



CONSOLIDATED MAIL OUTPATIENT PHARMACY (CMOP)

TECHNICAL MANUAL

Version 2.0
April 1997

(Revised October 2003)

Revision History

The table below lists changes made since the initial release of this manual. Each time this manual is updated, the Title Page lists the new revised date and this page describes the changes. Either update the existing manual with the Change Pages document, or replace it with the updated manual.

Note: The Change Pages document may include unedited pages needed for two-sided copying. Only edited pages display the patch number and revision date in the page footer.

Revision Date	Revised Pages	Patch Number	Description
10/2003	11, 13-16, 16a-16b, 19, 30, 61, 63	PSX*2*41	Updated screenshots to include new comments in transmissions related to patch changes. Added new transmission messages. Updated the Routines listing to include new routines. Included changes for other language modifications.
10/2002	Title Page; i-iv; 79-80; EDI Document pages 1-42	PSX*2*38	Added Appendix C, Electronic Data/HL7 Interface Guidelines (NOTE: Original format of this EDI document, including page numbers, have been retained); Updated Title Page and TOC; Changes unrelated to the patch: Added Revision History Page and renumbered initial section from Revision History through TOC; corrected date on Title Pages and in footer to reflect original package release date.
05/2000	i,iii; 9-21, 36-37; 64-65.	PSX*2*23	CMOP-Controlled Substance Rx's project changes: Update version references of Outpatient Pharmacy and FileMan packages; replace references to Sliding Windows Protocol (SWP) with TCP/IP; Add example of controlled substances message subject header for CMOP Site Mailman Examples 3, 4, and 7 and CMOP Facility MailMan Message examples 4 and 6; Update and reorder routine and file lists; Add CS Indicator to Message ZXI segment definition
04/1997			Original Released Technical Manual.

Preface

Version 2.0 of Consolidated Mail Outpatient Pharmacy (CMOP) software processes and automatically transmits prescription data from a Veterans Affairs Medical Center (VAMC) to a CMOP host facility where prescriptions are mailed from an integrated and highly automated outpatient prescription dispensing system. The CMOP software package is intended for pharmacists and pharmacy technicians who are familiar with the functionality of Outpatient Pharmacy Version 7.0.

This technical manual provides additional information for package coordinators and supervisors. Users who are not familiar with Veterans Health Information Systems and Technology Architecture (VISTA) software may also wish to refer to documentation for VA Kernel.

2. The **CMOP Activation Approved** message is returned from the CMOP facility when the CMOP Manager has approved the activation request. At the time of this message, an alert is also generated to all CMOP Manager key holders indicating the approval. At this time, the site becomes active for CMOP processing. **Pharmacy users should sign off the system completely. The users should sign back onto the system after receiving the approval message to set up the appropriate CMOP/Outpatient site parameters. All prescriptions processed after the site parameters are set up for CMOP will be screened and suspended for CMOP if transmission criteria are met.**

```

Subj: CMOP Activation Approved  [#33619] 09 Feb 97 11:50 6 Lines
From: POSTMASTER                in 'IN' basket.  Page 1  **NEW**
-----

```

Request to activate CMOP processing.

```

CMOP           : LEAVENWORTH
Approving Official: ARTHUR RICHMOND
Action Date/Time : FEB 9,1997@11:50
Action         : Approved

```

3. The **CMOP Transmission Confirmation** message is created when medical center CMOP transmission data has been handed to MailMan for delivery to the CMOP host facility. The subject line of the message will include the transmission number. A typical CMOP transmission would look like the example below. Controlled substance transmissions will be indicated on the subject line (i.e. CMOP CS 521-737 Transmitted [#34652] 10 Jan 97 06:22 8 Lines). Each **successful** transmission will generate a transmission confirmation message. **If a user initiates a transmission and does not receive a transmission confirmation message, the medical center IRM Service should be contacted for assistance.**

```

Subj: BIRMINGHAM CMOP 521-737 Transmitted  [#38862] 09 Feb 97 08:15 8 Lines
From: POSTMASTER (Sender: RICHMOND,ARTHUR) in 'IN' basket.  Page 1  **NEW**
-----

