



# **OUTPATIENT PHARMACY**

## **MANAGER'S USER MANUAL**

Version 7.0  
December 1997

(Revised April 2011)

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Department of Veterans Affairs  
Product Development

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# 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
04/2011	i v-xii 7 9 10 62 66 82 83 85  106 116 121-122ddd  132-132r 133 134a-134h 137-138 285-285b 292-292d 292e-292n  292o-292p 292q-292r 293-294  299-302	PSO*7*251	Updated Revision History Updated Table of Contents Added Order Status Add the word “prompt” New OP Hidden Action Added site parameter Added example of site parameter Added codes New example Added information regarding Intervention Menu Hidden Actions Added blank page Added blank page Allergy/ADR Order Checks and Drug-Drug Interaction Enhancements Enhanced Order Checks Added remote order checking note CPRS Order Checks Added Intervention Menu to the screen example Incorporate dosing checks in verification process Incorporate dosing checks in verification process examples Verifying ePharmacy Orders Updated screens for Process Checks and Rx Verification CPRS Order Checks – How They Work Error Messages and Order Check Added API, DATUP, DIF, & FDB to the Glossary, and updated page numbering Updated Index to include Enhanced Drug-Drug Interactions, Duplicate Drug Order Check, Allergy/ADR Order Check Display and CPRS Order Checks, and updated page numbering (G. Tucker, PM, H. Whitney, Developer, S. Heiress and G. Scorca, Tech Writer)
11/10	All	PSO*7*358	Added information regarding TRICARE Active Duty Bypass/Override details (S. Spence, PM; G. Johnson, Tech Writer)

Date	Revised Pages	Patch Number	Description
06/10	i, viii-xi, 85, 105, 105a-b, 106, 112, 112a-b, 280, 281	PSO*7*348	Added two new options to OUTPUT REPORTS menu: List of Patients/Prescriptions for Recall Notice option and Prescription List for Drug Warnings option.
03/10	176, 180	PSO*7*338	When using the Complete Orders from OERR option, the message <There are ## flagged orders for INSTITUTION> now appears in reverse video. (R. Santos, PM; S. B. Gilbert, Technical Writer)
11/09	ix-xi, 132, 178, 178a-b, 224a-b, 279-281	PSO*7*324	The following changes are included in this patch. <ul style="list-style-type: none"> <li>• Ability to duplicate the allergy intervention data filed for the last drug</li> <li>• Alerts for a discontinued CMOP prescription</li> </ul> (E. Wright, PM; R. Sutton, S. B. Gilbert, Technical Writers)
10/09	v-xi, 12, 81-83, 87, 256, 280-281	PSO*7*326	The Social Security Number was removed from print outs given to patients. The patient lookup has been expanded to include the ability to look up by prescription number or wand a barcode with the prescription from many options. (E. Wright, PM; S. B. Gilbert, Tech Writer)
08/09	57, 78	PSO*7*311	Deleted Pharmacy Patient Non-VA Meds Report/Clean-up menu. (A. Scott, PM; T. Dawson, Tech Writer)
08/09	All	PSO*7*320	The following changes are included in this patch. <ul style="list-style-type: none"> <li>• Remote Data prompt, notification, and screen have been added.</li> <li>• A hidden action, DR [Display Remote], has been added.</li> <li>• Remote prescriptions print at the end of the Action Profile (132 Column Printout) Report.</li> <li>• "THIS PATIENT HAS PRESCRIPTIONS AT OTHER FACILITIES" prints at the end of the Pull Early from Suspense and the Print from Suspense File reports.</li> </ul> (G. Tucker, PM; S. B. Scudder, Tech Writer)

# Preface

This user manual describes the functional characteristics of Outpatient Pharmacy V. 7.0. It is intended for pharmacists and technicians who are familiar with the functioning of Outpatient Pharmacy in a Veterans Affairs Medical Center (VAMC).

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

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All orders are sub-grouped by like statuses and then listed alphabetically within the sub-group.

**Order Status:** The current status of the order. These statuses include:

- A Active
- S Suspended
- N Non-Verified or Drug Interactions
- HP Placed on hold by provider through CPRS
- H Placed on hold via backdoor Pharmacy
- E Expired
- DP Discontinued by provider through CPRS
- DE Discontinued due to edit via backdoor Pharmacy
- DC Discontinued via backdoor Pharmacy

The Status column will also display some additional discontinued type actions performed on the order. The codes and the action they represent are as follows:

- DF Discontinued due to edit by a provider through CPRS
- DD Discontinued due to death
- DA Auto discontinued due to admission



A “B” will be appended to the above statuses if the Bad Address Indicator was set and there was no active temporary address at the time of the last label activity.

**CMOP Indicators:** There are two separate indicators when the drug in an order is marked for Consolidated Mail Outpatient Pharmacy (CMOP) processing. This indicator is displayed after the Order Status if applicable.

- > Drug for the prescription is marked for CMOP
- T Displayed when the last fill is either in a Transmitted or Retransmitted CMOP state. (This indicator can overwrite the “>” indicator.

**Copay Indicator:** A “\$” displayed to the right of the prescription number indicates the prescription is copay eligible.

**ePharmacy Indicator** An ‘e’ displayed to the right of the prescription number indicates that the prescription is electronic third-party billable.

**Return to Stock Indicator:** An “R” displayed to the right of the Last Fill Date indicates the last fill was returned to stock.

**Pending Orders:** Any orders entered through Computerized Patient Records System (CPRS), or another outside source, that have not been finished by Outpatient Pharmacy.

**Non-VA Meds Orders:** Any over the counter (OTC) medications, herbal supplements, medications prescribed by providers outside the VA, and medications prescribed by the VA, but purchased by the patient at an outside pharmacy are displayed here. Non-VA Meds orders cannot be placed or updated in Outpatient Pharmacy. The user can input information about a patient’s use of Non-VA Meds only through CPRS. However, the user can use either CPRS or Outpatient Pharmacy menu options to view Non-VA Meds data in a patient’s medical records.

**Third Party Rejects** Any prescriptions that are rejected by third-party payers because of Refill Too Soon (code 79) or Drug Utilization Review (DUR - code 88) are displayed in this section.

**Example: Showing Rejected Prescriptions**

Medication Profile		August 12, 2006@12:35:04		Page:		1 of		1	
OPPATIENT16,ONE				<A>					
PID: 000-24-6802		Ht (cm): 177.80		(02/08/2005)					
DOB: APR 3,1941 (65)		Wt (kg): 90.45		(02/08/2005)					
SEX: MALE									
		ISSUE		LAST		REF		DAY	
#	RX #	DRUG		QTY	ST	DATE	FILL	REM	SUP
-----REFILL TOO SOON/DUR REJECTS (Third Party)-----									
1	51368009\$e	DIGOXIN (LANOXIN) 0.05MG CAP		90	A>	02-16	02-16	3	90
2	51360563e	OXYBUTYNIN CHLORIDE 15MG SA TAB		180	S>	02-15	05-06	0	90
-----ACTIVE-----									
3	100003470e	ABSORBABLE GELATIN FILM		1	A	11-04	11-04	5	31
4	100003461	ACETAMINOPHEN 650MG SUPPOS.		10	A>	11-04	11-04	1	10
5	100003185e	ALBUMIN 25% 50ML		2	A	08-01	08-01	5	5
-----DISCONTINUED-----									
6	100003530	ANALGESIC BALM 1 POUND		1	A	01-08	01-08	3	90
7	100003400	APPLICATORS, COTTON TIP STERILE		10	A	09-23	09-23	5	31
+ Enter ?? for more actions									
PU Patient Record Update		NO New Order							
PI Patient Information		SO Select Order							
Select Action: Next Screen//									



## Using List Manager with Outpatient Pharmacy

List Manager is a tool designed so that a list of items can be presented to the user for an action.

For Outpatient Pharmacy, the List Manager does the following:

- Allows the pharmacist or technician to browse through a list of actions
- Allows the pharmacist or technician to take action against those items
- Allows the user to select an action that displays an action or informational profile
- Allows the user to select a different action without leaving an option.

## Entering Actions

Actions are entered by typing the name(s), or synonym(s) at the “Select Item(s)” prompt. In addition to the various actions that may be available specific to a particular option, List Manager provides generic actions applicable to any List Manager screen. A double question mark (??) may be entered at the “Select Action” prompt for a list of all actions available. The following is a list of generic List Manager actions with a brief description. The synonym for each action is shown in brackets following the action name. Entering the synonym is the quickest way to select an action. Outpatient Pharmacy hidden actions are displayed with the letters (OP) next to the action.

<b>Action</b>	<b>Description</b>
Next Screen [+]	Move to the next screen (may be shown as a default).
Previous Screen [-]	Move to the previous screen.
Up a Line [UP]	Move up one line.
Down a Line [DN]	Move down one line.
Shift View to Right [>]	Move the screen to the right if the screen width is more than 80 characters.
Shift View to Left [<]	Move the screen to the left if the screen width is more than 80 characters.
First Screen [FS]	Move to the first screen.
Last Screen [LS]	Move to the last screen.

<b>Action</b>	<b>Description</b>
Go to Page [GO]	Move to any selected page in the list.
Re Display Screen [RD]	Redisplay the current.
Print Screen [PS]	Prints the header and the portion of the list currently displayed.
Print List [PL]	Prints the list of entries currently displayed.
Search List [SL]	Finds selected text in list of entries.
Auto Display (On/Off) [ADPL]	Toggles the menu of actions to be displayed/not displayed automatically.
Quit [QU]	Exits the screen (may be shown as a default).

## Outpatient Pharmacy Hidden Actions

The Outpatient Pharmacy hidden actions will display with the previous hidden actions once a completed or finished order is selected and a double question mark (??) is entered at the “Select Action:” prompt.

The following hidden actions appear on the Medication Profile screen and can only be applied to one order at a time.

<b>Action</b>	<b>Description</b>
Activity Logs [AL]	Displays the Activity Logs.
Copy [CO]	Allows the user to copy and edit an order.
DIN	Displays available drug restriction/guideline information for the Dispense Drug and Orderable Item associated with the selected medication order.
Intervention Menu [IN]	Intervention menu allows the user to enter a new intervention or delete, edit, print, and view an existing intervention.
Hold [HD]	Places an order on a hold status.
Other OP Actions [OTH]	Allows the user to choose from the following sub-actions: Progress Note [PN], Action Profile [AP], Print Medication Instructions [MI], Display Orders' Statuses [DO], or Non-VA Meds Report [NV].

Site Parameter	Description
DRUG CHECK FOR CLERK	This field is used to determine if the duplicate drug warnings should be shown for non-pharmacist.
FEE BASIS SUPPORT	This field is used to determine if fee basis prescriptions are processed.
MULTI RX REQUEST FORM	This field is used to determine if the multiple prescription request forms are printed with medication labels.
BARCODES ON REQUEST FORMS	This field is used to determine if barcodes are printed on profiles, labels, and multi request forms.
BARCODES ON ACTION PROFILES	This field is used to indicate if barcodes are to print with the action profiles. The printer used must be setup or have barcode capabilities for the barcodes to print. Contact IRM to help determine which printers have barcode capabilities.
VERIFICATION	This field is used to determine if prescriptions entered by a non-pharmacist are placed in a non-verified status.
DISPLAY GROUP	This field is used to determine which bingo board display screen will be shown on the waiting room monitor.
SCREEN PROFILES	This field is used to determine if profiles are displayed when refilling and renewing medications.
EDIT PATIENT DATA	This field is used to determine if editing of patient data will be allowed.
EDIT DRUG	This field will be used to determine if drugs can be changed during prescription edit.
RENEWING RX'S ALLOWED	This field will be used to determine if renewing of medications will be allowed.
PASS MEDS CANCEL	This field is used to determine if pass medications are to be cancelled.
AUTO SUSPEND	This field is used to determine if medication that is refilled or renewed before the next possible fill date is to be placed in suspense automatically.
SHALL COMPUTER ASSIGN RX #S	This field is used to determine if the computer will auto generate prescription numbers.
PROFILE WITH NEW PRESCRIPTIONS	This field is used to determine if medication profiles are printed when new medication is ordered.
SLAVED LABEL PRINTING	<p>This field will be used to allow printing of RX labels without being able to queue to a printer.</p> <p>This parameter is primarily for slaved printing of RX labels. If 'yes' is the answer the prompt or action to be taken on the label will include the '/PRINT' action.</p>
METHADONE PROGRAM	This field will be used to determine if the site has a methadone program and if a particular drug should be prompted for.
METHADONE DRUG	This field will be used to show what drug is being used if the site has a methadone program.
DAYS TO PULL FROM SUSPENSE	This field will be used to pull a patient's medication from suspense for a specified number of days. The day range is from 0 to 10.
DAYS TO PULL SUSPENDED CS CMOP	This field will be used to pull a patient's controlled substances from suspense for CMOP medications for a specified number of days. The range is between 0 and 10.

