Problem Selection List Enhancements (Patches OR*3.0*429 and GMPL*2.0*49) Deployment, Installation, Back-Out, and Rollback Guide



December 2017

Department of Veterans Affairs

Office of Information and Technology (OI&T)

Enterprise Program Management Office (EPMO)

Revision History

Date	Version	Description	Author
2017-12-04	0.2	Updates from reviews	REDACTED
2017-07-05	0.1	Initial Draft	REDACTED

Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all those activities. Its purpose is to provide clients, stakeholders, and support personnel with a smooth transition to the new product or software, and should be structured appropriately, to reflect particulars of these procedures at a single or at multiple locations.

Per the Veteran-focused Integrated Process (VIP) Guide, the Deployment, Installation, Back-out, and Rollback Plan is required to be completed prior to Critical Decision Point #2 (CD #2), with the expectation that it will be updated throughout the lifecycle of the project for each build, as needed.

Table of Contents

1	Int	troduction	5
	1.1	Purpose	5
	1.2	Dependencies	5
	1.3	Constraints	5
2	Ro	oles and Responsibilities	5
3	De	eployment	7
	3.1	Timeline	7
	3.2	Site Readiness Assessment	7
	3.2	2.1 Deployment Topology (Targeted Architecture)	8
	3.2		
	3.2	2.3 Site Preparation	8
	3.3	Resources	8
	3.3	3.1 Facility Specifics	8
	3.3	3.2 Hardware	8
	3.3		
	3.3		
_		3.3.4.1 Deployment/Installation/Back-Out Checklist	
4		stallation	
	4.1	Pre-installation and System Requirements	
	4.2	Platform Installation and Preparation	
	4.3	Download and Extract Files	
	4.4	Database Creation	
	4.5 4.6	Installation Scripts Cron Scripts	
	4.6 4.7	Access Requirements and Skills Needed for the Installation	
	4.8	Installation Procedure	
	4.8		
		stallation	11
		.8.1.1 Pre/Post Installation Overview	
		.8.1.2 Installation Instructions	
	7	4.8.1.3.1 Review Problem Selection Lists to See if Reassignments Are Necessary	
	4.9	System Configuration	18
	4.10	Database Tuning	18
5	Ba	ack-Out Procedure	18
	5.1	Back-Out Strategy	18

	5.2	Back-Out Considerations	18
	5.2	2.1 Load Testing	18
	5.2	.2 User Acceptance Testing	18
	5.3	Back-Out Criteria	18
	5.4	Back-Out Risks	18
	5.5	Authority for Back-Out	19
	5.6	Back-Out Procedure	19
	5.6	5.1 Installing the Back-Out Patch	19
	5.7	Back-out Verification Procedure	19
3	Ro	ollback Procedure	19
	6.1	Rollback Considerations	19
	6.2	Rollback Criteria	20
	6.3	Rollback Risks	20
	6.4	Authority for Rollback	20
	6.5	Rollback Procedure	20
	6.6	Rollback Verification Procedure	20
7	Ex	ample Installation	21

1 Introduction

This document describes how to deploy and install Problem Selection List Enhancements (Patches OR*3.0*429 and GMPL*2.0*49), as well as how to back-out the product and rollback to a previous version.

1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom Problem Selection List Enhancements 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, a communications plan, and a rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

1.2 Dependencies

The Problem Selection List Enhancements project is for installation on a fully patched VistA system. This utility enables Clinical Application Coordinators (CACs) to create problem selection lists for their system, divisions, locations, clinics, or users to help them quickly assign problems that they frequently use.

1.3 Constraints

The Problem Selection List Enhancements will be released as part of a combined multi-package build under PROBLEM SELECTION LIST BUILD 1.0. This combined build consists of the GMPL*2.0*49 and OR*3.0*429 patches. The patches are expected to be installed on existing VistA platforms.

2 Roles and Responsibilities

No single entity is in charge of decision making for deployment, installation, back out and rollback of Problem Selection List Enhancements. Rather, the Critical Decision Point representatives (commonly referred to as the three in the box) under the Veterans In Process (VIP) will meet and approve release from a business perspective.