```

CMOP TRANSMISSION CONFIRMATION:

```

Pharmacy Division   : BIRMINGHAM
Batch Number        : 521-737
Transmitted by      : RICHMOND,ARTHUR
Date/Time           : FEB 4,1997@08:15:48
Total orders/Rx's   : 1/5
Beginning order #    : 12
Ending order #       : 12

```

- The **CMOP Transmission Acknowledgment** message is created by the host CMOP software when the data transmission is received, data is validated, and loaded into safe storage in the CMOP database. A typical CMOP transmission would like the example below. Controlled substance transmissions will be indicated on the subject line (i.e. CMOP CS 521-524 Acknowledged. [#32614] 06 Jan 95 15:18 8 Lines). This message serves two purposes. Initially the message is delivered to the remote medical center to the PSXMAIL key holders to indicate that the CMOP has successfully received the data transmitted. The message is also delivered to the medical center CMOP server software and is used to file the date and time the data was received at the CMOP in the transmission entry in the CMOP TRANSMISSION file (#550.2). Receipt of **both** the Transmission Confirmation and the Transmission Acknowledgment messages for a single transmission confirm that the data transmitted and downloaded to the CMOP facility successfully.

```

Subj: CMOP 521-524 Acknowledged.  [#34712] 04 Apr 95 17:17 8 Lines
From: POSTMASTER                  in 'IN' basket.  Page 1  **NEW**
-----
CMOP TRANSMISSION ACKNOWLEDGEMENT:
Pharmacy Division      : BIRMINGHAM
Batch Number           : 521-737
Transmitted by         : WOODSTOCK, PHIL
Date/Time              : FEB 4, 1997@09:16:43
Total orders/Rx's      : 1/5
Beginning order #      : 12
Ending order #         : 12

```

- The **CMOP Error Encountered** message is created when medical center CMOP transmission data has been handed to MailMan for delivery to the CMOP host facility. This message is a direct result of the CMOP software screening prescriptions suspended for CMOP during data transmission. **If a problem is detected with a prescription selected for transmission, the prescription is not transmitted to the CMOP, but is noted in this message to the user to provide information to correct the problem.** If the data is corrected as noted in this message, the prescription will be included in the next transmission. If the data problem is not corrected, the prescription will continue to be listed in this message each time a transmission is initiated. **If the data is not corrected the prescription will never be transmitted.** The CMOP Error Encountered message may be sent in varying formats depending on the data problems to be reported. Two examples are shown on the following page..

..... *Examples of this message are shown on the following page*

Example 1

Subj: 521 CMOP Error Encountered [#34392] 11 Dec 96 08:43 16 Lines
From: POSTMASTER (Sender: ATHENS,DEBBIE) in 'IN' basket. Page 1 **NEW**

An error has been encountered while processing prescription data for the Consolidated Mail Outpatient Pharmacy system.

Date/Time : DEC 11,1996@08:43
Process : Data Validation
Error Type : Invalid or missing data

Description :

RX #	Fill	Data Field	SSN	NAME
300410	Original	Patient Address	000-11-2222	Arkansas, Mary

Action Taken: Rx's not sent to CMOP but still suspended for transmission.

Recommended action: Correct invalid data.

Example 2

Subj: 521 CMOP Error Encountered [#38880] 05 Dec 96 14:14 21 Lines
From: POSTMASTER (Sender: ATHENS,DEBBIE) in 'IN' basket. Page 1 **NEW**

An error has been encountered while processing prescription data for the Consolidated Mail Outpatient Pharmacy system.

Date/Time : DEC 5,1996@14:14
Process : Transmission of Batch Data
Error Type : Invalid or missing data

Description :

The following data is missing in the OUTPATIENT SITE file.

State
Street Address
City
Zip Code
Area Code
Phone Number

Action Taken: No data transmission will occur without this information.

Recommended action: Correct invalid data.

