



# **OUTPATIENT PHARMACY**

## **TECHNICAL MANUAL/SECURITY GUIDE**

Version 7.0  
December 1997

(Revised November 2010)



## 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
11/10	i, ii, 5-6, 11-14, 16, 30-31, 36	PSO*7*358	Update routine list, security keys, file list, and options for the Bypass/Override functionality and added in the TRICARE Active Duty Release. (S. Spence, PM; Jon Bolas, Tech Writer)
06/10	i, 14, 27, 35, 36	PSO*7*348	Added routines PSORLST & PSORLST2; added options Prescription List for Drug Warnings and List of Patients/Prescriptions for Recall Notice in Output Reports menu; (N. Goyal, PM; E. Phelps, Tech Writer)
10/09	<a href="#">13-14</a>	PSO*7*326	Added routine PSOPATLK. (E. Wright, PM; S. B. Scudder, Tech Writer)
08/09	14	PSO*7*320	Added routines PSORMRX, PSORMRXD, and PSORMRXP. (G. Tucker, PM; S. B. Scudder, Tech Writer)
08/09	9, 34	PSO*7*311	Deleted Pharmacy Patient Non-VA Meds Report/Clean-up menu. (A. Scott, PM; T. Dawson, Tech Writer)
07/09	11, 13-16, 30, 36	PSO*7*289	Added files, routines, and the NDC Validation and ePharmacy Site Parameter options to the list. (M. Anthony, PM; G. O'Connor, S. B. Scudder, Tech Writers)
01/09	13-15, 63	PSO*7*305	Added routine PSOATRFC. Extended the PSOAUTRF security key description. Added the Privacy Notification element to the NTE segment. (G. Tucker, PM; S. B. Scudder, Tech Writer)
08/08	13, 14, 56a-b	PSO*7*225	The following changes are included in this patch. New routines have been added: PSOCAN3N, PSOHLN3, PSOORFI5, PSOORFI6, PSOORFL, PSOORRL3, PSOORRLN, and PSOORRLO. Special Escaping Characters information has been added. (S. Templeton, PM; S. B. Scudder, Tech Writer)
07/08	15	PSO*7*279	Update for the addition of the PSOAUTRF key. (A. Scott, PM; T. Dawson, Tech Writer)
06/08	9, 34	PSO*7*288	Update for the new menu option [Pharmacy Patient Non-VA Meds Report/Clean-up]. (A. Scott, PM, T. Dawson, Tech Writer)

Date	Revised Pages	Patch Number	Description
05/08	13-14	PSO*7*294	Update Routine List with routines PSOQ0076, PSOQ0186, PSOQ0236, PSOQ0496, PSOQ0595, PSOQCF04, PSOQMCAL, PSOQRART, PSOQTIU4, PSOQUAP, PSOQUAP2, and PSOQUTIL. (S. Templeton, PM; S. B. Scudder, Tech Writer)
10/07	i-iv, 13-14, 38-43	PSO*7*260	Updated Routine List with routines PSO260PI, PSOBPSR1, PSOBPSRP, PSOBPSU1, PSOBPSU2, PSONVAVW, PSOPMP0, PSOPMP1, PSOPMPPF, and PSOREJP3. Updated menu listing with new ePharmacy menu options. (S. Spence, PM; S. Krakosky, Tech Writer)
10/07	All	PSO*7*264	Re-numbered pages; removed section heading numbering. Updated Routine List with routines PSOATRD, PSOATRF, PSOATRF1, PSOATRP, PSOATRPP, PSOATRR, and PSORESUS. Updated menu listing with new option. (E. Williamson, PM; S. Krakosky, Tech Writer)

# Implementation and Maintenance

## Resource Requirements

Outpatient Pharmacy V. 7.0 contains approximately 404 routines including all PSO\* routines and compiled templates, PSOX\* and APSPT\* that take up approximately 1.5MB disk space.

