

**Clinical Ancillary Services (CAS)**  
**Development – Delivery of Pharmacy Enhancements (DDPE)**  
**Inpatient Medication Administration - Transdermal**

**Installation Guide**



**Department of Veterans Affairs**  
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**Version 1.0**

## Revision History

<b>Date</b>	<b>Version</b>	<b>Description</b>	<b>Author</b>
12/6/16	0.8	Added updated Backout steps for PSB*3*83 and PSB*3*87.	Rachel Walters
07/29/16	0.7	Accepted track changes and added install instructions for OR*3*417.	Dan Pendergrass Ellen Phelps
03/10/16	0.6	Multiple modifications for content and appearance/clarification purposes.	Greg Napoliello Dan Pendergrass Lori Masucci Nancy Smith Rose Grealish Bob Kaiser Remela Wilson
03/03/16	0.5	Updated one roll back step	Greg Napoliello
03/03/16	0.4	Updating install routine sections	Dan Pendergrass
03/02/16	0.3	More major modifications to content and TOC	Greg Napoliello
01/13/16	0.2	Some more modifications	Greg Napoliello
11/12/15	0.1	Initial draft.	Rachel Walters Dan Pendergrass

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# 1. Introduction

This document provides installation instructions for Clinical Ancillary Services (CAS) Development Delivery of Pharmacy enhancements (DDPE) Inpatient Medications Administration – Transdermal patches.

## 2. System Requirements

The following table lists the software elements for Inpatient Medications.

**Inpatient Medication Software Elements**

<b>Application</b>	<b>Version</b>
Adverse Reaction Tracking	4.0
Decision Support System	3.0
Inpatient Medications	5.0
Kernel	8.0
Laboratory	5.2
Mailman	8.0
National Drug File	4.0
Nursing	4.0
Order Entry/Results Reporting	3.0
Outpatient Pharmacy	7.0
Patient Information Management Systems	5.3
Pharmacy Data Management	1.0
RPC Broker (32-bit)	1.1
Toolkit	7.3
VA FileMan	22.0

### 2.1. Pre-Installation

The associated patches are the following and should be installed in the following order:

- PSS\*1\*191
- PSJ\*5\*315
- PSB\*3\*83
- OR\*3\*417
- PSB\*3\*87 (BCBU)

\*\*\* WARNING FOR ALL SITES CURRENTLY USING WMA \*\*\*  
(Wireless Medication Administration)  
From CareFusion

The below 15 VAMC sites should not install patch PSB\*3\*83 until the site has confirmed they have received CareFusion's software update:

Pyxis Med Administration Verification VA v. 5.1

Bay Pines, FL  
Boise, ID  
Bonham, TX  
Brockton, MA  
Dallas, TX  
Danville, IL  
Kerrville, TX  
Little Rock, AR  
Loma Linda, CA  
Marion, IN  
Pittsburgh, PA  
Pittsburgh, PA-Heinz  
San Antonio, TX  
Topeka, KS  
West Roxbury, MA

Installation of BCMA Patch PSB\*3.0\*83 may cause your WMA application to stop functioning as you would expect it to. In order for the WMA devices to work properly with PSB\*3.0\*83 installed, you must contact CareFusion, the WMA vendor, to obtain the most current version of the WMA software.

## 2.2. Patch Installations

The scope of this project, as defined by the PWS, is as follows:

1. The Clinical Ancillary Services Development – Delivery of Pharmacy Enhancements (CAS DDPE) Inpatient Medications Administration – Transdermal project provides a solution to address the errors in transdermal medication administration processes that have led to adverse patient events. The following features related to transdermal medications are needed by the business to avert these errors in the future by implementing the following capabilities within Inpatient Medications Administration/VistA:
  - a. Create a mechanism to remind the user to “follow-up” on certain medications requiring additional steps in administration or assessment, e.g., alert the user to remove a transdermal medication at a specified time.

- b. Ensure previous statuses of multi-step medications appear in the Medication Administration History reports, e.g., the date and time a transdermal medication was applied or an intravenous fluid marked ‘infusing’ will remain visible after it has been marked ‘removed’ or ‘completed’, respectively.
- c. Enhance the current mechanism used to document and display the anatomic location of injectable medications to support transdermal medications. Implementation includes changing the terminology of “Injection site” throughout the applications including Inpatient Medication Administration and VistA. Any field names used to store or refer to “location” data within VistA shall be evaluated as to whether or not the terminology needs to be changed. For example, if the field in VistA is named “IV Location,” the name of the field is changed to simply “Location” so that when data from the field are pulled into reports, the field name will adequately reflect the updated contents.
- d. A change to any order involving a transdermal medication forces a misleading “remove patch” alert to appear. The Contractor shall change the software to differentiate between a change and a discontinued order and display an appropriate, corresponding alert.

**2.2.1. Installation Instructions Overview**

\*\*\*\*\* ATTENTION \*\*\*\*\*

Clinical Ancillary Services (CAS) Development-Delivery of Pharmacy Enhancements (DDPE) VA Inpatient Medication Administration - Transdermal enhancement includes 5 patches, which must be installed in the following order:

- 1. PSS\*1\*191
- 2. PSJ\*5\*315
- 3. PSB\*3\*83
- 4. OR\*3\*417
- 5. PSB\*3\*87

ATTENTION: This enhancement also includes a new Graphical User Interface (GUI) executable, BCMA GUI PSB3\_P083.EXE. Installation of this GUI is required immediately after the KIDS install for the Patch to function.

