

# **OUTPATIENT PHARMACY**

## **TECHNICAL MANUAL/SECURITY GUIDE**

Version 7.0 December 1997

(Revised February 2012)

Department of Veterans Affairs — Product 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
02/12	i-vi, <u>11</u>	PSO*7*385	Removed "TRICARE" from file 52.87 name
	<u>16, 30-31</u>		Changed name of PSO TRICARE and PSO TRICARE MGR security keys to PSO TRICARE/CHAMPVA and PSO TRICARE/CHAMPVA MGR respectively.
			Updated ePharmacy Menu with correct menu items
	<u>36</u> , <u>38-39</u>		Added Advanced Beneficiary Notice Code for ePharmacy Rx in Appendix A references
	<u>58, 60, 63-</u> <u>64</u>		
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-	PSO*7*382	Added routine PSOMPHRC.
	14		(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)

Date	Revised Pages	Patch Number	Description
04/11	i-iv	PSO*7*251	Updated the Table of Contents.
	11		Change the number of files from 24 to 26.
	13-14		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.
	23		Updated the External Relations table
	31		Change the number of files from 24 to 26.
	36 & 38		Changed menu item Process Drug/Drug Interactions to Process Order Checks.
	40		Removed heading and information under Routine Mapping.
			(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)
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)

Date	Revised Pages	Patch Number	Description
08/08	13, 14,	PSO*7*225	The following changes are included in this patch.
	56a-b		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**

Introduction	1
Orientation	3
Online Documentation	3
Related Manuals	3
Implementation and Maintenance	5
Resource Requirements	5
Options to be Deleted during Installation	6
Templates to be Deleted during Installation	
Routines to be Deleted during Installation	
M Audiofax (Telephone Refill Requests)	
Setting up the Bingo Board Device	
Mail Group Setup for the HL7 External Interface	
Using the Maintenance Menu	
Queue Background Jobs	9
Files1	1
Outpatient Pharmacy Files1	1
Routine List	3
Exported Options1	
Menu Assignments	
Security Keys	
Package Security	
Archiving and Purging	
Setting up the Archive Device	
Callable Routines1	9
External Interfaces1	9
External Relations	3
Data Base Integration Agreements (IAs)2	3
Internal Relations	5
Package-Wide Variables	5
Templates	
Software Product Security	
Mail Group Setup for the HL7 External Interface	
Archiving/Purging	
Interfacing	
Electronic Signatures	
Menu Assignments	
Security Keys	
File Security	

Outpatient Pharmacy V. 7.0 Menu Diagrams	
Outpatient Pharmacy Manager	
Pharmacist Menu	
Pharmacy Technician's Menu	
Standalone Options	
Journaling Globals	41
Barcodes and Label Printer Support	41
Barcodes on Dot Matrix Printers	
New Label Stock (Version 6.0 and Later Versions) – Dot Matrix Labels	42
Laser Label Printers	
ScripTalk® Printers	
Glossary	53
Appendix A: Outpatient Pharmacy HL7 Interface Specifications	55
Appendix B: HL7 Messaging with an External System	73
Appendix C:	81
Appendix D: HL7 Messaging for VistA Data Extraction Framework (VDEF)	83
Index	101

## **Files**

This package requires the 26 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:

FILE #	NAME		SEC.	DATA COMES W/FILE	SITE	
50.073	DUE QUESTIONNAIRE	YES	YES	NO		 -
	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		
52.53	PHARMACY AUTOMATED DISPENSING DEVICES	S YES	YES	NO		
52.8	PHARMACY ARCHIVE	YES	YES	NO		
52.86	EPHARMACY SITE PARAMETERS	YES	YES	NO		
52.87	PSO AUDIT LOG	YES	YES	NO		
52.9	PHARMACY PRINTED QUEUE	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		
ruary 2012	Outpatient Pharmacy V Technical Manual/Securit		e			11

#### **Outpatient Pharmacy Files**

FILE #	NAME	UP DATE DD	SEND SEC. CODE	DATA COMES SI W/FILE DA	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.