Response Time monitor hooks have been placed in the following routines:

<b>Routine</b>	<b>Purpose</b>
PSOR52	File New Prescriptions in File (#52)
PSORN52	File Renewed Prescriptions in File (#52)
PSOR52	File Refill Prescriptions in File (#52)

This package requires 27 files (see “Files” section in this manual). A typical site may require the following disk space:

1 Mbyte	DRUG file (#50) (4000 entries)
3 Mbytes per month	DRUG COST file (#50.9) (800 items dispensed by 200 dispensing physicians)
150 Mbytes	PRESCRIPTION file (#52) (500,000 prescriptions)
50 Mbytes	PHARMACY PATIENT file (#55) (500,000 prescriptions)
About 1 to 2 Mbytes	Routines and the other files (except for RX VERIFY file (#52.4), RX SUSPENSE file (#52.5), and PHARMACY ARCHIVE file (#52.8))
3 to 5 Mbytes of “swing space”	RX VERIFY file (#52.4), RX SUSPENSE file (#52.5), and PHARMACY ARCHIVE file (#52.8)

Outpatient Pharmacy V. 7.0 may be expected to require about 350 Mbytes of disk space. The actual disk utilization will, of course, depend primarily on the size of the 3 large files—PRESCRIPTION file (#52), PHARMACY PATIENT file (#55) and DRUG COST file (#50.9).

The requirements for Video Display Terminals (VDTs) and printers also depend on the number of transactions Outpatient Pharmacy V. 7.0 performs. Approximately three VDTs and one printer are needed for each 500 prescriptions (or fraction of 500) issued each day. If mail-out refills are handled separately, at least one VDT and one printer for each 500 refills are required. An additional VDT and a printer may be desired in the supervisor’s office, and 1 VDT in the office of people who are assigned to consult with patients about their medication regimens.

There are no special device requirements for dot matrix labels except to print barcodes on labels. In this case, the label printer must be able to print barcodes and must be able to be set to a form length of either 4 inches or 24 lines. The section in this document on barcodes provides additional information about this function.

Laser printed labels require one or more specially configured printers. The printer must be able to print to a legal length form and must print barcodes. In addition, the printer must support Hewlett Packard's Printer Control Language (PCL) version 5 or greater.

### Options to be Deleted during Installation

**NOTE:** The options listed below are deleted on the initial installation of Outpatient Pharmacy V. 7.0. No options are deleted after the initial installation, up to patch PSO\*7\*46.

Option Name	Menu Text
PSO DRUG	Drug Enter/Edit
PSO DRUGMENU	Drug/Drug Interaction Functions
PSO HOLDRX	Hold Rx
PSO INTERACTION	Drug Interactions Menu
PSO INTERACTION LOCAL ADD	Enter/Edit Local Drug Interaction
PSO INTERACTION SEVERITY	Edit Drug Interaction Severity
PSO LAB MONITOR	Mark/Unmark Lab Monitor Drugs
PSO NEW	New Prescription Entry
PSO REF	Refill Prescriptions
PSO RXEDIT	Edit Prescriptions
PSO RXHOLD	Hold Features
PSO RXPAR	Partial Prescription
PSO SIGED	Medication Instruction File Add/Edit
PSO UNHOLDRX	Unhold Rx
PSO FACILITY SETUP	Enter Facility Data for Clozapine
PSO MARK DRUG	Mark Clozapine Drug
PSOL UNMARK DRUG	Unmark Clozapine Drug
PSOARCCO	Find
PSOARCHLIST	List One Patient's Archived Rxs
PSOARCIN	Tape Retrieval
PSOARCPURGE	Purge
PSOARCSV	Save

# Files

This package requires the 27 files listed below. Information about the files can be obtained by using the VA FileMan to generate a list of file attributes.