Site Parameter	Description
RECENTLY DC'D/EXPIRED DAYS	Allow local facilities to set a timeframe (7-45 days) for which a discontinued or expired outpatient medication order will be identified as 'recently discontinued/expired'. Default value is 7 days.
NEW LABEL STOCK	This field will be used to determine which medication label stock will be used.
EXTERNAL INTERFACE	This field allows sites to alter the characteristics of the external interface. The Set of Codes field have the following values:  0 - the external interface is off 1 - send all drugs to the external interface; print labels locally 2 - send all drugs to the external interface; don't print labels locally 3 - send only marked drugs to the external interface; don't print labels locally 4 - send only marked drugs to external interface and print labels through VistA.
DISPENSING SYSTEM PRINTER	This field identifies the name of the printer(s) that, when selected, and the interface is in use, an HL7 message is generated to the dispensing system.
BLANK LABEL BETWEEN PATIENTS	This field will determine if a blank label should print between patients on the label printers.
VERIFYING PHARMACIST ON LABELS	This site parameter will determine if the name of the verifying pharmacist or the name of the person who made the order request will print on the Rx label. If the parameter is set to Yes the verifying pharmacist name will print.
AUTOMATED DISPENSE	This field will determine what version of the automated dispense machine this site is running. If the machine is older than HL7 V.2.4, enter letter O, if HL7 V.2.4 has been installed, enter 2.4.
FILE RELEASE DATE/TIME	This field is used to indicate if the release date/time is to be filed for the prescription dispensed by an external interface.
ENABLE MASTER FILE UPDATE	This field will determine if the automated dispense machines are ready to receive HL7 V.2.4 messages.
DISPENSE DNS NAME	This is the DNS computer name of the automated dispensing machine that is used for this outpatient site division.
DISPENSE DNS PORT	Enter the DNS port number associated with the automated dispense machine for this outpatient pharmacy site division.

The CPRS ORDERING INSTITUTION field in the OUTPATIENT SITE file allows multiple Institutions to be entered for the local site. If more than one Institution is entered for a site, the user can select the appropriate Institution when using the *Complete Orders from OERR* option and complete Pending Orders from clinics that are associated with the specific Institution selected.

Site Parameter	Description
SCRIPTALK DEVICE	This field contains a pointer to the ScripTalk printer device in the device file.
SCRIPTALK AUTO-PRINT SETTINGS	Set this to 'A' to have a ScripTalk label automatically print for ScripTalk-enrolled patients whenever their regular medication label prints. Set to 'M' if ScripTalk labels will be printed manually.
DEFAULT OUTPATIENT SITE	The outpatient site (and parameters) which will be used for ward order entry. An entry in this field will bypass the site selection prompt when entering outpatient from OE/RR.
ADMISSION CANCEL OF RXS	This field is used to determine if outpatient medication will be cancelled after 72 hours of an admission to the medical center.
EXEMPT WARD FROM AUTOCANCEL	For all of the WARD LOCATIONS entered, prescriptions for patients on these wards will not be canceled by the Autocancel RX's on Admission Outpatient Pharmacy system job.
DAYS PRINTED RX STAYS IN 52.5: 7	This field contains the number of days printed prescriptions are to remain in the RX SUSPENSE file when running the Delete From Suspense File option. The number of days to remain may be from 7 to 90.
POLYPHARMACY W/ACTION PROFILE	This field is used to determine if a polypharmacy report prints with action profile across all divisions.
INTERDIVISIONAL PROCESSING	This field is used to indicate if interdivisional processing is to occur.
DIVISION PROMPT ASKED	This field is used to indicate if the 'Division' prompt is to be asked.
REFILL/RENEW DIVISION	This field is used to indicate the refill/renew division for multi divisional sites.
PROCESS AUTO REFILLS FOR INPAT	This flag should be set to Yes, only if the site wants the scheduled AUTO REFILL [PSO AUTO REFILL] option to process refills for patients who are currently an inpatient. The AUTO REFILL job defaults to NO unless the site has this flagged as YES.
PROCESS AUTO REFILLS FOR CNH	This flag should be set to Yes, only if the site wants the scheduled AUTO REFILL [PSO AUTO REFILL] option to process refills for CNH patients. The AUTO REFILL job defaults to NO unless the site has this flagged as YES.

The following example displays all of the prompts that are possible with the *Site Parameter Enter/Edit* option. The prompts displayed at each site will depend upon that site's settings.

#### Example: Site Parameter Enter/Edit - all fields

```
Select Maintenance (Outpatient Pharmacy) Option: SITE Parameter Enter/Edit

Select SITE NAME: ALBANY      500
Would you like to see all site parameters for this division? Y// NO

NAME: ALBANY// <Enter>
MAILING FRANK STREET ADDRESS: 114 ANYSTREET AVE// <Enter>
AREA CODE: 555// <Enter>
PHONE NUMBER: 555-1234// <Enter>
MAILING FRANK ZIP+4 CODE: 55555// <Enter>
SITE NUMBER: 123// <Enter>
```

### Example: Site Parameter Enter/Edit - all fields (continued)

```
NCPDP NUMBER: <Enter>
MAILING FRANK CITY: ANY CITY// <Enter>
MAILING FRANK STATE: ANY STATE// <Enter>
MAILING COMMENTS: <Enter>
INACTIVE DATE: <Enter>
HOLD FUNCTION?: NO// <Enter>
SUSPENSE FUNCTION?: YES// <Enter>
CANCEL DRUG IN SAME CLASS: YES// <Enter>
REFILL INACTIVE DRUG RXS: YES// <Enter>
ASK METHOD OF PICKUP: YES// <Enter>
PASS MEDS ON PROFILE: YES// <Enter>
PROFILE `SORT BY' DEFAULT: DATE// <Enter>
COPIES ON NEW: YES// <Enter>
DRUG CHECK FOR CLERK: YES// <Enter>
FEE BASIS SUPPORT: YES// <Enter>
MULTI RX REQUEST FORM: YES// <Enter>
BARCODES ON REQUEST FORMS: BOTH// <Enter>
BARCODES ON ACTION PROFILES: YES// <Enter>
VERIFICATION: YES// <Enter>
DISPLAY GROUP: OUTPATIENT// <Enter>
SCREEN PROFILES: YES// <Enter>
EDIT PATIENT DATA: YES// <Enter>
EDIT DRUG: YES// <Enter>
RENEWING RX'S ALLOWED: YES// <Enter>
PASS MEDS CANCEL: NO// <Enter>
AUTO SUSPEND: YES// <Enter>
SHALL COMPUTER ASSIGN RX #S: YES// <Enter>
PROFILE WITH NEW PRESCRIPTIONS: NO// <Enter>
SLAVED LABEL PRINTING: YES// <Enter>
METHADONE PROGRAM: NO// <Enter>
METHADONE DRUG: METHADONE SOLUTION (METHADOSE)// <Enter>
DAYS TO PULL FROM SUSPENSE: 2// <Enter>
DAYS TO PULL SUSPENDED CS CMOP: <Enter>
RECENTLY DC'D/EXPIRED DAYS: <Enter>
NEW LABEL STOCK: YES// <Enter>
EXTERNAL INTERFACE: SEND ALL ORDERS AND PRINT LABEL
// <Enter>
Select DISPENSING SYSTEM PRINTER: <Enter>
BLANK LABEL BETWEEN PATIENTS: <Enter>
VERIFYING PHARMACIST ON LABELS: YES// <Enter>
AUTOMATED DISPENSE: HL7 V.2.4// <Enter>
FILE RELEASE DATE/TIME: YES// <Enter>
ENABLE MASTER FILE UPDATE: <Enter>
DISPENSE DNS NAME: <Enter>
DISPENSE DNS PORT: <Enter>
Select CPRS ORDERING INSTITUTION: TROY// <Enter>
  CPRS ORDERING INSTITUTION: TROY// <Enter>
  LOGICAL LINK: <Enter>
Select CPRS ORDERING INSTITUTION: <Enter>
RELATED INSTITUTION: ALBANY// <Enter>
NPI INSTITUTION: <Enter>
LABEL/PROFILE MONITOR MAX: 1000// <Enter>
NARCOTICS NUMBERED DIFFERENTLY: YES// <Enter>
NARCOTIC LOWER BOUND: 10000// <Enter>
NARCOTIC UPPER BOUND: 99999// <Enter>
PRESCRIPTION # LOWER BOUND: 100000999// <Enter>
PRESCRIPTION # UPPER BOUND: 500000000// <Enter>
IB SERVICE/SECTION: PHARMACY// <Enter>
```

## Purge External Batches

### [PSO INTERFACE PURGE]

This option purges entries from the PHARMACY EXTERNAL INTERFACE file.

Example: Purge External Batches

```
Select External Interface Menu Option: Purge External Batches
Enter cutoff date for purge of External Interface file:  022807  (FEB 28, 2007)

Purge entries that were not successfully processed?  NO// <Enter>

Purge queued to run in background.

Select External Interface Menu Option: <Enter>
```

## Recompile AMIS Data

### [PSO AMIS RECOMPILE]

To gather Automated Management Information System (AMIS) data from various sources, use this option. It is recommended that this job should be queued to run during off-peak hours (or at a time that is convenient for the site).



The month/day/year may be specified for a current month report, but only month and year can be specified for reports of past months.

# Chapter 15: Using the Medication Profile

---

This chapter describes the Medication Profile, its different formats, and how it can be used in patient care.

## Medication Profile

[PSO P]

The Medication Profile displays a profile of all prescriptions on file for a particular patient. The prescription display includes all Non-VA Med orders also. The user may view this information directly on the screen or request it to be printed. The medication profile is available in two formats: short or long.

### Medication Profile: Short Format

The short format displays the following information:

- patient name
- eligibility
- reactions
- prescription number
- Sig
- quantity
- last fill date
- address
- DOB
- narrative
- prescriptions
- drug name
- Status
- issue date
- refills remaining.

The short report format of the fields for Non-VA Med orders include the drug name or orderable item name, dosage, schedule and date documented.

