PHARMACY DATA MANAGEMENT

TECHNICAL MANUAL/ SECURITY GUIDE

Version 1.0
September 1997

(Revised August 2008)

Department of Veterans Affairs
VistA Health Systems Design & Development

Revision History

Each time this manual is updated, the Title Page lists the new revised date and this page describes the changes. If the Revised Pages column lists "All," replace the existing manual with the reissued manual. If the Revised Pages column lists individual entries (e.g., 25, 32), either update the existing manual with the Change Pages Document or print the entire new manual.

Date	Revised Pages	Patch Number	Description
08/08	iii, 25, 33-34	PSS*1*94	Added Medication Routes and Administration Scheduling sections. Added PSSSCHED routine. (S. Templeton, PM; G. O'Connor, Tech. Writer)
10/06	i, ii, 25	PSS*1*112	Pharmacy Re-Engineering (PRE) Encapsulation Cycle II project. Added routines PSS55MIS and PSS50TMP to the Routine List. (J. Caudullo, PM; J. Nemetz, Tech. Writer)
09/06	i, ii, 25	PSS*1*108	Pharmacy Re-Engineering (PRE) Encapsulation Cycle II project. Added routine PSS551 to the Routine List. (H. Whitley, PM; J. Nemetz, Tech. Writer)
04/06	i, 25	PSS*1*90	HIPAA NCPDP Global project. Added routines PSSDAWUT and PSSNDCUT to the Routine List. (S. Spence, PM; M. Newman, Tech. Writer)
04/06	i, ii, 25	PSS*1*106	Pharmacy Re-Engineering (PRE) Encapsulation Cycle II project. Added routine PSS781 to the Routine List. (H. Whitley, PM; L. Woodson, Tech. Writer)
11/05	i, ii, 25	PSS*1*101	Pharmacy Re-Engineering (PRE) Encapsulation Cycle II project. Added routines PSS55 and PSS59P7 to the Routine List. (H. Whitley, PM; L. Woodson, Tech. Writer)
03/05	i, ii, 24a, 25, 29-31, 48	PSS*1*87	Laser Labels Phase II project. Added *Warning Builder* and *Warning Mapping* options descriptions and updated the menu options. Added four new routines to the routine list. Cleaned up misspelled words and such on many pages. (H. Whitley, PM; L. Woodson, Tech. Writer)
10/04	i., 25, 33	PSS*1*85	Added routines and a reference to the *Pharmacy Re-Engineering (PRE) Application Program Interface (API) Manual* created for the Pharmacy Re-Engineering (PRE) project Encapsulation cycle 1.
10/04	i, 24a, 25, 29-31, 32d-h, 48, 53	PSS*1*82	Updated the option description to include *Send Entire Drug File to External Interface* [PSS MASTER FILE ALL] option. Added new master file update information to the "HL7 Messaging with an External System" section. Updated routine list to include PSSMSTR. Updated the web address for the VistA Documentation Library (VDL).
07/03	i, 25, 31, 48	PSS*1*61	Updated routine list to four new add PKI routines. Added new *Controlled Substances/PKI Reports* [PSS/PKI REPORTS] menu and four associated report options to the

Date	Revised Pages	Patch Number	Description
			Pharmacy Data Management [PSS MGR] menu.
04/03	i, 5, 8, 29, 35, 48	PSS*1*68	Updated patch references to include PSS*1*68. Added NON-VA MED field (#8) to the PHARMACY ORDERABLE ITEM file (#50.7).
03/03	i., 5, 8, 24a, 29, 31, 35, 48	PSS*1*47	Updated patch references to include PSS*1*47. Added new field OTHER LANGUAGE INSTRUCTIONS (#7.1) to the PHARMACY ORDERABLE ITEM file (#50.7) list and *Other Language Translation Setup* option description.
11/02	i, ii 5, (6) 23 - 25, (26) 29-30,(47), 48	PSS*1*55	Renumbered front matter starting from this Revision History page. Updated Patch number. Updated Option descriptions to include *Drug Text File Report* option. Added routine PSSDTR in the Routines section. Added the *Drug Text File Report* option to the current PDM Menu in the Exported Options section.
10/02	Title, i-iv, 32a-32d	PSS*1*57	Updated Title Page, Revision Page and Table of Contents. A section was added for the new HL7 Messaging with an External System.
09/01	All	PSS*1*38	Added this Revision History Page. Added Patch Release changes and Pharmacy Ordering Enhancements (POE) edits. Updated manual to comply with current documentation standards.
09/97	N/A	N/A	Original Release of Technical Manual.

Table of Contents

(This page included for two-sided copying.)

Introduction

Pharmacy Data Management (PDM) provides tools for managing Pharmacy data. It includes tools for creating Pharmacy Orderable Items and maintaining files necessary for the Computer Patient Record System (CPRS). PDM consolidates tools for managing the various Pharmacy software products. It provides Pharmacy Supervisors, in one location, the capability to enter and edit data from the local DRUG file (#50) for all Pharmacy related packages.

The PDM Technical Manual is designed to acquaint the user with the various PDM options and offer specific guidance on the maintenance and use of the PDM package. Documentation concerning the PDM package, including any subsequent change pages affecting this documentation, can be found at the VistA Documentation Library (VDL) on the Veterans Administration Intranet at http://vista.med.va.gov/vdl.

Notations that will be used consistently throughout this PDM Technical Manual are outlined below.

- Menu options will be italicized.
  Example: The *Drug Enter/Edit* option permits you to enter or edit a drug.

- Screen prompts will be denoted with quotation marks around them.
  Example: the "SELECT DRUG" prompt will display next.

- Responses in bold face indicate user input.
  Example: DRUG INTERACTION SEVERITY: **CRITICAL**

- Text centered between bent parentheses represents a keyboard key that needs to be pressed in order for the system to capture a user response or move the cursor to another field.

  <Enter> indicates that the Enter key (or Return key on some keyboards) must be pressed.
  Example: Type **Y** for Yes or **N** for No and press **<Enter>**

  <Tab> indicates that the Tab key must be pressed.
  Example: Press **<Tab>** to move the cursor to the next field.

-  Indicates especially important or helpful information.

-  Options are locked with a particular security key. The user must hold the particular security key to be able to perform the menu option.

  Example:  Without the PSXCOMPMGR key the Consolidated Mail Outpatient Pharmacy options cannot be accessed.

-  The page symbol indicates a referral to a diagram.

- **?**, **??**, **???** One, two or three question marks can be entered at any of the prompts for online help. One question mark elicits a brief statement of what information is appropriate for the prompt. Two question marks provide more help, plus the hidden actions, and three question marks will provide more detailed help, including a list of possible answers, if appropriate.

- ^ Up arrow (caret or a circumflex) and pressing **<Enter>** can be used to exit the present option.

Technical Manual

(This page included for two-sided copying.)

Implementation and Maintenance

The PHARMACY ORDERABLE ITEM file (#50.7) must be built prior to the installation of Outpatient Pharmacy V. 7.0 and Inpatient Medications V. 5.0. The PHARMACY ORDERABLE ITEM file (#50.7) will be similar to the PRIMARY DRUG file (#50.3) used by Inpatient Medications V. 4.5. The main difference is that each entry in the PHARMACY ORDERABLE ITEM file (#50.7) has an associated Dosage Form that will always print next to the name. The PHARMACY ORDERABLE ITEM file (#50.7) will be duplicated in the ORDERABLE ITEM file (#101.43) that will reside in CPRS V. 1.0. Any update to the PHARMACY ORDERABLE ITEM file (#50.7) will automatically update the corresponding entry in the ORDERABLE ITEM file (#101.43). The NAME field (#.01) and the DOSAGE FORM field (#.02) values in the PHARMACY ORDERABLE ITEM file (#50.7) will print on Outpatient Pharmacy reports, profiles, Inpatient Medication reports, MAR labels etc., in place of the Primary Drug Name.

The PHARMACY ORDERABLE ITEM file (#50.7) includes the following fields. These fields reflect the package content up to and including the release of patch PSS*1*68.

☒ These fields were necessary for the initial installation but were deleted following later patches.

***** These fields were not exported with the initial installation but were added with later patches.

Field Number		Field Name	Description
.01		**NAME**	This is the name of the Pharmacy Orderable Item. It is a free text field that can be up to 40 characters in length.
.02		**DOSAGE FORM**	This is a pointer to the DOSAGE FORM file (#50.606). This is a required field and will always print next to the Pharmacy Orderable Item name.
.03		**IV FLAG**	This field will be set to 1 to indicate that the Pharmacy Orderable Item entry is pointed to by either the IV ADDITIVES file (#52.6), or the IV SOLUTIONS file (#52.7). If this field is not set to 1, it indicates that the entry is pointed to from the DRUG file (#50).
.04		**INACTIVE DATE**	This will contain the date the entry had been made inactive.
.05		**DAY (nD) or DOSE (nL) LIMIT**	This is a free text field used to calculate a default value for the "STOP DATE" prompt of the order.

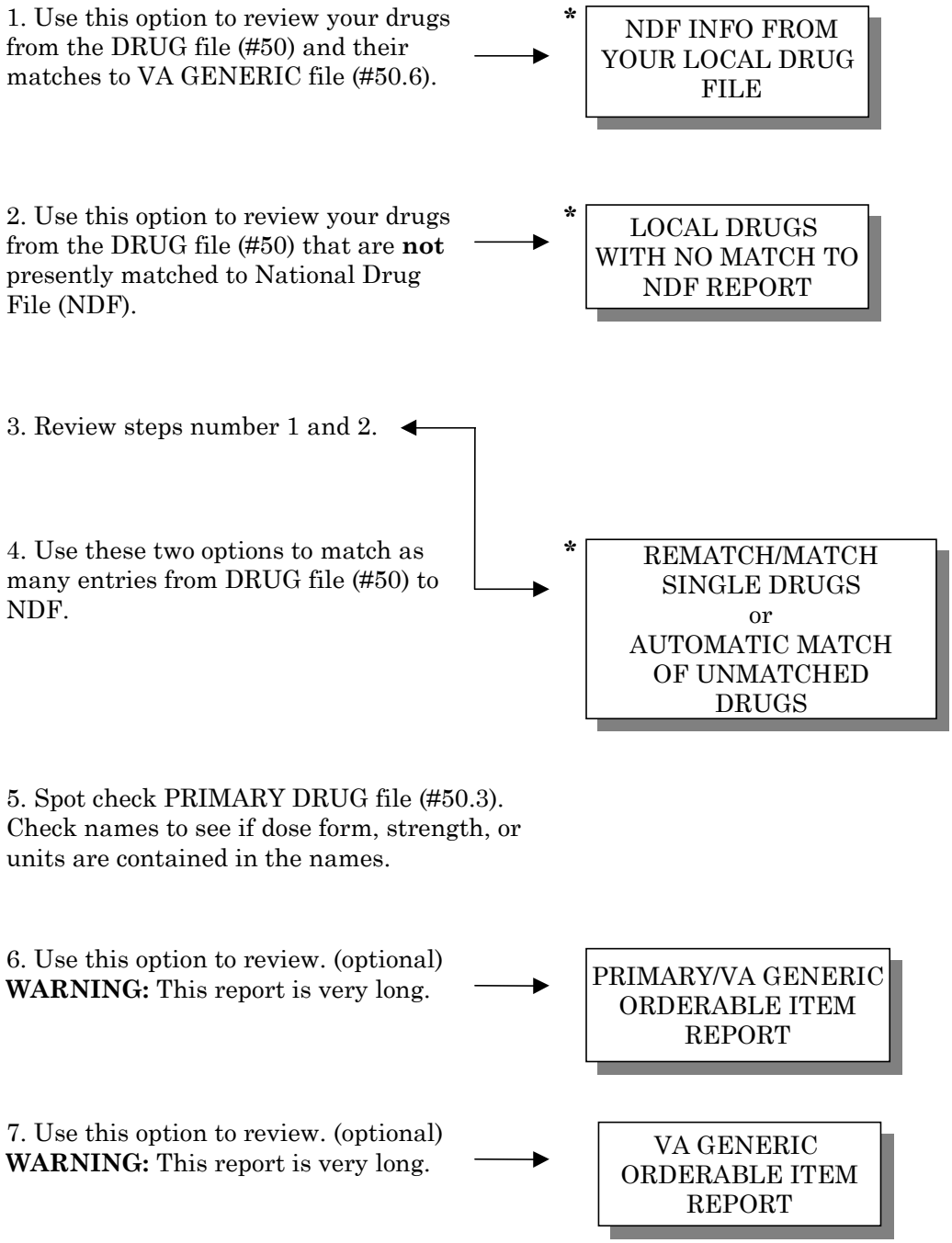
Field Number		Field Name	Description
.06		**MED ROUTE**	This is a pointer to the MEDICATION ROUTES file (#51.2). If a MED ROUTE is entered here, it will be used as the default value during order entry when this drug is selected.
.07		**SCHEDULE TYPE**	This field is a set of codes and will be used as a default value when selecting this drug in order entry.
.08		**SCHEDULE**	This is a free text field and will be used as a default value during order entry when this drug is selected.
.09		**SUPPLY**	This is a set of codes with 1 (one) indicating that the Orderable Item is a supply.
2		**SYNONYM (multiple)**	This multiple will contain all the associated synonyms for the Pharmacy Orderable Item.
	.01	**SYNONYM**	A free text synonym name up to 30 characters long.
☒3		**CORRESPONDING UD ITEM**	If CHANGE TYPE OF ORDER FROM OERR field (#20.412) in the PHARMACY SYSTEM file (#59.7) parameter in Inpatient Mediations package is set, this field will be asked to user. This field will indicate corresponding Orderable Items to choose from and which package (UD or IV) to finish the order.
☒4		**CORRESPONDING IV ITEM**	If CHANGE TYPE OF ORDER FROM OERR field (#20.412) in the PHARMACY SYSTEM file (#59.7) parameter in Inpatient Mediations package is set, this field will be asked to user. This field will indicate corresponding Orderable Items to choose from and which package (UD or IV) to finish the order.