## **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</i> <i>Rx Patient Status from Copayment</i> [PSOCP EXEMPTION] option is used to change the copay exemption for an Rx Patient Status.
PSO REJECTS BACKG	ROUND 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 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/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

#### **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 BACKO	GROUND 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/CHAM	PVA 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/CHAM	PVA MGR This key is required to access the <i>TRICARE CHAMPVA</i> <i>Bypass/Override Report</i> [PSO TRI CVA OVERRIDE REPORT] option.

#### **File Security**

This package requires 26 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
					DLL	
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	@	@ @	@	@	@
52.52	OVERRIDES	w	W			W
52.53	PHARMACY AUTOMATED DISPENSING					
32.33	DEVICES					
52.8	PHARMACY ARCHIVE					
52.86	EPHARMACY SITE PARAMETERS	@	Рр	@	@	@
52.87	PSO AUDIT LOG	@	Рр	@	@	@
52.9	PHARMACY PRINTED					
52.9	QUEUE					
52.91	TPB ELIGIBILITY	@				
52.92	TPB INSTITUTION LETTERS	@				
53	RX PATIENT STATUS					
59	OUTPATIENT SITE					
59.1	OUTPATIENT AMIS DATA	@		@	@	@
50.12	OUTPATIENT PHARMACY	@		@	@	@
59.12	MANAGEMENT DATA	w		w	W	W
59.2	WAITING TIME	@	@	@	@	@
59.3	GROUP DISPLAY	@	@	@	@	@
59.8	OUTPATIENT CLINIC SORT					
37.0	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 Order Checks 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) NDC Validation ePharmacy Medication Profile Division Preferences ePharmacy Site Parameters Third Party Payer Rejects - View/Process Third Party Payer Rejects – Worklist TRICARE CHAMPVA Bypass/Override Report View ePharmacy Rx List One Patient's Archived Rx's Manual Print of Multi-Rx Forms Reprint an Outpatient Rx Label Signature Log Reprint **View Prescriptions** 

#### ScripTalk Main Menu ...

- PT ScripTalk Patient Enter/Edit
- QBAR Queue ScripTalk Label by Barcode
- QRX Queue ScripTalk Label by Rx#
- RPT ScripTalk Reports ...
  - AUD ScripTalk Audit History Report
  - WHO Report of ScripTalk Enrollees
  - Reprint a non-voided Outpatient Rx Label
- PARM Set Up and Test ScripTalk Device ... ScripTalk Device Definition Enter/Edit Print Sample ScripTalk Label Test ScripTalk Device
  - Reinitialize ScripTalk Printer

#### Supervisor Functions ...

- Add New Providers Daily Rx Cost Delete a Prescription Edit Provider Initialize Rx Cost Statistics **Inter-Divisional Processing** Inventory Lookup Clerk by Code Monthly Rx Cost Compilation Patient Address Changes Report Pharmacist Enter/Edit Purge Drug Cost Data **Recompile AMIS Data** Site Parameter Enter/Edit View Provider **Suspense Functions** ... Auto-delete from Suspense Change Suspense Date
- Count of Suspended Rx's by Day Delete Printed Rx's from Suspense Log of Suspended Rx's by Day (this Division) Print from Suspense File Pull Early from Suspense Queue CMOP Prescription Reprint Batches from Suspense **Update Patient Record**