The short format displays the status in an abbreviated form. The following is an explanation of the codes:

Code	Status/Description
A	Active
B	Bad Address Indicated
DF	Discontinued due to edit by a provider through CPRS
DE	Discontinued due to edit via backdoor Pharmacy
DP	Discontinued by provider through CPRS
DC	Discontinued via backdoor Pharmacy
DD	Discontinued due to death
DA	Auto discontinued due to admission
E	Expired
HP	Placed on hold by provider through CPRS
H	Placed on hold via backdoor Pharmacy
N	Non Verified
P	Pending due to drug interactions
S	Suspended
\$	Copay eligible
E	third-party electronically billable
R	Returned to stock prescription (next to last fill date)



## Example: Medication Short Profile

Medication Profile Jun 12, 2006@22:33:13 Page: 1 of 1

OPPATIENT16, ONE  
 PID: 000-55-3421 Ht(cm): \_\_\_\_\_ (\_\_\_\_\_)  
 DOB: DEC 2, 1923 (82) Wt(kg): 100.00 (06/24/2003)  
 SEX: MALE Non-VA Meds on File  
 Last entry on 1-20-05

#	RX #	DRUG	QTY	ST	ISSUE DATE	LAST FILL	REF REM	DAY SUP
-----REFILL TOO SOON/DUR REJECTS (Third Party)-----								
1	2390\$e	DIGOXIN (LANOXIN) 0.05MG CAP	90	A>	02-16	02-16	3	90
2	2391e	OXYBUTYNIN CHLORIDE 15MG SA TAB	180	S>	02-15	05-06	0	90
-----ACTIVE-----								
3	2396	AMPICILLIN 250MG CAP	40	A>	06-12	06-12	0	10
4	2395	AZATHIOPRINE 50MG TAB	90	E	06-10	05-03	3	90
-----DISCONTINUED-----								
5	2398	FOLIC ACID 1MG TAB	90	DD>	05-03	05-03R	3	90
6	2400	HYDROCORTISONE 1%CR	1	DE>	05-03	05-03R	11	30
7	2394	IBUPROFEN 400MG TAB 500'S	270	DC	05-03	05-03	3	90
8	2399	MVI CAP/TAB	90	DP>	05-03	05-03R	3	90
9	2402	TEMPAZEPAM 15MG CAP	30	DF	06-01	06-01	5	30
10	2392	THIAMINE HCL 100MG TAB	90	DA>	05-03	05-03R	3	90
-----HOLD-----								
11	2393	WARFARIN 5MG TAB	90	H	05-03	-	3	90
12	2401	FUROSEMIDE 40MG TAB	90	HP	05-03	-	2	90
-----NON-VERIFIED-----								
13	2397	BACLOFEN 10MG TABS	30	N	03-14	03-14	5	30
-----PENDING-----								
14	CAPTOPRIL 25MG TAB		QTY: 180		ISDT: 06-12	REF: 3		
15	MULTIVITAMIN CAP/TAB		QTY: 30		ISDT: 06-12>	REF: 3		
-----NON-VA MEDS (Not dispensed by VA) -----								
GINKO EXT 1 TAB ONCE A DAY BY MOUTH					Date Documented: 01/13/01			
Enter ?? for more actions								
PU	Patient Record Update				NO	New Order		
PI	Patient Information				SO	Select Order		
Select Action: Quit//								



### NOTES:

Order #4 indicates that it has recently expired.

Orders #5,7,10 indicate that they were recently discontinued.

Hold Type display codes are shown in **blue**.

Discontinue Type display codes are shown in **blue**.

## Medication Profile: Long Format

The long format displays all information contained on the short format as well as the following additional fields:

- physician's name
- fill date
- dates of refills/partial fills
- whether the prescription was filled at the pharmacy window or by mail
- clerk code
- total allowable refills
- which division filled it

The long report format of the fields for Non-VA Med orders include the start date, CPRS order #, status, documented by, order check(s), override reason, override provider, and statement of explanation.

### Example: Medication Profile – Long Format

```
Select PATIENT NAME:  OPPATIENT,ONE      8-5-19      666000777      NO      NSC
VETERAN      OPPATIENT,ONE
WARNING : ** This patient has been flagged with a Bad Address Indicator.
LONG or SHORT: SHORT// LONG
Sort by DATE, CLASS or MEDICATION: DATE// <Enter>

All Medications or Selection (A/S): All// <Enter>
DEVICE: HOME// [Select Print Device]  GENERIC INCOMING TELNET

OPPATIENT,ONE
      (TEMP ADDRESS from AUG 28,2006 till (no end date))
LINE1      DOB:  AUG 5,1919
ANYTOWN      PHONE: 555-1212
TEXAS 77379      ELIG: NSC
CANNOT USE SAFETY CAPS.

WEIGHT(Kg):      HEIGHT(cm):
DISABILITIES:

ALLERGIES:_____
ADVERSE REACTIONS:_____

Enter RETURN to continue or '^' to exit: <Enter>

Outpatient prescriptions are discontinued 72 hours after admission
```

#### Medication Profile Sorted by ISSUE DATE

```
Rx #: 100001968Ae      Drug: LOPERAMIDE 2MG CAP
SIG: TAKE TWO CAPSULES BY MOUTH EVERY DAY
QTY: 60      # of Refills: 5      Issue/Expr: 12-15-05/06-16-06
Prov: OPPROVIDER16,TWO      Entry By: 10000000013 Filled: 01-14-06 (M)
Last Released:      Original Release:
Refilled: 02-19-04 (M)      Released:
Remarks:
Division: ALBANY (500)      Active      4 Refills Left
```

-----example continues-----

### Example: Medication Profile – Long Format (continued)

```
-----  
Non-VA MEDS (Not Dispensed by VA)  
GINKO BILLOBA TAB  
  Dosage: 1 TABLET  
  Schedule: ONCE A DAY  
  Route: MOUTH  
  Status: Discontinued (10/08/03)  
  Start Date: 09/03/03      CPRS Order #: 12232  
  Documented By: OPCLERK21,FOUR on 09/03/03  
  Statement of Explanation: Non-VA medication not recommended by VA provider.
```

```
ACETAMINPHEN 325MG CT  
  Dosage: 325MG  
  Schedule:  
  Route:  
  Status: Active  
  Start Date: 09/03/03      CPRS Order #: 12234  
  Documented By: OPCLERK21,FOUR on 09/03/03  
  Statement of Explanation: Non-VA medication recommended by VA provider  
                          Patient wants to buy from Non-VA pharmacy
```

The Intervention menu hidden action has been included in the Patient Information, the Medication Profile and Detailed Order ListMan screens when utilizing the following options:

- Patient Prescription Processing [PSO LM BACKDOOR ORDERS]
- Complete Orders from OERR [PSO LMOE FINISH]
- Edit Prescriptions [PSO RXEDIT]

See Chapter 17, “Using the Pharmacy Intervention Menu” for more details.

## Medication Reconciliation

The Medication Reconciliation product (patch PSO\*7\*294) introduces the components necessary to build four tools useful for medication reconciliation. The product utilizes Health Summary components and Text Integrated Utility (TIU) data objects to create a list of current medications. Medication Reconciliation also leverages the Remote Data Interoperability (RDI) software to include medication data from other sites.

For a complete list of functionality, please refer to the Medication Reconciliation Implementation Guide.

# Chapter 16: About the Output Reports Menu

---

This chapter describes the options on the *Output Reports* menu.

## Output Reports

### [PSO OUTPUTS]

The *Output Reports* menu generates a variety of management reports. These reports contain current medication profiles, utilization, cost, and workload information that help management maintain the highest level of patient care.

The following reports and menus are available on the *Output Reports* menu:

- *Action Profile (132 COLUMN PRINTOUT)*
- *Alpha Drug List and Synonyms*
- *AMIS Report*
- *Bad Address Reporting Main Menu ...*
- *CMOP Controlled Substance Rx Dispense Report*
- *Commonly Dispensed Drugs*
- *Cost Analysis Reports ...*
- *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 ...*
- *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*

### Example: Internet Refill Report – Summary report, sorted by result

Select Output Reports Option: **Internet** Refill Report

You may select a single or multiple DIVISIONS,  
or enter ^ALL to select all DIVISIONS.

DIVISION: **ALBANY** 500 ALBANY

ANOTHER ONE: **<Enter>**

Beginning Date: **06.27.07** (JUN 27, 2007)

Ending Date: **08.16.07** (AUG 16, 2007)

Select one of the following:

P	Patient
D	Date
R	Result

Sort by Patient/Date/Result (P/D/R): R// **Result**

Select one of the following:

D	Detail
S	Summary

Print Detail/Summary report (D/S): S// **Summary**

DEVICE: HOME// **[Select Print Device]**

INTERNET REFILL REPORT BY RESULT - Summary AUG 16,2007@15:31 PAGE: 1  
For date range JUN 27, 2007 through AUG 16, 2007 for ALBANY

Result	Count
Filled	3
Not Filled	9

Total: 12

Press Return to continue: **<Enter>**

**\*\* END OF REPORT \*\***

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### Example: Non-VA Meds Usage Report (continued)

```
Non-VA Meds Usage Report                                     Page: 1
Sorted by PATIENT NAME
Date Range: 10/29/2003 - 02/06/2004                        Run Date: Feb 06, 2004@13:51:08
-----
OPPATIENT3,ONE (ID:6789)                                     Patient Phone #: 555-555-5555
  Non-VA Med: ACIVICIN
  Dispense Drug:                                           Dosage: 2 ML
  Schedule: 3-4 TIMES A DAY                               Med Route: INTRAMUSCULAR
  Status: ACTIVE                                           CPRS Order #: 12510
  Documented By: OPCLERK10,FOUR                           Documented Date: 11/06/2003
  Clinic: 161 - LAB                                       Start Date: 01/01/2003

Statement/Explanation: Medication prescribed by Non-VA provider. PATIENT WANTED
                        TO BUY FROM WALGREENS BECAUSE OF COPAY.

  Non-VA Med: IMIPRAMINE
  Dispense Drug: IMIPRAMINE 50MG TAB                       Dosage: 50MG
  Schedule: FOUR TIMES A DAY AFTER MEALS                 Med Route: MOUTH
                & AT BEDTIME
  Status: DISCONTINUED on 12/20/2003                    CPRS Order #: 12514
  Documented By: OPCLERK16,FOUR                         Documented Date: 11/20/2003
  Clinic: 161 - LAB                                     Start Date: 11/01/2003

OPPATIENT18,ONE (ID: 6789)                                 Patient Phone #:
  Non-VA Med: RANITIDINE
  Dispense Drug: RANITIDINE 150MG TAB                     Dosage: 300MG
  Schedule: EVERY OTHER DAY                               Med Route: MOUTH
  Status: ACTIVE                                           CPRS Order #: 12593
  Documented By: OPCLERK1,FOUR                           Documented Date: 12/18/2003
  Clinic: 285 - DIABETIC                                  Start Date: 12/18/2003

Order Check #1: Duplicate drug class order: HISTAMINE ANTAGONISTS (NIZATIDINE
                CAP,ORAL 150MG TAKE TWO CAPSULES EVERY MORNING AND TAKE TWO
                CAPSULES EVERY EVENING WITH FOOD [ACTIVE])
  Override Reason: Doctor's Therapy
  Override Provider: OPPROVIDER21,TWO

Statement/Explanation: Non-VA medication not recommended by VA provider
=====
Total: 2 patients and 3 orders.
```



Non-VA Meds are automatically discontinued when a Date of Death has been entered for a patient. In the event a Date of Death is entered in-error and subsequently deleted, the Non-VA Meds will be automatically reinstalled to an active status if they were active before they were discontinued.

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# Chapter 18: Processing Drug/Drug Interactions

---

This chapter describes the option used for processing drug interactions.

## Process Drug/Drug Interactions

### [PSO INTERACTION VERIFY]

This option can be used to process information for medications that have been marked as a drug/drug interaction. This allows prescriptions with drug/drug interactions to be processed, deleted, or bypassed. An assigned signature code, which will not appear on the screen, must be entered to complete any of these actions. It will then be verified or non-verified. The *Electronic Signature Code Edit* option can be found under the *User's Toolbox* menu in Kernel V. 8.0.



When processing a drug/drug interaction, the profile will list the status of the interacting drug orders as pending (P).

This section describes the Drug-Drug Interaction enhancements made to the Outpatient Pharmacy application included in PSO\*7\*251.

The Duplicate Drug order check will continue to be performed against active, pending, non-verified, orders on hold (initiated through pharmacy or CPRS), expired and discontinued orders. The timeframe for inclusion of expired and discontinued orders is determined by the display rules on the medication profile. This check will be performed on active Non-VA Medication orders.

Legacy VistA drug-drug interactions have been enhanced to utilize FDB's DIF business rules, APIs and database to provide more clinically relevant drug interaction information. No changes have been made to the existing user actions for critical or significant drug interactions. The pharmacist will have to log an intervention for local, pending and remote critical interactions and have the option of logging an intervention for local and remote significant interactions. No action is required for Non-VA medications orders.

Any remote Outpatient order (from another VAMC or Department of Defense (DoD) facility) using data from Health Data Repository Historical (HDR-Hx) or Health Data Repository- Interim Messaging Solution (HDR-IMS) that has been expired for 30 days or less will be included in the list of medications to be checked.

FDB custom drug interaction tables will be used to store custom changes to FDB standard reference drug interaction tables. FDB drug interactions that are designated as critical in VistA will have their severity level modified to '1'. All FDB drug interactions that are designated as significant in VistA will have their severity level modified to '2'. Any drug interaction in VistA that is not in FDB will be added to the FDB custom tables. For these interactions a custom monograph will be created with a clinical effects section.