Field Number		Field Name	Description
***5**		**FORMULARY STATUS**	This field will designate the formulary status of the Orderable Item. The non-formulary status will be displayed to the provider next to the selectable list of Orderable Item(s) during CPRS order entry (List Manager and GUI). This field is not editable. The software controls it. An Orderable Item will only be marked as non-formulary if there are no active Dispense Drugs that are formulary drugs matched to the item.
***6**		**OI-DRUG TEXT ENTRY (multiple)**	
	***.01**	**OI-DRUG TEXT ENTRY**	This is a pointer to the DRUG TEXT file (#51.7). This file contains such information as drug restrictions, guidelines and protocols to help assure that medications are being used according to formulary specifications. This information will be seen in CPRS and Pharmacy when a medication order is placed for the Pharmacy Orderable Item. New entries to the DRUG TEXT file (#51.7) must be made through the *Drug Text Enter/Edit* option.
***7**		**PATIENT INSTRUCTIONS**	The text in this field shall be presented as a default for the Patient Instructions prompt in the Outpatient Pharmacy package when entering orders, if the Dispense Drug selected is matched to this Pharmacy Orderable Item. This text will also be presented during the Outpatient Medication order entry process through CPRS, and the CPRS user can then determine whether or not these Instructions should be part of the order. For all words entered in this field, the software will check for expansions for each word in the MEDICATION INSTRUCTION file (#51) and expand the word accordingly.

Field Number		Field Name	Description
7.1		**OTHER LANGUAGE INSTRUCTIONS**	The text in this field shall be presented as a default for the OTHER PATIENT INSTRUCTIONS prompt in the Outpatient Pharmacy package when entering orders, if the order being entered is for a patient who has designated a preference for another language.
8		**NON-VA MED**	This field indicates whether the Pharmacy Orderable Item is selectable as a Non-VA Med (either an herbal supplement, an over-the-counter (OTC) medication, or a prescription drug not dispensed by the VA). This field is not editable.

Work Flowchart for Creating and Matching Orderable Items

Below are the instructions for matching Orderable Items during the initial installation of PDM.



*** Options are located in the NDF package**.

8. When you have determined which method to create orderable items, use this option to automatically create your PHARMACY ORDERABLE ITEM file (#50.7). → CREATE PHARMACY ORDERABLE ITEMS

9. Use this option to match the remainder of your entries in DRUG file (#50) to Orderable Items. This option will loop until all that can be matched are matched. → MANUALLY MATCH DISPENSE DRUGS

10. Use this option to monitor your matching progress in the previous step. → ORDERABLE ITEM MATCHING STATUS

11. At the completion of step 9, use this report to review all of your Orderable Item matches. → ORDERABLE ITEM REPORT

12. Use this option to edit/correct any remaining Orderable Items that show up on the Orderable Item Report from step 11. → EDIT ORDERABLE ITEMS

13. Use these two options to "fine tune" your DRUG file (#50), IV ADDITIVES file (#52.6), and the IV SOLUTION file (#52.7) matches to PHARMACY ORDERABLE ITEM file (#50.7). → DISPENSE DRUG/ORDERABLE ITEM MAINTENANCE or ADDITIVE/SOLUTIONS, ORDERABLE ITEMS

Steps 12 and 13 would be used to edit Orderable Items following the initial setup of PDM.

Steps in Creating the Pharmacy Orderable Item File

The following steps to create Orderable Items must be performed prior to installing any patches to the PDM package. Following the installation of patches, these steps may not be run. Instead, the user would access *the Dispense Drug/ Orderable Item Maintenance* option to create new Orderable Items.

STEP 1
The first two options in the *Pharmacy Data Management* menu, (*Primary/VA Generic Orderable Item Report* and *VA Generic Orderable Item Report*), should be run first. These reports will reflect what the PHARMACY ORDERABLE ITEM file (#50.7) will look like, based on which of the two methods is chosen when creating the PHARMACY ORDERABLE ITEM file (#50.7)

> The *Primary/VA Generic Orderable Item Report* option will use your existing PRIMARY DRUG file (#50.3), as a basis of creating the new file.
>
> The *VA Generic Orderable Item Report* option will use the VA Generic name from the VA GENERIC file (#50.6), as a basis for creating the new file.


There may be some instances of a drug not being matched when the report said it would be matched, but these instances should be limited to a very few.

Various factors come into play with these two methods. If the PHARMACY ORDERABLE ITEM file (#50.7) is created by VA Generic Name, then the PRIMARY DRUG file (#50.3) must be a duplication of the DRUG file (#50). In either method, the more entries in the DRUG file (#50) that are matched to the VA GENERIC file (#50.6), the more Orderable Items the software can automatically create. If the file is created by Primary/VA Generic Name, once the Primary Name portion of the option is finished, the software will also create as many entries as it can based on the VA Generic name.

One advantage of creating the PHARMACY ORDERABLE ITEM file (#50.7) by Primary Name is that all entries created via the PRIMARY DRUG file (#50.3) will have certain fields automatically populated, by being carried over from the PRIMARY DRUG file (#50.3) to the PHARMACY ORDERABLE ITEM file (#50.7). These fields are DAY (nD) or DOSE (nD), MED ROUTE, SCHEDULE TYPE, SCHEDULE, and the SYNONYM multiple.

For either method, IV Additives and IV Solutions will also have entries created for them in the PHARMACY ORDERABLE ITEM file (#50.7). Three files will point to the PHARMACY ORDERABLE ITEM file (#50.7); they are the DRUG file (#50), the IV ADDITIVES file (#52.6), and the IV SOLUTIONS file (#52.7).

STEP 2
The third option in the *Pharmacy Data Management* menu, *Create Pharmacy Orderable Items*, is the option that actually creates the entries in the PHARMACY ORDERABLE ITEM file (#50.7), and creates the pointers in the files mentioned in step 1. Based on the reports generated in step 1, the new file can be created by using either of the two methods.

STEP 3
The *Manually Match Dispense Drugs* option should be run next. This option will step through all the remaining entries in the IV ADDITIVES file (#52.6), the IV SOLUTIONS file (#52.7), and the DRUG file (#50), and ask the user to match any unmatched drugs to an entry in the PHARMACY ORDERABLE ITEM file (#50.7). The user will be required to match all Additives and Solutions with valid pointers to the DRUG file (#50), and all entries in the DRUG file (#50) that are marked with an I, O, or U in the APPLICATION PACKAGES' USE field (#63) which are active or have an active date of a year or less.

Each time this option is run, upon exit of the option, a check will be done to see if there are any drugs that are still not matched that should be matched according to the rules mentioned above. If there are, a message will be given stating this and reminding the user that someone will have to return to this option and continue matching drugs until they are all matched. If upon exit, all the necessary drugs are matched, a message will be given, and a job will be queued to do a final check on the file for any invalid data. Upon completion of that queued job, a mail message will be sent to the user who completed the matching process stating that everything has been completed.


The other options in the *Pharmacy Data Management* menu provide methods of maintaining the PHARMACY ORDERABLE ITEM file (#50.7) and the pointer relationships of the other files.

File List

The following PDM files are exported with the PDM package.

File#	NAME	UPDATE DD	DATA COMES WITH FILE	USER OVERRIDE
50	DRUG	FULL	NO	
50.4	DRUG ELECTROLYTES	FULL	NO	
50.606	DOSAGE FORM	FULL	YES (MERGE)	NO
50.7	PHARMACY ORDERABLE ITEM	FULL	NO	
51	MEDICATION INSTRUCTION	FULL	NO	
51.1	ADMINISTRATION SCHEDULE	FULL	YES (MERGE)	YES
51.2	MEDICATION ROUTES	FULL	YES (MERGE)	YES
51.5	ORDER UNIT	FULL	NO	
51.7	DRUG TEXT	FULL	YES (OVERWRITE)	YES
52.6	IV ADDITIVES	FULL	NO	
52.7	IV SOLUTIONS	FULL	NO	
54	RX CONSULT	FULL (SCREEN)	NO	
55	PHARMACY PATIENT (Partial DD)	PARTIAL	NO	
59.7	PHARMACY SYSTEM	FULL	NO	

The following non-PDM files are exported with the PDM package.

File#	NAME	UPDATE DD	DATA COMES WITH FILE	USER OVERRIDE
200	NEW PERSON (Partial DD)	PARTIAL	NO	
9009032.3	APSP INTERVENTION TYPE	FULL	YES (OVERWRITE)	NO
9009032.4	APSP INTERVENTION	FULL	NO	
9009032.5	APSP INTERVENTION RECOMMENDATION	FULL	YES (OVERWRITE)	NO

(This page included for two-sided copying.)

File Descriptions

File descriptions can be viewed by using the VA FileMan *Print File Entries* option. If files are out of sync they will need to be entered individually at the "START WITH NUMBER" prompt.

```
Select OPTION: PRINT FILE ENTRIES

OUTPUT FROM WHAT FILE: PHARMACY ORDERABLE ITEM// FILE
     1   FILE                              (490 entries)
     2   FILEGRAM ERROR LOG                (0 entries)
     3   FILEGRAM HISTORY                  (0 entries)
CHOOSE 1-3: 1
SORT BY: NAME// .001  NUMBER
START WITH NUMBER: FIRST// 50.7
GO TO NUMBER: LAST// 50.7
  WITHIN NUMBER, SORT BY:
FIRST PRINT ATTRIBUTE: 1  GLOBAL NAME
THEN PRINT ATTRIBUTE: .01  NAME
THEN PRINT ATTRIBUTE: DESCRIPTION      (word-processing)
THEN PRINT ATTRIBUTE: <Enter>

  ************************
Heading (S/C): FILE LIST// <Enter>
START AT PAGE: 1// <Enter>
DEVICE: <Enter>

FILE LIST                                      JUL 10,2001  13:18    PAGE 1
GLOBAL NAME     NAME
  DESCRIPTION
------------------------------------------------------------------------------

        NUMBER: 50.7
^PS(50.7,       PHARMACY ORDERABLE ITEM
  Order Entry name for items that can be ordered in the Pharmacy package.
```

(This page included for two-sided copying.)