If an issue with the software arises that would require a national rollback, then the same three in the box members under VIP will coordinate with several groups (including Patient Safety Health Product Support, Information Technology Operations Service (ITOPS), and Site leadership) to decide whether a back out and rollback of the software is necessary. The Facility Chief Information Officer (FCIO) has the final authority to require the patch back out and data rollback and accept the associated risks.

The following table provides Problem Selection List Enhancements 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 ITOPS.	Deployment	Plan and schedule deployment (including orchestration with vendors)	After national release.
	Site personnel in conjunction with IT support – which may be local or ITOPS.	Deployment	Determine and document the roles and responsibilities of those involved in the deployment.	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 ITOPS. The IT support will need to include person(s) to install the KIDS build as well as the personnel to deploy the GUI – which may be done on each machine, a shared network and/or the Citrix access gateway	Deployment	Execute deployment	After national release.
	Site personnel in conjunction with IT support – which may be local or ITOPS. The IT support will need to include person(s) to install the KIDS build as well as the personnel to deploy the GUI – which may be done on each machine, a shared network and/or the Citrix access gateway	Installation	Plan and schedule installation	After national release.
	N/A – will work under the VistA ATO and security protocols.	Installation	Ensure authority to operate and that certificate authority security documentation is in place	

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
	N/A – no equipment is being added.	Installation	Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes	
	Local support personnel or CACs.		Coordinate training	
	Facility CIO 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 CPRS Development Team during the compliance period. At the end of the compliance period, support will be transitioned to HPS Clinical Sustainment.	Post Deployment	Hardware, Software and System Support	After national release.

3 Deployment

The Problem Selection List Enhancements will have a standard release with a 30-day compliance window. This patch will be released as part of a combined multi-package build under PROBLEM SELECTION LIST BUILD 1.0. This combined build consists of the GMPL*2.0*49 and OR*3.0*429 patches.

There are currently no site-facing on-line meetings or training planned for this deployment.

3.1 Timeline

The provisional timeline calls for the patch to be released sometime in the summer or fall of 2017 with a 30-day compliance period after national release.

3.2 Site Readiness Assessment

This section discusses the locations that will receive the Problem Selection List Enhancements deployment.

7

3.2.1 Deployment Topology (Targeted Architecture)

Problem Selection List Enhancements will be deployed to each VistA instance. That will include local sites as well as regional data processing centers.

3.2.2 Site Information (Locations, Deployment Recipients)

The initial deployment will be to Initial Operating Capabilities (IOC) sites for verification of functionality. Once that testing is completed and approval is given for national release, the Problem Selection List Enhancements patches (OR*3*429 and GMPL*2*49) will be deployed to all VistA systems.

The Production (IOC) Test sites are:

REDACTED

3.2.3 Site Preparation

Problem Selection List Enhancements

• Identify users that will need the new key, GMPL IMPRT UTIL, to perform national/local selection list updates using the import utility: Sites should identify the users who will need the new GMPL IMPRT UTIL key to perform the national/local selection list updates using the import utility. Most likely, this will be the sites' CACs. Once the users have been identified, the list of names should be communicated to the Region (ITOPS) personnel. The installer will most likely also make the key assignments post-installation.

3.3 Resources

3.3.1 Facility Specifics

N/A

3.3.2 Hardware

N/A

3.3.3 Software

N/A

3.3.4 Communications

The Problem Selection List Enhancements patches will be deployed using the normal patch deployment process. After the patches are nationally released, sites will have 30 days to install them.

3.3.4.1 Deployment/Installation/Back-Out Checklist

The deployment and installation will be performed by site support personnel, local or ITOPS, once the patches are nationally released.

4 Installation

During installation of the combined build, several things will occur. This information is to aid those installing the combined build containing the two patches. Step-by-step instructions are further below.

4.1 Pre-installation and System Requirements

The Problem Selection List Enhancements patches assume a fully-patched VistA system.

4.2 Platform Installation and Preparation

Please check your system to verify that the following, previously released national patches are installed:

- GMPL*2.0*40
- GMPL*2.0*45
- OR*3.0*385

This multi-package build (VistA KIDS Build) should take less than 5 minutes to install.