The following Outpatient Pharmacy order entry processes have been enhanced:

- Entering a new order via backdoor pharmacy options
- Finishing a pending order

- Renewing an order
- Editing an order which results in a new order being created.
- Verifying an order
- Copying an order
- Reinstating a discontinued order

If a dispense drug is associated with an active Non-VA med order, that dispense drug will be used for the drug interaction order check.

If no dispense drug is associated with an active Non-VA med order, the first active dispense drug marked for Non-VA med use associated with the orderable item will be used for the Drug Interaction order check.

If there are no active dispense drugs marked for Non-VA med use that are associated with the orderable item, then the first active dispense drug marked for Outpatient use associated with the Orderable Item will be used.

If there are no active dispense drugs marked for Outpatient use associated with the orderable item, the first active dispense drugs associated with the orderable item will be used.

If there are no active dispense drugs associated with the orderable item for the Non-VA med order, no Drug Interaction order check will be performed.

Drug interaction order checks will be performed against pending orders.

The software will display to a non-pharmacist (does not hold PSORPH key) when entering a new order via pharmacy backdoor options or when finishing an order entered through CPRS the same drug interaction warning information as shown to a pharmacist.

See examples below:

### **Critical Drug Interaction with Local Rx**

```
***CRITICAL*** Drug Interaction with Prospective Drug:
                INDINAVIR 400MG CAP and

                Local Rx#: 2443
                Drug: AMIODARONE 200MG TAB (ACTIVE)
                SIG: TAKE ONE TABLET BY MOUTH THREE TIMES DAILY
                Processing Status: Released locally on 11/08/06@08:55:32 (Window)
                Last Filled On: 11/08/06

The concurrent administration of amiodarone with indinavir,(1) nelfinavir,(2)
ritonavir,(3) or tipranavir coadministered with ritonavir(4) may result in increased
levels, clinical effects, and toxicity of amiodarone.
```

### **Significant Drug Interaction with Local Rx**

```
***SIGNIFICANT*** Drug Interaction with Prospective Drug:
                WARFARIN 5MG TAB and

                Local RX#: 2443
                Drug: ASPIRIN 325MG TAB (ACTIVE)
                SIG: TAKE ONE TABLET BY MOUTH THREE TIMES DAILY
                Processing Status: Released locally on 11/08/06@08:55:32 (Window)
                Last Filled On: 11/08/06
```

\*\*\* REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

### Significant Drug Interaction with Remote Rx

\*\*\*Significant\*\*\* Drug Interaction with Prospective Drug:  
WARFARIN 5MG TAB and

LOCATION: <VA or DOD facility> Remote RX#: 10950021  
Drug: ASPIRIN 325MG EC TAB (ACTIVE)  
SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING  
Last Filled On: 11/08/06

\*\*\* REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

### Critical Drug Interaction with Remote Rx

\*\*\*CRITICAL\*\*\* Drug Interaction with Prospective Drug:  
INDINAVIR 400MG CAP and

LOCATION: <VA or DOD Facility> Remote Rx#: 2443  
Drug: AMIODARONE 200MG TAB (ACTIVE)  
SIG: TAKE ONE TABLET BY MOUTH THREE TIMES DAILY  
Last Filled On: 11/08/06

The concurrent administration of amiodarone with indinavir,(1) nelfinavir,(2) ritonavir,(3) or tipranavir coadministered with ritonavir(4) may result in increased levels, clinical effects, and toxicity of amiodarone.

### Critical Drug Interaction with Non-VA Med Order

\*\*\*Critical\*\*\* Drug Interaction with Prospective Drug:  
WARFARIN 5MG TAB and

Non-VA Med: CIMETIDINE 200MG TAB  
Dosage: ONE TABLET Schedule: AT BEDTIME

The pharmacologic effects of warfarin may be increased resulting in severe bleeding.

### Significant Drug Interaction with Non-VA Med Order

\*\*\*Significant\*\*\* Drug Interaction with Prospective Drug:  
WARFARIN 5MG TAB and

Non-VA Med: ASPIRIN 325MG TAB  
Dosage: ONE TABLET Schedule: <NOT ENTERED>

\*\*\* REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

### Critical Drug Interaction with Pending Order

\*\*\*CRITICAL\*\*\* Drug Interaction with Prospective Drug:  
INDINAVIR 400MG CAP and

Pending Drug: AMIODARONE 200MG TAB  
SIG: TAKE ONE TABLET EVERY 8 HOURS

The concurrent administration of amiodarone with indinavir,(1) nelfinavir,(2) ritonavir,(3) or tipranavir coadministered with ritonavir(4) may result in increased levels, clinical effects, and toxicity of amiodarone.

### Significant Drug Interaction with Pending Order

\*\*\*SIGNIFICANT\*\*\* Drug Interaction with Prospective Drug:  
WARFARIN 5MG TAB and

Pending Drug: ASPIRIN 325MG TAB

SIG: TAKE ONE TABLET EVERY 8 HOURS

\*\*\* REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

The FDB standard professional drug interaction monograph is shown below:

This information is generalized and not intended as specific medical advice. Consult your healthcare professional before taking or discontinuing any drug or commencing any course of treatment.

**MONOGRAPH TITLE:** Anticoagulants/Salicylates

**SEVERITY LEVEL:** 2-Severe Interaction: Action is required to reduce the risk of severe adverse interaction.

**MECHANISM OF ACTION:** Multiple processes are involved: 1) Salicylate doses greater than 3 gm daily decrease plasma prothrombin levels. 2) Salicylates may also displace anticoagulants from plasma protein binding sites. 3) Salicylates impair platelet function, resulting in prolonged bleeding time. 4) Salicylates may cause gastrointestinal bleeding due to irritation.

**CLINICAL EFFECTS:** The concurrent use of anticoagulants and salicylates may result in increased INR values and increase the risk of bleeding.

**PREDISPOSING FACTORS:** None determined.

**PATIENT MANAGEMENT:** Avoid concomitant administration of these drugs. If salicylate use is necessary, monitor prothrombin time, bleeding time, or INR values closely. When possible, the administration of a non-aspirin salicylate would be preferable.

**DISCUSSION:** This interaction has been reported between aspirin and warfarin and between aspirin and dicumarol. Diflunisal, sodium salicylate, and topical methyl salicylate have been shown to interact with anticoagulants as well. Based on the proposed mechanisms, other salicylates would be expected to interact with anticoagulants as well. The time of highest risk for a coumarin-type drug interaction is when the precipitant drug is initiated, altered, or discontinued.

**REFERENCES:**

1. Quick AJ, Clesceri L. Influence of acetylsalicylic acid and salicylamide on the coagulation of blood. *J Pharmacol Exp Ther* 1960;128:95-8.
2. Watson RM, Pierson RN, Jr. Effect of anticoagulant therapy upon aspirin-induced gastrointestinal bleeding. *Circulation* 1961 Sep;24:613-6.
3. Barrow MV, Quick DT, Cunningham RW. Salicylate hypoprothrombinemia in rheumatoid arthritis with liver disease. Report of two cases. *Arch Intern Med* 1967 Nov;120(5):620-4.
4. Weiss HJ, Aledort LM, Kochwa S. The effect of salicylates on the hemostatic properties of platelets in man. *J Clin Invest* 1968 Sep; 47(9):2169-80.
5. Udall JA. Drug interference with warfarin therapy. *Clin Med* 1970 Aug; 77:20-5.
6. Fausa O. Salicylate-induced hypoprothrombinemia. A report of four cases. *Acta Med Scand* 1970 Nov;188(5):403-8.
7. Zucker MB, Peterson J. Effect of acetylsalicylic acid, other nonsteroidal anti-inflammatory agents, and dipyridamole on human blood platelets. *J Lab Clin Med* 1970 Jul;76(1):66-75.
8. O'Reilly RA, Sahud MA, Aggeler PM. Impact of aspirin and chlorthalidone on the pharmacodynamics of oral anticoagulant drugs in man. *Ann N Y Acad Sci* 1971 Jul 6;179:173-86.
9. Dale J, Myhre E, Loew D. Bleeding during acetylsalicylic acid and anticoagulant therapy in patients with reduced platelet reactivity after aortic valve replacement. *Am Heart J* 1980 Jun;99(6):746-52.
10. Donaldson DR, Sreeharan N, Crow MJ, Rajah SM. Assessment of the interaction of warfarin with aspirin and dipyridamole. *Thromb Haemost* 1982 Feb 26;47(1):77.
11. Chesebro JH, Fuster V, Elveback LR, McGoon DC, Pluth JR, Puga FJ, Wallace RB, Danielson GK, Orszulak TA, Piehler JM, Schaff HV. Trial of combined warfarin plus dipyridamole or aspirin therapy in prosthetic heart valve replacement: danger of aspirin compared with dipyridamole. *Am J Cardiol* 1983 May 15;51(9):1537-41.
12. Chow WH, Cheung KL, Ling HM, See T. Potentiation of warfarin anticoagulation by topical methylsalicylate ointment. *J R Soc Med* 1989 Aug;82(8):501-2.
13. Meade TW, Roderick PJ, Brennan PJ, Wilkes HC, Kelleher CC. Extra-cranial bleeding and other symptoms due to low dose aspirin and low intensity oral anticoagulation. *Thromb Haemost* 1992 Jul 6;68(1):1-6.

Following the drug interaction monograph prompts, when a critical or significant drug interaction is generated with a local, pending, or remote medication order, users not holding a PSORPH key shall be presented with the next prompt in the current order entry dialog. They will not be shown any intervention prompts or dialog.

Following the drug interaction monograph prompts, when a significant drug interaction is generated with a local, pending, or remote medication order, the user will be presented with 'Do you want to intervene?' prompt for the following processes:

- New order entry via backdoor pharmacy options
- Finishing a pending order
- Renewing an order
- Copying an order
- Editing an order which results in creation of a new order
- Verifying an order
- Reinstating an order

### **Critical Drug Interaction with Local Rx – No Monograph –Backdoor New Order Entry**

```
***CRITICAL*** Drug Interaction with Prospective Drug:
                INDINAVIR 400MG CAP and

        Local RX#: 2443
        Drug: AMIODARONE 200MG TAB (ACTIVE)
        SIG: TAKE ONE TABLET BY MOUTH THREE TIMES DAILY
Processing Status: Released locally on 11/08/06@08:55:32 (Window)
        Last Filled On: 11/08/06

The concurrent administration of amiodarone with indinavir,(1) nelfinavir,(2)
ritonavir,(3) or tipranavir coadministered with ritonavir(4) may result in increased
levels, clinical effects, and toxicity of amiodarone.

Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// n NO
RX DELETED

        Or

Do you want to Continue? Y// ES

Do you want to Process medication
INDINAVIR 400MG CAP: P// ROCESS

Enter your Current Signature Code: SIGNATURE VERIFIED
Remote data not available - Only local order checks processed.

Press Return to Continue...

Now creating Pharmacy Intervention
for INDINAVIR 400MG CAP

PROVIDER: OPPROVIDER, ONE
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.
```

Would you like to edit this intervention ? N// O  
 VERB: TAKE  
 Available Dosage(s)  
     1. 400MG  
     2. 800MG  
  
 Select from list of Available Dosages, Enter Free Text Dose  
 or Enter a Question Mark (?) to view list: 1 400MG  
  
 You entered 400MG is this correct? Yes//   YES  
 VERB: TAKE  
 DISPENSE UNITS PER DOSE(CAPSULE): 1// 1  
 Dosage Ordered: 400MG  
  
 NOUN: CAPSULE  
 ROUTE: ORAL// ORAL  
 .

## Significant Drug Interaction with Local Rx – With Monograph – Backdoor New Order Entry

\*\*\* Significant \*\*\* Drug Interaction with Prospective Drug:  
                     WARFARIN 5MG TAB and

Local RX#: 2411  
     Drug: ASPIRIN 325MG EC TAB (ACTIVE)  
     SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING  
 Processing Status: Released locally on 11/08/06@08:55:32 (Window)  
     Last Filled On: 11/08/06

\*\*\* REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// Y es

Device: Home// *<Home would print to screen, or a specific device could be specified>*

Professional Monograph  
 Drug Interaction with WARFARIN and ASPIRIN

This information is generalized and not intended as specific medical advice. Consult your healthcare professional before taking or discontinuing any drug or commencing any course of treatment.