The Data Dictionaries (DDs) are considered part of the online documentation for this software application. Use the VA FileMan *List File Attributes* [DILIST] option, under the *Data Dictionary Utilities* [DI DDU] option, to print the DDs. The following are the files for which DDs should be printed:

## Outpatient Pharmacy Files

FILE #	NAME	UP DATE DD	SEND SEC. CODE	DATA COMES W/FILE	SITE DATA	RSLV PTS	USER OVER RIDE
50.073	DUE QUESTIONNAIRE	YES	YES	NO			
50.0731	DUE ANSWER SHEET	YES	YES	NO			
50.0732	DUE QUESTION	YES	YES	NO			
50.0733	DUE SECTION	YES	YES	NO			
50.9	DRUG COST	YES	YES	NO			
52	PRESCRIPTION	YES	YES	NO			
52.11	PATIENT NOTIFICATION (Rx READY)	YES	YES	NO			
52.4	RX VERIFY	YES	YES	NO			
52.41	PENDING OUTPATIENT ORDERS	YES	YES	NO			
52.43	PRESCRIPTION REFILL REQUEST	YES	YES	NO			
52.5	RX SUSPENSE	YES	YES	NO			
52.51	PHARMACY EXTERNAL INTERFACE	YES	NO	NO			
52.52	CLOZAPINE PRESCRIPTION OVERRIDES	YES	YES	NO			
52.8	PHARMACY ARCHIVE	YES	YES	NO			
52.86	EPHARMACY SITE PARAMETERS	YES	YES	NO			
52.87	PSO TRICARE AUDIT LOG	YES	YES	NO			
52.9	PHARMACY PRINTED QUEUE	YES	YES	NO			
52.86	EPHARMACY SITE PARAMETERS	YES	YES	NO			
52.91	TPB ELIGIBILITY	YES	NO	NO			
52.92	TPB INSTITUTION LETTERS	YES	YES	NO			
53	RX PATIENT STATUS	YES	YES	NO			
59	OUTPATIENT SITE	YES	YES	NO			

FILE #	NAME	UP DATE DD	SEND SEC. CODE	DATA COMES W/FILE	SITE DATA	RSLV PTS	USER OVER RIDE
59.1	OUTPATIENT AMIS DATA	YES	YES	NO			
59.12	OUTPATIENT PHARMACY MANAGEMENT DATA	YES	YES	NO			
59.2	WAITING TIME	YES	YES	NO			
59.3	GROUP DISPLAY	YES	NO	NO			
59.8	OUTPATIENT CLINIC SORT GROUP	YES	YES	NO			

The namespace for the Outpatient Pharmacy V. 7.0 package is PSO.





PSOQCF04	PSOQMCAL	PSOQRART	PSOQTIU4	PSOQUAP	PSOQUAP2	PSOQUTIL	PSOR52
PSORDS	PSOREF	PSOREF0	PSOREF1	PSOREF2	PSOREJP0	PSOREJP1	PSOREJP2
PSOREJP3	PSOREJP4	PSOREJU1	PSOREJU2	PSOREJU3	PSOREJU4	PSOREJUT	PSORELD1
PSORELDT	PSORENW	PSORENW0	PSORENW1	PSORENW2	PSORENW3	PSORENW4	PSORESK
PSORESK1	PSORESUS	PSORFL	PSORLST	PSORLST2	PSORMRX	PSORMRXD	PSORMRXP
PSORN52	PSORN52A	PSORN52C	PSORN52D	PSORPTS	PSORPTS1	PSORX1	PSORXCLE
PSORXDL	PSORXED	PSORXED1	PSORXEDT	PSORXI	PSORXL	PSORXL1	PSORXLAB
PSORXPA1	PSORXPR	PSORXPR1	PSORXRP1	PSORXRP2	PSORXRPT	PSORXVW	PSORXVW1
PSORXVW2	PSOSD	PSOSD0	PSOSD1	PSOSD2	PSOSD3	PSOSDP	PSOSIG
PSOSIGCX	PSOSIGDS	PSOSIGMX	PSOSIGNO	PSOSIGTX	PSOSITED	PSOSPSIG	PSOSTART
PSOSUBCH	PSOSUCH1	PSOSUCHG	PSOSUCLE	PSOSUDCN	PSOSUDEL	PSOSUDP1	PSOSUDP2
PSOSUDPR	PSOSUINV	PSOSULB1	PSOSULBL	PSOSULOG	PSOSUP	PSOSUPAT	PSOSUPOE
PSOSUPRX	PSOSUSTR	PSOSUSRP	PSOSUTL	PSOSUTL1	PSOTALK	PSOTALK1	PSOTALK2
PSOTALK3	PSOTPCAN	PSOTPCEE	PSOTPCL	PSOTPCLP	PSOTPCLR	PSOTPCLW	PSOTPCRP
PSOTPCR1	PSOTPCUL	PSOTPENV	PSOTPHL1	PSOTPHL2	PSOTPPPOS	PSOTPPRE	PSOTPPRV
PSOTPRX1	PSOTRI	PSOTRLBL	PSOUTIL	PSOUTL	PSOUTLA	PSOUTLA1	PSOVCNT
PSOVDF1	PSOVDF2	PSOVDF3	PSOVDFK	PSOVER	PSOVER1	PSOVER2	PSOVERC