It is recommended that the installation be done during non-peak hours. If at all possible, the users should not be in the Problem List ListManager application when the KIDS installation is being performed.

4.3 Download and Extract Files

The Problem Selection List Enhancements patches are being released in a host file called PROBLEM_SELECTION_LIST_BUILD_1_0.KID. This combined build consists of the GMPL*2.0*49 and OR*3.0*429 patches.

The preferred method is to retrieve files from download.vista.med.va.gov. This transmits the files from the first available server. Sites may also elect to retrieve files directly from a specific server.

Sites may retrieve the software and/or documentation directly using Secure File Transfer Protocol (SFTP) from the ANONYMOUS.SOFTWARE directory at the following OI&T Field Offices:

Hines: REDACTED

Salt Lake City: REDACTED

Documentation can also be found on the VA Software Documentation Library at: http://www.va.gov/vdl/

Problem Selection List Enhancements files to be downloaded	File Contents	Download Format
PROBLEM_SELECTION_LIST_BUILD_1_0.KID	 OR*3*429: Contains the new parameter to assign the problem selection list and list migration code GMPL*2*49: Content changes for the problem selection list, including the distribution of the new VA National Problem Selection List 	ASCII
cprsguitm.doc and cprsguitm.pdf	CPRS Technical Manual: GUI Version	Binary
cprsguium.doc and cprsguium.pdf	CPRS User Guide: GUI Version	Binary
gmpl_2_0_49_ig.docx and gmpl_2_0_49_ig.pdf	Problem Selection List Enhancements (Patches OR*3.0*429 and GMPL*2.0*49) Deployment, Installation, Back-Out, and Rollback Guide	Binary
gmpl_2_0_49_rn.docx and gmpl_2_0_49_rn.pdf	Problem Selection List Enhancements (Patches GMPL*2.0*49 and OR*3.0*429) Release Notes	Binary
gmpl_2_0_49_tm.doc and gmpl_2_0_49_tm.pdf	Problem List Technical Manual	Binary
gmpl_2_0_49_um.doc and gmpl_2_0_49_um.pdf	Problem List User Manual	Binary

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

Installation of the Problem Selection List Enhancements patches requires the following to install:

• Programmer access to VistA instance and ability to install KIDS build.

4.8 Installation Procedure

4.8.1 Problem Selection List Enhancements Multi-Package Build KIDS Installation

4.8.1.1 Pre/Post Installation Overview

There is a pre and post-installation routine (GMPLY49) included. This routine will be automatically deleted once installation has completed.

The following things will occur before, during, and after patch installation.

GMPL*2*49:

Pre-installation:

• Pre-existing USER/CLINIC Selection List Assignment Report: During preinstallation, this report is auto generated to identify Problem Selection Lists assigned to users and clinics prior to the installation of GMPL*2.0*49. This report will be sent to the installer and OR CACS mail group via MailMan.

Sample MailMan Report

```
Subj: Pre-existing USER/CLINIC Selection List Assignment Report [#154391] 08/23/17@08:16 129 lines
From: GMPL*2.0*49 INSTALL In 'IN' basket. Page 1
```

This report was auto generated during installation to identify Problem Selection Lists assigned to users and clinics prior to the installation of GMPL*2.0*49. After installation all users and clinic assignments will be migrated to the new Default Selection List Display parameter setting. If users and clinics desire to use the National Problem Selection List as their default setting then use the Assign/Remove menu option to reassign those users or clinics listed in the report.

```
User Selection List Assignments:
  PROVIDER, ONE
                                     USER LIST 1
  PROVIDER, TWO
                                     USER LIST 2
  PROVIDER, THREE
                                     USER LIST 3
  PROVIDER, FOUR
                                     USER LIST 4
Clinic Selection List Assignments:
   CARDIOLOGY
                                     CARDIO CLINIC LIST
  GENERAL MEDICINE
                                     GENERAL MED CLINIC LIST
  PAIN CLINIC
                                    PAIN CLINIC LIST
  PRIMARY CARE
                                     PRIMARY CARE CLINIC LIST
User(s) assigned to a Selection List that no longer exists:
   PROVIDER, FIVE
                                     Selection List #5
  PROVIDER, SIX
                                     Selection List #6
```

