Outpatient Pharmacy (PSO)

ePharmacy

Technical Manual/Security Guide

Version 7.0

December 1997

<mark>**(November 2013)**</mark>

Department of Veterans Affairs
Product Support

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
11/13	Cover, Cover back, i-iii, v, 5, 13-14, 16, 30	PSO*7*421	Changed graphic from VA Seal to VistA logo; changed layout for cover page. Update other front matter including TOC, revision history, etc. Update routine count. Add new routines: PSO7P421, PSOBPSSL Add PSO EPHARMACY SITE MANAGER to security keys (added twice to document). (S. Spence/S. Taubenfeld, PM; K. McGarghan, Tech Writer)
05/13	i- iii, 13-14, 16	PSO*7*391	Added new routine PSOPKIV2 to the list of routines. PSDRPH key added to Security key section. (N. Goyal, PM; J. Owczarzak, Tech Writer)
01/13	i-ii 9 13-14 33-34 & 38-39 53-54	PSO*7*390	Update Revision History Added option Automate Internet Refill that was missed in the manual for PSO*7*264 Add new routines: PSODGAL2, PSODDPR7, PSODDPR8 Add menu option; Check Drug Interaction Added BSA & CrCL to the Glossary (G. Tucker, PM; S. Heiress, Tech Writer)
09/12	i, 15, 30	PSO*7*386	Added description of patch's new security key PSO TECH ADV and modifications to the HOLD/UNHOLD functionality. (N. Goyal, PM; J. Owczarzak, Tech Writer)
03/12	i, 13-14, 60, 60a-60b, 63	PSO*7*367	Added routine PSOFDAUT. Updated NTE Segment listing. (N. Goyal, PM; B. Thomas, Tech Writer)
03/12	i, 9, 11, 31, 34, 69, 70, 71	PSO*7*354	Added new menu option Enter/Edit Automated Dispensing Devices Updated list of files with file 52.53 Added file 52.53 to file security section Added new menu option Enter/Edit Automated Dispensing Devices Added RXD-13 Dispense-To location (N. Goyal, PM; J. Owczarzak, Tech Writer)

Date	Revised Pages	Patch Number	Description
02/12	i-vi, 11 16, 30-31	PSO*7*385	Removed "TRICARE" from file 52.87 name
			Changed name of PSO TRICARE and PSO TRICARE MGR security keys to PSO TRICARE/CHAMPVA and PSO TRICARE/CHAMPVA MGR respectively.
	36, 38-39		
			Updated ePharmacy Menu with correct menu items
	58, 60, 63-64		
			Added Advanced Beneficiary Notice Code for ePharmacy Rx in Appendix A references (S. Spence, PM; B. Tomlin, Tech Writer)
02/12	i, ii, 9, 11, 31, 34, 69, 70, 71	PSO*7*354	Updated list of files with file 52.53 (N. Goyal, PM; J. Owczarzak, Tech Writer)
09/11	i, ii, 5, 13-14	PSO*7*382	Added routine PSOMPHRC. (N. Goyal, PM; J. Owczarzak, Tech Writer)
04/11	i-ii, 13-14	PSO*7*343	Added routine PSOFDAMG. (T. Leggett, PM; B. Thomas, Tech Writer)
04/11	i, 13-14	PSO*7*316	Removed routine PSOQUAP. Documentation released with PSO*7*343. (G. Pickwood, DM; D. Dertien, Tech Writer)
04/11	i-iv 11 13-14	PSO*7*251	Updated the Table of Contents. Change the number of files from 24 to 26. Added the following routines per Bill Tatum, developer for PRE: PSO251PO, PSOCPPRE, PSODDPR1, PSODDPR2, PSODDPR3, PSODDPR4, PSODDPR5, PSODDPRE, PSODGAL1, PSODGDGP, PSODOSCL, PSODOSUN, PSODOSUT, PSOORROC, PSODOSU2, PSOVRPT.
	19		Added information under Callable Routines section. And Removed links and added references under the External Interfaces. Updated the External Relations table
	23		Change the number of files from 24 to 26.
	31		Changed menu item Process Drug/Drug Interactions to Process Order Checks.
	36 & 38		Removed heading and information under Routine Mapping.
	40		(B. Tatum, Developer, M. Colyvas & S. Heiress, Tech Writer)
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	13-14	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)

Date	Revised Pages	Patch Number	Description
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, PSOHLSN3, 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)
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)

(This page included for two-sided copying.)

Table of Contents

Implementation and Maintenance

Resource Requirements

Outpatient Pharmacy V. 7.0 contains approximately 527 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:

Routine	Purpose
PSON52	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 three 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.

Routine List

The following routine list for Outpatient Pharmacy appears when the new routine set is loaded. Each routine's first line contains a brief description of the routine's function. Use the First Line Routine Print [XU FIRST LINE PRINT] option to print a list of just the first line of each PSO* routine.