For retrieval and installation instructions, please see the [Client Installation Instructions](#) section.

\*\*\*\*\*

**2.2.2. Installing PSS\*1\*191**

Software being released as a host file and/or documentation describing the new functionality introduced by this patch are available, as follows.

The preferred method is to retrieve files from [download.vista.med.va.gov](http://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 Field Offices:

Albany:	<a href="http://fo-albany.med.va.gov">fo-albany.med.va.gov</a>
Hines:	<a href="http://fo-hines.med.va.gov">fo-hines.med.va.gov</a>
Salt Lake City:	<a href="http://fo-slc.med.va.gov">fo-slc.med.va.gov</a>

The following documentation should be available at these sites:

PHARMACY DATA MANAGEMENT RELEASE NOTES <a href="#">pss_1_p191_rn.pdf</a>	Binary
PHARMACY DATA MANAGEMENT TECHNICAL MANUAL/SECURITY GUIDE <a href="#">pss_1_tm_r0316_Inpatient_Medications_Transdermal.pdf</a>	Binary
PHARMACY DATA MANAGEMENT USER MANUAL <a href="#">pss_1_um_r0316_Inpatient_Medications_Transdermal_.pdf</a>	Binary

**Patch Installation:**

**Pre/Post-Installation Overview:**

A post-installation routine PSS1P191 will run with this install and will be automatically deleted after installation. A second post-installation routine PSSP191A may be deleted after install, but will not delete automatically.

**Pre-Installation Instructions:**

This patch may be installed with users on the system, although it is 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.

## **Installation Instructions:**

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 PSS\*1.0\*191:
  - 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 choose patch PSS\*1.0\*191 to install.
5. When prompted "Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//," Respond Yes
6. When prompted "Want KIDS to INHIBIT LOGONs during the install? NO//," Respond No
7. When prompted "Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//," Respond No

## **Post-Installation Instructions**

Check installing users email account. The post-install routine PSS1P191 will provide a list of Orderable Items that were updated during this process. This message will also be sent to all users holding the PSJI MGR and PSJU MGR keys. The update will note which Orderable Items with a Dosage Form that contains the word "PATCH" will be updated to a Prompt For Removal in BCMA value of 1 in order to preserve legacy behavior. The routine PSS1P191 will be deleted after installation.

The post-install via routine PSSP191A will also provide a list of orders tied to users holding the keys PSJ RPH and PSJU RPHARM in addition to the MGR keys. These Orderable Items indicate the approximate number of orders that will eventually need to be discontinued and re-created when the PSJ\*5.0\*315 patch is finally installed. No action should be taken on these orders until patch PSJ\*5.0\*315 is installed.



Another version of this report will be available on the Pharmacy Data Management [PSS MGR] menu. The routine PSSP191A should be deleted after the install. The recommendation is to edit the Orderable Items for Medications that Require Removal and set the appropriate value for the field Prompt for Removal in BCMA (#12). The new report installed on the Orderable Item Management [PSS ORDERABLE ITEM MANAGEMENT] menu will aid this process. Once this is done, a more accurate representation will be available of the number and type of orders that will need to be addressed upon install of PSJ\*5.0\*315.