#### Verification ...

List Non-Verified Scripts Non-Verified Counts Rx Verification by Clerk

#### **Pharmacist Menu**

**Bingo Board User ...** Enter New Patient Display Patient's Name on Monitor Remove Patient's Name from Monitor Status of Patient's Order **Change Label Printer Change Suspense Date DUE Supervisor** ... Enter a New Answer Sheet 1 2 Edit an Existing Answer Sheet 3 Create/Edit a Questionnaire 4 **Batch Print Questionnaires** 5 **DUE Report Enter/Edit Clinic Sort Groups** External Interface Menu ... Purge External Batches **Reprint External Batches** View External Batches **Medication Profile Pharmacy Intervention Menu ...** Enter Pharmacy Intervention Edit Pharmacy Intervention Print Pharmacy Intervention **Delete Intervention View Intervention Print from Suspense File Process Order Checks Pull Early from Suspense Queue CMOP Prescription 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) NDC Validation ePharmacy Medication Profile Division Preferences ePharmacy Site Parameters Third Party Payer Rejects - View/Process Third Party Payer Rejects - Worklist TRICARE CHAMPVA Bypass/Override Report View ePharmacy Rx List One Patient's Archived Rx's Manual Print of Multi-Rx Forms Reprint an Outpatient Rx Label Signature Log Reprint View Prescriptions Update Patient Record Verification ... List Non-Verified Scripts Non-Verified Counts Rx Verification by Clerk

#### Pharmacy Technician's Menu

#### Bingo Board User ...

Enter New Patient Display Patient's Name on Monitor Remove Patient's Name from Monitor Status of Patient's Order

#### **Change Label Printer**

#### **DUE User ...**

- 1 Enter a New Answer Sheet
- 2 Edit an Existing Answer Sheet
- 3 Batch Print Questionnaires

Medication Profile Patient Prescription Processing Pull Early from Suspense Queue CMOP Prescription Release Medication Update Patient Record

#### **Standalone Options**

The Transitional Pharmacy Benefit (TPB) options were available in previous releases of Outpatient Pharmacy V. 7.0, but are currently placed "Out of Order" by PSO\*7\*227.

On the following page, the <u>Routine Mapping</u> heading and its information is no longer needed and has been deleted.

#### **B. TRANSACTION SPECIFICATIONS**

#### **Communication Protocol**

The lower level communication protocol used by Outpatient Pharmacy V. 7.0 to transmit data between systems is either X3.28 or HLLP over an RS-232 connection.

A site parameter in the Outpatient Pharmacy V. 7.0 application called External Interface controls transmission of data to the dispensing machine. If the parameter is set to 0, no transmission will occur.

There is also a new parameter that is used for sites running HL7 V.2.4. It is in the OUTPATIENT SITE file (#59), and is called AUTOMATED DISPENSE. This must be set to determine which version of HL7 the site is running.

#### **Processing Rules**

A Pharmacy Encoded Order Message (event type=O01) is transmitted whenever an order is placed in Outpatient Pharmacy V. 7.0 and the criteria are met for the dispensing machine. Upon successful receipt and storage of the message, the dispensing machine will generate and transmit a Pharmacy Encoded Order Acknowledgement Message (event type=O02).

The following HL7 messages will be used to support the exchange of Outpatient Pharmacy data with any automatic dispensing system:

RDS	Pharmacy Encoded Order Message
RRD	Pharmacy Encoded Order Ack. Message
ACK	General Ack. Message

The messages for the dispense request will consist of the following HL7 segments:

IAM	Patient Adverse Reaction Information
MSH	Message Header
NTE	Notes and Comments
PID	Patient Identification
PV1	Patient Visit
PV2	Patient Visit – additional information
ORC	Common Order
RXE	Pharmacy/Treatment Encoded Order
RXD	Pharmacy/Treatment Dispense
RXR	Pharmacy/Treatment Route

#### Specific Transaction – Dispense Request

RDS	Pharmacy/Treatment Encoded Order Message
MSH	Message Header
[PID]	Patient Identification
[PV1]	Patient Visit
[PV2]	Patient Visit – additional information
{IAM}	Patient Adverse Reaction Information
{ORC	Common Order
{NTE}	Notes and Comments
RXE	Pharmacy/Treatment Encoded Order
RXD	Pharmacy/Treatment Dispense
{NTE}	Notes and Comments (contains PMI)
{RXR}	Pharmacy/Treatment Route
}	