Option Descriptions

The option descriptions below were retrieved from VA FileMan and provide the PDM options following the initial installation of the PDM package.

```
------------------------------------------------------------------
PSS MGR Pharmacy Data Management

This menu contains the options necessary to build and maintain the PHARMACY ORDERABLE ITEM file
(#50.7), and to also build and maintain the Med. Route/Instructions table.

Type: menu
Item:PSS PRIMARY/VA GENERIC REPORT
Item:PSS VA GENERIC DRUG REPORT
Item:PSS CREATE ORDERABLE ITEMS
Item:PSS PRE-RELEASE MANUAL MATCH
Item:PSS ORDERABLE ITEM STATUS
Item:PSSXX MARK
Item:PSS DRUG ENTER/EDIT
Item:PSS DRG INTER MANAGMENT
Item:PSS INTERACTION LOCAL ADD
Item:PSS INTERACTION SEVERITY
Item:PSSJI ELECTROLYTE FILE
Item:PSS LOOK
Item:PSS MED. ROUTE/INSTRUCTIONS
Item:PSSJU MI
Item:PSS ORDERABLE ITEM MANAGEMENT
Item:PSS EDIT ORDERABLE ITEMS
Item:PSS MAINTAIN ORDERABLE ITEMS
Item:PSS ADDITIVE/SOLUTIONS
Item:PSS ORDERABLE ITEM REPORT
Item:PSS PRIMARY DRUG EDIT
Item:PSS SYS EDIT
Item:PSS SCHEDULE EDIT
------------------------------------------------------------------
PSS PRIMARY/VA GENERIC REPORT
Primary/VA Generic Orderable Item Report

This option provides a report of potential Pharmacy Orderable Items based on creating your
PHARMACY ORDERABLE ITEM file (#50.7) by Primary Drug name, then VA Generic Name. This report can
be run to show drugs that can be auto-created, or be run to show drugs that can't be auto-
created.

Type: run routine   Routine: PRI^PSSMATCH
------------------------------------------------------------------
PSS VA GENERIC DRUG REPORT
VA Generic Orderable Item Report

This option provides a report of potential Pharmacy Orderable Items based on creating your
PHARMACY ORDERABLE ITEM file (#50.7) by VA Generic name only. This report can be run to show
drugs that can be auto-created, or run to show drugs that can't be auto-created.

Type:run routine   Routine: VA^PSSMATCH
------------------------------------------------------------------
PSS CREATE ORDERABLE ITEMS
Create Pharmacy Orderable Items

This option is used to populate the PHARMACY ORDERABLE ITEM file (#50.7). It will also match
entries in the IV ADDITIVES file (#52.6), the IV SOLUTIONS file (#52.7), and the DRUG file (#50)
to the new PHARMACY ORDERABLE ITEM file (#50.7). This option can only be run one time. It will
queue a background job that builds a large TMP global that will be used to create the new file.
Do not run this option until you are sure of the method that you want to create the file by. See
the Implementation and Maintenance section of this manual, (Steps In Creating Orderable Item
File), for more information.

Type: run routine     Routine: PSSCREAT
------------------------------------------------------------------
```

```
-------------------------------------------------------------
PSS PRE-RELEASE MANUAL MATCH
Manually Match Dispense Drugs

This option is used to manually match IV Additives, IV Solutions, and Dispense Drugs to Pharmacy
Orderable Items.

This option must be invoked after the PSS CREATE ORDERABLE ITEMS option has been run to
completion. This option will force the matching of all Additives and Solutions with Dispense Drug
pointers, and all Dispense Drugs marked with an I, O, or U in the APPLICATION PACKAGES' USE field
(#63). Every time this option is exited, a check will be done for any unmatched drugs, and an
appropriate message will be given to the user. When all drugs are matched that should be matched,
a job will be queued that checks for any invalid data. At the completion of this job, a mail
message will be sent to the user who completed the matching process. At this time, the pre-
release work is finished, and installation of Outpatient Pharmacy V. 7.0 and Inpatient
Medications V. 5.0 will be allowed.

Type: run routine   Routine: PSSPOIM2
 ------------------------------------------------------------------
PSS ORDERABLE ITEM STATUS
Orderable Item Matching Status

This option allows the user to check the status of the manual matching of Orderable Items.

Type: run routine       PSSOICT
 ------------------------------------------------------------------
PSSXX MARK
CMOP Mark/Unmark (Single Drug)

This option allows the user to mark/unmark a single drug for transmission to the CMOP.

Type: run routine      PSSMARK
-------------------------------------------------------------
PSS DRUG ENTER/EDIT
Drug Enter/Edit

This option allows the user to edit fields for ALL pharmacy packages if they possess the proper
package key. It also will allow the user to match to NDF and Orderable Item.

Type:run routine   ROUTINE: PSSDEE
-------------------------------------------------------------
PSS DRG INTER MANAGEMENT
Drug Interaction Management

This is the sub-menu driver for drug interaction maintenance.

Type:menu
-------------------------------------------------------------
PSS INTERACTION LOCAL ADD
Enter/Edit Local Drug Interaction

This option allows pharmacy sites to add local drug ingredient interactions to the DRUG/DRUG
INTERACTION file or edit only local drug interactions already in the file. The national entries
in the DRUG/DRUG INTERACTION file cannot be edited.

This information displays on a screen or prints on a label whenever a pharmacist fills a
prescription.

Type:action   ENTRY ACTION: D ADD^PSSHELP
-------------------------------------------------------------
```

```
-------------------------------------------------------------
PSS INTERACTION SEVERITY
Edit Drug Interaction Severity

With this option the pharmacy manager can change the drug interaction severity in the DRUG/DRUG
INTERACTION file from significant to critical only. Severity cannot be changed from critical to
significant.

Type:action    ENTRY ACTION: D CRI^PSSHELP
-------------------------------------------------------------

PSSJI ELECTROYLYTE FILE
Electrolyte File (IV)

This option will allow you to alter the contents of the DRUG ELECTORYLYTES file (#50.4). This is
the file that is pointed to by the ELECTROLYTE field in both the IV ADDITIVES (#52.6) and IV
SOLUTIONS (#52.7) files.

Type:run routine   Routine: ELECTRO^PSSIVDRG
-------------------------------------------------------------
PSS LOOK
Lookup into Dispense Drug File

This option provides a report of all information regarding the dispense drug.

Type:run routine   ROUTINE: PSSLOOK
-------------------------------------------------------------
PSS MED. ROUTE/INSTRUCTIONS
Med. Route/Instructions Table Maintenance

This option is used to maintain the table of medication routes that will be displayed as defaults
in OE/RR, based on dosage form.

Type: run routine     ROUTINE: ENMR^PSSFILED
-------------------------------------------------------------
PSSJU MI
Medication Instruction File Add/Edit

The UNIT DOSE package contains a field called SPECIAL INSTRUCTIONS. This field utilizes the
abbreviations and expansions of the MEDICATION INSTRUCTION file when printing on various reports.
This option allow the user to enter and edit abbreviations and expansions in the MEDICATION
INSTRUCTION file and to "flag" those entries for use by the INPATIENT packages only, OUTPATIENT
package only, or by both.

Type:run routine   ROUTINE: ENMI^PSSFILED
-------------------------------------------------------------
PSS ORDERABLE ITEM MANAGEMENT
Orderable Item Management

This is the sub-menu driver for Orderable Item maintenance.

Type:menu
-------------------------------------------------------------
PSS EDIT ORDERABLE ITEMS
Edit Orderable Items

This option is used to edit entries in the PHARMACY ORDERABLE ITEM
file (#50.7). All fields except the DOSAGE FORM and IV FLAG fields can be edited.

Type: run routine     Routine: PSSPOIMO
-------------------------------------------------------------
```

PSS MAINTAIN ORDERABLE ITEMS
Dispense Drug/Orderable Item Maintenance

This option is for maintaining the relationship between Dispense Drugs and Orderable Items.

This option is used to maintain the relationship between Dispense Drugs and entries in the PHARMACY ORDERABLE ITEM file (#50.7). The Dispense Drug will be prompted for, and then the user can match it to a Pharmacy Orderable Item, or re-match it to a different Pharmacy Orderable Item, depending on whether the Dispense Drug chosen has already been matched. This option is different from the PSS PRE-RELEASE MANUAL MATCH option, where this prompts for Dispense Drug, and this option will remain on the Pharmacy Data Management menu for maintenance purposes. The PSS PRE-RELEASE MANUAL MATCH option is only for the initial set-up of the PHARMACY ORDERABLE ITEM file (#50.7), and should be completed prior to the installations of Inpatient Medications V. 5.0 and Outpatient Pharmacy V. 7.0.

Type: run routine Routine: PSSPOIMN

PSS ADDITIVE/SOLUTIONS
Additive/Solutions, Orderable Items

This option is for maintaining the links between entries in the IV ADDITIVES file (#52.6) and the PHARMACY ORDERABLE ITEM file (#50.7),and also between the IV SOLUTIONS file (#52.7) and the PHARMACY ORDERABLE ITEM file (#50.7). Once an Additive or Solution is chosen, the user can then match to an Orderable Item, or re-match to different Orderable Item, depending on whether the Additive or Solution chosen has already been matched.

Type: run routine Routine: PSSADDIT

PSS ORDERABLE ITEM REPORT
Orderable Item Report

This option prints a report that is broken up into three parts. The first part shows all Pharmacy Orderable Items that are linked to IV Additives. The second part shows all Pharmacy Orderable Items linked to IV Solutions. The third part shows all Pharmacy Orderable Items linked to Dispense Drugs.

Type: run routine Routine: PSSPOIKA

PSS PRIMARY DRUG EDIT
Primary Drug Edit

Allows the user to create and edit entries in the PRIMARY DRUG file.

Type: run routine Routine: ENPDE^PSSFIL

PSS SYS EDIT
Pharmacy System Parameters Edit

This will be the edit IV Identifier field that will be displayed with IV Orderable Items. The IV Identifier will be set to “IV” when the package is initially installed.

The Change Type of Order From OERR field is a site parameter that will allow the pharmacist to change the type of order from what is received from OERR. If this field is set to yes, it will be possible to change the order type on orders where the Orderable Item has data in the CORRESPONDING IV ITEM field for unit dose orders or data in the CORRESPONDING UD ITEM for IV orders.

Type:run routine Routine: PSSYSP

PSS SCHEDULE EDIT
Standard Schedule Edit

This option allows the user to edit the set of times associated with the standard dosage administration schedules. This may be used to define the outpatient expansion to be used when the schedule is entered for an outpatient medication order.