PSO146PS	PSO153PS	PSO251PO	PSO260PI	PSO5241	PSO5252	PSO525AP	PSO5291
PSO52API	PSO52B	PSO52EX	PSO53	PSO55FX2	PSO55FX3	PSO59	PSO7P421
PSOADDR	PSOAMIS	PSOAMIS0	PSOAMIS1	PSOARC	PSOARCCO	PSOARCCV	PSOARCDE
PSOARCF1	PSOARCF2	PSOARCF3	PSOARCF4	PSOARCF5	PSOARCF6	PSOARCIN	PSOARCLT
PSOARCR1	PSOARCR2	PSOARCRR	PSOARCS2	PSOARCSV	PSOARCTG	PSOARCTP	PSOARX
PSOARX1	PSOATRD	PSOATRF	PSOATRF1	PSOATRFC	PSOATRP	PSOATRPP	PSOATRR
PSOAUTOC	PSOB	PSOBAI	PSOBAIR2	PSOBAIRP	PSOBARV	PSOBBC	PSOBGMG1
PSOBGMG2	PSOBGMG3	PSOBGMGR	PSOBING1	PSOBINGO	PSOBKDE1	PSOBKDED	PSOBMST
PSOBORP0	PSOBORP1	PSOBORP2	PSOBORP3	PSOBPSR1	PSOBPSRP	PSOBPSSL	PSOBPSSP
PSOBPSU1	PSOBPSU2	PSOBPSUT	PSOBRPRT	PSOBSET	PSOBSET1	PSOBUILD	PSOCAN
PSOCAN1	PSOCAN2	PSOCAN3	PSOCAN3N	PSOCAN4	PSOCLERK	PSOCLO1	PSOCLOLS
PSOCLPRE	PSOCLUTL	PSOCMOP	PSOCMOPA	PSOCMOPB	PSOCMOPC	PSOCMOPR	PSOCOPAY
PSOCOST	PSOCOSTP	PSOCP	PSOCP1	PSOCPA	PSOCPB	PSOCPBA2	PSOCPBAK
PSOCPC	PSOCPD	PSOCPDUP	PSOCPE	PSOCPIB	PSOCPPRE	PSOCPTRH	PSOCPTRI
PSOCPVW	PSOCSRL	PSOCST	PSOCST10	PSOCST11	PSOCST12	PSOCST2	PSOCST3
PSOCST4	PSOCST5	PSOCST6	PSOCST7	PSOCST8	PSOCST9	PSOCSTD	PSOCSTM
PSOCSTX	PSODACT	PSODAWUT	PSODDPR1	PSODDPR2	PSODDPR3	PSODDPR4	PSODDPR5
PSODDPR7	PSODDPR8	PSODDPRE	PSODEA	PSODEDT	PSODELI	PSODEM	PSODGAL
PSODGAL1	PSODGAL2	PSODGDG1	PSODGDG2	PSODGDGI	PSODGDGP	PSODGNVI	PSODI
PSODIAG	PSODIR	PSODIR1	PSODIR2	PSODIR3	PSODISP	PSODISP1	PSODISP2
PSODISP3	PSODISPS	PSODIV	PSODLKP	PSODOSCL	PSODOSU2	PSODOSUN	PSODOSUT
PSODP	PSODPT	PSODRDU1	PSODRDU2	PSODRDUP	PSODRG	PSODRGN	PSODSPL
PSODSRC	PSODUE	PSOELPST	PSOEXBCH	PSOEXDT	PSOEXREF	PSOEXRST	PSOFDAMG
PSOFDAUT	PSOFSIG	PSOFTDR	PSOFUNC	PSOHCPRS	PSOHCSUM	PSOHDR	PSOHELP
PSOHELP1	PSOHELP2	PSOHELP3	PSOHELP4	PSOHLD	PSOHLDA	PSOHLDC	PSOHLDIS
PSOHLDS	PSOHLDS1	PSOHLDS2	PSOHLDS3	PSOHLDS4	PSOHLEXC	PSOHLEXP	PSOHLINC
PSOHLINL	PSOHLNE1	PSOHLNE2	PSOHLNE3	PSOHLNE4	PSOHLNEW	PSOHLPII	PSOHLPIS
PSOHLSG	PSOHLSG1	PSOHLSG2	PSOHLSG3	PSOHLSG4	PSOHLSG5	PSOHLSIG	PSOHLSIH
PSOHLSN	PSOHLSN1	PSOHLSN2	PSOHLSN3	PSOHLSNC	PSOHLUP	PSOHLUP1	PSOLAB
PSOLBL	PSOLBL1	PSOLBL2	PSOLBL3	PSOLBL4	PSOLBLD	PSOLBLD1	PSOLBLN
PSOLBLN1	PSOLBLN2	PSOLBLS	PSOLBLT	PSOLLL1	PSOLLL2	PSOLLL3	PSOLLL4
PSOLLL5	PSOLLL6	PSOLLL7	PSOLLL8	PSOLLL9	PSOLLLH	PSOLLLHN	PSOLLLI
PSOLLLW	PSOLLU1	PSOLLU2	PSOLLU3	PSOLLU4	PSOLMAL	PSOLMAO	PSOLMDA
PSOLMLST	PSOLMPAT	PSOLMPF	PSOLMPI	PSOLMPO	PSOLMPO1	PSOLMPO2	PSOLMRN
PSOLMUTL	PSOLSET	PSOMAUEX	PSOMGCM1	PSOMGCOM	PSOMGM31	PSOMGMN1	PSOMGMN2
PSOMGMN3	PSOMGMN4	PSOMGMRP	PSOMGR31	PSOMGREP	PSOMGRP1	PSOMGRP2	PSOMGRP3
PSOMGRP4	PSOMHV1	PSOMLLD2	PSOMLLDT	PSON52	PSONCPDP	PSONDCUT	PSONDCV
PSONEW3	PSONEW	PSONEW1	PSONEW2	PSONEWF	PSONEWG	PSONFI	PSONGR
PSONRXN	PSONTEG	PSONTEG0	PSONVAR1	PSONVARP	PSONVAVW	PSONVNEW	PSOORAL
PSOORAL1	PSOORAL2	PSOORAPI	PSOORCPY	PSOORDA	PSOORDER	PSOORDRG	PSOORED1
PSOORED2	PSOORED3	PSOORED4	PSOORED5	PSOORED6	PSOORED7	PSOOREDT	PSOORFI1
PSOORFI2	PSOORFI3	PSOORFI4	PSOORFI5	PSOORFI6	PSOORFIN	PSOORFL	PSOORNE1
PSOORNE2	PSOORNE3	PSOORNE4	PSOORNE5	PSOORNE6	PSOORNEW	PSOORNW1	PSOORNW2
PSOORRD2	PSOORRDI	PSOORRL	PSOORRL1	PSOORRL3	PSOORRLN	PSOORRLO	PSOORRNW
PSOORROC	PSOORUT1	PSOORUT2	PSOORUT3	PSOORUTL	PSOP	PSOP1	PSOP2
PSOPAT	PSOPATLK	PSOPFSU0	PSOPFSU1	PSOPKIV1	PSOPMP0	PSOPMP1	PSOPMPPF