### Example of PSS\*1\*191 Installation

```
1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution
```

```
Select Installation <TEST ACCOUNT> Option: 6  Install Package(s)
Select INSTALL NAME:   PSS*1.0*191   12/1/15@10:54:33
=> PSS*1*191 TEST
```

```
This Distribution was loaded on Dec 01, 2015@10:54:33 with header of
PSS*1*191 TEST
```

```
It consisted of the following Install(s):
```

```
PSS*1.0*191
```

```
Checking Install for Package PSS*1.0*191
```

```
Install Questions for PSS*1.0*191
```

```
Incoming Files:
```

```
50.7      PHARMACY ORDERABLE ITEM (Partial Definition)
```

```
Note: You already have the 'PHARMACY ORDERABLE ITEM' File.
```

```
Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES//
```

```
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// ;;999 SSH VIRTUAL TERMINAL

-----  
Install Started for PSS\*1.0\*191 :  
Dec 01, 2015@10:56:06

Build Distribution Date: Nov 23, 2015

Installing Routines:  
Dec 01, 2015@10:56:06

Installing Data Dictionaries:  
Dec 01, 2015@10:56:06

Installing PACKAGE COMPONENTS:

Installing OPTION  
Dec 01, 2015@10:56:06

Running Post-Install Routine: ^PSS1P191

=====  
Queuing background job for PSS\*1\*191 Post Install Diagnostic Report...  
Start time: Dec 01, 2015@10:56:08  
A MailMan message will be sent to the installer upon Post  
Install Completion. This may take an hour.  
=====  
\*\*\* Task #8953082 Queued! \*\*\*

Updating Routine file...

Updating KIDS files...

PSS\*1.0\*191 Installed.  
Dec 01, 2015@10:56:08

Not a production UCI

NO Install Message sent

Call MENU rebuild

Starting Menu Rebuild: Dec 01, 2015@10:56:10

Collecting primary menus in the New Person file...

Primary menus found in the New Person file

OPTION NAME	MENU TEXT	# OF USERS	LAST USED	LAST BUILT
XMUSER	MailMan Menu	9	10/24/97	12/01/15
EVE	Systems Manager Menu	214	11/30/15	12/01/15
PSO MANAGER	Outpatient Pharmacy Manager	2	08/18/15	12/01/15
PSO USER1	Pharmacist Menu	1		12/01/15
PSO USER2	Pharmacy Technician's Menu	3	07/26/96	12/01/15
PSO SUPERVISOR	Supervisor Functions	1		12/01/15
DGMGR	MAS MANAGER	1	12/11/96	12/01/15
PSJU MGR	Unit Dose Medications	2	05/03/05	12/01/15
NURS-SYS-MGR	Nursing System Manager's ...	1	11/18/98	12/01/15
NURS-ADM	Administrator's Menu	2		12/01/15
NURS-HN	Head Nurse's Menu	1	11/30/90	12/01/15
LRLIASON	Lab liaison menu	1	09/15/92	12/01/15
LRMENU	Laboratory DHCP Menu	2	12/11/97	12/01/15
LRWARDM	Ward lab menu	1	05/06/99	12/01/15
YSUSER	Mental Health	2	10/07/97	12/01/15
RA TECHMENU	Rad/Nuc Med Technologist ...	1	10/16/90	12/01/15
MCARCATH	Cath Lab Menu	1		12/01/15
RT OVERALL	Record Tracking Total Sys...	2	05/25/94	12/01/15
ZZWARD LAB/PHARM USER				
	WARD LAB/PHARMACY USER	1	07/18/94	12/01/15
FBA MAIN MENU	Fee Basis Main Menu	5	09/19/94	12/01/15
A3FSMBMGR	FSMB RD Menu	1		12/01/15
ZZCPTST	CASTLE POINT PSO ACTION P...	1	08/11/89	12/01/15
SROMENU	Surgery Menu	15	10/22/15	12/01/15
ORMGR	CPRS Manager Menu	2	12/28/98	12/01/15
DVBA REGIONAL OFFICE MENU				
	A.M.I.E Regional Office M...	1	10/30/95	12/01/15
DVBA MASTER MENU	AMIE MASTER MENU	1		12/01/15
GECO GECS MAIN MENU	Miscellaneous Code Sheet ...	1	11/29/90	12/01/15
OE/RR MASTER MENU	OE/RR MASTER MENU	1	05/03/95	12/01/15
PHARMACY MASTER MENU	PHARMACY MASTER MENU	1	10/16/15	12/01/15
IB MANAGER MENU	Integrated Billing Master...	1		12/01/15
OR MAIN MENU NURSE	Nurse Menu	1	02/23/99	12/01/15
OR MAIN MENU WARD CLERK				
	Ward Clerk Menu	3	02/26/99	12/01/15
OR MAIN MENU CLINICIAN				
	Clinician Menu	5	08/05/05	12/01/15
ARZ MASTER	Accounts Receivable Maste...	2	10/26/95	12/01/15
VAQ (MENU) MAIN	Patient Data Exchange	1	12/22/95	12/01/15
PRSA EMP MENU	Employee Menu	1	04/07/94	12/01/15
ZZCLIMAP	Clinical Applications Mai...	7	11/08/05	12/01/15

```

ESP POLICE CHIEF MENU
      Police Chief                1          07/15/94  12/01/15
ZCLIN2MISC2      Discharge Summary/Problem... 1          10/23/95  12/01/15
ZCLINMAP1      CLINICAL 1 APPLICATIONS      1          09/08/97  12/01/15
EEO COUNSELORS MENU Counselor's Menu                1          08/21/95  12/01/15
PLW MAIN MENU   PLW MAIN MENU                1          03/19/96  12/01/15
ZZ TRAINING MENU Training Menu                30         08/29/96  12/01/15
TIU MAIN MENU MRT Text Integration Utilitie... 2          02/07/95  12/01/15
TIU MAIN MENU MGR Text Integration Utilitie... 1          11/01/94  12/01/15
TIU MAIN MENU TRANSCRIPTION
      Text Integration Utilitie... 1          09/11/96  12/01/15
TIU MAIN MENU REMOTE USER
      Text Integration Utilitie... 1          02/27/95  12/01/15
TIU MAIN MENU PN CLINICIAN
      Progress Notes User Menu      1          12/01/15
TIU MAIN MENU CLINICIAN
      Progress Notes/Discharge ... 1          03/11/94  12/01/15
TIU IRM MAINTENANCE MENU
      TIU Maintenance Menu          1          12/01/15  12/01/15

```

Building secondary menu trees....

Merging.... done.

Install Completed

**Example Mailman Messages Sent by Pre/post-Install Routine to Certain Keyholders:**

**First mail message sent:**