Type:run routine Routine: ENPSJSE^PSSJEEU

The option descriptions below were retrieved from VA FileMan and reflect the PDM options following the installation of patch PSS*1*38.

```
-------------------------------------------------------------
NAME: PSS MGR
MENU TEXT: Pharmacy Data Management
TYPE: menu
PACKAGE: PHARMACY DATA MANAGEMENT
DESCRIPTION:   This menu contains options pertaining to maintaining pharmacy
data files, creating Pharmacy Orderable Items, and the Medication Route/
Instructions table among other assorted functions.
ITEM: PSSXX MARK
ITEM: PSS DOSAGES MANAGEMENT
ITEM: PSS DRUG ENTER/EDIT
ITEM: PSS DRG INTER MANAGEMENT
ITEM: PSSJI ELECTROLYTE FILE
ITEM: PSS LOOK
ITEM: PSSJU MI
ITEM: PSS MEDICATION ROUTES EDIT
ITEM: PSS ORDERABLE ITEM MANAGEMENT
ITEM: PSS ORDERABLE ITEM REPORT
ITEM: PSSNFI
ITEM: PSS EDIT TEXT
ITEM: PSS DRUG TEXT FILE REPORT
ITEM: PSS SYS EDIT
ITEM: PSS SCHEDULE EDIT
ITEM: PSS SYNONYM EDIT
-------------------------------------------------------------
NAME: PSS DOSAGES MANAGEMENT
MENU TEXT: Dosages
TYPE: menu
DESCRIPTION:   This menu option contains options that control the editing of
dosages.
ITEM: PSS DOSAGE CONVERSION
ITEM: PSS DOSAGE FORM EDIT
ITEM: PSS EDIT DOSAGES
ITEM: PSS COMMON DOSAGES
ITEM: PSS DOSE FORM/NOUN REPORT
ITEM: PSS DOSAGE REVIEW REPORT
-------------------------------------------------------------
NAME: PSS DRG INTER MANAGEMENT
MENU TEXT: Drug Interaction Management
TYPE: menu
DESCRIPTION:   This is the sub-menu driver for drug interaction maintenance.
ITEM: PSS INTERACTION LOCAL ADD
ITEM: PSS REPORT LOCAL INTERACTIONS
-------------------------------------------------------------
NAME: PSS ORDERABLE ITEM MANAGEMENT
MENU TEXT: Orderable Item Management
TYPE: menu
DESCRIPTION:   This is the sub-menu driver for Orderable Item maintenance.
ITEM: PSS MAINTAIN ORDERABLE ITEMS
ITEM: PSS EDIT ORDERABLE ITEMS
ITEM: PSS ORDERABLE ITEM DOSAGES
ITEM: PSS INSTRUCTIONS/ITEMS REPORT
-------------------------------------------------------------
NAME: PSSXX MARK
MENU TEXT: CMOP Mark/Unmark (Single drug)
TYPE: run routine
LOCK: PSXCMOPMGR
DESCRIPTION:   This option allows the user to mark/unmark a single drug for
transmission to the CMOP.
ROUTINE: PSSMARK
UPPERCASE MENU TEXT: CMOP MARK/UNMARK (SINGLE DRUG)
-------------------------------------------------------------
NAME: PSS DOSAGE CONVERSION
MENU TEXT: Auto Create Dosages
TYPE: run routine
DESCRIPTION:   This option is used to populate the Possible Dose fields and
Local Possible Dose fields in the DRUG file.
ROUTINE: PSSDOSCR
UPPERCASE MENU TEXT: AUTO CREATE DOSAGES
```

```
-------------------------------------------------------------
NAME: PSS DOSAGE FORM EDIT
MENU TEXT: Dosage Form File Enter/Edit
TYPE: run routine
DESCRIPTION:   This option provides the ability to edit data in the DOSAGE
FORM file (#50.606).
ROUTINE: DF^PSSDFEE
UPPERCASE MENU TEXT: DOSAGE FORM FILE ENTER/EDIT
-------------------------------------------------------------
NAME: PSS EDIT DOSAGES
MENU TEXT: Enter/Edit Dosages
TYPE: run routine
DESCRIPTION:   This option allows you to edit Possible Dose fields and Local
Possible Dose fields for a selected dispense drug.
ROUTINE: DOS^PSSDOSER
UPPERCASE MENU TEXT: ENTER/EDIT DOSAGES
-------------------------------------------------------------
NAME: PSS COMMON DOSAGES
MENU TEXT: Most Common Dosages Report
TYPE: run routine
DESCRIPTION:   This report displays the most common dosages administered over
a specified time period for Unit Dose orders.
ROUTINE: EN^PSSCOMMN
UPPERCASE MENU TEXT: MOST COMMON DOSAGES REPORT
-------------------------------------------------------------
NAME: PSS DOSE FORM/NOUN REPORT
MENU TEXT: Noun/Dosage Form Report
TYPE: run routine
DESCRIPTION:   This report displays the Dosage Forms, along with their
associated Nouns and Package Use field. It also displays the Local Possible
Dose based on the nouns and instructions.
ROUTINE: PSSNOUNR
UPPERCASE MENU TEXT: NOUN/DOSAGE FORM REPORT
-------------------------------------------------------------
NAME: PSS DOSAGE REVIEW REPORT
MENU TEXT: Review Dosages Report
TYPE: run routine
DESCRIPTION:   This report shows the possible doses and local possible doses
for selected dispense drugs.
ROUTINE: PSSDOSRP
UPPERCASE MENU TEXT: REVIEW DOSAGES REPORT
-------------------------------------------------------------
NAME: PSS DRUG ENTER/EDIT
MENU TEXT: Drug Enter/Edit
TYPE: run routine
DESCRIPTION:   This option allows the user to edit fields for ALL pharmacy
packages if they possess the proper package key. It also will allow the user
to match to NDF and Orderable Item.
ROUTINE: PSSDEE
UPPERCASE MENU TEXT: DRUG ENTER/EDIT
-------------------------------------------------------------
NAME: PSS INTERACTION LOCAL ADD
MENU TEXT: Enter/Edit Local Drug Interaction
TYPE: run routine
PACKAGE: PHARMACY DATA MANAGEMENT
DESCRIPTION:   This option allows sites to add their local drug ingredient
interactions.
ROUTINE: PSSDINT
UPPERCASE MENU TEXT: ENTER/EDIT LOCAL DRUG INTERACTION
-------------------------------------------------------------
NAME: PSS REPORT LOCAL INTERACTIONS
MENU TEXT: Report of Locally Entered Interactions
TYPE: run routine
DESCRIPTION:   This option allows sites to print a report of locally entered
drug interactions and their severity.
ROUTINE: PSSDRINT
UPPERCASE MENU TEXT: REPORT OF LOCALLY ENTERED INTERACTIONS
```

```
------------------------------------------------------------------
NAME: PSSJI ELECTROLYTE FILE
MENU TEXT: Electrolyte File (IV)
TYPE: run routine
DESCRIPTION:
This option will allow you to alter the contents of the DRUG ELECTROLYTES
file (50.4). This is the file that is pointed to by the ELECTROLYTES sub-file
in the IV ADDITIVES (52.6) and IV SOLUTIONS (#52.7) files.
EXIT ACTION: K I1
ROUTINE: ELECTRO^PSSVIDRG
UPPERCASE MENU TEXT: ELECTROLYTE FILE (IV)
------------------------------------------------------------------
NAME: PSS LOOK
MENU TEXT: Lookup into Dispense Drug File
TYPE: run routine
DESCRIPTION:   This option provides a lookup into DISPENSE DRUG file. It
displays fields commonly edited.
ROUTINE: PSSLOOK
UPPERCASE MENU TEXT: LOOKUP INTO DISPENSE DRUG FILE
------------------------------------------------------------------
NAME: PSSJU MI
MENU TEXT: Medication Instruction File Add/Edit
TYPE: run routine
DESCRIPTION:   The UNIT DOSE package contains a field called SPECIAL
INSTRUCTIONS. This field utilizes the abbreviations and expansions of the
MEDICATION INSTRUCTION file when printing on various reports. This option
allow the user to enter and edit abbreviations and expansions in the
MEDICATION INSTRUCTION file and to "flag" those entries for use by the
INPATIENT packages only, OUTPATIENT package only, or by both.
ROUTINE: ENMI^PSSFILED
UPPERCASE MENU TEXT: MEDICATION INSTRUCTION FILE ADD/EDIT
------------------------------------------------------------------
NAME: PSS MEDICATION ROUTES EDIT
MENU TEXT: Medication Route File Enter/Edit
TYPE: run routine
DESCRIPTION:   This option provides the ability to edit data in the MEDICATION
ROUTES file (#51.2).
ROUTINE: MR^PSSDFEE
UPPERCASE MENU TEXT: MEDICATION ROUTE FILE ENTER/EDIT
------------------------------------------------------------------
NAME: PSS EDIT ORDERABLE ITEMS
MENU TEXT: Edit Orderable Items
TYPE: run routine
DESCRIPTION:   This option is for editing Pharmacy Orderable Items.
ROUTINE: PSSPOIMO
UPPERCASE MENU TEXT: EDIT ORDERABLE ITEMS
------------------------------------------------------------------
NAME: PSS MAINTAIN ORDERABLE ITEMS
MENU TEXT: Dispense Drug/Orderable Item Maintenance
TYPE: run routine
DESCRIPTION:   This option is for maintaining the relationship between
Dispense Drugs and Orderable Items.
ROUTINE: PSSPOIMN
UPPERCASE MENU TEXT: DISPENSE DRUG/ORDERABLE ITEM MAINTENANCE
------------------------------------------------------------------
NAME: PSS ORDERABLE ITEM DOSAGES
MENU TEXT: Orderable Item/Dosages Report
TYPE: run routine
DESCRIPTION:   This option prints a report that displays Inpatient and
Outpatient Dosages for each Pharmacy Orderable Item. These are the dosages
that will display for selection through Computerized Patient Record System
(CPRS) when an Orderable Item is selected for a medication order.
ROUTINE: EN^PSSOIDOS
UPPERCASE MENU TEXT: ORDERABLE ITEM/DOSAGES REPORT
------------------------------------------------------------------
NAME: PSS INSTRUCTIONS/ITEMS REPORT
MENU TEXT: Patient Instructions Report
TYPE: run routine
DESCRIPTION:   This option prints a report that displays Pharmacy Orderable
Items, along with the expanded Patient Instructions for each Orderable Item.
These Patient Instructions are used as default values for Outpatient orders
entered through Computerized Patient Record System (CPRS) and Outpatient
Pharmacy.
ROUTINE: EN^PSSPNSRP
UPPERCASE MENU TEXT: PATIENT INSTRUCTIONS REPORT
------------------------------------------------------------------
```

```
NAME: PSS ORDERABLE ITEM REPORT
MENU TEXT: Orderable Item Report
TYPE: run routine
DESCRIPTION:   This option lists items from your Pharmacy Orderable Item file,
along with the associated Dispense Drugs.
ROUTINE: PSSPOIKA
UPPERCASE MENU TEXT: ORDERABLE ITEM REPORT
------------------------------------------------------------
NAME: PSSNFI
MENU TEXT: Formulary Information Report
TYPE: run routine
DESCRIPTION:   This option provides a listing of pertinent pharmacy formulary
information.
ROUTINE: PSSNFI
UPPERCASE MENU TEXT: FORMULARY INFORMATION REPORT
------------------------------------------------------------
NAME: PSS EDIT TEXT
MENU TEXT: Drug Text Enter/Edit
TYPE: run routine
DESCRIPTION:   This option enables you to edit entries in the DRUG TEXT file.
This file contains drug information, restrictions, and guidelines, etc.
ROUTINE: PSSTXT
UPPERCASE MENU TEXT: DRUG TEXT ENTER/EDIT
------------------------------------------------------------
NAME: PSS SYS EDIT
MENU TEXT: Pharmacy System Parameters Edit
TYPE: run routine
DESCRIPTION:   This option allows the user to edit the Pharmacy System
parameters used in Pharmacy Data Management.
ROUTINE: PSSYSP
UPPERCASE MENU TEXT: PHARMACY SYSTEM PARAMETERS EDIT
------------------------------------------------------------
NAME: PSS SCHEDULE EDIT
MENU TEXT: Standard Schedule Edit
TYPE: run routine
DESCRIPTION:   Allows user to edit the set of times associated with the
standard dosage administration schedules (Q3H,Q8H,TID, etc.).  This may be
used to define the outpatient expansion to be used when the schedule is
entered for an outpatient medication order.
ROUTINE: ENPSJSE^PSSJEEU
UPPERCASE MENU TEXT: STANDARD SCHEDULE EDIT
------------------------------------------------------------
NAME: PSS SYNONYM EDIT
MENU TEXT: Synonym Enter/Edit
TYPE: run routine
DESCRIPTION:   The option provides easy access to update the synonym
information for an entry in the local DRUG file.
ROUTINE: PSSSEE
UPPERCASE MENU TEXT: SYNONYM ENTER/EDIT
```

The option description below was retrieved from VA FileMan and reflects the new option added to PDM following the installation of patch PSS*1*55.

```
------------------------------------------------------------
NAME: PSS DRUG TEXT FILE REPORT
MENU TEXT: Drug Text File Report
TYPE: run routine
DESCRIPTION:   This option will display the Drug Text Name, Synonyms, Drug
Text, Inactive date if inactive, and list all drug and pharmacy orderable
items linked to it.  The report is printable for one or all entries.
ROUTINE: PSSDTR
UPPERCASE MENU TEXT: DRUG TEXT FILE REPORT
```

The option description below was retrieved from VA FileMan and reflects the new option added to PDM following the installation of patch PSS*1*47. *Other Language Translation Setup* [PSS OTHER LANGUAGE SETUP] option is a stand-alone option that must be assigned to the person(s) responsible for maintaining it.

```
-------------------------------------------------------------
NAME: PSS OTHER LANGUAGE SETUP
MENU TEXT: Other Language Translation Setup
TYPE: action
PACKAGE: PHARMACY DATA MANAGEMENT
DESCRIPTION:   This option can be used to enter other language translations
that will print on the outpatient pharmacy Rx labels.
ENTRY ACTION: D OTHLAN^PSSJEEU
UPPERCASE MENU TEXT: OTHER LANGUAGE TRANSLATION SET
```

The option description below was retrieved from VA FileMan and reflects the new option added to PDM following the installation of PSS*1*82.

```
-------------------------------------------------------------
NAME: PSS MASTER FILE ALL
MENU TEXT: Send Entire Drug File to External Interface
TYPE: run routine
DESCRIPTION:   This option will send the entire DRUG file (#50) to an external
interface through HL7 messaging.
ROUTINE: PSSMSTR
UPPERCASE MENU TEXT: SEND ENTIRE DRUG FILE TO EXTER
```

The two option descriptions below were retrieved from VA FileMan and reflect the new options added to PDM following the installation of PSS*1*87.

```
-------------------------------------------------------------
NAME: PSS WARNING BUILDER
MENU TEXT: Warning Builder
TYPE: run routine
DESCRIPTION:   This option will allow you to define a custom warning label
list containing entries from both the new warning label source and the old Rx
Consult file entries.
ROUTINE: PSSWRNB
UPPERCASE MENU TEXT: WARNING BUILDER
-------------------------------------------------------------
NAME: PSS WARNING MAPPING
MENU TEXT: Warning Mapping
TYPE: run routine
DESCRIPTION:   This option is used to match an entry from the old Rx Consult
file to the new commercial data source warning file to aid in using the
Warning Builder (to identify local warnings that do not have an equivalent
entry in the new commercial data source).

The user can also enter a Spanish translation for an Rx Consult file entry, if
desired, but whenever possible, the new commercial data source's warnings
(English or Spanish depending on the patient setting) should be used.
ROUTINE: EDIT^PSSWMAP
UPPERCASE MENU TEXT: WARNING MAPPING
```

(This page included for two-sided copying.)

Routines

The following routines are used by the Pharmacy Data Management package.