The Pharmacy/Treatment Encoded Order Message (Dispense Request) is as follows:

#### **Example:**

```
MSH|^~\&|PSO VISTA|521^OUTPATIENT|PSO
DISPENSE | 521 | 20030620125043 | | RDS^013^RDS_013 | 10001 | P | 2.4 | | | AL | AL
PID|||500000022V981671^^^USVAMC^PN^USVHA~1234^^^USVAMC^USVAMC^USVAMC~000456789^^^
USSSA^SS^USSSA||OPPATIENT^ONE||19590116|M|||60 Park Pl&Apt 25&Suite
600^^Birmingham^AL^35233-1234^^C||(251) 555-5555
PV1 | | O
IAM||D^Drug^LGMR120.8|128^ASPIRIN^LGMR120.8|SV|ALLERGY|||||||19961205||||C
ORC|NW|12345^OP7.0||||||20030608|10^OPPROVIDER^TWO||987^OPPROVIDER^ONE| TNA1225
:||20030616|NEW|57^7TH FLOOR^99PSC||65421^OPPROVIDER5^THREE|VA5|Albany^52312|700
South 19th Street^^Birmingham^AL^35233 | (817) 555-5555
[{NTE|1||Free Text|Medication Instructions~Patient Instructions Narrative~Drug
Warning Narrative~Profile Information~Drug Interactions~Drug Allergy Indications
RXE|""""|D0082^DIGOXIN 0.25MG TAB^99PSNDF^372.3^DIGOXIN 0.25MG
TAB^99PSD|""""||20^MG^99PSU|120^TAB, RAPID DISINTEGRATE^99PSF||WINDOW|LANOXIN
0.125MG|30|^TAB|3|EZ9278277|188^OPPROVIDER3^ONE|123987|3|2|199809070830|||^IBUPRO
FEN 400MG TAB | | | | | | | | Y~N~N
RXD|3|D0082^DIGOXIN 0.25MG TAB^99PSNDF^372.3^DIGOXIN 0.25MG
TAB^99PSD|20030610||||100001351|3|~6P~6505-00-584-
0398|157^OPPROVIDER^TWO||30|CERTIFIED MAIL||^NON-SAFETY||||20040615
NTE | PMI | | CORTICOSTEROIDS - ORAL | Patient Medication Instructions
RXR|6^Oral^99PSR
```

#### The Pharmacy Encoded Order Acknowledgment Message is as follows:

RRD	Pharmacy Encoded Order Ack. Message
MSH	Message Header
MSA	Message Acknowledgement

#### Example:

MSH|~^\&|PSO DISPENSE|BP-CHEYENNE|PSO VISTA|BP-CHEYENNE|20040227222454-0500||ACK|4425981296|T|2.4|| MSA|AA|10001

SEGMENT	SEQ#	LEN	DT	R/O	<b>RP</b> /#	TBL#	ELEMENT NAME	EXAMPLE
MSH	1	1	ST	R			Field Separator	
	2	4	ST	R			Encoding Characters	~^\&
	3	180	HD	R		0361	Sending Application	PSO 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	PSO DISPENSE
	6	180	HD	R		0362	Receiving Facility – DNS name and port of dispensing machine	~DISPENSE.VH A.MED.VA.GOV :9300~DNS
	7	26	TS				Date/Time of Message	20040405152416
	9	15	CM	R	0076		Message Type	RDS~013
	10	20	ST	R			Message Control ID	10001
	11	3	PT	R	0103		Processing ID	Р
	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
PID	3	250	СХ	R	Y		Patient ID (will contain IEN, SSN, ICN, Claim #, etc if exists)	218~~~USVHA& &0363~PI~VA FACILITY ID&500&L
	5	250	XPN	R			Patient Name	OPPATIENT~ON E
	7	26	TS	R			Date/Time of Birth	19280622
	8	1	IS			0001	Administrative Sex	М
	11	250	XAD	R	Y/3		Patient Address	164 Friendship DR~""~TROY~N Y~12180~~P~""
	13	250	XTN	R	Y/3		Phone Number-Home	(555)555-5555
PV1	2	1	IS	R		0004	Patient Class	O for Outpatient
								1
PV2	24	15	IS	R	Y		Patient Status Code	SC~NO COPAY
IAM	2	250	CE	0	Y	0127	Allergen Type Code	D~DRUG~LGM R120.8
	3	250	CE	R	Y		Allergen Code/Mnemonic/Descripti on	128~ASPIRIN~L GMR120.8
	4	250	CE	0	Y	0128	Allergy Severity Code	SV
	5	15	ST	0	Y		Allergy Reaction Code	ALLERGY
	13	26	TS	0	Y		Reported Date/Time	19961205
	17	250	CE	0	Y	0438	Allergy Clinical Status Code	C