- The **CMOP Inactivation Notice** message is generated when the Outpatient Pharmacy personnel selects to inactivate the medical center using the *CMOP Site Manager* menu option *Activate/Inactivate CMOP Processing*. **Inactivation of CMOP processing is immediately effective. Users who do not sign off and then sign back onto the system when inactivation takes place will continue to do CMOP processing.**

```

Subj: CMOP Inactivation Notice [#38894] 05 Dec 96 10:57 05 Lines
From: POSTMASTER (Sender: JONES,DIANA) in 'IN' basket. Page 1 **NEW**
-----

```

Inactivation notice sent

```

CMOP           : LEAVENWORTH
Requester      : DEBBIE ATHENS
Action Date/Time: DEC 5,1996@10:57

```

- The **CMOP Auto-Transmission Schedule** message is generated when the Outpatient Pharmacy personnel uses the *Setup Auto-transmission* option from the *CMOP Site Manager* menu to set up an automated transmission schedule to the CMOP host facility. A typical CMOP transmission will look like the example below. Controlled substance transmissions will be indicated on the subject line (i.e. *CMOP CS Auto-Transmission Schedule [#36452] 11 Jan 96 07:24 7 Lines*). **The message notifies key holders that manual transmissions are not necessary to transmit data.** Transmissions will begin automatically on the date and times indicated and continue for the selected frequency until the transmissions are unscheduled or modified.

```

Subj: CMOP Auto-Transmission Schedule [#38875] 11 Dec 96 09:32 7 Lines
From: POSTMASTER (Sender: WOODSTOCK,PHIL) in 'IN' basket. Page 1 **NEW**
-----

```

Auto-transmission Schedule.

```

Facility           : BIRMINGHAM, AL.
Date Initiated     : Dec 11, 1996@09:32
Begin Automatic Transmissions : Dec 11, 1996@09:32
Number of days to transmit thru: 1
Scheduling Frequency (hours) : 6
Initiating Official : RALEIGH, RICHARD

```

- The **CMOP Not Dispensed Rx List** message is generated when release information indicates a prescription has been cancelled (**not dispensed**) by the vendor-automated system. The prescription at the remote medical center is marked **not dispensed** in the PRESCRIPTION file (#52). The prescription is not marked with a status of Cancelled. The prescriptions may be filled locally, edited and re-suspended, or resubmitted for CMOP processing. Cancellation reasons are listed with the Rx number and other transmission information to assist the user in correcting the cause of the cancellation and re-submitting the prescription for filling by the CMOP. A separate message is created for each pharmacy division.

.....*An example of this message is shown on the following page*.....

Subj: CMOP Not Dispensed Rx List [#38912] 11 Dec 96 11:05 24 Lines

From: POSTMASTER in 'IN' basket. Page 1 **NEW**

Not Dispensed Rx Report for the BIRMINGHAM Division.

The following prescriptions were not dispensed by the vendor:

Patient: KANSAS, THOMAS SSN: 009-87-6543

Rx #: 11642K (ORG) Qty: 60 Trans #: 737
Drug: ISONIAZID 100MG TAB CMOP Drug ID: I0067
Reason: QUANTITY OR DISP PROBLEM

Rx #: 15634A (ORG) Qty: 120 Trans #: 737
Drug: AMINOPHYLLINE 500MG RTL SUPP CMOP Drug ID: A0214
Reason: QUANTITY OR DISP PROBLEM

Patient: ALASKA, FRED SSN: 000-11-2222

Rx #: 15558A (ORG) Qty: 120 Trans #: 738
Drug: ACETAMINOPHEN 325MG TAB CMOP Drug ID: A0022
Reason: QUANTITY OR DISP PROBLEM

Instructions: Prescriptions cannot be processed at CMOP for the reason listed above. Please review the prescription and take the appropriate action(s). If you have any questions, contact your CMOP contact person.