MONOGRAPH TITLE: Anticoagulants/Salicylates

SEVERITY LEVEL: 2-Severe Interaction: Action is required to reduce the risk of severe adverse interaction.

MECHANISM OF ACTION: Multiple processes are involved: 1) Salicylate doses greater than 3 gm daily decrease plasma prothrombin levels. 2) Salicylates may also displace anticoagulants from plasma protein binding sites. 3) Salicylates impair platelet function, resulting in prolonged bleeding time. 4) Salicylates may cause gastrointestinal bleeding due to irritation.

CLINICAL EFFECTS: The concurrent use of anticoagulants and salicylates may result in increased INR values and increase the risk of bleeding.

PREDISPOSING FACTORS: None determined.

PATIENT MANAGEMENT: Avoid concomitant administration of these drugs. If salicylate use is necessary, monitor prothrombin time, bleeding time, or INR values closely. When possible, the administration of a non-aspirin salicylate would be preferable.

DISCUSSION: This interaction has been reported between aspirin and warfarin and between aspirin and dicumarol. Diflunisal, sodium salicylate, and topical methyl salicylate have been shown to interact with anticoagulants as well. Based on the proposed mechanisms, other salicylates would be expected to interact with anticoagulants as well. The time of

highest risk for a coumarin-type drug interaction is when the precipitant drug is initiated, altered, or discontinued.

REFERENCES:

- 1.Quick AJ, Clesceri L. Influence of acetylsalicylic acid and salicylamide on the coagulation of blood. J Pharmacol Exp Ther 1960;128:95-8.
- 2.Watson RM, Pierson RN, Jr. Effect of anticoagulant therapy upon aspirin-induced gastrointestinal bleeding. Circulation 1961 Sep;24:613-6.
- 3.Barrow MV, Quick DT, Cunningham RW. Salicylate hypoprothrombinemia in rheumatoid arthritis with liver disease. Report of two cases. Arch Intern Med 1967 Nov;120(5):620-4.
- 4.Weiss HJ, Aledort LM, Kochwa S. The effect of salicylates on the hemostatic properties of platelets in man. J Clin Invest 1968 Sep; 47(9):2169-80.
- 5.Udall JA. Drug interference with warfarin therapy. Clin Med 1970 Aug; 77:20-5.
- 6.Fausa O. Salicylate-induced hypoprothrombinemia. A report of four cases. Acta Med Scand 1970 Nov;188(5):403-8.
- 7.Zucker MB, Peterson J. Effect of acetylsalicylic acid, other nonsteroidal anti-inflammatory agents, and dipyridamole on human blood platelets. J Lab Clin Med 1970 Jul;76(1):66-75.
- 8.O'Reilly RA, Sahud MA, Aggeler PM. Impact of aspirin and chlorthalidone on the pharmacodynamics of oral anticoagulant drugs in man. Ann N Y Acad Sci 1971 Jul 6;179:173-86.
- 9.Dale J, Myhre E, Loew D. Bleeding during acetylsalicylic acid and anticoagulant therapy in patients with reduced platelet reactivity after aortic valve replacement. Am Heart J 1980 Jun;99(6):746-52.
- 10.Donaldson DR, Sreeharan N, Crow MJ, Rajah SM. Assessment of the interaction of warfarin with aspirin and dipyridamole. Thromb Haemost 1982 Feb 26;47(1):77.
- 11.Chesebro JH, Fuster V, Elveback LR, McGoon DC, Pluth JR, Puga FJ, Wallace RB, Danielson GK, Orszulak TA, Piehler JM, Schaff HV. Trial of combined warfarin plus dipyridamole or aspirin therapy in prosthetic heart valve replacement: danger of aspirin compared with dipyridamole. Am J Cardiol 1983 May 15;51(9):1537-41.
- 12.Chow WH, Cheung KL, Ling HM, See T. Potentiation of warfarin anticoagulation by topical methylsalicylate ointment. J R Soc Med 1989 Aug;82(8):501-2.
- 13.Meade TW, Roderick PJ, Brennan PJ, Wilkes HC, Kelleher CC. Extra-cranial bleeding and other symptoms due to low dose aspirin and low intensity oral anticoagulation. Thromb Haemost 1992 Jul 6;68(1):1-6.

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Do you want to Intervene? Y// NO  
Remote data not available - Only local order checks processed.

Press Return to Continue...

VERB: TAKE

Available Dosage(s)

1. 2.5MG
2. 5MG

.

.

OR

Do you want to Intervene? Y// ES  
Remote data not available - Only local order checks processed.

Press Return to Continue...

Now creating Pharmacy Intervention  
for WARFARIN 5MG TAB

PROVIDER: OPPROVIDER,ONE           OPP           119  
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this  
intervention or for more options.

Would you like to edit this intervention ? N// O

```

VERB: TAKE
Available Dosage(s)
    1. 5MG
    2. 10MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 5MG

You entered 5MG is this correct? Yes//    YES
VERB: TAKE
DISPENSE UNITS PER DOSE(TABLET): 1// 1
Dosage Ordered: 5MG

NOUN: TABLET
ROUTE: PO//    ORAL        PO    MOUTH
.

```

## Significant Drug Interaction with Remote Rx - With Monograph –Backdoor New Order Entry

```

*** Significant*** Drug Interaction with Prospective Drug:
                        WARFARIN 5MG TAB and

                        LOCATION: <VA or DOD facility>      Remote RX#: 10950021
                        Drug: ASPIRIN 325MG EC TAB (ACTIVE)
                        SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING)
                        Last Filled On: 11/08/06

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// Y es

Device: Home// <Home would print to screen, or a specific device could be specified>

Professional Monograph
Drug Interaction with WARFARIN and ASPIRIN

MONOGRAPH TITLE:   Anticoagulants/Salicylates

SEVERITY LEVEL:    2-Severe Interaction: Action is required to reduce the risk of severe
adverse interaction.

MECHANISM OF ACTION: Multiple processes are involved:  1) Salicylate doses greater than
3 gm daily decrease plasma prothrombin levels. 2) Salicylates may also displace
anticoagulants from plasma protein binding sites. 3) Salicylates impair platelet
function, resulting in prolonged bleeding time. 4) Salicylates may cause gastrointestinal
bleeding due to irritation.

CLINICAL EFFECTS:  The concurrent use of anticoagulants and salicylates may result in
increased INR values and increase the risk of bleeding.

PREDISPOSING FACTORS:  None determined.

PATIENT MANAGEMENT:  Avoid concomitant administration of these drugs. If salicylate use
is necessary, monitor prothrombin time, bleeding time, or INR values closely.  When
possible, the administration of a non-aspirin salicylate would be preferable.

DISCUSSION:  This interaction has been reported between aspirin and warfarin and between
aspirin and dicumarol.  Diflunisal, sodium salicylate, and topical methyl salicylate have
been shown to interact with anticoagulants as well.  Based on the proposed mechanisms,
other salicylates would be expected to interact with anticoagulants as well.The time of
highest risk for a coumarin-type drug interaction is when the precipitant drug is
initiated, altered, or discontinued.

REFERENCES:
1.Quick AJ, Clesceri L. Influence of acetylsalicylic acid and salicylamide on the
coagulation of blood. J Pharmacol Exp Ther 1960;128:95-8.
2.Watson RM, Pierson RN, Jr. Effect of anticoagulant therapy upon aspirin-induced
gastrointestinal bleeding. Circulation 1961 Sep;24:613-6.

```



3.Barrow MV, Quick DT, Cunningham RW. Salicylate hypoprothrombinemia in rheumatoid arthritis with liver disease. Report of two cases. Arch Intern Med 1967 Nov;120(5):620-4.  
 4.Weiss HJ, Aledort LM, Kochwa S. The effect of salicylates on the hemostatic properties of platelets in man. J Clin Invest 1968 Sep; 47(9):2169-80.  
 5.Udall JA. Drug interference with warfarin therapy. Clin Med 1970 Aug; 77:20-5.  
 6.Fausa O. Salicylate-induced hypoprothrombinemia. A report of four cases. Acta Med Scand 1970 Nov;188(5):403-8.  
 7.Zucker MB, Peterson J. Effect of acetylsalicylic acid, other nonsteroidal anti-inflammatory agents, and dipyridamole on human blood platelets. J Lab Clin Med 1970 Jul;76(1):66-75.  
 8.O'Reilly RA, Sahud MA, Aggeler PM. Impact of aspirin and chlorthalidone on the pharmacodynamics of oral anticoagulant drugs in man. Ann N Y Acad Sci 1971 Jul 6;179:173-86.  
 9.Dale J, Myhre E, Loew D. Bleeding during acetylsalicylic acid and anticoagulant therapy in patients with reduced platelet reactivity after aortic valve replacement. Am Heart J 1980 Jun;99(6):746-52.  
 10.Donaldson DR, Sreeharan N, Crow MJ, Rajah SM. Assessment of the interaction of warfarin with aspirin and dipyridamole. Thromb Haemost 1982 Feb 26;47(1):77.  
 11.Chesebro JH, Fuster V, Elveback LR, McGoon DC, Pluth JR, Puga FJ, Wallace RB, Danielson GK, Orszulak TA, Piehler JM, Schaff HV. Trial of combined warfarin plus dipyridamole or aspirin therapy in prosthetic heart valve replacement: danger of aspirin compared with dipyridamole. Am J Cardiol 1983 May 15;51(9):1537-41.  
 12.Chow WH, Cheung KL, Ling HM, See T. Potentiation of warfarin anticoagulation by topical methylsalicylate ointment. J R Soc Med 1989 Aug;82(8):501-2.

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Do you want to Intervene? Y// NO

Press Return to Continue...

VERB: TAKE

Available Dosage(s)

- 1. 2.5MG
- 2. 5MG

.

OR

Do you want to Intervene? Y// ES

Press Return to Continue...

Now creating Pharmacy Intervention  
for WARFARIN 5MG TAB

PROVIDER: OPPROVIDER,ONE            OPP            119  
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this  
intervention or for more options.

Would you like to edit this intervention ? N// O

VERB: TAKE

Available Dosage(s)

- 1. 5MG
- 2. 10MG

Select from list of Available Dosages, Enter Free Text Dose  
or Enter a Question Mark (?) to view list: 1 5MG

You entered 5MG is this correct? Yes// YES

VERB: TAKE

DISPENSE UNITS PER DOSE(TABLET): 1// 1

Dosage Ordered: 5MG

NOUN: TABLET

ROUTE: PO// ORAL PO MOUTH

## Critical Drug Interaction with Remote Rx - No Monograph – Backdoor New Order Entry

```
***CRITICAL*** Drug Interaction with Prospective Drug:
                  INDINAVIR 400MG CAP and

                LOCATION: <VA or DOD facility>   Remote RX#: 2543789
                Drug: AMIODARONE 200MG TAB (ACTIVE)
                SIG: TAKE ONE TABLET BY MOUTH EVERY 8 HOURS
                Last Filled On: 11/08/06

The concurrent administration of amiodarone with indinavir,(1) nelfinavir,(2)
ritonavir,(3) or tipranavir coadministered with ritonavir(4) may result in increased
levels, clinical effects, and toxicity of amiodarone.

Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// n  NO
RX DELETED

      OR

Do you want to Continue? Y// ES

Do you want to Process medication
INDINAVIR 400MG CAP: P// ROCESS

Enter your Current Signature Code:      SIGNATURE VERIFIED

Press Return to Continue...

Now creating Pharmacy Intervention
for INDINAVIR 400MG CAP

PROVIDER: OPPROVIDER, ONE
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O
VERB: TAKE
Available Dosage(s)
    1. 400MG
    2. 800MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 400MG

You entered 400MG is this correct? Yes//  YES
VERB: TAKE
DISPENSE UNITS PER DOSE(CAPSULE): 1// 1
Dosage Ordered: 400MG

NOUN: CAPSULE
ROUTE: ORAL// ORAL
.
```

## Critical Drug Interaction with Non-VA Medication Order – Backdoor New Order Entry – No Monograph

```
Select Action: Quit// NO  New Order

Eligibility: SC LESS THAN 50%      SC%: 40
RX PATIENT STATUS: SC LESS THAN 50%//
```

```

DRUG: WARFARIN
  Lookup: GENERIC NAME
    1  WARFARIN 2.5MG TAB          BL110
    2  WARFARIN 5MG TAB           BL110
CHOOSE 1-2: 2  WARFARIN 5MG TAB    BL110

Now doing remote order checks. Please wait...
Now Processing Enhanced Order Checks! Please Wait...

***Critical*** Drug Interaction with Prospective Drug:
                WARFARIN 5MG TAB and

                Non-VA Med: CIMETIDINE 200MG TAB
                Dosage: ONE TABLET    Schedule: AT BEDTIME

The pharmacologic effects of warfarin may be increased resulting in severe bleeding.

Display Professional Interaction Monograph? No// No

VERB: TAKE
Available Dosage(s)
    1. 5MG
    2. 10MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 5MG

You entered 5MG is this correct? Yes//
.