```

Subj: PHARMACY ORDERABLE ITEM MANAGEMENT [#169339] 12/01/15@10:56 15 lines
From: POSTMASTER In 'IN' basket. Page 1

```

-----

The following Orderable Items have the Dosage Form Patch and the Prompt for Removal in BCMA field was updated to a value of 1 by Patch PSS\*1\*191

ORDERABLE ITEM NAME - DOSAGE FORM	INACTIVE DATE	DISPENSE DRUG NAME	IEN
-----	-----	-----	-----

NICOTINE - PATCH	NONE	NICOTINE PAD	42
NITROGLYCERIN - PATCH	NONE	NITROGLYCERIN PATCHES 10M	2313
		NITROGLYCERIN PATCHES 15M	5029
		NITROGLYCERIN PATCHES 5MG	3785
NITROGLYCERIN 0.6MG S.L.T. - P	NONE	NITROGLYCERIN 0.6MG S.L.T	247

Enter message action (in IN basket): Ignore//

**Second mail message sent:**

Subj: PHARMACY ORDERABLE ITEM MANAGEMENT [#169340] 12/01/15@10:56 14 lines  
 From: POSTMASTER In 'IN' basket. Page 1

-----

Active Orders for Medications Requiring Removal (MRR).  
 Prior to Installation of PSJ\*5\*315 these orders should be reviewed for planning purposes, but no action taken.  
 Once PSJ\*5\*315 is installed they will need to be Discontinued and re-entered after coordinating with your Pharmacy ADPAC.  
 This report can be recalled from the PSS MGR Menu.

Sorted by Patient within Ward

Pat	Patient	Orderable	Ordr	MRR
ID	Loc	Item Name	Sts	Val
-----	-----	-----	----	---
B5555	7A GEN MED	NICOTINE PAD	A	1

Total Orders found: 1

Enter message action (in IN basket): Ignore//

### 2.2.3. Installing PSJ\*5\*315

Software being released as a host file and/or documentation describing the new functionality introduced by this patch are available as follows. The preferred method is to retrieve files from [download.vista.med.va.gov](http://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 Field Offices:

Albany:	<a href="http://fo-albany.med.va.gov">fo-albany.med.va.gov</a>
Hines:	<a href="http://fo-hines.med.va.gov">fo-hines.med.va.gov</a>
Salt Lake City:	<a href="http://fo-slc.med.va.gov">fo-slc.med.va.gov</a>

The following documentation should be available at these sites:

INPATIENT MEDICATIONS NURSE'S USER MANUAL psj_5_nurse_um_r0416.pdf	Binary
INPATIENT MEDICATIONS PHARMACIST'S USER MANUAL psj_5_phar_um_r0416.pdf	Binary
INPATIENT MEDICATIONS TECHNICAL MANUAL/ SECURITY GUIDE psj_5_tm_r0416.pdf	Binary

#### Patch Installation:

##### Pre/Post-Installation Overview:

A post-installation routine PSJ15P315 will run with this install and will be automatically deleted after installation.

##### Pre-Installation Instructions:

This patch may be installed with users on the system, although it is recommended that it be installed during non-peak hours to minimize potential disruption to users. This patch should take less than five minutes to install. Patch PSS\*1.0\*191 is required to install this patch.

##### Installation Instructions:

1. Choose the PackMan message containing this patch PSJ\*5.0\*315.
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 PSJ\*5.0\*315:
  - 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 choose the patch to install.
  5. When prompted "Want KIDS to INHIBIT LOGONs during the install? NO//," respond Yes
  6. When prompted "Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//," respond No

**Post-Installation Instructions:**

Post-install routine QUE^PSJ5P315 checks for active MRR orders generated for Inpatient Medications and creates a report. This report will show orders that have been created for Orderable items with the "Prompt for removal in BCMA" value set to 1 or greater, but do not have the new File 55 fields containing removal information. This indicates that the orders are legacy orders and must be cancelled and re-ordered after the install of PSJ\*5\*315. This process is needed because, although the BCMA GUI application can display legacy orders as well as the new format, the combination of both displaying simultaneously on the same patient may cause confusion and should be avoided.

This report will be sent to all Pharmacists holding the keys PSJ RPH and PSJU RPHARM as well as the PSS MGR keys and can also be called manually from the PSS MGR menu using the "Orders for MRRs With Removal Properties" option.

**Example of PSJ\*5\*315 Installation**