9. The **CMOP Acknowledgement not Received** message is sent when a Transmission Acknowledgement message has not been received for a previous transmission after 24 hours. The CMOP software checks each transmission entry in the CMOP TRANSMISSION file (#550.2) 24 hours after the data is transmitted to ensure that the data was received at the CMOP host facility. If an acknowledgement date/time has not been filed for the transmission, this message reminds the key holders that the Transmission Acknowledgement message has not yet been received. The user should first contact the medical center IRM Service and request that the MailMan queue be checked to see if the transmission was sent. If it has been sent, the CMOP Manager at the host facility should be contacted to determine if there is another reason for the delay.

Subj: 521 CMOP Acknowledgement not Received [#38915] 20 Feb 97 15:56 3 Lines

From: POSTMASTER in 'IN' basket. Page 1

An acknowledgement message for transmission # 739 has not been received within the specified time. Please contact the CMOP facility to see if there is a problem.

10. The **CMOP Recovery Message** is sent whenever a failed CMOP transmission is detected. This message is simply a notification message that the last transmission did not complete. CMOP recovery procedures were initiated to reset the data so that it will be transmitted in the next transmission for that division.

```
Subj: CMOP Recovery Message BIRMINGHAM, AL. [#3288] 11/25/02@11:55 11 Lines
From: <POSTMASTER@BAB.ISC-BIRM.VA.GOV> in 'IN' basket. Page 1 **NEW**
```

The last CMOP transmission did not complete properly. The data for this transmission will be sent to the CMOP during the next transmission for that division.

If you have scheduled auto transmissions for CMOP, please check to see that they are still scheduled for the correct time.

This message is just a notification that problems were detected with the last transmission and that the data was sent to the CMOP facility for processing. If you are getting this message frequently, please contact your IRM staff. Otherwise there is not anything that you need to do.

Transmission: 20081730
Division: TROY
CMOP Host: DALLAS
Type: NON-Controlled Subs
Date/Time: NOV 25, 2002@11:55:25

The prescriptions have been reset into CMOP suspense and this transmission has been closed.

11. The **CMOP Error Message** is sent when the software encounters an error that interrupts the transmission. CMOP will then reset the prescriptions for the division's transmission that was interrupted and proceed to process the other divisions.

```
Subj: CMOP Error TROY 4003 [#138163] 12/18/02@10:19 5 lines
From: POSTMASTER In 'IN' basket. Page 1 *New*
```

--

NON-CS CMOP Transmission encountered the following error. Please investigate

Division: TROY
Type/Batch NON-CS / 4003
Error: LOCK+16^PSXRTR:1, %DSM-E-NUMBER, Attempt to perform
division
by zero, -DSM-I-ECODE, MUMPS error code: M9

The prescriptions have been reset and other divisions' transmissions are continuing.

12. The **CS or NON-CS Scheduled Transmission Re-Queued Message** is sent if an auto-scheduled transmission starts up and finds another transmission is still in process. After the message is sent, the auto-scheduled CS or NON-CS transmission is re-queued to start again with a thirty-minute delay.

```
Subj: NON-CS Scheduled Transmission RE-Queued [#138176] 12/18/02@15:06
6 lines
From: TAMPA, ANNETTE In 'IN' basket. Page 1
```

```
-----
--
The NON-CS Scheduled Transmission for DEC 18,2002@15:06:01
was re-queued with task # 2026 to run again in 30 minutes.
It could not obtain a lock on the RX QUEUE file #550.1.
That indicates that a transmission was in progress.
```