```

### **Critical Drug Interaction with Pending Order – No Monograph –Backdoor New Order Entry**

```

***CRITICAL*** Drug Interaction with Prospective Drug
                INDINAVIR 400MG CAP and

                Pending Drug: AMIODARONE 200MG TAB
                SIG: TAKE ONE TABLET EVERY 8 HOURS

The concurrent administration of amiodarone with indinavir,(1) nelfinavir,(2)
ritonavir,(3) or tipranavir coadministered with ritonavir(4) may result in increased
levels, clinical effects, and toxicity of amiodarone.

Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// n  NO
RX DELETED

    Or

Do you want to Continue? Y// ES

Do you want to Process medication
INDINAVIR 400MG CAP: P// ROCESS

Enter your Current Signature Code:    SIGNATURE VERIFIED
Remote data not available - Only local order checks processed.

Press Return to Continue...

Now creating Pharmacy Intervention
for INDINAVIR 400MG CAP

PROVIDER: OPPROVIDER, ONE
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

```

Would you like to edit this intervention ? N// O  
 VERB: TAKE  
 Available Dosage(s)  
     1. 400MG  
     2. 800MG  
  
 Select from list of Available Dosages, Enter Free Text Dose  
 or Enter a Question Mark (?) to view list: 1 400MG  
  
 You entered 400MG is this correct? Yes//   YES  
 VERB: TAKE  
 DISPENSE UNITS PER DOSE(CAPSULE): 1// 1  
 Dosage Ordered: 400MG  
  
 NOUN: CAPSULE  
 ROUTE: ORAL// ORAL

## Significant Drug Interaction with Pending Rx – With Monograph – Backdoor New Order Entry

\*\*\* Significant \*\*\* Drug Interaction with Prospective Drug  
                             WARFARIN 5MG TAB and  
  
     Pending Drug: ASPIRIN 325MG EC TAB  
                     SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING  
  
 \*\*\* REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS  
  
 Display Professional Interaction Monograph? No// Y es  
  
 Device: Home// <Home would print to screen, or a specific device could be specified>  
  
 Professional Monograph  
 Drug Interaction with WARFARIN and ASPIRIN  
  
 This information is generalized and not intended as specific medical advice. Consult your  
 healthcare professional before taking or discontinuing any drug or commencing any course  
 of treatment.  
  
 MONOGRAPH TITLE:   Anticoagulants/Salicylates  
  
 SEVERITY LEVEL:   2-Severe Interaction: Action is required to reduce the risk of severe  
 adverse interaction.  
  
 MECHANISM OF ACTION:   Multiple processes are involved:   1) Salicylate doses greater than  
 3 gm daily decrease plasma prothrombin levels. 2) Salicylates may also displace  
 anticoagulants from plasma protein binding sites. 3) Salicylates impair platelet  
 function, resulting in prolonged bleeding time. 4) Salicylates may cause gastrointestinal  
 bleeding due to irritation.  
  
 CLINICAL EFFECTS:   The concurrent use of anticoagulants and salicylates may result in  
 increased INR values and increase the risk of bleeding.  
  
 PREDISPOSING FACTORS:   None determined.  
  
 PATIENT MANAGEMENT:   Avoid concomitant administration of these drugs. If salicylate use  
 is necessary, monitor prothrombin time, bleeding time, or INR values closely. When  
 possible, the administration of a non-aspirin salicylate would be preferable.  
  
 DISCUSSION:   This interaction has been reported between aspirin and warfarin and between  
 aspirin and dicumarol. Diflunisal, sodium salicylate, and topical methyl salicylate have  
 been shown to interact with anticoagulants as well. Based on the proposed mechanisms,  
 other salicylates would be expected to interact with anticoagulants as well. The time of  
 highest risk for a coumarin-type drug interaction is when the precipitant drug is  
 initiated, altered, or discontinued.

# REFERENCES:

- 1.Quick AJ, Clesceri L. Influence of acetylsalicylic acid and salicylamide on the coagulation of blood. J Pharmacol Exp Ther 1960;128:95-8.
- 2.Watson RM, Pierson RN, Jr. Effect of anticoagulant therapy upon aspirin-induced gastrointestinal bleeding. Circulation 1961 Sep;24:613-6.
- 3.Barrow MV, Quick DT, Cunningham RW. Salicylate hypoprothrombinemia in rheumatoid arthritis with liver disease. Report of two cases. Arch Intern Med 1967 Nov;120(5):620-4.
- 4.Weiss HJ, Aledort LM, Kochwa S. The effect of salicylates on the hemostatic properties of platelets in man. J Clin Invest 1968 Sep; 47(9):2169-80.
- 5.Udall JA. Drug interference with warfarin therapy. Clin Med 1970 Aug; 77:20-5.
- 6.Fausa O. Salicylate-induced hypoprothrombinemia. A report of four cases. Acta Med Scand 1970 Nov;188(5):403-8.
- 7.Zucker MB, Peterson J. Effect of acetylsalicylic acid, other nonsteroidal anti-inflammatory agents, and dipyridamole on human blood platelets. J Lab Clin Med 1970 Jul;76(1):66-75.
- 8.O'Reilly RA, Sahud MA, Aggeler PM. Impact of aspirin and chlorthalidone on the pharmacodynamics of oral anticoagulant drugs in man. Ann N Y Acad Sci 1971 Jul 6;179:173-86.
- 9.Dale J, Myhre E, Loew D. Bleeding during acetylsalicylic acid and anticoagulant therapy in patients with reduced platelet reactivity after aortic valve replacement. Am Heart J 1980 Jun;99(6):746-52.
- 10.Donaldson DR, Sreeharan N, Crow MJ, Rajah SM. Assessment of the interaction of warfarin with aspirin and dipyridamole. Thromb Haemost 1982 Feb 26;47(1):77.
- 11.Chesebro JH, Fuster V, Elveback LR, McGoon DC, Pluth JR, Puga FJ, Wallace RB, Danielson GK, Orszulak TA, Piehler JM, Schaff HV. Trial of combined warfarin plus dipyridamole or aspirin therapy in prosthetic heart valve replacement: danger of aspirin compared with dipyridamole. Am J Cardiol 1983 May 15;51(9):1537-41.
- 12.Chow WH, Cheung KL, Ling HM, See T. Potentiation of warfarin anticoagulation by topical methylsalicylate ointment. J R Soc Med 1989 Aug;82(8):501-2.
- 13.Meade TW, Roderick PJ, Brennan PJ, Wilkes HC, Kelleher CC. Extra-cranial bleeding and other symptoms due to low dose aspirin and low intensity oral anticoagulation. Thromb Haemost 1992 Jul 6;68(1):1-6.

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Do you want to Intervene? Y// NO  
Remote data not available - Only local order checks processed.

Press Return to Continue...

VERB: TAKE  
Available Dosage(s)  
1. 2.5MG  
2. 5MG

.

.

OR

Do you want to Intervene? Y// ES  
Remote data not available - Only local order checks processed.

Press Return to Continue...

Now creating Pharmacy Intervention  
for WARFARIN 5MG TAB

PROVIDER: OP-PROVIDER,ONE                      OPP                      119  
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this  
intervention or for more options.

Would you like to edit this intervention ? N// O  
VERB: TAKE  
Available Dosage(s)  
1. 5MG

```

2. 10MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 5MG

You entered 5MG is this correct? Yes//  YES
VERB: TAKE
DISPENSE UNITS PER DOSE(TABLET): 1// 1
Dosage Ordered: 5MG

NOUN: TABLET
ROUTE: PO//  ORAL          PO  MOUTH
.

```

## Significant Drug Interaction with Local Rx – Finishing Pending Order – No Monograph

```

+          Enter ?? for more actions
BY Bypass                                DC Discontinue
ED Edit                                  FN Finish
Select Item(s): Next Screen// FN  Finish

Now doing remote order checks. Please wait...
Now Processing Enhanced Order Checks! Please Wait...

***SIGNIFICANT*** Drug Interaction with Prospective Drug:
                    WARFARIN 5MG TAB and

        Local RX#: 2498
        Drug: ASPIRIN 325MG EC TAB  (ACTIVE)
        SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
Processing Status: Released locally on 11/08/06@08:55:32  (Window)
Last Filled On: 11/08/06

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// No

Do you want to Intervene? Y// NO

Was treatment for Service Connected condition? YES//

Are you sure you want to Accept this Order? NO//
.
.
OR

Do you want to Intervene? Y// ES

Now creating Pharmacy Intervention
for WARFARIN 5MG TAB

PROVIDER:      OERRPROVIDER, ONE
RECOMMENDATION: NO CHANGE

See 'Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

Rx # 2500                      10/19/07
OPPATIENT, ONE                  #30
TAKE ONE TABLET BY MOUTH AT BEDTIME

WARFARIN 5MG TAB
OERRPROVIDER,ONE  OPPHARMACIST,ONE
# of Refills: 11

```

SC Percent: 40%  
 Disabilities: NONE STATED

This Rx has been flagged by the provider as: NO COPAY

Was treatment for Service Connected condition? YES//

Are you sure you want to Accept this Order? NO//

.

## Critical Drug Interaction with Local Rx – Finishing Pending Order – No Monograph

```

+          Enter ?? for more actions
BY Bypass          DC Discontinue
ED Edit           FN Finish
Select Item(s): Next Screen// FN  Finish

                                Oct 19, 2007@07:48:33
Now doing remote order checks. Please wait...
Now Processing Enhanced Order Checks! Please Wait...

***CRITICAL*** Drug Interaction with Prospective Drug:
                    IBUPROFEN 600MG TAB and

                    Local RX#: 2498
                    Drug: ASPIRIN 325MG EC TAB  (ACTIVE)
                    SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
Processing Status: Released locally on 11/08/06@08:55:32  (Window)
Last Filled On: 11/08/06

In some patients, NSAIDS have been associated with an increase in the hypoprothrombinemic
effect to anticoagulants.

Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// NO

Pending OP Orders (ROUTINE)  Oct 19, 2007@08:55:12          Page:      1 of      4
OPPATIENT, ONE                                     <A>
  PID: 666-45-6754                                Ht(cm): 187.96 (07/05/1994)
  DOB: JAN 1,1945 (62)                            Wt(kg): 77.27 (07/05/1994)

CPRS Order Checks:
  CRITICAL drug-drug interaction: ASPIRIN & IBUPROFEN (ASPIRIN TAB,EC 325MG
  TAKE ONE TABLET BY MOUTH EVERY MORNING  [ACTIVE])
  Overriding Provider: OERRPROVIDER, ONE
  Overriding Reason: TESTING

  SIGNIFICANT drug-drug interaction: IBUPROFEN & WARFARIN (WARFARIN TAB 5MG
  TAKE ONE TABLET BY MOUTH AT BEDTIME  [PENDING])
  Overriding Provider: OERRPROVIDER, ONE
  Overriding Reason:

  SIGNIFICANT drug-drug interaction: IBUPROFEN & METHOTREXATE (METHOTREXATE
  TAB 2.5MG TAKE ONE TABLET BY MOUTH TWICE A DAY  [PENDING])
  Overriding Provider: OERRPROVIDER,ONE

+          Enter ?? for more actions
AC Accept          ED Edit          DC Discontinue
Select Item(s): Next Screen//.
.
.
OR

Do you want to Continue? Y// YES