• Scan and convert any mixed/lower case list/category names to upper case: During the pre-install, this patch also scans the PROBLEM SELECTION LIST and PROBLEM SELECTION CATEGORY files for any duplicate names or names in mixed/lower case format. A report of finding will be generated to the installer and OR CACS mail group via MailMan and any mixed/lower case names will automatically be converted to upper case. The report is Mixed/Lower Case Problem Selection List/Category Names.

Sample Mixed/Lower Case Name Report/Message

• **Data Dictionary Deletion**: The current data dictionaries for the PROBLEM SELECTION LIST file #125 and PROBLEM SELECTION CATEGORY file #125.11 will be deleted in preparation for the newly updated data dictionaries.

During patch installation, the following will occur:

- Routine installation/update
- Data Dictionary updates
- Addition of the National Problem Selection List Content: This patch will also install the first version of the VA-NATIONAL PROBLEM SELECTION LIST which comprises of the following national selection list categories:
 - VA-PRIMARY CARE
 - VA-CARDIOLOGY
 - VA-DENTAL
 - VA-DERMATOLOGY
 - VA-DIABETES
 - VA-EAR NOSE THROAT
 - VA-EMERGENCY DEPARTMENT
 - VA-ENDO METAB EXCEPT DIABETES
 - VA-GASTROENTEROLOGY
 - VA-GENERAL SURGERY
 - VA-GYNECOLOGY
 - VA-HEMATOLOGY
 - VA-INFECTIOUS DISEASE
 - VA-MENTAL HEALTH
 - VA-NEUROLOGY
 - VA-NEUROSURGERY
 - VA-ONCOLOGY
 - VA-OPHTHALMOLOGY
 - VA-ORTHOPEDICS
 - VA-PAIN
 - VA-PLASTIC SURGERY
 - VA-POLYTRAUMA
 - VA-PULMONARY
 - VA-RENAL NEPHROLOGY
 - VA-RHEUMATOLOGY
 - VA-UROLOGY
- Create New Key: With the installation of GMPL*2.0*49, a new key, GMPL IMPRT UTIL, has been created. This key will be given to those who will create problem selections lists and who can use the import utility.
- Updates to protocols and options

Post-installation:

• **Duplicate Name Scan:** The patch will scan for duplicate selection list/category names and generate a report The CAC will have to review any duplicate list and/or category names found and edit/delete/reconcile the entries as appropriate.

Sample Duplicate Name Report/Message

```
Subj: Duplicate Problem Selection List/Category Name Report [#203470]
03/13/17@12:59 10 lines
From: GMPL*2.0*49 INSTALL In 'IN' basket. Page 1

Duplicate problem selection list/category names are no longer allowed with patch GMPL*2.0*49. The following list/category names are duplicates.
Please have your CAC review these with the pre-existing file entries and rename, delete, or reconcile the duplicate entries as needed.

Duplicate List Names:
    ORTHOPEDIC

Duplicate Category Names:
    NEUROLOGY
```

- Mark GMPL CODE LIST menu option out of order
- Update GMPL SELECTION LIST CSV CHECK menu text
- Update display order of several items for GMPL BUILD LIST MENU option
- Resequencing GMPL MENU BUILD GROUP protocol menu items
- Set pre-existing lists/categories to a default local class
- Changes to the File Structure: To support the enhancements to problem list selection, the file structures for the PROBLEM SELECTION LIST file #125 and PROBLEM SELECTION CATEGORY file #125.11 were also redesigned. To enable a tighter coupling between a selection list and its categories, the PROBLEM SELECTION LIST CONTENTS file #125.1 will now be a subfile/multiple of the PROBLEM SELECTION LIST file #125. The same concept applies to the PROBLEM SELECTION CATEGORY CONTENT file #125.12 that will now be a subfile of the PROBLEM SELECTION CATEGORY file #125.11. A new CLASS field is also added to the List (#125) and Category (#125.11) files in order to delineate, control, and manage the editing capabilities of national, local, or VISN level lists and categories. With this new redesign, the file data is also migrated to their respective file record entries to ensure continued operability.