If you are getting this message frequently, please contact your IRM Group

13. The **CMOP Retransmission Report Message** has been enhanced to include the list of prescriptions that are either sent, or will not be sent because they have been released.

```
Subj: CMOP Retransmission Report for 7781 [#32168468] 12/12/02@15:55
109 lines
From: POSTMASTER - UNKNOWN
(Sender: SPRINGFIELD, JACK - ADP SITE MANAGER, IRM SERVICE (IRM - phone:
x85261)
) In 'IN' basket. Page 1
```

```
-----
--
CMOP Re-Transmission Report
Retransmission # 7782.
```

```
The Original Transmission # 7781 contained:
Beginning Message Number: 1
Ending Message Number : 80
Total Orders : 80
Total Rx's : 90
```

```
Retransmission # 7782 contained:
Beginning Message Number: 1
Ending Message Number : 80
Total Orders : 80
Total Rx's : 90
```

```
** Prescriptions that have been released are not sent. **
Following is the list of prescriptions
and their 'Sent' or 'Released Date' status.
```

```
ACxxxxxxx,Nxxxxxx A          335-xxxxxx  1192147G-2  SENT
Axxxxxx,Cxxxxxx PETER       321-xxxxxx  1380689-2  12/10/02
AxxxxxxCH,Mxxxxxx          344-16-xxxxxx 1401097-2  SENT
Bxxxxxx,Axxxxxx RICHARD     353-12-xxxxxx 1395540A-0  SENT
Bxxxxxx,xxxxxx LOYOLA       348-30-xxxxxx 1277158D-3  SENT
```

(Page intentionally left blank for two-sided copying)

6. The **CMOP Auto-Transmission Schedule** message is generated when the Outpatient Pharmacy personnel uses the *Setup Auto-transmission* option on the *Transmission Menu* to set up an automated transmission schedule to the CMOP host facility. **The message notifies the host CMOP personnel that the medical center has set up a schedule for automatic transmissions.** Transmissions will begin automatically on the date and time indicated and will continue for the selected frequency until the transmissions are unscheduled or modified. This information is recorded in the CMOP NATIONAL SITE file (#552). A typical CMOP transmission will look like the example below. Controlled substance transmissions will be indicated on the subject line (i.e. CMOP CS Auto-Transmission Schedule, BIRMINGHAM, AL. [#36874] 22 Mar 96 10:42 7 Lines).

```
Subj: CMOP Auto-Transmission Schedule, BIRMINGHAM, AL. [#38881]
11 Dec 96 09:33 7 Lines
From: POSTMASTER (Sender: TULSA,LARRY) in 'IN' basket. Page 1 **NEW**
```

Auto-Transmission Schedule.

```
Facility           : BIRMINGHAM, AL.
Initiating Official : TULSA,LARRY
Begin Automatic Transmissions : Dec 11, 1996@09:32
Scheduling Frequency (hours) : 6
Number of days to transmit thru: 1
Initiating Official : PITTSBURGH,ANTHONY
```

MailMan Server Option Set Up

This software is designed to transmit data via MailMan between the remote medical center facilities and the host facility. MailMan servers are used to accomplish this data transmission.

For a server to function it must be associated with an entry in the BULLETIN file (#3.6). The selected bulletin entry must point to a mail group with at least one **active** user.

A mail group **must** be set up with the name, CMOP MANAGERS. The mail group **must** have at least one **active** user as a member for the CMOP software to operate. It is recommended that the Outpatient Pharmacy package coordinator and other pharmacy staff responsible for CMOP functions be members of this mail group.

The installation process will set up the following OPTION (#19) and BULLETIN file (#3.6) entries. The entries may be viewed using the VA FileMan *Inquire to File Entries* option and will contain the information listed below.

Example:

```
VA FileMan Version 21.0

Select OPTION: Inquire to File Entries

OUTPUT FROM WHAT FILE: OPTION // <RET> (5464 entries)
Select OPTION NAME: PSXX CMOP SERVER Consolidated Mail Outpatient
Pharmacy Server
ANOTHER ONE: <RET>
STANDARD CAPTIONED OUTPUT? YES// <RET> (YES)
DISPLAY COMPUTED FIELDS? NO// <RET> (NO)
DISPLAY AUDIT TRAIL? NO// <RET> (NO)

NAME: PSXX CMOP SERVER
MENU TEXT: Consolidated Mail Outpatient Pharmacy Server
TYPE: server CREATOR: POSTMASTER
LOCK: PSXCMOPMGR PACKAGE: CMOP
DESCRIPTION: This server acts as the receiver for data transmissions and
other communications for the Consolidated Mail Outpatient Pharmacy system.
ROUTINE: PSXSERV SERVER BULLETIN: PSX CMOP
SERVER ACTION: RUN IMMEDIATELY SERVER MAIL GROUP: CMOP MANAGERS
SUPPRESS BULLETIN: YES, SUPPRESS IT
UPPERCASE MENU TEXT: CONSOLIDATED MAIL OUTPATIENT P

Select OPTION NAME: <RET>
```