```

```

Do you want to Process medication
IBUPROFEN 600MG TAB : P// ROCESS

Enter your Current Signature Code:      SIGNATURE VERIFIED

Now creating Pharmacy Intervention
for IBUPROFEN 600MG TAB

PROVIDER:      OERRPROVIDER, ONE
RECOMMENDATION: NO CHANGE

See 'Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

Rx # 2501                10/19/07
OPPATIENT, ONE          #90
TAKE ONE TABLET BY MOUTH THREE TIMES A DAY WITH FOOD OR MILK

IBUPROFEN 600MG TAB
OERRPROVIDER,ONE  OPPHARMACIST,ONE
# of Refills: 11

      SC Percent: 40%
      Disabilities: NONE STATED

This Rx has been flagged by the provider as: NO COPAY

Was treatment for Service Connected condition? YES//

Are you sure you want to Accept this Order? NO//

```

## Significant Drug Interaction with Pending Order – Finishing Pending Order – No Monograph

```

+      Enter ?? for more actions
BY  Bypass                DC  Discontinue
ED  Edit                  FN  Finish
Select Item(s): Next Screen// FN  Finish

Now doing remote order checks. Please wait...
Now Processing Enhanced Order Checks! Please Wait...

***SIGNIFICANT*** Drug Interaction with Prospective Drug:
                    WARFARIN 5MG TAB and

      Pending Drug: ASPIRIN 325MG EC TAB
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// No

Do you want to Intervene? Y// NO

Was treatment for Service Connected condition? YES//

Are you sure you want to Accept this Order? NO//
.
.
OR

```



```

Do you want to Intervene? Y// ES

Now creating Pharmacy Intervention
for WARFARIN 5MG TAB

PROVIDER:      OERRPROVIDER, ONE
RECOMMENDATION: NO CHANGE

See 'Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

Rx # 2500                10/19/07
OPPATIENT, ONE          #30
TAKE ONE TABLET BY MOUTH AT BEDTIME

WARFARIN 5MG TAB
OERRPROVIDER,ONE      OPPHARMACIST,ONE
# of Refills: 11

      SC Percent: 40%
      Disabilities: NONE STATED

This Rx has been flagged by the provider as: NO COPAY

Was treatment for Service Connected condition? YES//

Are you sure you want to Accept this Order? NO//
.

```

### Critical Drug Interaction with Pending Order – Finishing Pending Order – No Monograph

```

+      Enter ?? for more actions
BY Bypass                DC Discontinue
ED Edit                  FN Finish
Select Item(s): Next Screen// FN  Finish

      Oct 19, 2007@07:48:33
Now doing remote order checks. Please wait...
Now Processing Enhanced Order Checks! Please Wait...

***CRITICAL*** Drug Interaction with Prospective Drug:
      IBUPROFEN 600MG TAB and

      Pending Drug: ASPIRIN 325MG EC TAB
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING

In some patients, NSAIDS have been associated with an increase in the hypoprothrombinemic
effect to anticoagulants.

Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// NO

Pending OP Orders (ROUTINE)  Oct 19, 2007@08:55:12          Page:      1 of      4
OPPATIENT, ONE                                     <A>
  PID: 666-45-6754                                Ht(cm): 187.96 (07/05/1994)
  DOB: JAN 1,1945 (62)                            Wt(kg): 77.27 (07/05/1994)

CPRS Order Checks:
  CRITICAL drug-drug interaction: ASPIRIN & IBUPROFEN (ASPIRIN TAB,EC  325MG
  TAKE ONE TABLET BY MOUTH EVERY MORNING [ACTIVE])
  Overriding Provider: OERRPROVIDER, ONE
  Overriding Reason: TESTING

      SIGNIFICANT drug-drug interaction: IBUPROFEN & WARFARIN (WARFARIN TAB  5MG

```

```

    TAKE ONE TABLET BY MOUTH AT BEDTIME [PENDING])
    Overriding Provider: OERRPROVIDER, ONE
    Overriding Reason:

    SIGNIFICANT drug-drug interaction: IBUPROFEN & METHOTREXATE (METHOTREXATE
    TAB 2.5MG TAKE ONE TABLET BY MOUTH TWICE A DAY [PENDING])
    Overriding Provider: OERRPROVIDER, ONE

+          Enter ?? for more actions
AC Accept          ED Edit          DC Discontinue
Select Item(s): Next Screen//.
.
.
OR

Do you want to Continue? Y// YES

Do you want to Process medication
IBUPROFEN 600MG TAB : P// ROCESS

Enter your Current Signature Code:    SIGNATURE VERIFIED

Now creating Pharmacy Intervention
for IBUPROFEN 600MG TAB

PROVIDER:    OERRPROVIDER, ONE
RECOMMENDATION: NO CHANGE

See 'Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

Rx # 2501          10/19/07
OPPATIENT, ONE          #90
TAKE ONE TABLET BY MOUTH THREE TIMES A DAY WITH FOOD OR MILK

IBUPROFEN 600MG TAB
OERRPROVIDER, ONE  OPPHARMACIST, ONE
# of Refills: 11

    SC Percent: 40%
    Disabilities: NONE STATED

This Rx has been flagged by the provider as: NO COPAY

Was treatment for Service Connected condition? YES//

Are you sure you want to Accept this Order? NO//

```

### Critical Interaction –Renewing an Order

```

OP Medications (ACTIVE)          Feb 14, 2008@07:25:28          Page: 1 of 3
OPPATIENT,THREE                                     <A>
  PID: 000-00-0000                                Ht(cm): 167.64 (10/16/1993)
  DOB: JUL 1,1934 (73)                            Wt(kg): 68.18 (10/16/1993)

          Rx #: 2530$
(1) *Orderable Item: WARFARIN TAB
(2)          Drug: WARFARIN 2.5MG TAB
(3)          *Dosage: 2.5 (MG)
          Verb: TAKE
          Dispense Units: 1
          Noun: TABLET
          *Route: ORAL
          *Schedule: QHS
(4)Pat Instructions:

```

```

                SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
(5) Patient Status: OPT NSC
(6) Issue Date: 02/13/08 (7) Fill Date: 02/13/08
    Last Fill Date: 02/13/08 (Window)
+ Enter ?? for more actions
DC Discontinue PR Partial RL Release
ED Edit RF Refill RN Renew
Select Action: Next Screen// RN Renew
FILL DATE: (2/14/2008 - 2/14/2009): TODAY// (FEB 14, 2008)
MAIL/WINDOW: WINDOW// WINDOW
METHOD OF PICK-UP:
Nature of Order: WRITTEN// W
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No// NO

Now Renewing Rx # 2530 Drug: WARFARIN 2.5MG TAB

Now doing remote order checks. Please wait...
Now Processing Enhanced Order Checks! Please Wait...

***CRITICAL*** Drug Interaction with Prospective Drug:
                WARFARIN 2.5MG TAB and

                Local RX#: #2527
                Drug: CIMETIDINE 300MG TAB (ACTIVE)
                SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
Processing Status: Released locally on 09/08/07@08:55:32 (Window)
    Last Filled On: 09/08/07

The pharmacologic effects of warfarin may be increased resulting in severe bleeding.

Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// NO

RENEWED RX DELETED

OR
Do you want to Continue? Y// ES

Do you want to Process medication
WARFARIN 2.5MG TAB: P// ROCESS

Enter your Current Signature Code: SIGNATURE VERIFIED

Now creating Pharmacy Intervention
for WARFARIN 2.5MG TAB

PROVIDER: OPPROVIDER, FOUR FPP 119
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

2530A WARFARIN 2.5MG TAB QTY: 30
# OF REFILLS: 11 ISSUED: 02-14-08
SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
FILLED: 03-04-08
ROUTING: WINDOW PHYS: OPPROVIDER, FOUR

Edit renewed Rx ? Y//
.

```

## Significant Interaction – Renewing an Order

```
OP Medications (ACTIVE)      Feb 14, 2008@07:15:31      Page: 1 of 3
OPPATIENT,THREE                                     <A>
  PID: 000-00-0000      Ht(cm): 167.64 (10/16/1993)
  DOB: JUL 1,1934 (73)      Wt(kg): 68.18 (10/16/1993)

      Rx #: 2531$
(1) *Orderable Item: INDOMETHACIN CAP,ORAL
(2)      Drug: INDOMETHACIN 25MG CAP
(3)      *Dosage: 25 (MG)
      Verb: TAKE
      Dispense Units: 1
      Noun: CAPSULE
      *Route: ORAL
      *Schedule: TID
(4)Pat Instructions:
      SIG: TAKE ONE CAPSULE BY MOUTH THREE TIMES A DAY
(5) Patient Status: OPT NSC
(6)      Issue Date: 02/13/08      (7) Fill Date: 02/13/08
      Last Fill Date: 02/13/08 (Window)
+      Enter ?? for more actions
DC Discontinue      PR Partial      RL Release
ED Edit      RF Refill      RN Renew
Select Action: Next Screen// RN Renew
FILL DATE: (2/14/2008 - 2/14/2009): TODAY// (FEB 14, 2008)
MAIL/WINDOW: WINDOW// WINDOW
METHOD OF PICK-UP:
Nature of Order: WRITTEN// W
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No// NO

Now Renewing Rx # 2531      Drug: INDOMETHACIN 25MG CAP

Now doing remote order checks. Please wait...
Now Processing Enhanced Order Checks! Please Wait...

***SIGNIFICANT*** Drug Interaction with Prospective Drug:
      INDOMETHACIN 25MG CAP and

      Local RX#: 2530
      DRUG: WARFARIN 2.5MG TAB
      SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
Processing Status: Released locally on 01/08/08@08:55:32 (Window)
      Last Filled On: 01/08/08

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// No

Do you want to Intervene? Y// ES
Remote data not available - Only local order checks processed.

Press Return to Continue...

Now creating Pharmacy Intervention
for INDOMETHACIN 25MG CAP

PROVIDER:      OPPROVIDER,FOUR      FPP      119
RECOMMENDATION:      NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O
```

```

2531A          INDOMETHACIN 25MG CAP          QTY: 90
# OF REFILLS: 11  ISSUED: 02-14-08
SIG: TAKE ONE CAPSULE BY MOUTH THREE TIMES A DAY
FILLED: 03-04-08
ROUTING: WINDOW      PHYS: OPPROVIDER,FOUR

Edit renewed Rx ? Y//
.
.

      OR

Do you want to Intervene? Y// NO
Remote data not available - Only local order checks processed.

Press Return to Continue...

2531A          INDOMETHACIN 25MG CAP          QTY: 90
# OF REFILLS: 11  ISSUED: 02-14-08
SIG: TAKE ONE CAPSULE BY MOUTH THREE TIMES A DAY
FILLED: 03-04-08
ROUTING: WINDOW      PHYS: OPPROVIDER,FOUR

Edit renewed Rx ? Y//
.