PSOPOLY	PSOPOST	PSOPOST1	PSOPOST2	PSOPOST3	PSOPOST4	PSOPOST5	PSOPOST6
PSOPOST7	PSOPOST8	PSOPRA	PSOPRF	PSOPRFSS	PSOPRI	PSOPRVW	PSOPST68
PSOPTPST	PSOQ0076	PSOQ0186	PSOQ0236	PSOQ0496	PSOQ0595	PSOQCF04	PSOQMCAL
PSOQRART	PSOQTIU4	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	PSOSURST	PSOSUSTR
PSOSUSRP	PSOSUTL	PSOSUTL1	PSOTALK	PSOTALK1	PSOTALK2	PSOTALK3	PSOTPCAN
PSOTPCEE	PSOTPCL	PSOTPCLP	PSOTPCLR	PSOTPCLW	PSOTPCRP	PSOTPCRX	PSOTPCUL
PSOTPENV	PSOTPHL1	PSOTPHL2	PSOTPPOS	PSOTPPRE	PSOTPPRV	PSOTPRX1	PSOTRI
PSOTRLBL	PSOUTIL	PSOUTL	PSOUTLA	PSOUTLA1	PSOVCNT	PSOVDF1	PSOVDF2
PSOVDF3	PSOVDFK	PSOVER	PSOVER1	PSOVER2	PSOVERC	PSOVRPT	

PSOINTERFACE   This key is used to access the *External Interface Menu* [PSO EXTERNAL INTERFACE] option.

PSOAUTRF   This key allows the use of the Automate Internet Refill functionality and the Automate CPRS Refill functionality.

PSO TRICARE/CHAMPVA
                     This key is required to be able to do an override on TRICARE or CHAMPVA prescription.

PSO TRICARE/CHAMPVA MGR
                     This key is required to access the *TRICARE CHAMPVA Bypass/Override Report* [PSO TRI CVA OVERRIDE REPORT] option

PSO EPHARMACY SITE MANAGER
                     This key is required to access the *PSO ePharmacy Site Parameters* [PSO ePHARM SITE PARAMETERS] 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.

Security Keys

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 TECH ADV   This security key is used by pharmacy technicians to HOLD and
                            UNHOLD prescriptions using a subset of the HOLD reasons available to
                            PSORPH key holders.

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 *Exempt Rx
                            Patient Status from Copayment* [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   *NOTE: Disabled until further notice.* 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 *External Interface Menu* [PSO
                            EXTERNAL INTERFACE] option.

PSO TRICARE/CHAMPVA
                            This key should be assigned to a pharmacist in order to perform an
                            Override and electronically sign a prescription for a TRICARE or
                            CHAMPVA patient.

PSO TRICARE/CHAMPVA MGR
                            This key is required to access the *TRICARE CHAMPVA Bypass/Override
                            Report* [PSO TRI CVA OVERRIDE REPORT] option.

PSO EPHARMACY SITE MANAGER
This key is required to access the *PSO ePharmacy Site Parameters* [PSO ePHARM SITE
                            PARAMETERS] option