```

1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution

Select Installation <TEST ACCOUNT> Option: 6 Install Package(s)
Select INSTALL NAME:      PSJ*5.0*315      1/8/16@10:41:56

```

=> PSJ\*5\*315 TEST

This Distribution was loaded on Jan 08, 2016@10:41:56 with header of  
PSJ\*5\*315 TEST

It consisted of the following Install(s):  
PSJ\*5.0\*315

Checking Install for Package PSJ\*5.0\*315

Install Questions for PSJ\*5.0\*315

Incoming Files:

53.1 NON-VERIFIED ORDERS (Partial Definition)

Note: You already have the 'NON-VERIFIED ORDERS' File.

55 PHARMACY PATIENT (Partial Definition)

Note: You already have the 'PHARMACY PATIENT' File.

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// ;;999 SSH VIRTUAL TERMINAL

-----  
Install Started for PSJ\*5.0\*315 :  
Jan 08, 2016@10:43:57

Build Distribution Date: Jan 05, 2016

Installing Routines:  
Jan 08, 2016@10:43:58

Running Pre-Install Routine: QUE^PSJ5P315

=====  
Queuing background job for PSJ\*5\*315 Pre Install Diagnostic Report...  
Start time: Jan 08, 2016@10:43:58  
A MailMan message will be sent to the installer upon Post  
Install Completion. This may take an hour.  
=====

\*\*\* Task #213887 Queued! \*\*\*

Installing Data Dictionaries: ..



Jan 08, 2016@10:44

Installing PACKAGE COMPONENTS:

Installing PROTOCOL

Jan 08, 2016@10:44

Updating Routine file...

The following Routines were created during this install:

PSGXR3  
PSGXR31  
PSGXR310  
PSGXR311  
PSGXR312  
PSGXR313  
PSGXR314  
PSGXR32  
PSGXR33  
PSGXR34  
PSGXR35  
PSGXR36  
PSGXR37  
PSGXR38  
PSGXR39  
PSSJXR  
PSSJXR1  
PSSJXR10  
PSSJXR11  
PSSJXR12  
PSSJXR13  
PSSJXR14  
PSSJXR15  
PSSJXR16  
PSSJXR17  
PSSJXR18  
PSSJXR19  
PSSJXR2  
PSSJXR20  
PSSJXR21  
PSSJXR22  
PSSJXR23  
PSSJXR24  
PSSJXR25  
PSSJXR26  
PSSJXR27  
PSSJXR28  
PSSJXR29  
PSSJXR3  
PSSJXR30  
PSSJXR31  
PSSJXR32  
PSSJXR33  
PSSJXR34

PSSJXR4  
PSSJXR5  
PSSJXR6  
PSSJXR7  
PSSJXR8  
PSSJXR9

Updating KIDS files...

PSJ\*5.0\*315 Installed.  
Jan 08, 2016@10:44:01

Not a production UCI

Install Completed

### Example Mailman Messages Sent by Pre/post-Install Routine to Certain Keyholders:

#### Mail message sent:

Subj: Pharmacy Data Management [#170758] 03/02/16@14:55 12 lines  
From: POSTMASTER In 'IN' basket. Page 1 \*New\*

-----  
Orders for Medications Requiring Removal (MRR) ACTIVE PRIOR to  
Installation of PSJ\*5\*315. These orders will need to be Discontinued  
and re-entered after coordinating with your Pharmacy ADPAC.  
This report can be recalled from the PSS MGR Menu.

Sorted by Patient within Ward

Pat	Patient	Orderable	Ordr	MRR
ID	Loc	Item Name	Sts	Val
-----	-----	-----	-----	---

Total Orders found: 0

Enter message action (in IN basket): Ignore//

## 2.2.4. Installing PSB\*3\*83

The software being released and/or documentation that describes the new functionality introduced by this patch are available from the below sites.

The preferred method is to retrieve files from [download.vista.med.va.gov](http://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 Field Offices:

Albany:	<a href="http://fo-albany.med.va.gov">fo-albany.med.va.gov</a>
Hines:	<a href="http://fo-hines.med.va.gov">fo-hines.med.va.gov</a>
Salt Lake City:	<a href="http://fo-slc.med.va.gov">fo-slc.med.va.gov</a>

### Patch Installation:

#### Pre-Installation Instructions:

**\*\*IMPORTANT\*\*** Inpatient menu options listed in the Installation Instructions section should be exited by all users prior to the install of the patches listed at the top of this Patch Description. Also, these menu options should be disabled during these installs.

This patch may be installed with users on the system, although it is 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.

#### Installation Instructions:

##### Client Installation Instructions:

The software distribution includes these modified files:

FILE NAME	DESCRIPTION	FILE VERSION	BYTES	FTP MODE
BCMA.CHM	Client help file		1,192 KB	binary
BCMA.EXE	Client	3.0.83.42	3,112 KB	binary
BCMAPar.CHM	Parameters Client help		376 KB	binary
BCMAPar.EXE	Parameters Client	3.0.83.13	1,676 KB	binary

1. Prior client compatible with patch: NO
2. Client can be copied instead of installed: YES
3. Is your site running the CareFusion Wireless Medication Administration (WMA) software? If YES, please contact CareFusion to ensure your site has the latest compatible WMA patch.

If BCMA is currently running, please exit BCMA. This client installation patch file can be used to upgrade an existing version of BCMA, or can be used for a brand new installation.

1. Double Click on PSB3\_0P83.EXE, which will launch the InstallShield Wizard.
2. When the “InstallShield Wizard Welcome” screen is displayed, click "Next".
3. On the “Choose Destination Location” screen, simply click "Next"
4. If you would like to change the destination folder to one other than default, click "Browse" to navigate to the folder of your choice. Click "Next".
5. On the "Setup Type" screen, select one of the following options:
  - a. Typical - installs only the BCMA client program, which is necessary for medication administration.
  - b. Complete - installs the BCMA client and the GUI BCMA site parameters definition program.
  - c. Custom - allows you to select which programs to install. Typical is selected by default. Click "Next."
6. The “InstallShield Wizard Ready to Install the Program” screen will display. Click "Install" to proceed with the installation.
7. The “InstallShield Wizard Complete” screen will be displayed.
8. Click "Finish" and the BCMA installation is now complete.

#### VistA Patch Install Instructions

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 PSB\*3.0\*83.
  - 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.

1. From the Installation Menu, select the Install Package(s) option and enter the patch PSB\*3.0\*83.
2. When prompted "Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//," respond NO.
3. When prompted "Want KIDS to INHIBIT LOGONs during the install? NO//," respond NO.
4. When prompted "Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES//," respond YES.
5. Disable the below menu option:
  - a. PSJ OE.
6. If prompted "Delay Install (Minutes): (0 - 60): 0//," respond 0.

### Post-Installation Instructions:

#### **\*\*Important\*\***

Before running BCMA in a division, the user should run BCMA Site Parameters program. Specifically:

- Start BCMA Parameters client
- Menu File | Open
- Select Division
- The program will silently load the body chart background image to Vista for this Division. This image will be used by BCMA when the user is in the Dermal Site Needed / Injection Site Needed window and clicks Select from Body Diagram.

After these steps are completed, the user can run BCMA in that division.

### Example of PSB\*3\*83 MUMPS Patch Installation