# Exported Options

## Menu Assignments

Unless menus have already been assigned, the *Outpatient Pharmacy Manager* [PSO MANAGER] menu should be assigned to the Package Coordinator for Outpatient Pharmacy. It should also be added to the menu of the Site Manager and any ADP/IRMS staff that the Package Coordinator selects to help in the operation of Outpatient Pharmacy. The *Pharmacist Menu* [PSO USER1] option should be assigned to all pharmacists and the *Pharmacy Technician's Menu* [PSO USER2] option should be assigned to all pharmacy technicians and other pharmacy personnel who may view prescriptions and/or inquire into other Outpatient Pharmacy V. 7.0 files.

## Security Keys

PROVIDER	Holders of this key will be prompted for ICD-9 Diagnosis code entry.
PSORPH	This key is required to use all of the Outpatient Pharmacy V. 7.0 options. It should be assigned to all pharmacists, the package coordinator, and all appropriate members of the ADP/IRMS staff.
PSO COPAY	This key is used to identify users to notify when a copay exemption cannot be determined at the time a prescription fill is released. Holders of this key are also notified any time the <i>Exempt Rx Patient Status from Copayment</i> [PSOCP EXEMPTION] option is used to change the copay exemption for an Rx Patient Status.
PSO REJECTS BACKGROUND MESSAGE	When prescriptions remain on the Third Party Payer Reject - Worklist over the specified number of days, the system will send a Mailman Message to holders of this key.
PSOA PURGE	<b>NOTE:</b> <i>Disabled until further notice.</i> This key should be assigned to the package coordinator and/or any person who will be responsible for archiving prescriptions.
PSOLOCKCLOZ	This key is used to override the lockouts in the Clozapine options. All members of the Clozapine treatment team must be entered as users on the system and must be given this key. All pharmacists who have the ability to override the lockouts in this option must also hold this key. The Pharmacy Service representative of the Clozapine treatment team should identify these pharmacists.

PSOINTERFACE	This key is used to access the <i>External Interface Menu</i> [PSO EXTERNAL INTERFACE] option.
PSOAUTRF	This key allows the use of the Automate Internet Refill functionality and the Automate CPRS Refill functionality.
PSO TRICARE	This key is required to be able to do an override on TRICARE prescription.
PSO TRICARE MGR	This key is required to access the <i>TRICARE Bypass/Override Report</i> [PSO TRICARE OVERRIDE REPORT] option

### Package Security

Electronic signatures may be established by using the *Electronic Signature code Edit* [XUSESIG] option.

In Kernel V. 8.0 the *Electronic Signature code Edit* [XUSESIG] option has been tied to the Common Options, under the *User's Toolbox* [XUSERTOOLS] submenu, for easy access by all users.