OR*3*429:

Pre-installation:

N/A

During:

• Installation/update of routines and parameter

Post-installation:

- Create New Parameter: A new Default Problem Selection List Display, ORQQPL SELECTION LIST, parameter will be added to the system. This parameter will be where the problem selection list assignments will be stored. This parameter determines which problem selection list the user will be shown when adding a new patient problem in CPRS.
- Migrate pre-existing USER/CLINIC list assignments to the new ORQQPL SELECTION LIST parameter: The pre-existing user and clinic list assignments in the New Person and Problem Selection List files respectively will be migrated over and managed under this new parameter.

When patch OR*3.0*429 patch is installed, it checks on the codes from lists that are being moved from the NEW PERSON and PROBLEM SELECTION LIST files to the ORQQPL SELECTION LIST parameter. Below are samples of what the message might look like:

Migrating default user Problem Selection list from NEW PERSON File to the ORQQPL SELECTION LIST parameter...

The following selection lists could not be migrated to the ORQQPL SELECTION LIST parameter because it contains one or more problems that have inactive SNOMED and/or ICD codes attached to them.

CARDIOLOGY ORTHOPEDIC

Migrating default clinic Problem Selection list from PROBLEM SELECTION LIST File to the ORQQPL SELECTION LIST parameter...

The following selection lists could not be migrated to the ORQQPL SELECTION LIST parameter because it contains one or more problems that have inactive SNOMED and/or ICD codes attached to them.

CARDIOLOGY ORTHOPEDIC

• Set system and package level setting of the parameter to the default VA-NATIONAL PROBLEM SELECTION LIST

4.8.1.2 Installation Instructions

This combined build will install two patches: GMPL*2.0*49 and OR*3.0*429. The patches load several routines and may be installed with users on the system although it is STRONGLY recommended that it be installed during non-peak hours to minimize potential disruption to users. This patch should take less than 5 minutes to install.

NOTE: Users should stay out of the Problem Selection List ListManager Application entirely during the installation of this patch as data from files #125.1 and #125.12 are being migrated to files #125 and #125.11 respectively.

Utilizing this ListMan App during the data migration process could lock up certain records and prevent data from being migrated successfully. If this should occur, a lock error message will be generated to the installer identifying those records during the post-installation.

- 1. From the Kernel Installation and Distribution System Menu, select the Installation menu.
- 2. Next, select 'Load a Distribution'. When prompted "Enter a Host File: enter directory>PROBLEM_SELECTION_LIST_BUILD_1_0.KID (where directory represents the location where you stored the KIDS file).
- 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 multi- package build name, PROBLEM SELECTION LIST BUILD 1.0:
 - a. 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.
 - b. 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 this patch (routines, DDs, templates, etc.).
 - c. Verify Checksums in Transport Global This option will allow you to ensure the integrity of the routines that are in the transport global.
- 4. From the Installation Menu, select the Install Package(s) option and select the package: PROBLEM SELECTION LIST BUILD 1.0.
- 5. When prompted 'Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//', respond with NO. KIDS will automatically attach the new menu options to the designated menu tree during the installation process. There is no need to rebuild the menu trees upon completion of installation.
- 6. When prompted 'Want KIDS to INHIBIT LOGONs during the install? NO//', respond with NO.
- 7. When prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//', respond with YES. Disable all GMPL* options and protocols.

4.8.1.3 Post-Installation Instructions

The post-install routine will automatically migrate data from files #125.1 and #125.12 to files #125 and #125.11 respectively. It is imperative that users stay out of the Problem Selection List ListMan App until the installer has received messages that the migration has successfully completed.

It will also set the CLASS field for all pre-existing lists and categories to "Local". Additionally it will scan for duplicate list/category names and send a report to the installer and OR CACs mail group via MailMan. A few other post-processing items such as updating the display order of several option and protocol menu items are also performed. The GMPL CODE LIST menu option is also marked out of order.