PSS32P3	PSS32P5	PSS50	PSS50A	PSS50A1	PSS50AQM	PSS50ATC
PSS50B	PSS50B1	PSS50B2	PSS50C	PSS50C1	PSS50CMP	PSS50D
PSS50DAT	PSS50DOS	PSS50E	PSS50F	PSS50F1	PSS50LAB	PSS50NDF
PSS50P4	PSS50P66	PSS50P7	PSS50P7A	PSS50TMP	PSS50WS	PSS51
PSS51P1	PSS51P15	PSS51P1A	PSS51P1B	PSS51P1C	PSS51P2	PSS51P5
PSS52P6	PSS52P6A	PSS52P6B	PSS52P7	PSS52P7A	PSS54	PSS55
PSS551	PSS55MIS	PSS59P7	PSS781	PSSADDIT	PSSAUTL	PSSCHENV
PSSCHPRE	PSSCHPST	PSSCLDRG	PSSCOMMN	PSSCPRS	PSSCPRS1	PSSCREAT
PSSCSPD	PSSDAWUT	PSSDDUT	PSSDDUT2	PSSDDUT3	PSSDEE	PSSDEE1
PSSDEE2	PSSDELOI	PSSDENT	PSSDFEE	PSSDGUPD	PSSDI	PSSDIN
PSSDOS	PSSDOSCR	PSSDOSCX	PSSDOSED	PSSDOSER	PSSDOSRP	PSSDTR
PSSENV	PSSENVN	PSSFIL	PSSFILED	PSSFILES	PSSGENM	PSSGIU
PSSGMI	PSSGS0	PSSGSH	PSSHELP	PSSHL1	PSSHLSCH	PSSHLU
PSSJEEU	PSSJORDF	PSSJSPU	PSSJSPU0	PSSJSV	PSSJSV0	PSSJXR
PSSJXR1	PSSJXR10	PSSJXR11	PSSJXR12	PSSJXR13	PSSJXR14	PSSJXR15
PSSJXR16	PSSJXR17	PSSJXR18	PSSJXR19	PSSJXR2	PSSJXR20	PSSJXR21
PSSJXR22	PSSJXR4	PSSJXR5	PSSJXR6	PSSJXR7	PSSJXR8	PSSJXR9
PSSLAB	PSSLOOK	PSSMARK	PSSMATCH	PSSMSTR	PSSNDCUT	PSSNOUNR
PSSNTEG	PSSOICT	PSSOICT1	PSSOPKI	PSSOPKI1	PSSORPH	PSSORPH1
PSSORUTL	PSSOUTSC	PSSPKIPI	PSSPKIPR	PSSPNSRP	PSSPOI	PSSPOIC
PSSPOID1	PSSPOID2	PSSPOID3	PSSPOIDT	PSSPOIKA	PSSPOIM	PSSPOIM1
PSSPOIM2	PSSPOIM3	PSSPOIMN	PSSPOIMO	PSSPOST	PSSPOST1	PSSPOST2
PSSPOST5	PSSPRE	PSSPRETR	PSSQORD	PSSREF	PSSREMCH	PSSSCHED
PSSSOLI1	PSSSOLIT	PSSSPD	PSSSUTIL	PSSSYN	PSSUTIL	PSSUTLA1
PSSUTLPR	PSSVIDRG	PSSVX6	PSSVX61	PSSVX62	PSSVX63	PSSVX64
PSSVX65	PSSVX66	PSSWMAP	PSSWRNA	PSSWRNB	PSSWRNE	PSSYSP

(This page included for two-sided copying.)

Exported Options

Stand Alone Options

All of the PDM options are designed to stand-alone and can be accessed without first accessing the top-level menu.

Menus

The original PDM menu that would be seen following the initial setup of the PDM package is displayed below. The options needed to build and maintain the PHARMACY ORDERABLE ITEM file (#50.7) will be under the Pharmacy Data Management menu, and will appear as follows.

Pharmacy Data Management [PSS MGR]

Primary/VA Generic Orderable Item Report
[PSS PRIMARY/VA GENERIC REPORT]

VA Generic Orderable Item Report
[PSS VA GENERIC DRUG REPORT]

Create Pharmacy Orderable Items
[PSS CREATE ORDERABLE ITEMS]

Manually Match Dispense Drugs
[PSS PRE-RELEASE MANUAL MATCH]

Orderable Item Matching Status
[PSS ORDERABLE ITEM STATUS]

CMOP Mark/Unmark (Single drug) 
[PSSXX MARK]

Drug Enter/Edit
[PSS DRUG ENTER/EDIT]

Drug Interaction Management...
[PSS DRG INTER MANAGEMENT]

Enter/Edit Local Drug Interaction
[PSS INTERACTION LOCAL ADD]

Edit Drug Interaction Severity
[PSS INTERACTION SEVERITY]

Electrolyte File (IV)
[PSSJI ELECTROLYTE FILE]

Lookup into Dispense Drug File
[PSS LOOK]

Med. Route/Instructions Table Maintenance
[PSS MED. ROUTE/INSTRUCTIONS]

Medication Instruction File Add/Edit
[PSSJU MI]

Orderable Item Management...
[PSS ORDERABLE ITEM MANAGEMENT]

Edit Orderable Items
[PSS EDIT ORDERABLE ITEMS]

Dispense Drug/Orderable Item Maintenance
[PSS MAINTAIN ORDERABLE ITEMS]

Additive/Solutions, Orderable Items
[PSS ADDITIVE/SOLUTIONS]

Orderable Item Report
[PSS ORDERABLE ITEM REPORT]

Primary Drug Edit
[PSS PRIMARY DRUG EDIT]

Pharmacy System Parameters Edit
[PSS SYS EDIT]

Standard Schedule Edit
[PSS SCHEDULE EDIT]

 Locked: PSXCMOPMGR
Without the PSXCMOPMGR key, the *CMOP Mark/Unmark (Single drug)* option will not appear on your menu.

The PDM menu that was exported with the original PDM package has been modified to include subsequent changes and patches, including the changes resulting from the Pharmacy Ordering Enhancements project.

The PDM menu up to and including PSS*1*87 appears below. PSS*1*87 was the last patch to affect a change to the PDM menu.

Pharmacy Data Management [PSS MGR]

Dosages…
[PSS DOSAGES MANAGEMENT]

Auto Create Dosages
[PSS DOSAGE CONVERSION]

Dosage Form File Enter/Edit
[PSS DOSAGE FORM EDIT]

Enter/Edit Dosages
[PSS EDIT DOSAGES]

Most Common Dosages Report
[PSS COMMON DOSAGES]

Noun/Dosage Form Report
[PSS DOSE FORM/ NOUN REPORT]

Review Dosages Report
[PSS DOSAGE REVIEW REPORT]

Drug Enter/Edit
[PSS DRUG ENTER/ EDIT]

Drug Interaction Management…
[PSS DRG INTER MANAGEMENT]

Enter/Edit Local Drug Interaction
[PSS INTERACTION LOCAL ADD]

Report of Locally Entered Interactions
[PSS REPORT LOCAL INTERACTIONS]

Electrolyte File (IV)
[PSSJI ELECTROLYTE FILE]

Lookup into Dispense Drug File
[PSS LOOK]

Medication Instruction File Add/Edit
[PSSJU MI]

Medication Route File Enter/Edit
[PSS MEDICATION ROUTES EDIT]

Orderable Item Management…
[PSS ORDERABLE ITEM MANAGEMENT]

- Edit Orderable Items
  [PSS EDIT ORDERABLE ITEMS]

- Dispense Drug/Orderable Item Maintenance
  [PSS MAINTAIN ORDERABLE ITEMS]

- Orderable Item/Dosages Report
  [PSS ORDERABLE ITEM DOSAGES]

- Patient Instructions Report
  [PSS INSTRUCTIONS/ ITEMS REPORT]

Orderable Item Report
[PSS ORDERABLE ITEM REPORT]

Formulary Information Report
[PSSNFI]

Drug Text Enter/Edit
[PSS EDIT TEXT]

Drug Text File Report
[PSS DRUG TEXT FILE REPORT]

Pharmacy System Parameters Edit
[PSS SYS EDIT]

Standard Schedule Edit
[PSS SCHEDULE EDIT]

Synonym Enter/Edit
[PSS SYNONYM EDIT]

Other Language Translation Setup
[PSS OTHER LANGUAGE SETUP]

The *Other Language Translation Setup* [PSS OTHER LANGUAGE SETUP] option is a stand-alone option that must be assigned to the person(s) responsible for maintaining it.

Controlled Substances/PKI Reports
[PSS CS/PKI REPORTS]

DEA Spec Hdlg & CS Fed Sch Discrepancy
[PSS DEA VS CS FED. SCH. DISCR.]

Controlled Substances Not Matched to NDF
[PSS CS NOT MATCHED TO NDF]

CS (DRUGS) Inconsistent with DEA Spec Hdlg
[PSS CS DRUGS INCON WITH DEA]

CS (Ord. Item) Inconsistent with DEA Spec Hdlg
[PSS CS (OI) INCON WITH DEA]

Send Entire Drug File to External Interface
[PSS MASTER FILE ALL]

CMOP Mark/Unmark (Single drug)
[PSSXX MARK] 

When using the *CMOP Mark/Unmark (Single drug)* [PSSXX MARK] option to mark a drug for CMOP the user **must** update the cost information in the DRUG file (#50) to ensure the cost data for each prescription fill will be correct.

Warning Builder
[PSS WARNING BUILDER]

Warning Mapping
[PSS WARNING MAPPING]

 Locked: PSXCMOPMGR
Without the PSXCMOPMGR key, the *CMOP Mark/Unmark (Single drug)* option will not appear on your menu.

 A post-installation routine for patch PSS*1*61 identifies those drugs with discrepancies between the CS FEDERAL SCHEDULE field (#19) of the VA PRODUCT file (#50.68) and DEA, SPECIAL HDLG field (#3) of the DRUG file (#50). Four mail messages are generated and sent to the installer and to holders of the PSNMGR keys: These mail messages can be re-generated on demand using the Controlled Substances/PKI Reports [PSS CS/PKI REPORTS] menu added with this patch.

The post-install also checks to see if the DEA, SPECIAL HDLG field (#3) of the DRUG file (#50) is null and if the drug is matched to an entry in the VA PRODUCT file (#50.68), and the CS FEDERAL SCHEDULE field (#19) of the VA PRODUCT file (#50.68) has data, then it updates the DEA, SPECIAL HDLG field (#3) of the DRUG file (#50) with the DEA, SPECIAL HDLG code mapped to corresponding CS FEDERAL SCHEDULE code.

(This page included for two-sided copying.)

HL7 Messaging with an External System

New Protocol

A new protocol, PSS HUI DRUG UPDATE, is exported and has been created to generate HL7 messages when new drugs are added to the DRUG file (#50) and existing entries are updated. This protocol is exported with the text "DELETE ONLY TO SEND DRUG UPDATE MESSAGES" in the DISABLE field (#2) of the PROTOCOL file (#101). To activate the sending of these HL7 messages, the text from the DISABLE field (#2) of the PROTOCOL file (#101) must be deleted and at least one receiving protocol added as a subscriber. The drug data elements included in the HL7 message are defined in the table below.

HL7 Drug Message Segment Definition Table

When the PSS HUI DRUG UPDATE protocol is enabled, the following table defines the data elements sent in each segment of the HL7 drug message.

Segment	Piece	Field Name	HL7 TBL # or Data Type	Description
MSH	1	|	ST	Field Separator
	2	^~\&	ST	Encoding Characters
	3	Pharmacy	No suggested value	Sending Application
	9	MFN	0076	Message Type
MFI	1	50^DRUG^99PSD	0175	Master File ID
	3	UPD	0178	File-Level Event Code
	6	NE	0179	Response Level Code
MFA	1	MUP/MAD	0180	UPDATE/ADD
MFE	1	MUP/MAD	0180	UPDATE/ADD
	4	IEN^DRUG NAME^99PSD		File 50 Entry
ZPA	1	NDC	ST	National Drug Code
	2	LOCAL NON-FORMULARY	CE	If "1" true
	3	INACTIVE DATE	DT	HL7 Format (YYYYMMDD)
	4	APPLICATION PACKAGE USE	ST	Used by what packages
	5	MESSAGE	ST	Info on drug

Segment	Piece	Field Name	HL7 TBL # or Data Type	Description
	6	VA CLASSIFICATION	ST	VA Class
	7	DEA SPECIAL HDLG	ST	How drug is dispense based on DEA codes
	8	FSN	ST	Federal Stock #
	9	WARNING LABEL	ST	Drug Warnings for patient
	10	VISN NON-FORMULAR	CE	If '1' true
ZPB	1	PHARMACY ORDERABLE ITEM	CE	IEN^OI tied to dispense drug^PSD50.7
	2	DOSAGE FORM	ST	IEN^Dosage Form associated with OI^PSD50.606
	3	MEDICATION ROUTE	ST	IEN^Med Route associated with OI^PSD51.2
	4	PSNDF VA PRODUCT NAME ENTRY	CE	IEN^VA PRODUCT NAMES^PSD50.68
	5	DISPENSE UNIT	ST	Dispense Unit for a drug
	6	CMOP DISPENSE	CE	1 or 0
	7	OP EXTERNAL DISPENSE	CE	1 or 0
	8	EXPIRATION DATE	DT	HL7 Format (YYYYMMDD)
	9	LAB TEST MONITOR	CE	IEN^Lab Test^LAB60
ZPC	1	SPECIMEN TYPE	CE	IEN^ SPECIMEN TYPE^LAB61
	2	MONITOR ROUTINE	ST	Program that runs to find lab test and results
	3	LAB MONITOR MARK	CE	If '1' true
	4	STRENGTH	NM	Dose of drug
	5	UNIT	CE	IEN^Unit of measure^PSD50.607
	6	PRICE PER ORDER UNIT	NM	
	7	PRICE PER DISPENSE UNIT	NM	
[{ZPD}]	1	SYNONYM	ST	Trade Name
	2	NDC CODE	ST	National Drug Code
	3	INTENDED USE	CE	CE^INTENTED USE