Segments used in the Outpatient Pharmacy HL7 interface Dispense Request:

SEGMENT	SEQ#	LEN	DT	R/O	<b>RP</b> /#	TBL#	ELEMENT NAME	EXAMPLE
ORC	1	2	ID	R		0119	Order Control	NW
	2	80	EI	С			Placer Order Number	402331~OP7.0
	9	26	TS	0			Date/Time of Transaction	20040405
	10	250	XCN	R			Entered By	10~OPPROVIDE R~TWO
	12	250	XCN	0			Ordering Provider	987~OPPROVID ER~ONE
	13	80	PL	0			Enterer's Location	_TNA1225:
	15	26	TS	0			Order Effective Date	20030616
	16	10	ST	R			Order Control Code Reason	NEW
	17	250	CE	0			Entering Organization	57~7 <sup>TH</sup> FLOOR~99PSC
	19	250	XCN	0			Action By	65421~OPPROVI DER5~THREE
	20	250	CE	0		0339	Advanced Beneficiary Notice Code	VA5
	21	250	XON	0			Ordering Facility Name	AL BANY~~500
	22	250	XAD	0			Ordering Facility Address	101 CHURCH AVE~~ALBANY ~NY~12208
	23	250	XTN	0			Ordering Facility Phone #r	(518)555-5554
NTE	1	1	SI	0			Set ID	1
	3	6553	FT	0			Comment	USE 50 FOR
		6						TESTING BY MOUTH TWICE A DAY FOR 30 DAYS
	4	250	RE	0			Comment Type – 1 = Medication Instructions 2 = Patient Instructions Narrative 3 = Drug Warning Narrative 4 = Profile Information 5 = Drug Interactions	Medication Instructions
RXE	1	200	TQ	R			Quantity/Timing	Null
RXE	2	250	CE	R			Give Code	XH001~HEMAT EST TAB (NOT FOR ORAL USE)~99PSNDF~ 3207.12039.4321 ~HEMATEST REAGENT TAB. 100/BTL~99PSD
	3	20	NM	R			Give Amount-Minimum	Null
	5	250	CE	R			Give Units	20~MG~99PSU
	6	250	CE	0			Give Dosage Form	165~TAB,TEST~ 99PSF
	8	200	CM	0			Deliver-To Location	WINDOW

Segments used in the Outpatient Pharmacy HL7 interface Dispense Request: (continued)

[ORC-10] Entered By is the person's pointer to the NEW PERSON file (#200) and name in VistA who keyed in the order.

[ORC-12] Ordering Provider is a composite ID field. The first component is the Provider's pointer to the NEW PERSON file (#200) in VistA and the second component is his/her name.

[ORC.13] Enterer's Location is the printer where the dispensing machine should print the label.

[ORC-15] Order Effective Date is the date/time the order took effect.

[ORC-16] Order Control Code Reason is a coded element field. The fifth component reflects the status of the order (for example, New, Refill, Partial, Reprint, or Partial Reprint).

[ORC-17] Entering Organization is the Clinic number and name.