4.8.1.3.1 Review Problem Selection Lists to See if Reassignments Are Necessary

When this patch is installed, any pre-existing User or Clinic selection list assignments prior to patch installation will be retained. A report will be generated and sent to the installer and OR CACS mail group via Mailman that identifies all existing assignments. Sites should review these assignments to see if they need to be changed.

If there are any users that are assigned to a selection list that no longer exists, they will also be captured in this report.

The following is a sample report:

```
Subj: Pre-existing USER/CLINIC Selection List Assignment Report [#154024]
08/15/17@09:50 129 lines
From: GMPL*2.0*49 INSTALL In 'IN' basket. Page 1
This report was auto generated during installation to identify Problem
Selection Lists assigned to users and clinics prior to the installation of
GMPL*2.0*49. After installation all users and clinic assignments will be
migrated to the new Default Selection List Display parameter setting. If
users and clinics desire to use the National Problem Selection List as
their default setting then use the Assign/Remove menu option to reassign
those users or clinics listed in the report.
User Selection List Assignments:
  PROVIDER, ONE
                                     USER LIST 1
  PROVIDER, TWO
                                     USER LIST 2
  PROVIDER, THREE
                                     USER LIST 3
  PROVIDER, FOUR
                                     USER LIST 4
Clinic Selection List Assignments:
  CARDIOLOGY
                                     CARDIO CLINIC LIST
  GENERAL MEDICINE
                                    GENERAL MED CLINIC LIST
                                    PAIN CLINIC LIST
  PAIN CLINIC
  PRIMARY CARE
                                    PRIMARY CARE CLINIC LIST
User(s) assigned to a Selection List that no longer exists:
```

PROVIDER, FIVE Selection List #5
PROVIDER, SIX Selection List #6

Type <Enter> to continue or '^' to exit:

4.9 System Configuration

4.10 Database Tuning

N/A

5 Back-Out Procedure

5.1 Back-Out Strategy

5.2 Back-Out Considerations

5.2.1 Load Testing

No load testing was performed on the build.

5.2.2 User Acceptance Testing

User acceptance testing was conducted by the two test sites listed in section 3.2.2.

The sites followed the provided test scripts and executed the test cases according to the plan to test the patches of the Problem Selection List Enhancements. The sites either passed or failed any item based on testing. The tests were performed by Clinical Application Coordinators at each site who are familiar using the CPRS and Problem List applications. The test cases were then delivered with concurrence by the sites to the development team. Any items that failed were redeveloped and then sent back to the sites for the next build and further acceptance testing following the same process. Once in production, the same final test cases from the last build were tested in production. No subsequent builds were created as the test cases passed and sites signed off on concurrence for release of the product.

5.3 Back-Out Criteria

Back-out would only be considered if there was a catastrophic failure that causes loss of function for the CPRS or Problem List application or a significant patient safety issue.

5.4 Back-Out Risks

Backing out the Problem Selection List Enhancements would involve Problem Selection List data dictionary changes and the removal of nationally released Problem Selection List content.

18

5.5 Authority for Back-Out

The Facility CIO has the final authority to require the rollback and accept the associated risks.

5.6 Back-Out Procedure

Backing out the patch should only be considered if there is a catastrophic failure of CPRS or the Problem List application. The back out would be accomplished by installing a patch.

5.6.1 Installing the Back-Out Patch

These steps assume that the only reason to consider a back-out for the Problem Selection List Enhancements is in the event of a catastrophic failure.

1. Contact the CPRS Development team to notify them there has been a catastrophic failure with the Problem Selection List Enhancements:

REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED

- 2. If the decision is made to proceed with back-out and rollback, coordinate with the appropriate IT support, local and ITOPS, to schedule an installation time for the back-out.
- 3. Install patch GMPL*2.0*51.