# Software Product Security

## Mail Group Setup for the HL7 External Interface

A mail group and device should be set up in order to run the HL7 external interface. The recommended name of the mail group is PSO HLGROUP1. The recommended device name is PSO HLDEVICE1.

## Archiving/Purging

For archiving and purging information, see the section titled “Archiving and Purging” in this manual.

## Interfacing

For interface information, see the section titled “External Interfaces” in this manual.

## Electronic Signatures

Electronic signatures may be established by using the *Electronic Signature code Edit* [XUSESIG] option. In Kernel V. 8.0 the *Electronic Signature code Edit* [XUSESIG] option has been tied to the Common Options, under the *User’s Toolbox* [XUSERTOOLS] submenu, for easy access by all users.

## Menu Assignments

The *Outpatient Pharmacy Manager* [PSO MANAGER] menu should be assigned to the Package Coordinator for Outpatient Pharmacy and also added to the menu of the Site Manager and any ADP/IRMS staff that s/he selects to help in the operation of Outpatient Pharmacy. The *Pharmacist Menu* [PSO USER1] option should be assigned to all pharmacists and the *Pharmacy Technician’s Menu* [PSO USER2] option should be assigned to all pharmacy technicians and other pharmacy personnel who may view prescriptions and/or inquire into other Outpatient Pharmacy files.

## Security Keys

PSORPH	This key should be assigned to all pharmacists, the package coordinator, and all appropriate members of the ADP/IRMS staff.
PSO COPAY	This key should be assigned to any users who need to be notified when a copay exemption cannot be determined at the time a prescription fill is released. Holders of this key are also notified any time the <i>Exempt Rx Patient Status from Copayment</i> [PSOCP EXEMPTION] option is used to change the copay exemption for an Rx Patient Status.
PSO REJECTS BACKGROUND MESSAGE	When prescriptions remain on the Third Party Payer Reject - Worklist over the specified number of days, the system will send a Mailman Message to holders of this key.
PSOA PURGE	<i>NOTE: Disabled until further notice.</i> This key should be assigned to the package coordinator and/or any person who will be responsible for archiving prescriptions.
PSOLOCKCLOZ	This key is used to override the lockouts in the Clozapine option. All members of the Clozapine treatment team must be entered as users on the system and must be given this key. All pharmacists who have the ability to override the lockouts in this option must also hold this key. The Pharmacy Service representative of the Clozapine treatment team should identify these pharmacists.
PSOINTERFACE	This key is used to access the <i>External Interface Menu</i> [PSO EXTERNAL INTERFACE] option.
PSO TRICARE	This key should be assigned to a pharmacist in order to perform an Override and electronically sign a prescription for a TRICARE patient.
PSO TRICARE MGR	This key is required to access the <i>TRICARE Bypass/Override Report</i> [PSO TRICARE OVERRIDE REPORT] option.

## File Security

This package requires 24 files in addition to those of the Kernel and other files to which it points, for example the PATIENT file (#2). Information about all files, including these can be obtained by using the VA FileMan to generate a list of file attributes.

File Numbers	File Names	DD	RD	WR	DEL	LAYGO
50.073	DUE QUESTIONNAIRE					
50.0731	DUE ANSWER SHEET					
50.0732	DUE QUESTION					
50.0733	DUE SECTION					
50.9	DRUG COST					
52	PRESCRIPTION					
52.11	PATIENT NOTIFICATION (Rx READY)					
52.4	RX VERIFY	@	@	@	@	@
52.41	PENDING OUTPATIENT ORDERS			@		
52.43	PRESCRIPTION REFILL REQUEST	@	Pp	@	@	@
52.5	RX SUSPENSE				#	
52.51	PHARMACY EXTERNAL INTERFACE	@	@	@	@	@
52.52	CLOZAPINE PRESCRIPTION OVERRIDES	@	@	@	@	@
52.8	PHARMACY ARCHIVE					
52.86	EPHARMACY SITE PARAMETERS	@	Pp	@	@	@
52.87	PSO TRICARE AUDIT LOG	@	Pp	@	@	@
52.9	PHARMACY PRINTED QUEUE					
52.91	TPB ELIGIBILITY	@				
52.92	TPB INSTITUTION LETTERS	@				
53	RX PATIENT STATUS					
59	OUTPATIENT SITE					
59.1	OUTPATIENT AMIS DATA	@		@	@	@
59.12	OUTPATIENT PHARMACY MANAGEMENT DATA	@		@	@	@
59.2	WAITING TIME	@	@	@	@	@
59.3	GROUP DISPLAY	@	@	@	@	@
59.8	OUTPATIENT CLINIC SORT GROUP					

