s) option and choose the
   patch to install.

    i.  If prompted 'Want KIDS to Rebuild Menu Trees Upon
       Completion of Install? NO//', answer NO.
   ii. When prompted 'Want KIDS to INHIBIT LOGONs during the
      install? NO//', answer NO.

   iii. When prompted 'Want to DISABLE Scheduled Options, Menu
       Options, and Protocols? NO//', answer NO.

# 4.10 Installation Verification Procedure

This summary of routines should match the transport global listing of routines as there are no Post-install routines or actions required.

# 4.11 Post Installation

After a successful installation the following init routine can be deleted: PXP234I

If there were any Health Factors entries with incomplete measurement definitions, a MailMan message; Subject: HEALTH FACTORS WITH INCOMPLETE MEASUREMENT DEFINITION, with a list of these health factors was sent to the installer and to the members of the MANAGEMENT MAIL GROUP. See section 5.1.1 of the PCE V Health Factors Measurements Repair Release Notes for instructions on how to process the list and make repairs.

If there were any V Heath Factors entries with measurements that could not be automatically repaired a MailMan message; Subject: V HEALTH FACTORS MEASUREMENT REPAIR, with a list of these entries was sent to the installer and to the members of the MANAGEMENT MAIL GROUP. See section 5.1.2 of the PCE V Health Factors Measurements Repair Release Notes for instructions on how to process the list and make repairs.

# 4.12 System Configuration

N/A

## 4.13 Database Tuning

N/A

# 5  Back-Out Procedure

In the rare circumstance that a Back-Out is necessary, the steps described in this section can be used.

## 5.1  Back-Out Strategy

The overall Back-Out strategy is to return the routines to their pre-patch state, as well as backing out any necessary data dictionary changes, and option changes.

## 5.2  Back-Out Considerations

Back-Out should be considered only if all other avenues are exhausted.  The development team will be involved if issues with the patch arise.

### 5.2.1  Load Testing

N/A

### 5.2.2  User Acceptance Testing

Results of User Acceptance Testing will be provided.

## 5.3  Back-Out Criteria

Back-Out should be considered only if all other avenues are exhausted.  The development team will be involved if issues with the patch arise.

## 5.4  Back-Out Risks

Back-Out Risks are minimal because with utilization of the special back-out build, the system will revert to what it was prior to installing the PCE Standardization 2.0 build.

## 5.5  Authority for Back-Out

The site leadership has the final authority to require the back-out and accept the associated risks.

## 5.6  Back-Out Procedure

The following process will restore the VistA and CPRS systems to the state prior to the installation of PX*1*234.

**Step 1:**  Delete the routines: PXP234I, PXHFMEASREPAIR and the option PX HF MEASUREMENT REPAIR.

# 6    Rollback Procedure

In the rare circumstance that a Rollback is necessary, the steps described in this section can be used.

## 6.1   Rollback Considerations

Rollback should be considered only if all other avenues are exhausted.  The development team will be involved if issues with the patch arise.

The overall Rollback strategy is to return the ^AUTTHF and ^AUPNVHF globals to their pre-patch state.

## 6.2   Rollback Criteria

Rollback should be considered only if all other avenues are exhausted.  The development team will be involved if issues with the patch arise.

## 6.3   Rollback Risks

There are risks to restoring globals, users will need to be off the system while the globals are restored.

## 6.4   Authority for Rollback

The site leadership has the final authority to require the back-out and accept the associated risks.

## 6.5   Rollback Procedure

Follow your site's policy for restoring globals. Use the copies made in section 4.8 step 1.

## 6.6   Rollback Verification Procedure

N/A