Segment	Piece	Field Name	HL7 TBL # or Data Type	Description
	4	VSN	ST	Vendor Stock Number
	5	ORDER UNIT	CE	IEN^ABBREVIATION^EXPANSION ^PSD51.5
	6	PRICE PER ORDER UNIT	NM	
	7	DISPENSE UNITS PER ORDER UNIT	NM	
	8	PRICE PER DISPENSE UNIT	NM	
	9	VENDOR	ST	Vendor
[{ZPE}]	1	ACTIVITY LOG	DT	HL7 Format YYYYMMDDHHMM[SS]-ZZZZ
	2	REASON	CE	E^EDIT
	3	INITIATOR OF ACTIVITY	CE	IEN^NEW PERSON^VA200
	4	FIELD EDITED	ST	
	5	NEW VALUE	ST	
	6	NDF UPDATE	ST	
[{ZPF}]	1	DISPENSE UNITS PER DOSE	NM	
	2	DOSE	NM	
	3	PACKAGE	CE	CE^PACKAGE(S)
	4	BCMA UNITS PER DOSE	NM	
[{ZPG}]	1	CLOZAPINE LAB TEST	CE	IEN^LAB TEST^LAB60
	2	MONITOR MAX DAYS	NM	
	3	SPECIMEN TYPE	CE	IEN^ SPECIMEN TYPE^LAB61
	4	TYPE OF TEST	CE	1^WBC or 2^ANC
[{ZPH}]	1	LOCAL POSSIBLE DOSAGE	ST	FREE TEXT
	2	PACKAGE	CE	CE^PACKAGE(S)
	3	BCMA UNITS PER DOSE	NM	

New Protocol

Two new protocols, PSS EXT MFU CLIENT and PSS EXT MFU SERVER, are exported and have been created to generate HL7 messages when new drugs are added to the DRUG file (#50) and existing entries are updated. These protocols can only be activated by setting the following parameters in the OUTPATIENT SITE file (#59):

- AUTOMATED DISPENSE field (#105) needs to be set to **2.4**.
- ENABLE MASTER FILE UPDATE field (#105.2) needs to be set to **YES**.
- LOGICAL LINK field (#2005) needs to be set to **PSO DISP**.
- DISPENSE DNS NAME field (#2006) needs to be set to the dispensing system DNS name (for example, **dispensemachine1.vha.med.va.gov**).
- DISPENSE DNS PORT field (#2007) needs to be set to the dispensing system port number.

Specific Transaction

The Pharmacy/Treatment Encoded Order Message is as follows:

MFN	Master File Notification Message
MSH	Message Header
MFI	Master File Identifier
{MFE	Master File Entry
{{ZPA}	Drug File Information
{RXD}	Pharmacy/Treatment Dispense
{OBR}}	Observation Request
}	

Example:

```
MSH|~^\&|PSS VISTA|521~FO-BIRM.VHA.MED.VA.GOV~DNS|PSS
DISPENSE|~DISPENSE1.VHA.MED.VA.GOV:9300~DNS|20030701||MFN~M01~MFN_M01|10001|P|2.4|||AL|AL
MFI|50~DRUG~99PSD||UPD|||NE
MFE|MUP|||PROPANTHELINE 15MG TAB
ZPA|PROPANTHELINE 15MG TAB|N|LFN~Local Non-Formulary~Pharm Formulary Listing|20031226|Take with
food|DE200|6|P|50~6505-00-960-8383~LPS50|8~NO
ALCOHOL~LPS54|229~Bacitracin~LPSD50.7|3~CAP,ORAL~LPSD50.606|15~IV PUSH~LPSD51.2|3643~ATROPINE SO4
0.4MG TAB~LPSD50.68|OP~OP Dispense~99OP|20030830|9~Rubella~LLAB60|72~Hair of
Scalp~LLAB61|PSOCLO1|N|100|20~MG~LPSD50.607|4.28&USD~UP|15.64&USD~UP|TAB|2|BLUE HOUSE
VENDOR|0010-0501-33|TRADENAME
RXD||||1|||||1|||~P&200&LPSD50.0903||||||||||||O
OBR||||1102~ACETAZOLAMIDE~LLAB60||||||||||70&NECK&LLAB61|||||||||WBC|||7
```

HL7 Drug Message Segment Definition Table

When the PSS EXT MFU SERVER protocol is enabled, the following table defines the data elements sent in each segment of the HL7 drug message.

Segments used in the Master File Update message:

SEGMENT	SEQ#	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	EXAMPLE
MSH	1	1	ST	R			Field Separator	|
	2	4	ST	R			Encoding Characters	~^\&
	3	180	HD	R		0361	Sending Application	PSS VISTA
	4	180	HD	R		0362	Sending Facility – station ID and station DNS name	521~FO-BIRM.MED.VA.GOV~DNS
	5	180	HD	R		0361	Receiving Application	PSS DISPENSE
	6	180	HD	R		0362	Receiving Facility – DNS name and port of dispensing machine	~DISPENSE.VHA.MED.VA.GOV:9300~DNS
	7	26	TS				Date/Time of Message	20040405152416
	9	15	CM	R	0076		Message Type	MFN_M01
	10	20	ST	R			Message Control ID	10001
	11	3	PT	R	0103		Processing ID	P
	12	3	VID	R	0104		Version ID	2.4
	15	2	ID			0155	Accept Ack. Type	AL
	16	2	ID			0155	Application Ack Type	AL
MFI	1	250	CE	R		0175	Master File Identifier	50^DRUG^99PSD
	3	3	ID	R		0178	File-Level Event Code	UPD
	6	2	ID	R		0179	Response Level Code	NE
MFE	1	3	ID	R		0180	Record-Level Event Code	MUP
	4	200	Varies	R			Primary Key Value – MFE	PROPANTHELINE 15MG TAB
ZPA	1	200	Varies	R			Primary Key Value – ZPA	PROPANTHELINE 15MG TAB
	2	1	ID	R		0136	Is Synonym	N
	3	200	CE	R			Formulary Listing	LFN~Local Non-Formulary~Pharm Formulary Listing
	4	10	DT	O			Inactive Date	20031226
	5	200	ST	O			Drug Message	Take with Food
	6	30	ST	O			Drug Classification	DE200
	7	10	ST	O			DEA-Schedule Code	6
	8	1	ST	O			DEA-Drug Type	P
	9	100	CE	R			Stock Number	50~6505-00-960-8383~LPS50
	10	100	CE	O			Warning Label	8~NO ALCOHOL~LPS54

Segments used in the Master File Update message: (continued)

SEGMENT	SEQ#	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	EXAMPLE
	11	100	CE	O			Pharmacy Orderable Item	229~Bacitracin~LPSD50.7
	12	100	CE	O			Dosage Form	3~CAP,ORAL~LPSD50.606
	13	100	CE	O			Medication Route	15~IV PUSH~LPSD51.2
	14	100	CE	O			Drug Name Identifiers	3643~ATROPINE SO4 0.4MG TAB~LPSD50.68
	15	100	CE	O			Dispense Flags	OP~OP Dispense~99OP
	16	15	DT	O			Drug Expiration Date	20030830
	17	100	CE	O			Lab Test Monitor	9~Rubella~LLAB 60
	18	100	CE	O			Specimen Type	72~Hair of Scalp~LLAB61
	19	10	CE	O			Monitor Routine	PSOCLO1
	20	1	ID	O			Lab Monitor Mark	N
	21	50	NM	O			Strength	100
	22	250	CE	R			Unit	20~MG~LPSD50.607
	23	50	CP	R			Price Per Order Unit	4.28&USD~UP
	24	50	CP	R			Price Per Dispense Unit	15.64&USD~UP
	25	25	ST	O			Dispense Unit	TAB
	26	50	NM	O			Dispense Units Per Order Unit	2
	27	50	ST	O			Vendor	BLUE HOUSE VENDOR
	28	12	ST	O			NDC Code	0010-0501-33
	29	25	ST	O			Intended Use	TRADE NAME
RXD	4	20	NM	R			Actual Dispense Amount	1
	8	20	NM	R			Dispense Notes	1
	12	10	CQ	O			Total Daily Dose	~P&200&LPSD50.0903
	24	2	ID	R			Dispense Package Method	O
OBR	4	250	CE	O			Universal Service Identifier	1102~ACETAZOLAMIDE~LLAB 60
	15	300	CM	O			Specimen Source	70&NECK&LLAB61
	24	3	ID	R			Diagnostic Serv Sect ID	WBC
	27	200	TQ	O			Quantity/Timing	7

Notes pertaining to some of the data elements:

[MSH-3] Sending Application is the station ID along with the DNS name of the sending facility.

[MSH-5] Receiving Application is the DNS name and DNS port number of the dispensing application.

[MSH-10] Message Control ID is the number that uniquely identifies the message. It is returned in MSA-2 of the dispense completion message.

[MFI-1] Master File Identifier is hard-coded to 50~DRUG~99PSD.

[MFE-1] Record-Level Event Code can be either MUP for Update or MAD for Add.

[MFE-4] Primary Key Value – MFE is the GENERIC NAME field (#.01) from the DRUG file (#50).

[ZPA-1] Primary Key Value – ZPA will be the generic name of the drug first and then all synonyms will follow in consecutive ZPA segments.

[ZPA-2] Is Synonym is set to Y or N depending on whether the primary key is a synonym.

[ZPA-3] Formulary Listing will contain LFN and/or VISN is the formulary is not to appear on the Local or VISN formulary.

[ZPA-9] Stock Number is the FSN field (#6) from the DRUG file (#50) or the VSN field (#400) from the SYNONYM subfile (#50.1) of the PRESCRIPTION file (#50).

[ZPA-15] Dispense Flags will indicate if this drug may be dispensed to an external interface and if it is marked to be dispensed at a Consolidated Outpatient Pharmacy (CMOP). If both are yes, the answer would be OP~OP Dispense~Pharm dispense^CMOP~CMOP dispense~Pharm dispense flag.

[ZPA-29] Intended User will be TRADE NAME, QUICK CODE, DRUG ACCOUNTABILITY or CONTROLLED SUBSTANCES.

[RXD-4] Actual Dispense Amount is the BCMA UNITS PER DOSE field (#3) from the POSSIBLE DOSAGES file (#50.0903).

[RXD-9] Dispense Notes is the DISPENSE UNITS PER DOSE field (#.01) from the POSSIBLE DOSAGES file (#50.0903).

[RXD-12] Total Daily Dose will be either P for Possible Dosages or LP for Local Possible Dosages.

[OBR-4] Universal Service Identifier is used for Clozapine Lab Test.

[OBR-15] Specimen Source is used for Clozapine Specimen Type.

[OBR-24] Diagnostic Serv Sect ID is used for Clozapine Type of Test.

[OBR-27] Quantity/Timing is used to encode Monitor Max days from the CLOZAPINE LAB TEST file (#50.02).

Data Archiving and Purging

There are no archiving and purging functions necessary with this release of the PDM package.

Callable Routines/Entry Points/Application Program Interfaces (APIs)

APIs, callable routines, and entry points can be viewed by first choosing the *DBA* menu option on FORUM and then choosing the *Integration Agreement*s *Menu* option.
For detailed information on all supported Pharmacy Data Management APIs, see the *Pharmacy Re-Engineering (PRE) Application Program Interface (API) Manual* posted on the VistA Documentation Library (VDL) at http://www.va.gov/vdl/.

Medication Routes

The following paragraphs provide an explanation of medication route information.

If there is one and only one orderable item in the IV order, the Pharmacy Orderable Item file (50.7) will be checked to see if there is a default med route. Additionally, any med route defined for the dosage form of the orderable item will be checked. Duplicate entries will be filtered by inpatient pharmacy. The list of possible med routes sent back to CPRS will include the default med route (if defined), as well as any other med routes defined for the dosage form.

If there is more than one orderable item on the IV order, the Pharmacy Orderable Item file will be checked for each orderable item to see if a default is defined. This default will be pooled with the other possible med routes for each dosage form for each orderable item. Duplicates will be filtered by inpatient pharmacy. Regardless of whether all orderable item defaults match or not, a default med route will not be marked as a default if there is more than one orderable item on the order. The list of possible med routes returned to CPRS will include only those med routes that every orderable item in the order shares in common.

Administration Scheduling

The following rules apply to administration scheduling.

If there is a duplicate schedule, and if one of them contains ward-specific administration times for the ward location of the patient, the schedule returned for inclusion in the array of selectable schedules in CPRS will be the one with the ward-specific administration times.

If no duplicate has ward-specific administration times for the ward location of the patient, the schedule with the lowest IEN number will be returned. If both (or more than one) duplicate schedules have ward-specific administration times for the ward location of the patient, the schedule with the lowest IEN number in the ADMINISTRATION SCHEDULE file #51.1 will be the schedule in the array returned to CPRS.

External Relations

Integration Agreements

IAs can be viewed by first choosing the *DBA* option on FORUM and then the *Integration Agreements Menu* option.

Example: DBA Option

```
Select Primary Menu Option: DBA


Select DBA Option: INTEGration Agreements Menu


Select Integration Agreements Menu Option:  Custodial Package Menu

Select Custodial Package Menu Option:  ACTIVE by Custodial Package
Select PACKAGE NAME: PHARMACY DATA MANAGEMENT     PSS
DEVICE: HOME//
```

Internal Relations

All PDM options can function independently.