[ORC-19] Action By is the physician who cosigned, if any, and is a composite field. The first component is the physician's pointer to the NEW PERSON file (#200) in VistA and the second component is his/her name.

[ORC-20] Advanced Beneficiary Notice Code is used to send an indicator to an automated dispensing system that the RX being dispensed is for an electronically billed prescription and that a patient signature is needed. The value of "VA5" will be sent as the indicator in the RDS^O13 Dispense Request message for an ePharmacy patient prescription.

[ORC-21] Ordering Facility Name is the facility name and number found in the OUTPATIENT SITE file (#59).

[NTE] The Set ID field will identify the NTE segment (1=Med. Instructions; 2=Patient Instructions Narrative; 3=Drug Warning Narrative; 4=Profile Information; 5=Drug Interactions; 6=Drug Allergy Indications; 7=PMI Sheet; 8=Privacy Notification). The Comment field will contain the respective information.

[RXE-1] Quantity Timing is a required field but it will not be used in Outpatient Pharmacy V. 7.0. It will always be a null value ("").

[RXE-2] Give Code identifies the substance ordered as encoded by the Pharmacy. The components, in order, are the VA Product ID, VA Product Name, National Drug File, local file pointer, local drug name, and the local file.

[RXE-3] Give Amount - Minimum is a required field but it will not be used in Outpatient Pharmacy V. 7.0. It will always be a null value ("").

[RXE-5] Give Units identifies the units for the give amount as encoded by the VA National Drug file.

[RXE-6] Give Dosage Form is a coded element field. The fourth component is the pointer to the DOSAGE FORM file (#50.606). The fifth component is the form name, and the sixth component is the name of coding system (99PSF).

[RXE-8] Deliver-To-Location is the Method of Pickup (Window or Mail).

[RXE-9] Substitution Status is the value of the TRADE NAME field (#6.5) found in the PRESCRIPTION file (#52).

[RXE-10] Dispense Amount identifies the quantity.

[RXE-11] Dispense Units identifies the units for the dispense amount as encoded by the Pharmacy. [RXE-13] Ordering Provider's DEA Number will contain the physician's DEA number if the drug is a controlled substance.

[RXE-14] Pharmacist/Treatment Supplier's Verifier ID identifies the pharmacist who verified the order. The first component is the DFN pointer in the NEW PERSON file (#200) of VistA and the second component is the name.

[RXE-18] D/T of Most Recent Refill or Dose Dispensed contains the last date/time the patient received this particular drug. This is the PRIOR FILL DATE field (#102.1) from the PRESCRIPTION file (#52).

[RXE-21] Pharmacy/treatment dispense Instructions. (Label name & VA PRINT NAME).

[RXE-31] Supplementary Code contains three pieces of information:

- An indicator that the drug is a controlled substance or not (Y/N).
- An indicator if the patient is a ScripTalk patient (0 or 1).
- An indicator if the patient's PMI language preference is something other than English (Y/N).

[RXD-1] Dispense Sub-ID Counter identifies the prescription fill number.

[RXD-2] Dispense/Give code will contain the same give code as in RXE-2.

[RXD-9] Dispense Notes have two pieces of information:

- DEA, SPECIAL HDLG field (#3) from the DRUG file (#50).
- NDC field (#27) from the PRESCRIPTION file (#52).

[RXD-10] Dispensing Provider is the person who finished the order.

[RXD-12] Total Daily Dose is the days of supply for a partial fill.

[RXD-13] Dispense-To-Location will contain how the patient will receive the medication. Possible answers are WINDOW, REGULAR MAIL, CERTIFIED MAIL or DO NOT MAIL.

[RXD-15] Pharmacy/Treatment Supplier's Special Dispensing Instructions will indicate what sort of bottle cap should be employed. It is a safety cap or non-safety cap.

[RXD-25] Supplementary Code is the drug warning number and text.

[NTE] This segment following the RXD segment will contain the Patient Medication Instructions if any.

[RXR-1] Route is the medication route.