```
1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution

Select Installation <TEST ACCOUNT> Option: 6  Install Package(s)
Select INSTALL NAME:   PSB*3.0*83   3/2/16@17:01:48
=> PSB*3*83 TEST

This Distribution was loaded on Mar 02, 2016@17:01:48 with header of
```

```
PSB*3*83 TEST
It consisted of the following Install(s):
  PSB*3.0*83
Checking Install for Package PSB*3.0*83

Install Questions for PSB*3.0*83

Incoming Files:

  53.78    BCMA MEDICATION VARIANCE LOG (Partial Definition)
Note: You already have the 'BCMA MEDICATION VARIANCE LOG' File.

  53.79    BCMA MEDICATION LOG (Partial Definition)
Note: You already have the 'BCMA MEDICATION LOG' File.

Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//

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//    SSH VIRTUAL TERMINAL
-----

Install Started for PSB*3.0*83 :
      Mar 02, 2016@17:03:25

Build Distribution Date: Mar 02, 2016

Installing Routines:
      Mar 02, 2016@17:03:26

Installing Data Dictionaries:
      Mar 02, 2016@17:03:26

Installing PACKAGE COMPONENTS:

Installing FORM

Installing REMOTE PROCEDURE

Installing OPTION

Installing PARAMETER DEFINITION

Installing PARAMETER TEMPLATE
      Mar 02, 2016@17:03:27

Running Post-Install Routine: EN^PSB3P83

Updating Routine file...

Updating KIDS files...

PSB*3.0*83 Installed.
      Mar 02, 2016@17:03:27
```

## 2.2.5. Installing OR\*3\*417

The change made by OR\*3\*417 is in support of requirements for patch PSB\*3.0\*83. All the patches in this group should be installed prior to patch OR\*3.0\*417.

The change will add a line to the Order Details report and the Medication Administration History Report in the Computerized Patient Record System (CPRS). These reports will display the Removal times for Medications that Require Removal (MRRs).

### **Documentation and Software Retrieval Instructions:**

Updated documentation describing the new functionality and installation instructions introduced by this patch are available.

Files can be obtained from the ANONYMOUS.SOFTWARE directory at one of the OI Field Offices. The preferred method is to retrieve the file using Secure File Transfer Protocol (SFTP) from DOWNLOAD.VISTA.MED.VA.GOV, which will transmit the file from the first available server. Alternatively, sites may elect to retrieve the file from a specific OI Field Office.

OI FIELD OFFICE	FTP ADDRESS	DIRECTORY
Albany:	fo-albany.med.va.gov	anonymous.software
Hines:	fo-hines.med.va.gov	anonymous.software
Salt Lake City:	fo-slc.med.va.gov	anonymous.software

Documentation can also be found on the VA Software Documentation Library at: <http://www4.va.gov/vdl/>

### **Patch Installation:**

#### **Pre/Post Installation Overview:**

#### **Pre-Installation Instructions:**

This patch may be installed with users on the system, although it is 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. Patches PSS\*1.0\*191, PSJ\*5.0\*315 and PSB\*3.0\*83 should all be installed in listed order prior to install of OR\*3.0\*417. Patch PSB\*3.0\*87 is an optional patch for Barcode Medication Administration Backup sites.

#### **Installation Instructions:**

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 OR\*3.0\*417:
  - 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 choose the patch to install.
5. If prompted "Want KIDS to INHIBIT LOGONs during the install? NO//", Respond "No"
6. If prompted "Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//", Respond "No"
7. If prompted "Delay Install (Minutes): (0 - 60): 0//", Respond "0"

**Post-Installation Instructions:**

There are no installation routines with this patch. No further action required.

**Routine Information:**

The second line of each of these routines now looks like:

```
;;3.0;ORDER ENTRY/RESULTS REPORTING; **[Patch List]**;Dec 17, 1997;Build 10
```

The checksums below are new checksums, and can be checked with CHECK1^XTSUMBLD.

Routine Name: ORQ21

Before: B35534512 After: B37800373 \*\*141,190,195,215,243,361,350,417\*\*

Routine list of preceding patches: 350

**2.2.6. Installing PSB\*3\*87 (BCBU)**

The software being released as a host file introduced by this patch is available from the below sites.

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 Field Offices when patch is released.

Albany:	fo-albany.med.va.gov
Hines:	fo-hines.med.va.gov
Salt Lake City:	fo-slc.med.va.gov

Prior to release, this KIDS host file build will be located on the ANONYMOUS.PUB directory at the Albany OI Field Office.

The KIDS build is distributed by the host file named:

PSB\_3\_87.KID

### **Patch Installation:**

#### **Pre-Installation Instructions:**

#### **Installation Instructions:**

Do not queue this patch to install at a later time nor install this patch while BCMA users are on the system. Installation will take no longer than five minutes.

Suggested time to install: non-peak requirement hours.

1. From the Kernel Installation & Distribution System menu, select the LOAD DISTRIBUTION option and load the host file PSB\_3\_87.KID
2. From the Kernel Installation & 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 PSB\*3\*87.
  - a. Verify Checksums in Transport Global - This option will allow you to ensure the integrity of the routines that are in the transport global.
  - b. Print Transport Global - This option will allow you to view the components of the KIDS build.
  - c. 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, DD's, templates, etc.).
  - d. 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 DD's or templates.
3. Use the Install Package(s) option and select the package PSB\*3.0\*87.

4. When prompted "Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//," respond NO.
5. When Prompted "Want KIDS to INHIBIT LOGONs during the install? NO//," respond NO.
6. When Prompted "Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//," respond NO.

### Post-Installation Instructions

It is recommended that the backup system workstations be re-initialized after the install of this patch. It is also recommended to limit the number of workstations being initialized to no more than 4 at a time, so as to limit the impact to your network's speed.

Use one of the below Vista menu options, depending on your Site's configuration, for the BCMA Backup System.

```
Select OPTION NAME:      PSB BCBU VISTA MAIN      BCMA Backup System (VISTA)

PSB BCBU VISTA MAIN BCMA Backup System (VISTA)