Package-Wide Variables

There are no package-wide variables for this version.

Package Requirements

The initial PDM module relies on, at least, the following external packages to run effectively.

Package	Minimum version needed
National Drug File	V. 3.15
Outpatient Pharmacy	V. 6.0
Inpatient Medications	V. 4.5
Kernel	V. 8.0 (plus all patches, particularly XU*8*28)
VA FileMan	V. 21.0 (plus all patches)

The PDM module up to and including the release of PSS*1*68, relies on, at least, the following external packages to run effectively.

Package	Minimum version needed
National Drug File	V. 4.0
Outpatient Pharmacy	V. 7.0
Inpatient Medications	V. 5.0
Kernel	V. 8.0
VA FileMan	V. 22

(This page included for two-sided copying.)

Additional Information

SAC Exemptions

There are no Standards and Conventions (SAC) exemptions for this package.

Cross-Reference Logic To Keep Orderable Items Up To Date

With the introduction of PSS*1*38, a new process for keeping Orderable Items updated was implemented. The process is explained in detail in the section below.

Anytime specific fields are edited, or a pointer to the PHARMACY ORDERABLE ITEM file (#50.7) changes, the Orderable Item (OI) must be updated and sent to CPRS. Two different situations can precipitate these changes. Both situations are explained in detail here.

The first situation occurs when a field is edited that can possibly affect the status of the Orderable Item, but no Orderable Item pointers change. In this situation, the old Orderable Item is the same as the new Orderable Item. In these cases, the kill logic will be the same as the set logic. The kill and set logic will simply pass in the Orderable Item to the routine that checks all IV Additives/IV Solutions/Dispense Drugs matched to the Orderable Item, does all the necessary updates (Inactivation date, Supply flag, Non-formulary, Base, Additive), and then sends the Master File Update to CPRS on that Orderable Item. This type of update occurs when the fields listed below are edited.

File 50: DEA Special Hdlg
File 50: Inactivation Date
File 50: Application Packages' Use
File 50: Local Non-Formulary
File 50.7: Inactivation Date
File 52.6: Inactivation Date
File 52.6: Used in IV Fluid Order Entry
File 52.7: Inactivation Date
File 52.7: Used in IV Fluid Order Entry

The second situation occurs when pointers to the PHARMACY ORDERABLE ITEM file (#50.7) are changed. IV Additives, IV Solutions and the Dispense Drug always point to the same Orderable Item. That Orderable Item is, in turn, pointed to by the IV Additive or IV Solution. So, the fields that may be affected include the Orderable Item pointer in the DRUG file (#50) and the Generic Drug pointer in the IV ADDITIVES file (#52.6) and the IV SOLUTIONS file (#52.7).

File 50: Orderable Item Pointer
File 52.6: Generic Drug Pointer
File 52.7: Generic Drug Pointer

The initial change is to make the Orderable Item pointers in the IV ADDITIVES file (#52.6) and the IV SOLUTIONS file (#52.7) uneditable. The software will now control those pointers.

Scenario 1: The Orderable Item Pointer Is Changed For A Dispense Drug

In Example 1, the Orderable Item pointer is changed for a Dispense Drug. In this case, any Orderable Item pointers must be updated for entries in the IV ADDITIVES file (#52.6) and the IV SOLUTIONS file (#52.7) that point to that Dispense Drug. After these pointers have been updated, the Orderable Item must be updated for the old Orderable Item with what will point to it after the matching. The Orderable Item must also be updated for the new Orderable Item after the matching. And these pharmacy Orderable Item updates must be sent to CPRS as part of the Master File Update. To accomplish this the following steps must be completed.

1. Add a Cross-Reference on the Orderable Item pointer in the DRUG file (#50) that will hard set one Cross-Reference in the ORDERABLE ITEM file (#50.7) and two Cross-References in the DRUG file (#50) as follows.

   Orderable Item: ^PS(50.7,"A50",Orderable Item IEN, Dispense Drug IEN)=""
   Drug file: ^PSDRUG("A526", Dispense Drug IEN, Additive IEN,)=""
   Drug file: ^PSDRUG("A527", Dispense Drug IEN, Solution IEN,)=""

   The Orderable Item Cross-Reference allows access to Dispense Drugs matched to an Orderable Item. The two DRUG file (#50) Cross-References allow access to Solutions and Additives linked to Dispense Drugs. An "A50" Cross-Reference will also be added on the NAME field (# .01) of the PHARMACY ORDERABLE ITEM file (#50.7) containing a "Quit" command for the set and kill logic for documentation purposes only.

   When the Orderable Item pointer of a Dispense Drug changes, only one Cross-Reference is needed on that field to perform the following actions.

- **Kill Logic:** This command performs a hard kill of the "A50" Cross-Reference in the PHARMACY ORDERABLE ITEM file (#50.7) for that Dispense Drug using old value (X) and DA, where X equals the OI IEN and DA equals the Dispense Drug IEN. The two DRUG file (#50) Cross-References will not change.

  After the hard kill is completed, a Master File Update is performed for the old Orderable Item. The logic for all Dispense Drugs/IV Additives/IV Solutions matched to the Orderable item is executed by looping the three Cross-References to find all entries in all three files matched to the Orderable Item. Also in the Kill logic, the Orderable Item pointer is set to null and the Orderable Item pointer Cross-Reference is killed for any IV Additives or IV Solutions matched to the Dispense Drug.

- **Set Logic:** Using the New Value (X), where X equals the OI IEN, the "A50" Cross-Reference is hard set in the PHARMACY ORDERABLE ITEM file (#50.7). The Master File Update is then performed for the new Orderable Item. The logic for all Dispense Drugs/IV Additives/IV Solutions matched to the Orderable Item is executed by looping on the three Cross-References to find all entries in all three files matched to the Orderable Item. The Orderable Item pointer and the Orderable Item pointer Cross-References are

then hard set for all IV Additives and IV Solutions that have been matched to the Dispense Drug with new value (X).

Example 1:

Additives/Solution	**Dispense Drugs:**	**Orderable Item:**
IEN 3 points to =>	IEN 100 points to =>	500
IEN 4 points to =>	IEN 100 points to =>	500
IEN 5 points to =>	IEN 100 points to =>	500
IEN 10 points to =>	IEN 200 points to =>	500

Cross-References are:

^PS(50.7,"A50",500,100)=""
^PS(50.7,"A50",500,200)=""
^PSDRUG("A526",100,3)=""
^PSDRUG("A526",100,4)=""
^PSDRUG("A526",100,5)=""
^PSDRUG("A527",200,10)=""

Orderable Item 500 is pointed to by Dispense Drugs 100 and 200, and by IV Additives 3, 4, and 5, and IV Solution 10.

(If the LOCAL NON-FORMULARY field (#51) in the DRUG file (#50) is edited, the software will obtain the OI pointer 500 and execute the OI logic by looping on 500 in the "A50" Cross-Reference of the PHARMACY ORDERABLE ITEM file (#50.7). As it references each entry, the OI logic is executed by looping on the “A526” and “A527” Cross-references on the DRUG file (#50) before going to the next Orderable Item pointer in the "A50" Cross-reference in the PHARMACY ORDERABLE ITEM file (#50.7). For Example 1 above, the software will find in the first "A50" Cross-Reference for OI 500, Dispense Drug 100. The software will then loop through all the “A526” and “A527” Cross-References in the DRUG file (#50) to find the IV Additives 3, 4 and 5. In the second “A50” Cross-Reference for OI 500, Dispense Drug 200 is identified. The software will again loop through any existing “A526” and “A527” Cross-references in the DRUG file (#50) to find IV Solution 10.

If the Orderable Item pointer for Dispense Drug 100 is edited from 500 to 600, the Cross-Reference in the DRUG file (#50) the following logic will be performed.

- **Kill Logic**

  Kill the Cross-Reference ^PS(50.7,"A50",500,100) using DA and old value (X=500), where DA equals the IEN of the Dispense Drug and X equals the IEN of the Orderable Item

  The Cross-References would now be as follows.

^PS(50.7,"A50",500,200)=""
^PSDRUG("A526",100,3)=""
^PSDRUG("A526",100,4)=""
^PSDRUG("A526",100,5)=""
^PSDRUG("A527",200,10)=""

The ‘A50” and “A527” Cross-references now identify Orderable Item 500 to be pointed to by Dispense Drug 200 and IV Solution 10. The Orderable Item update for OI 500 is then performed for Dispense Drug 200 and IV solution 10.

While still in the Kill logic, the PHARMACY ORDERABLE ITEM field (#15) in the IV ADDITIVES file (#52.6) is set to null for IV Additives 3, 4, and 5. This action results in the deletion of Cross-References on the PHARMACY ORDERABLE ITEM field (#15) of the IV ADDITIVES file (#52.6).

- **Set Logic**

The “A50” Cross-Reference in the PHARMACY ORDERABLE ITEM file (#50.7) for the new Orderable Item 600 is set as follows.

^PS(50.7,"A50",500,200)=""
^PS(50.7,"A50",600,100)=""
^PSDRUG("A526",100,3)=""
^PSDRUG("A526",100,4)=""
^PSDRUG("A526",100,5)=""
^PSDRUG("A527",200,10)=""

The Orderable Item logic is executed on the new OI 600 by looping on the "A50" Cross-Reference, to get the Dispense Drug pointer of 100. The software then loops through any existing “A526” and “A527” Cross-References to get IV Additives 3, 4 and 5.

The value of the PHARMACY ORDERABLE ITEM (#15) field in the IV ADDITIVES file (#52.6) for IV Additives 3, 4, and 5 is set to 600. Existing Cross-References are also set to reflect this change.

Scenario 2: The Dispense Drug Pointer Is Edited For An IV Additive Or IV Solution

If the Dispense Drug is changed for an IV Additive or IV Solution, the Cross-References on the PHARMACY ORDERABLE ITEM field in the IV ADDITIVES file (#52.6) and IV SOLUTION file (#52.7) will perform the following set and kill logic.

- **Kill Logic**

First, the "A526" or "A527" Cross-References in the DRUG file (#50) will be killed. Then, using DA, which is equal to the Orderable Item IEN, the software will get the old Orderable Item pointer value and perform the Orderable Item logic on the old Orderable Item. Subsequently, the value in the PHARMACY ORDERABLE ITEM field for the IV

Additive and/or IV Solution will be set to null and the existing Cross-References on this field will be killed.

- **Set Logic**

First, the "A526" or "A527" Cross-References in the DRUG file (#50) will be set. Then Using X, which is equal to the Dispense Drug IEN, the software will identify the new Orderable Item in the DRUG file (#50) and perform the OI logic on that Orderable Item. The PHARMACY ORDERABLE ITEM field in the IV ADDITIVES file (#52.6) and IV SOLUTION file (#52.7) will be set to the new value and existing Cross-References will be also set.


Users can first check the new Dispense Drug, and if the Orderable Item does not change by rematching the Additive/Solution to the new Dispense Drug, they can choose the QUIT command.

Example 2:

IV Additives/IV Solution		**Dispense Drugs**		**Orderable Item**
IEN 3	points to =>	IEN 100	points to =>	500
IEN 4	points to =>	IEN 100	points to =>	500
IEN 5	points to =>	IEN 100	points to =>	500
IEN 10	points to =>	IEN 200	points to =>	500

Cross-References
^PS(50.7,"A50",500,100)=""
^PS(50.7,"A50",500,200)=""
^PSDRUG("A526",100,3)=""
^PSDRUG("A526",100,4)=""
^PSDRUG("A526",100,5)=""
^PSDRUG("A527",200,10)=""

For example, the USED IN IV FLUID ORDER ENTRY field (#17) in the IV ADDITIVES file (#52.6) for IV Additive 3 could be edited. The Orderable Item that the IV Additive points to in this case, is 500. Both the Kill and Set logic (same logic) for the OI 500 is updated by looping through the "A50" Cross-Reference in the PHARMACY ORDERABLE ITEM file (#50.7), finding each Dispense Drug IEN, and going through the "A526" and "A527" Cross-References in the DRUG file (#50) for that Dispense Drug. This process is then repeated for the next Dispense drug identified in the “A50” Cross-Reference
If the DRUG file (#50) pointer for IV Additive 3 were changed from Dispense Drug 100 to Dispense Drug 900, the Cross-Reference on the Dispense Drug Pointer would be killed.

- **Kill Logic**

Using old value of X, which equals the Dispense Drug 100 and DA, which equals the IV ADDITIVE 3, the software would kill Cross-Reference ^PSDRUG("A526",100,3) with the following Cross-References remaining.

^PS(50.7,"A50",500,100)=""
^PS(50.7,"A50",500,200)=""
^PSDRUG("A526",100,4)=""
^PSDRUG("A526",100,5)=""
^PSDRUG("A527",200,10)=""

Using DA, the software would get the old Orderable Item pointer of 500 and execute the Orderable Item logic for Dispense Drugs 100, IV Additives 4 and 5, Dispense Drug 200, and IV Solution 10.