5.7 Back-out Verification Procedure

- 1. Verify that the data dictionary for the PROBLEM SELECTION LIST file (#125) contains only three fields: NAME (#.01), DATE LAST MODIFIED (#.02), & CLINIC (#.03).
- 2. Verify that the data dictionary for the PROBLEM SELECTION CATEGORY file (#125.11) contains only two fields: NAME (#.01), DATE LAST MODIFIED (#1).
- 3. Perform regression testing to verify that the current Problem Selection lists still display correctly and works in VistA and CPRS.
- 4. Perform site-specific testing appropriate to the areas where the catastrophic failure was identified.

6 Rollback Procedure

6.1 Rollback Considerations

There are quite a few database changes specifically related the Problem Selection List Enhancements. Six and eight new fields are added to the PROBLEM SELECTION LIST file #125 and PROBLEM SELECTION CATEGORY file #125.11, respectively. Additionally, one

new option, protocol, security key, and parameter is added to support the enhancements. A few of the pre-existing Problem Selection list menu options and protocols are also modified.

6.2 Rollback Criteria

Rollback would only be considered if there was a catastrophic failure that causes loss of function for the CPRS or Problem List application or a significant patient safety issue.

6.3 Rollback Risks

Rolling back the Problem Selection List Enhancements would involve restoring the previous Problem Selection List data dictionaries and file structures and the removal of the new option, protocol, security key, parameter, and nationally released Problem Selection List content.

6.4 Authority for Rollback

The Facility CIO has the final authority to require the rollback and accept the associated risks.

6.5 Rollback Procedure

These steps assume that the only reason to consider a rollback for the Problem Selection List Enhancements is in the event of a catastrophic failure.

1. Contact the CPRS Development team to notify them there has been a catastrophic failure with the Problem Selection List Enhancements:

REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED

- 2. If the decision is made to proceed with back-out and rollback, coordinate with the appropriate IT support, local and ITOPS, to schedule an installation time for the rollback.
- 3. Install patch GMPL*2.0*51.

6.6 Rollback Verification Procedure

- 1. Verify that the data dictionary for the PROBLEM SELECTION LIST file (#125) contains only three fields: NAME (#.01), DATE LAST MODIFIED (#.02), & CLINIC (#.03).
- 2. Verify that the data dictionary for the PROBLEM SELECTION CATEGORY file (#125.11) contains only two fields: NAME (#.01), DATE LAST MODIFIED (#1).
- 3. Verify that the following new items have been removed: GMPL SELECTION LIST IMPORT option, GMPL MENU COPY GROUP protocol, GMPL IMPRT UTIL security key, and ORQQPL SELECTION LIST parameter.
- 4. Perform regression testing to verify that the current Problem Selection lists still display correctly and works in VistA and CPRS.