DFT      Default Workstation Initialize
DIV      Divisional Workstation Initialize
USR      Initialize a Backup Workstation with BCMA Users
```

## 2.3. Download and Extract Procedure

N/A

## 2.4. Database Creation

N/A

## 2.5. Installation Scripts

N/A

## 2.6. Cron Scripts

N/A

## 2.7. System Configuration

N/A

## **2.8. Database Tuning**

N/A

## **3. Implementation**

Implementation steps and procedures were described above by installing the patches in the order referenced and following each patches specific installation instructions.

### Important reminders:

The post install mailman messages sent by patch PSS\*1\*191 point to Orderable items that need file maintenance prior to implementing the full functionality of this project.

The post install mailman message sent by PSJ \*5\*315 post install also lists Orders that need to be re-entered to work correctly with the new functionality in BCMA Client.

## **4. Backout Procedure**

Backout pertains to a return to the last known good operational state of the software and appropriate platform settings.

### **4.1. Backout Strategy**

See section 4.6.

### **4.2. Backout Considerations**

### **4.3. User Acceptance Testing**

User Acceptance Testing is in progress.

### **4.4. Backout Criteria**

The project is canceled and the implemented features are no longer wanted by the stakeholders.

### **4.5. Authority for Backout**

The authority would come from the IPT and the VA project manager.

### **4.6. Automated Backout Steps**

The normal recommended process for backout is an automated process to enforce section 4.4 Backout Criteria requirements.

In the event that a backout of code was needed for all Transdermal patches, a patch would be developed to remove all components added by patches PSS\*1\*191 , PSJ\*5\*315, PSB\*3\*83 and PSB\*3\*87. This patch would restore existing routines to their prior state.

The following components would be backed out by the new patch:

**Menu Options:**

Option Name	Type	New/Modified/Deleted
Orderable Item Management [PSS ORDERABLE ITEM MANAGEMENT]	Menu	Modified
Orderable Items that Require Removal Report [PSS MRR ORDERABLE ITEMS RPT]	Rout	New
Orderable Items Report for High Risk\High Alert [PSS HR/HA ORDERABLE ITEMS RPT]	Rout	New
Pharmacy Data Management [PSS MGR]	Menu	Modified
Orders for MRRs With Removal Properties [PSS MRR ORDERS DIAGNOSTIC RPT]	Rout	New

**Files & Fields Associated:**

File Name (#)	Field Name (#)	New/Modified/Deleted
ORDERABLE ITEM (#50.7)	PROMPT FOR REMOVAL IN BCMA (#12)	New
NON-VERIFIED ORDERS(#53.1)	DURATION OF ADMINISTRATION (#137)	New
NON-VERIFIED ORDERS(#53.1)	REMOVE TIMES (#138)	New
NON-VERIFIED ORDERS(#53.1)	REMOVE PERIOD (#139)	New
NON-VERIFIED ORDERS(#53.1)	BCMA PROMPT FOR REMOVAL FLAG (#140)	New
PHARMACY PATIENT(#55)		
UNIT DOSE(#62)	DURATION OF ADMINISTRATION (#137)	New
PHARMACY PATIENT(#55)		
UNIT DOSE(#62)	REMOVE TIMES (#138)	New
PATIENT PHARMACY(#55)		
UNIT DOSE(#62)	REMOVE PERIOD (#139)	New
PHARMACY PATIENT(#55)		
UNIT DOSE(#62)	BCMA PROMPT FOR REMOVAL FLAG (#140)	New
BCMA MEDICATION LOG (53.79)		
	SCHEDULED REMOVAL TIME (.17)	New
	DERMAL SITE (.18)	New
	ACTION DATE/TIME (.06)	Mod
	SCHEDULED ADMINISTRATION TIME (.13)	Mod
Subfile:		
DISPENSE DRUG (53.795)	PROMPT FOR REMOVAL IN BCMA (.06)	New
BCMA MEDICATION VARIANCE LOG (53.78)	EVENT(.05)	Mod

Add a new code to the set of codes for the EVENT field:		4:EARLY/LATE REMOVE	New
BCMA BACKUP DATA (#53.7)		ORDER NUMBER (#9)	Modified
ORDER NUMBER (#53.702)		REMOVE TIMING (#7.4)	New
		DURATION OF ADMINISTRATION (#7.5)	New
MED LOG DATE/TIME		ASSOC. MED LOG GIVE DATE/TIME (#4)	New
(#53.70213)		ASSOC. MED LOG GIVE ENTERED BY (#5)	New
		ASSOC. MED LOG GIVE STATUS MSG (#6)	New

**Remote Procedure Calls Associated:**

RPC Name	New/Modified/Deleted
PSB COVERSHEET1	Modified
PSB GETINJECTIONSITE	Modified
PSB GETORDERTAB	Modified
PSB GETSETWP	New
PSB MED LOG LOOKUP	Modified
PSB TRANSACTION	Modified
PSB VALIDATE ORDER	Modified

**Parameters Associated:**

Parameter Name	New/Modified/Deleted
PSB AL GROUPS	New
PSB AL IMAGE GENERAL	New
PSB AL IMAGES	New
PSB AL MASTER LIST	New
PSB LIST ANATOMIC LOCATIONS	New
PSB LIST BODY SITES	New

**Templates Associated:**

Template Name	Type	File Name (Number)	New/Modified/Deleted
PSB DIVISION	Kernel	PARAMETER TEMPLATE (#8989.52)	Modified

## 4.7. Manual Backout Steps for PSB\*3\*83 and PSB\*3\*87

If Class 3 GUI software (Pyxis Med Administration Verification VA v. 5.1) updates are not available at National Release for PSB\*3\*83 and PSB\*3\*87 and if sites running Wireless Medication Administration (WMA) software inadvertently install PSB\*3\*83 and PSB\*3\*87, please follow the steps in the below process documents:

Note: in the .pdf version of this document, click the attachments icon (paperclip) at the top left of the navigation pane in Adobe Reader to view these attachments.



PSB\_3\_83 BACKOUT PSB\_3\_87 BACKOUT  
MANUAL PROCESS.doc MANUAL PROCESS.doc

## 5. Rollback Procedure

Rollback pertains to data and elements other than routines.

### 5.1. Rollback Considerations

A follow-up patch for each namespace would be needed to delete/modify that namespace's data dictionary entries that were added/modified and other non-routine components added/modified by this projects patches and would follow the basic logic flow below.

Logic flow using FileMan API calls as much as possible for the below actions

1. New data fields would need to be erased that were likely populated by the new functionality, while the new data fields are still valid in the data dictionary.
2. New file cross references would now need to be deleted.
3. New fields need to be deleted out of the data dictionary.
4. Modified data dictionary fields would need to be restored.
5. Existing REMOTE PROCEDURE file (#8994) entries would need to be restored while new file entries would need to be deleted from the site.
6. Existing PROTOCOL file (#101) entries would need to be restored while new file entries would be deleted from the site.
7. Existing OPTION file (#19) entries would need to be restored while new file entries would be deleted from the site.
8. Existing PARAMETERS file (#8989.5) entries would need to be restored while new file entries would be erased and then deleted from the Kernel Parameter Definition file at the site.
9. Existing PARAMETER DEFINITION file (#8989.51) entries would need to be restored while new file entries would be erased and then deleted from the PARAMETER DEFINITION file at the site.
10. Existing PARAMETER TEMPLATE file (#8989.52) entries would need to be restored.

**Note:** These new data entries are the result of a new field added to the data dictionary or the modification of an existing field in the data dictionary.

### 5.2. Rollback Criteria

The back-out of INPATIENT MEDICATION ADMINISTRATION - TRANSDERMAL patches that modified existing fields, and established new fields would be justification for rollback.

### 5.3. Rollback Risks

None

### 5.4. Authority for Rollback

The authority would come from the IPT and the VA project manager.

## **5.5. Rollback Procedure**

See section 5.1.