The site must enter CMOP Managers in the MAIL GROUP field of the PSX CMOP entry in the BULLETIN file (#3.6).

Files

This package requires the 21 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 VA FileMan option *List File Attributes* [DILIST], under *Data Dictionary Utilities* [DI DDU], to print the DDs. The following are the files for which you should print DDs:

Outpatient Pharmacy Files

FILE #	NAME	UP DATE DD	SEND SEC. CODE	DATA COMES W/FILE	SITE DATA	RSLV PTS	USER OVER RIDE
550	CMOP SYSTEM	YES	YES	NO			
550.1	CMOP RX QUEUE	YES	YES	NO			
550.2	CMOP TRANSMISSION	YES	YES	NO			
552	CMOP NATIONAL SITE	YES	YES	NO			
552.1	CMOP REFERENCE	YES	YES	NO			
552.2	CMOP DATABASE	YES	YES	NO			
552.3	CMOP RELEASE	YES	YES	NO			
552.4	CMOP MASTER DATABASE	YES	YES	NO			
552.5	CMOP COST STATS	YES	YES	NO			
553	CMOP INTERFACE	YES	YES	NO			
553.1	CMOP QUERY LOG	YES	YES	NO			
554	CMOP OPERATIONS	YES	YES	NO			
555	CMOP MASTER DATABASE ARCHIVE	YES	YES	NO			
50	DRUG	YES	YES	NO			
50.6	NATIONAL DRUG	YES	YES	YES			
51.5	ORDER UNIT	YES	YES	YES			
52	PRESCRIPTION	YES	YES	NO			
52.5	RX SUSPENSE	YES	YES	NO			
54	RX CONSULT	YES	YES	YES			

The namespace for the Consolidated Mail Outpatient Pharmacy package is PSX.

Patient Identification Segment—PID

The Patient Identification Segment is used as the primary means of communicating patient identification information, which for the most part is not likely to change.

SEGMENT	SEQ#	LEN	DT	R/O	RP/#	ELEMENT NAME
PID	3	16	CK	R		Patient ID (Internal ID)
	5	48	PN	R		Patient Name
	11	106	AD	R		Patient Address
	13	18	PH	O		Phone Number
	14	1	NM	O		Other Language PMI Flag

Contents of the patient identification segment are:

Segment ID—identifies type of segment (PID).

Patient ID—social security number (see HL7 encoding rules).

Patient Name—identifies the patient (see HL7 encoding rules).

Patient Address—mailing location for patient order.

Phone Number—home phone number.

Other Language PMI Flag—denotes in which language to print the PMI

Example of PID segment:

```
PID|||999999999^1^M11||CALIFORNIA^JAMES|||107 OAK  
RD.^APT#3^LIMA^OH^48132||(555)394-5617|1
```

Common Order Segment—ORC

The common order segment may consist of data common to all orders for the patient. The order control data field defines the function of the order segment. For this application this segment serves to mark the beginning of a new prescription/item order for the patient. It consists of only the segment ID and the order control data field indicating a new order. All order segments must be preceded by an ORC segment.

ORC—Segment Definition Table

SEGMENT	SEQ#	LEN	DT	R/O	RP/#	ELEMENT NAME
ORC	1	2	ST	R		Order Control

Example ORC segment:

ORC|NW|

Pharmacy Order Segments—RX1, ZX1

Two segments are used by this application to complete a pharmacy order. These are the RX1 pharmacy segment, defined by HL7, and the ZX1 application defined segment. These segments occur only once for each pharmacy order and always follow an ORC segment. Multiple orders (ORC, RX1, ZX1 combination) may be present for each patient order message.