Please refer to Chapter 28 of Kernel V. 8.0 Systems Manual concerning installation of security codes sections entitled "Sending Security Codes."

*(This page included for two-sided copying.)*



## **Output Reports ...**

- Action Profile (132 COLUMN PRINTOUT)
- Alpha Drug List and Synonyms
- AMIS Report
- Bad Address Reporting Main Menu ...
  - Bad Address Suspended List
  - List Prescriptions Not Mailed
- CMOP Controlled Substance Rxs Dispense Report
- Commonly Dispensed Drugs
- Cost Analysis Reports ...
  - Clinic Costs
  - Division Costs by Drug
  - Drug Costs
  - Drug Costs by Division
  - Drug Costs by Division by Provider
  - Drug Costs by Provider
  - High Cost Rx Report
  - Patient Status Costs
  - Pharmacy Cost Statistics Menu ...
    - Pharmacy Statistics
    - Sort Statistics By Division
  - Provider by Drug Costs
  - Provider Costs
  - Request Statistics
- Daily AMIS Report
- Drug List By Synonym
- Free Text Dosage Report
- Inactive Drug List
- Internet Refill Report
- List of Patients/Prescriptions for Recall Notice
- List Prescriptions on Hold
- Management Reports Menu ...
  - Daily Management Report Menu ...
    - All Reports
    - Cost of Prescriptions
    - Count of Prescriptions
    - Intravenous Admixture
    - Type of Prescriptions Filled
  - Date Range Recompile Data
  - Initialize Daily Compile
  - Monthly Management Report Menu ...
    - All Reports
    - Cost of Prescriptions
    - Count of Prescriptions
    - Intravenous Admixture
    - Type of Prescriptions Filled
  - One Day Recompile Data

- Purge Data
- Medication Profile
- Monthly Drug Cost
- Narcotic Prescription List
- Non-Formulary List
- Non-VA Meds Usage Report
- Poly Pharmacy Report
- Prescription List for Drug Warnings
- Released and Unreleased Prescription Report

**Pharmacy Intervention Menu ...**

- Enter Pharmacy Intervention
- Edit Pharmacy Intervention
- Print Pharmacy Intervention
- Delete Intervention
- View Intervention

**Process Drug/Drug Interactions**

**Release Medication**

**Return Medication to Stock**

**Rx (Prescriptions) ...**

- Patient Prescription Processing
- Barcode Rx Menu ...
  - Barcode Batch Prescription Entry
  - Check Quality of Barcode
  - Process Internet Refills
- Complete Orders from OERR
- Discontinue Prescription(s)
- Edit Prescriptions
- ePharmacy Menu ...
  - Ignored Rejects Report
  - ePharmacy Medication Profile (View Only)
  - ePharmacy Medication Profile Division Preferences
  - Third Party Payer Rejects - View/Process
  - Third Party Payer Rejects – Worklist
  - NDC Validation
  - ePharmacy Site Parameters
  - TRICARE Bypass/Override Report
- List One Patient's Archived Rx's
- Manual Print of Multi-Rx Forms
- Reprint an Outpatient Rx Label
- Signature Log Reprint
- View Prescription