5. Perform site-specific testing appropriate to the areas where the catastrophic failure was identified.

7 Example Installation

```
Select Installation <TEST ACCOUNT> Option: 6 Install Package(s)
Select INSTALL NAME: PROBLEM SELECTION LIST BUILD 1.0
                                                          8/30/17@12:25:48
     => Problem Selection List Build 1.0 ;Created on Aug 23, 2017@08:35:44
This Distribution was loaded on Aug 30, 2017@12:25:22 with header of
  Problem Selection List Build 1.0 ;Created on Aug 23, 2017@08:35:44
   It consisted of the following Install(s):
PROBLEM SELECTION LIST BUILD 1.0 GMPL*2.0*49
                                                   OR*3.0*429
Checking Install for Package PROBLEM SELECTION LIST BUILD 1.0
Install Ouestions for PROBLEM SELECTION LIST BUILD 1.0
Checking Install for Package GMPL*2.0*49
Install Ouestions for GMPL*2.0*49
Incoming Files:
             PROBLEM SELECTION LIST (including data)
Note: You already have the 'PROBLEM SELECTION LIST' File.
I will REPLACE your data with mine.
   125.11
             PROBLEM SELECTION CATEGORY (including data)
Note: You already have the 'PROBLEM SELECTION CATEGORY' File.
I will REPLACE your data with mine.
Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//
Checking Install for Package OR*3.0*429
Install Questions for OR*3.0*429
Want KIDS to INHIBIT LOGONs during the install? NO//
Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//
Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.
DEVICE: HOME// SECURE SHELL
Install Started for PROBLEM SELECTION LIST BUILD 1.0:
              Aug 30, 2017@12:25:48
Build Distribution Date: Aug 23, 2017
 Installing Routines:
```

```
Aug 30, 2017@12:25:48
Install Started for GMPL*2.0*49 :
               Aug 30, 2017@12:25:48
Build Distribution Date: Aug 23, 2017
Installing Routines:
              Aug 30, 2017@12:25:48
Running Pre-Install Routine: PRE^GMPLY49
 Retrieving pre-existing USER/CLINIC selection list assignment report...
 Report has been generated to the installer & OR CACS mailgroup via MailMan.
  Scanning for mixed or lower case Problem Selection list/category names...
 No mixed or lower case list/category names found.
  Removing old PROBLEM SELECTION LIST file #125 data dictionary...
  Data dictionary for file #125 removed.
  Removing old PROBLEM SELECTION CATEGORY file #125.11 data dictionary...
  Data dictionary for file #125.11 removed.
Installing Data Dictionaries:
               Aug 30, 2017@12:26:07
Installing Data:
               Aug 30, 2017@12:26:08
Installing PACKAGE COMPONENTS:
Installing SECURITY KEY
Installing PROTOCOL
Installing OPTION
               Aug 30, 2017@12:26:08
Running Post-Install Routine: POST^GMPLY49
 Scanning for duplicate Problem Selection list/category names...
 A duplicate list/category name report has been generated to the installer
 and OR CACS mailgroup via MailMan.
 Marking GMPL CODE LIST menu option out of order...
  Done.
  Updating GMPL SELECTION LIST CSV CHECK menu text...
  Done.
  Updating display order of several items for GMPL BUILD LIST MENU option...
  Resequencing GMPL MENU BUILD GROUP protocol menu items...
  Done.
  Setting pre-existing lists to a default LOCAL class...
  ...Local class assignments completed.
```

```
Setting pre-existing categories to a default LOCAL class...
  ...Local class assignments completed.
  Migrating data in File #125.1 to File #125...
  ...Migration complete.
  Migrating data in File #125.12 to File #125.11...
  ... Migration complete.
 Updating Routine file...
 Updating KIDS files...
 GMPL*2.0*49 Installed.
               Aug 30, 2017@12:26:08
 Not a production UCI
 NO Install Message sent
Install Started for OR*3.0*429 :
               Aug 30, 2017@12:26:08
Build Distribution Date: Aug 23, 2017
 Installing Routines:
               Aug 30, 2017@12:26:08
 Installing PACKAGE COMPONENTS:
 Installing PARAMETER DEFINITION
               Aug 30, 2017@12:26:08
 Running Post-Install Routine: POST^ORY429
Migrating default user Problem Selection list from NEW PERSON File to the
ORQQPL SELECTION LIST parameter...
  The following selection lists could not be migrated to the ORQQPL SELECTION
  LIST parameter because it contains one or more problems that have inactive
  SNOMED and/or ICD codes attached to them.
          CHERYL
          MELANIE'S
          TESTER'S LIST
Migrating default clinic Problem Selection list from PROBLEM SELECTION LIST
File to the ORQQPL SELECTION LIST parameter...
  The following selection lists could not be migrated to the ORQQPL SELECTION
  LIST parameter because it contains one or more problems that have inactive
  SNOMED and/or ICD codes attached to them.
          CHERYL
          MELANIE'S
          TESTER'S LIST
Setting system & package level for ORQQPL SELECTION LIST parameter to a default
```

Problem List 2.0 Problem Selection List Enhancements Deployment, Installation, Back-Out & Roll Back Guide

```
VA National Selection List...

Updating Routine file...

Updating KIDS files...

OR*3.0*429 Installed.
Aug 30, 2017@12:26:09

Not a production UCI

NO Install Message sent

Updating Routine file...

Updating KIDS files...

PROBLEM SELECTION LIST BUILD 1.0 Installed.
Aug 30, 2017@12:26:09

No link to PACKAGE file

NO Install Message sent

Install Completed
```