RX1 Segment Definition Table

SEGMENT	SEQ#	LEN	DT	R/O	RP/#	ELEMENT NAME
RX1	1	20	TX	R		Prescription Index
	12	11	CQ	R		Quantity Dispensed *
	14	48	CE	R		Drug ID (locally defined)
	19	3	NM			Number of Refills
	20	8	DT	R		Issue Date
	21	3	NM			Refills Remaining
	24	8	DT	R		Expiration Date
	25	8	DT			Last Refill Date
	26	20	ST	R		Rx Number
	30	80	TX	R		Instructions (SIG) **

*For purposes of this application, the field length of the data element, Quantity Dispensed has been expanded to 11 to allow for a maximum quantity of 8 significant digits and two decimal digits (nnnnnnnn.nn).

**The SIG data element for the RX1 data segment will have the maximum field length of 80 characters. If necessary, immediately following the RX1 will be an NTE (Notes and Comments) segment, which will contain up to the next 100 characters of the SIG data element. If the SIG length exceeds this 80-character limit the NTE segment will repeat as necessary until all of the SIG is transmitted. See the section of this document referring to NTE segments for further description of these segments. The SIG data may also contain instructions in another language.

Example RX1 segment:

```
RX1|521-10170-1|||||30|218A^ RANITIDINE 100mg ^L|||5|19921225|3|||
19930630|19921230|10170|||TAKE ONE TABLET THREE TIMES A DAY AFTER MEALS
```

The standard HL7 definitions apply to all data elements except the Drug ID and the Prescription Index. The Drug ID element is locally defined for the CMOP application. The coded element consists of three components: the identifier, the VA Print name, and the coding system name, “L”, indicating this is a locally defined code. The Prescription Index data element is used by the vendor system to determine the existence of a duplicate prescription date at the time the patient order is received. This data element is formatted as follows: facility ID–prescription number–fill number of the prescription.

For the purposes of this application, the data elements, Issue Date (Sequence #20) and Expiration Date, are present in data fields currently **unused** by HL7 (V. 2.1). The Issue Date is the date the physician wrote the order, and the Expiration Date is the date the prescription expires.

ZX1 Segment Definition Table

SEGMENT	SEQ#	LEN	DT	R/O	RP/#	ELEMENT NAME
ZX1	1	20	ST	R		RX Number
	2	48	CE	R		Pharmacy Site ID
	3	1	ST	R		Mail Processing ID
	4	3	NM	R		RX count
	5	8	ST			Refill text
	6	30	ST	R		Provider/Physician
	7	1	NM			Registered Mail
	8	12	ST	R		Clerk/Verifying Pharmacist
	9	8	TS	R		Fill date (YYYYMMDD)
	10	1	NM			Copayment ID
	11	1	NM			Renewable
	12	1	NM			Safety Cap
	13	3	NM	R		Days Supply
	14	1	NM			Controlled Subs Indicator
	15	20	ST			Barcode Data
	16	11	ST		Y/5	Warning Message Flag
	17	20	ST	R		Patient Status
	18	20	ST			Clinic

Example ZX1 segment:

```
ZX1|10170|521^BIRMINGHAM|M|1|(1 of 2)|FEELGOOD, IDO|1|(674/1874)|19920125|
1|1|1|30|1|521-107396|3~7|SC50|CARDIOLOGY
```

Application specific data elements included in the ZX1 segment are described as follows:

Rx Number—the prescription number of the medication/item requested.

Pharmacy Site ID—SITE NUMBER field and PHARMACY DIVISION NAME field from the OUTPATIENT SITE file (#59) of the sending medical center. Example: 521^Birmingham

Mail Processing ID—Currently the only designation permitted is “M”—mail.

Rx Count—Total number of Rx’s including this Rx which are remaining in the patient order (number of orders to be processed).

Provider/Physician—The name of the provider/physician responsible for this order.