The value for the PHARMACY ORDERABLE ITEM field (#15) in the IV ADDITIVES file (#52.6) would be set to null and Cross-References on this field would be deleted.

- **Set Logic**

Using new value X, where X equals the Dispense Drug 900, the software would set the new "A526" Cross Reference as ^PSDRUG("A526",900,3)="", The updated Cross-References are as follows

^PS(50.7,"A50",500,100)=""
^PS(50.7,"A50",500,200)=""
^PSDRUG("A526",100,4)=""
^PSDRUG("A526",100,5)=""
^PSDRUG("A526",900,3)=""
^PSDRUG("A527",200,10)=""

Using new value of X, where X equals the Dispense Drug 900, the software gets the Orderable Item pointer for Dispense Drug 900, in this example, Orderable Item 2000. The applicable Cross-References would be the following.

^PS(50.7,"A50",500,100)=""
^PS(50.7,"A50",500,200)=""
^PS(50.7,"A50",2000,900)=""
^PSDRUG("A526",100,4)=""
^PSDRUG("A526",100,5)=""
^PSDRUG("A526",900,3)=""
^PSDRUG("A527",200,10)=""

The software performs the OI update for Orderable Item 2000, with Dispense Drug 900 and IV Additive 3. The PHARAMCY ORDERABLE ITEM field (#15) value in the IV ADDITIVES file (#52.6) is set to 2000. The corresponding Cross-References on this field are also set.

Security Guide

(This page included for two-sided copying.)

Security Management

The PDM package does not contain any VA FileMan security codes except for programmer security (@) on the data dictionaries for the PDM files. Security with respect to standard options in the module is implemented by carefully assigning options to users and by the use of security keys.

Mail Groups and Alerts

No mail groups or alerts are required by PDM.

Remote Systems

PDM does not transmit data to any remote system or facility.

Archiving/Purging

There are no archiving and purging functions necessary with the PDM package.

Contingency Planning

Sites utilizing the PDM package should develop a local contingency plan to be used in the event of product problems in a live environment. The facility contingency plan must identify the procedure for maintaining functionality provided by this package in the event of system outage. Field station Information Security Officers (ISOs) may obtain assistance from their Regional Information Security Officer (RISO).

Interfacing

There are no specialized products embedded within or required by the PDM package.

Electronic Signatures

No electronic signatures are utilized in the PDM package.

(This page included for two-sided copying.)

Menus

The *Pharmacy Data Management* menu that is exported with the initial release of the PDM package is as follows.

**Primary/VA Generic Orderable Item Report*
**VA Generic Orderable Item Report*
**Create Pharmacy Orderable Items*
**Manually Match Dispense Drugs*
**Orderable Item Matching Status*
CMOP Mark/Unmark (Single drug)
    Locked with PSXCMOPMGR
Drug Enter/Edit
    IMPORTANT: Once Pharmacy Data Management is installed, the *Outpatient Drug Enter/Edit* and the *Inpatient Medications Dispense Drug Fields* options will be disabled and the *PDM Drug Enter/Edit* option should be used.
Drug Interaction Management...
    Enter/Edit Local Drug Interaction
    Edit Drug Interaction Severity
Electrolyte File (IV)
Lookup into Dispense Drug File
Med. Route/Instructions Table Maintenance
Medication Instruction File Add/Edit
Orderable Item Management...
    Edit Orderable Items
    Dispense Drug/Orderable Item Maintenance
    Additive/Solutions, Orderable Items
Orderable Item Report
**Primary Drug Edit*
Pharmacy System Parameters Edit
Standard Schedule Edit

* These items are for pre-release only and will be deleted with the installation Outpatient Pharmacy V. 7.0 and Inpatient Medications V. 5.0.

The PDM menu up to and including the release of PSS*1*87 appears below. PSS*1*87 was the last patch to affect a change to the PDM menu.

Dosages ...
Auto Create Dosages
Dosage Form File Enter/Edit
Enter/Edit Dosages
Most Common Dosages Report
Noun/Dosage Form Report
Review Dosages Report
Drug Enter/Edit
Drug Interaction Management ...
Enter/Edit Local Drug Interaction
Report of Locally Entered Interactions
Electrolyte File (IV)
Lookup into Dispense Drug File
Medication Instruction File Add/Edit
Medication Route File Enter/Edit
Orderable Item Management ...
Edit Orderable Items
Dispense Drug/Orderable Item Maintenance
Orderable Item/Dosages Report
Patient Instructions Report
Orderable Item Report
Formulary Information Report
Drug Text Enter/Edit
Drug Text File Report
Pharmacy System Parameters Edit
Standard Schedule Edit
Synonym Enter/Edit
Other Language Translation Setup
Controlled Substances/PKI Reports
DEA Spec Hdlg & CS Fed Sch Discrepancy
Controlled Substances Not Matched to NDF
CS (DRUGS) Inconsistent with DEA Spec Hdlg
CS (Ord. Item) Inconsistent with DEA Spec Hdlg
Send Entire Drug File to External Interface
MK *CMOP Mark/Unmark (Single drug)* 
Warning Builder
Warning Mapping

 Locked: PSXCMOPMGR
Without the PSXCMOPMGR key, the *CMOP Mark/Unmark (Single drug)* option will not appear on your menu.

Other Language Translation Setup [PSS OTHER LANGUAGE SETUP] option is a stand-alone option that must be assigned to the person(s) responsible for maintaining it.

Security Keys

The following keys are assigned through the individual packages. PDM does not export any of these keys.

Package	Keys
Outpatient Pharmacy	PSORPH
Inpatient Medications	PSJU MGR
Inpatient Medications	PSJI MGR
Automatic Replenishment/Ward Stock	PSGWMGR
Drug Accountability/Inventory Interface	PSAMGR
Controlled Substances	PSDMGR
National Drug File	PSNMGR
Consolidated Mail Outpatient Pharmacy	PSXCMOPMGR

(This page included for two-sided copying.)

File Security

Information about all files, including these, can be obtained by using the VA FileMan to generate a list of file attributes.

PDM Files

File Numbers	File Names	DD	RD	WR	DEL	LAYGO
50	DRUG	@				
50.4	DRUG ELECTROLYTES	@				
50.606	DOSAGE FORM	@		@	@	@
50.7	PHARMACY ORDERABLE ITEM	@				
51	MEDICATION INSTRUCTION	@				
51.1	ADMINISTRATION SCHEDULE	@				
51.2	MEDICATION ROUTES	@				
51.5	ORDER UNIT					
51.7	DRUG TEXT	@				
52.6	IV ADDITIVES	@				
52.7	IV SOLUTIONS	@				
54	RX CONSULT					
55	PHARMACY PATIENT (Partial DD)	@	P			
59.7	PHARMACY SYSTEM	^		^	^	^

Non-PDM Files

File Numbers	File Names	DD	RD	WR	DEL	LAYGO
200	NEW PERSON (Partial DD)	#	#	#	#	#
9009032.3	APSP INTERVENTION TYPE					
9009032.4	APSP INTERVENTION					
9009032.5	APSP INTERVENTION RECOMMENDATION					

Please refer to the "Sending Security Codes." section of the Kernel V. 8.0 Systems Manual for more information concerning installation of security codes.

(This page included for two-sided copying.)

References

There are no regulations or directives related to the Pharmacy Data Management package. Additional manuals related to the Pharmacy Data Management package can be found at the VistA Documentation Library (VDL) on the Internet at: http://www.va.gov/vdl/.

(This page included for two-sided copying.)

Glossary

Administration Schedule File
The ADMINISTRATION SCHEDULE file (#51.1) contains administration schedule names and standard dosage administration times. The name is a common abbreviation for an administration schedule (e.g., QID, Q4H, PRN). The administration time is entered in military time.

CPRS
A VistA computer software package called Computerized Patient Record System. CPRS is an application in VistA that allows the user to enter all necessary orders for a patient in different packages from a single application.

Dispense Drug
The Dispense Drug is pulled from DRUG file (#50) and usually has the strength attached to it (e.g., Acetaminophen 325 mg). Usually, the name alone without a strength attached is the Pharmacy Orderable Item name.

Dosage Form File
The DOSAGE FORM file (#50.606) contains all dosage forms and associated data that are used by Pharmacy packages and CPRS. The dosage form is used in SIG construction, default values and in the determination of the type of each dosage created for each application.

Drug Electrolytes File
The DRUG ELECTROLYTES file (#50.4) contains the names of anions/cations, and their cations and concentration units.

Drug File
The DRUG file (#50) holds the information related to each drug that can be used to fill a prescription or medication order. It is pointed to from several other files and should be handled carefully, usually only by special individuals in the Pharmacy Service. Entries are not typically deleted, but rather made inactive by entering an inactive date.

Drug Interaction File	The DRUG INTERACTION file (#56) is used to store DRUG-DRUG interactions. The file is sent out with data pre-populated. The pre-populated data cannot be deleted, data can only be added, or the severity of the national data can be elevated locally.
Drug Text File	The DRUG TEXT file (#51.7) stores rapidly changing drug restrictions, guidelines, and protocols to help assure medications are being used according to defined specifications.
IV Additives File	The IV ADDITIVES file (#52.6) contains drugs that are used as Additives in the IV room. Data entered includes drug generic name, print name, drug information, synonym(s), dispensing units, cost per unit, days for IV order, usual IV schedule, administration times, electrolytes, and quick code information.
IV Solutions File	The IV SOLUTIONS file (#52.7) contains drugs that are used as primary solutions in the IV room. The solution must already exist in the DRUG file (#50) to be selected. Data in this file includes: drug generic name, print name, status, drug information, synonym(s), volume, and electrolytes.
Local Possible Dosages	Local Possible Dosages are free text dosages that are associated with drugs that do not meet all of the criteria for Possible Dosages.

Medication Instruction File

The MEDICATION INSTRUCTION file (#51) is used by Unit Dose and Outpatient Pharmacy. It contains the medication instruction name, expansion and intended use.

Medication Routes File

The MEDICATION ROUTES file (#51.2) contains medication route names. The user can enter an abbreviation for each route to be used at their site. The abbreviation will most likely be the Latin abbreviation for the term.

Medication Routes/Abbreviations

The MEDICATION ROUTES file (#51.2) contains the medication routes and abbreviations, which are selected by each Department of Veterans Affairs Medical Centers (VAMC). The abbreviation cannot be longer than five characters to fit on labels and the Medical Administration Record (MAR). The user can add new routes and abbreviations as appropriate.

National Drug File

The National Drug File provides standardization of the local drug files in all VA medical facilities. Standardization includes the adoption of new drug nomenclature and drug classification and links the local drug file entries to data in the National Drug File. For drugs approved by the Food and Drug Administration (FDA), VA medical facilities have access to information concerning dosage form, strength and unit; package size and type; manufacturer's trade name; and National Drug Code (NDC). The NDF software lays the foundation for sharing prescription information among medical facilities.

Non-Formulary Drugs

Drugs that are not available for use by all providers.

Orderable Item

An Orderable Item is pulled from the PHARMACY ORDERABLE ITEM file (#50.7) and usually has no strength attached to it (e.g., Acetaminophen). The name, with a strength attached, is the Dispense Drug name (e.g., Acetaminophen 325mg).

Orderable Item File

The ORDERABLE ITEM file (#101.43) is a CPRS file that provides the Orderable Items for selection within CPRS. Pharmacy Orderable Items are a subset of this file.

Pending Order	A pending order is one that has been entered by a provider through CPRS without Pharmacy finishing the order. Once Pharmacy has finished (and verified for Unit Dose only) the order, it will become active.
Pharmacy Orderable Item	The Pharmacy Orderable Item is used through CPRS to order Inpatient Medications and Outpatient Pharmacy prescriptions.
Pharmacy Orderable Item File	The PHARMACY ORDERABLE ITEM file (#50.7) contains the Order Entry name for items that can be ordered in the Inpatient Medications and Outpatient Pharmacy packages.
Possible Dosages	Dosages that have a numeric dosage and numeric Dispense Units Per Dose appropriate for administration. For a drug to have possible dosages, it must be a single ingredient product that is matched to VA PRODUCT file (#50.68). The VA PRODUCT file (#50.68) entry must have a numeric strength and the dosage form/unit combination must be such that a numeric strength combined with the unit can be an appropriate dosage selection.
Prompt	A point at which the system questions the user and waits for a response.
Standard Schedule	Standard medication administration schedules are stored in the ADMINISTRATION SCHEDULE file (#51.1).
Units Per Dose	The Units Per Dose is the number of Units (tablets, capsules, etc.) to be dispensed as a dose for an order. Fractional numbers will be accepted.
VA Drug Class Code	A drug classification system used by VA that separates drugs into different categories based upon their characteristics. Some cost reports can be run for VA Drug Class Codes.
VA Product File	The VA PRODUCT file (#50.68) contains a list of available drug products.