```

## Copying An Order – Critical Interaction

```

OP Medications (ACTIVE)      Feb 14, 2008@09:20:04      Page:      1 of      3
OPPATIENT,TWO                                     <A>
  PID: 666-33-3333                                     Ht(cm): 167.64 (10/16/1993)
  DOB: JUL 1,1934 (73)                                Wt(kg): 68.18 (10/16/1993)

      Rx #: 2530$
(1) *Orderable Item: WARFARIN TAB
(2)      Drug: WARFARIN 2.5MG TAB
(3)      *Dosage: 2.5 (MG)
      Verb: TAKE
      Dispense Units: 1
      Noun: TABLET
      *Route: ORAL
      *Schedule: QHS
(4)Pat Instructions:
      SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
(5) Patient Status: OPT NSC
(6)      Issue Date: 02/13/08      (7) Fill Date: 02/13/08
      Last Fill Date: 02/13/08 (Window)
+      Enter ?? for more actions

DC  Discontinue      PR  Partial      RL  Release
ED  Edit            RF  Refill      RN  Renew
Select Action: Next Screen// co  CO

New OP Order (COPY)      Feb 14, 2008@09:20:04      Page:      1 of      2
OPPATIENT,TWO                                     <A>
  PID: 666-33-3333                                     Ht(cm): 167.64 (10/16/1993)
  DOB: JUL 1,1934 (73)                                Wt(kg): 68.18 (10/16/1993)

      Orderable Item: WARFARIN TAB
(1)      Drug: WARFARIN 2.5MG TAB
(2) Patient Status: OPT NSC
(3)      Issue Date: FEB 14,2008      (4) Fill Date: FEB 14,2008
(5) Dosage Ordered: 2.5 (MG)
      Verb: TAKE
      Dispense Units: 1
      Noun: TABLET
      Route: ORAL
      Schedule: QHS
(6)Pat Instruction:

```

```

          SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
(7)    Days Supply: 30                (8)    QTY (TAB): 30
(9)    # of Refills: 11              (10)   Routing: WINDOW
+      Enter ?? for more actions
AC    Accept                        ED    Edit
Select Action: Next Screen// ac    Accept
-----
Duplicate Drug in Local RX:

          Rx #: 2530
          Drug: WARFARIN 2.5MG TAB
          SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
          QTY: 30                      Refills remaining: 11
          Provider: OPPROVIDER, ONE      Issued: 02/13/08
          Status: ACTIVE                  Last filled on: 02/13/08
          Processing Status: Released locally on 02/13/08@08:55:32 (Window)
                                     Days Supply: 30
-----
Discontinue Rx #2530 WARFARIN 2.5MG TAB? Y/N YES

Rx #2530 WARFARIN 2.5MG TAB will be discontinued after the acceptance of the new order.

Now doing remote order checks. Please wait...
Now Processing Enhanced Order Checks! Please Wait...

***CRITICAL*** Drug Interaction with Prospective Drug:
                WARFARIN 2.5MG TAB and

          RX: #2560
          Drug: WARFARIN 2.5MG TAB (ACTIVE)
          SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
          Processing Status: Released locally on 02/18/08@08:55:32 (Window)
          Last Filled On: 02/18/08

The pharmacologic effects of warfarin may be increased resulting in severe bleeding.

Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// ES

Do you want to Process medication
WARFARIN 2.5MG TAB: P// ROCESS

Enter your Current Signature Code:    SIGNATURE VERIFIED
Remote data not available - Only local order checks processed.

Press Return to Continue...

Now creating Pharmacy Intervention
for WARFARIN 2.5MG TAB

PROVIDER:    OPPROVIDER,ONE      OPP      119
RECOMMENDATION:    NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O
Nature of Order: WRITTEN//
.
.
OR

Do you want to Continue? Y// NO
Duplicate Drug Rx #2530 WARFARIN 2.5MG TAB was NOT Discontinued.
.

```

## Copying an Order – Significant Interaction

Medication Profile Feb 14, 2008@08:56:40 Page: 1 of 1  
 OPPATIENT,TWO <A>

PID: 666-33-3333 Ht(cm): 167.64 (10/16/1993)  
 DOB: JUL 1,1934 (73) Wt(kg): 68.18 (10/16/1993)  
 SEX: MALE

#	RX #	DRUG	QTY	ST	DATE	ISSUE	LAST REF	FILL	REM	SUP
-----ACTIVE-----										
1	2528\$	AMINOPHYLLINE 200MG TAB	120	A	02-13	02-13	11	30		
2	2529\$	ASPIRIN 325MG EC TAB	30	A	02-13	02-13	11	30		
3	2527\$	CIMETIDINE 300MG TAB	30	A	02-13	02-13	11	30		
4	2531\$	INDOMETHACIN 25MG CAP	90	A	02-13	02-13	11	30		
5	2530\$	WARFARIN 2.5MG TAB	30	A	02-13	02-13	11	30		

DC Discontinue PR Partial RL Release  
 ED Edit RF Refill RN Renew  
 Select Action: Next Screen// co CO

New OP Order (COPY) Feb 14, 2008@08:56:43 Page: 1 of 2  
 OPPATIENT,TWO <A>

PID: 666-33-3333 Ht(cm): 167.64 (10/16/1993)  
 DOB: JUL 1,1934 (73) Wt(kg): 68.18 (10/16/1993)

Orderable Item: ASPIRIN TAB,EC  
 (1) Drug: ASPIRIN 325MG EC TAB <DIN>  
 (2) Patient Status: OPT NSC  
 (3) Issue Date: FEB 14,2008 (4) Fill Date: FEB 14,2008  
 (5) Dosage Ordered: 325 (MG)  
 Verb: TAKE  
 Dispense Units: 1  
 Noun: TABLET  
 Route: ORAL  
 Schedule: QAM  
 (6)Pat Instruction:  
 SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING  
 (7) Days Supply: 30 (8) QTY (TAB): 30  
 (9) # of Refills: 11 (10) Routing: WINDOW  
 + Enter ?? for more actions  
 AC Accept ED Edit  
 Select Action: Next Screen// ac Accept

Duplicate Drug in Local RX:

Rx #: 2529  
 Drug: ASPIRIN 325MG EC TAB  
 SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING  
 QTY: 30 Refills remaining: 11  
 Provider: OPPROVIDER, ONE Issued: 02/13/08  
 Status: ACTIVE Last filled on: 02/13/08  
 Processing Status: Released locally on 02/13/08@08:55:32 (Window)  
 Days Supply: 30

Discontinue Rx #2529 ASPIRIN 325MG EC TAB? Y/N YES

Rx #2529 ASPIRIN 325MG EC TAB will be discontinued after the acceptance of the new order.

Now doing remote order checks. Please wait...  
 Now Processing Enhanced Order Checks! Please Wait...

\*\*\*SIGNIFICANT\*\*\* Drug Interaction with  
 ASPIRIN 325MG EC TAB and

```

Local RX#: 2530
DRUG: WARFARIN 2.5MG TAB (ACTIVE)
SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
Processing Status: Released locally on 01/08/08@08:55:32 (Window)
Last Filled On: 01/08/08

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// No

Do you want to Intervene? Y// n NO
Remote data not available - Only local order checks processed.

Press Return to Continue...

Nature of Order: WRITTEN//          W
WAS THE PATIENT COUNSELED: NO//
.
.
OR

Do you want to Intervene? Y// ES
Remote data not available - Only local order checks processed.

Press Return to Continue...

Now creating Pharmacy Intervention
for ASPIRIN 325MG EC TAB

PROVIDER:      OPPROVIDER,ONE      OPP      119
RECOMMENDATION:      NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O
Nature of Order: WRITTEN//
.

```

## Verifying an Order – Critical Drug Interaction

```

OP Medications (NON-VERIFIED) Feb 13, 2008@08:49:48          Page:      1 of      2
PSOPATIENT,TWO                                             <A>
  PID: 000-00-0000                      Ht(cm): 167.64 (10/16/1993)
  DOB: JUL 1,1934 (73)                  Wt(kg): 68.18 (10/16/1993)

                                Rx #: 2528$
(1) *Orderable Item: AMINOPHYLLINE TAB
(2)      Drug: AMINOPHYLLINE 200MG TAB
(3)      *Dosage: 200 (MG)
          Verb: TAKE
          Dispense Units: 1
          Noun: TABLET
          *Route: ORAL
          *Schedule: Q6H
(4)Pat Instructions:
          SIG: TAKE ONE TABLET BY MOUTH EVERY 6 HOURS
(5) Patient Status: OPT NSC
(6)      Issue Date: 02/13/08          (7) Fill Date: 02/13/08
          Last Fill Date: 02/13/08 (Window)
+      Enter ?? for more actions
DC Discontinue      PR (Partial)          RL (Release)
ED (Edit)           RF (Refill)           RN (Renew)
Select Action: Next Screen// VF   VF

PSOPATIENT,TWO                      ID#:000-00-0000  RX #2528

```



RX #	DRUG	QTY	ST	ISSUE DATE	LAST FILL	REF REM	DAY SUP
-----NON-VERIFIED-----							
1 2528\$	AMINOPHYLLINE 200MG TAB	120	N	02-13	02-13	11	30
2 2529\$	ASPIRIN 325MG EC TAB	30	N	02-13	02-13	11	30
3 2527\$	CIMETIDINE 300MG TAB	30	N	02-13	02-13	11	30
4 2531\$	INDOMETHACIN 25MG CAP	90	N	02-13	02-13	11	30
5 2530\$	WARFARIN 2.5MG TAB	30	N	02-13	02-13	11	30

Press RETURN to Continue:

\*\*\*CRITICAL\*\*\* Drug Interaction with Prospective Drug:  
AMINOPHYLLINE 200MG TAB and

Local RX#: 2527  
Drug: CIMETIDINE 300MG (ACTIVE)  
SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME  
Processing Status: Released locally on 11/08/08@08:55:32 (Window)  
Last Filled On: 11/08/08

Concurrent cimetidine and theophylline derivative therapy may result in elevated theophylline derivative concentration levels, prolonged elimination half-life, and decreased clearance.

Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// NO

Medication Profile Feb 13, 2008@08:50:04 Page: 1 of 1  
PSOPATIENT,TWO <A>  
PID: 000-00-0000 Ht(cm): 167.64 (10/16/1993)  
DOB: JUL 1,1934 (73) Wt(kg): 68.18 (10/16/1993)  
SEX: MALE

#	RX #	DRUG	QTY	ST	ISSUE DATE	LAST FILL	REF REM	DAY SUP
-----NON-VERIFIED-----								
1	2528\$	AMINOPHYLLINE 200MG TAB	120	N	02-13	02-13	11	30
2	2529\$	ASPIRIN 325MG EC TAB	30	N	02-13	02-13	11	30
3	2527\$	CIMETIDINE 300MG TAB	30	N	02-13	02-13	11	30
4	2531\$	INDOMETHACIN 25MG CAP	90	N	02-13	02-13	11	30
5	2530\$	WARFARIN 2.5MG TAB	30	N	02-13	02-13	11	30

Enter ?? for more actions

ED (Edit) RF (Refill) RN (Renew)

.

OR

Do you want to Continue? Y// YES

Do you want to Process or Cancel medication?  
Rx #2528 DRUG: AMINOPHYLLINE 200MG TAB: PROCESS//

Enter your Current Signature Code: SIGNATURE VERIFIED

Now creating Pharmacy Intervention  
for AMINOPHYLLINE 200MG TAB

PROVIDER: PSOPROVIDER,TWO TPP 119  
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this intervention or for more options.

Would you like to edit this intervention ? N// O

RX: 2528                      PATIENT: PSOPATIENT,TWO (000-00-0000)  
 STATUS: Non-Verified      CO-PAY STATUS  
           DRUG: AMINOPHYLLINE 200MG TAB  
           QTY: 120            30 DAY SUPPLY  
           SIG: TAKE ONE TABLET BY MOUTH EVERY 6 HOURS  
 LATEST: 02/13/2008                      # OF REFILLS: 11    REMAINING: 11  
 ISSUED: 02/13/08                      PROVIDER:  
 LOGGED: 02/13/08                      CLINIC: NOT ON FILE  
 EXPIRES: 02/13/09                      DIVISION: HINES (499)  
           CAP: SAFETY                      ROUTING: WINDOW  
 ENTRY BY: PSOPHARMACIST,ONE                      VERIFIED BY:

LABEL LOG:

#    DATE                      RX REF                      PRINTED BY

=====  
 1    02/13/08    ORIGINAL                      OPCLERK,ONE  
 COMMENTS: From RX number 2528 Drug-Drug interaction  
 PATIENT STATUS : OPT NSC                      COPIES : 1  
 Now doing remote order checks. Please wait...  
 Remote data not available - Only local order checks processed.

Press Return to Continue...

EDIT: (Y/N/P): N// O

VERIFY FOR PSOPATIENT,TWO ? (Y/N/Delete/Quit): Y// ES

## Verifying an Order – Significant Drug Interaction

OP Medications (NON-VERIFIED) Feb 13, 2008@08:51:40                      Page: 1 of 2

PSOPATIENT,TWO

PID: 000-00-0000

Ht(cm): 167.64 (10/16/1993)

DOB: JUL 1,1934 (73)

Wt(kg): 68.18 (10/16/1993)

   Rx #: 2531\$  
 (1) \*Orderable Item: INDOMETHACIN CAP,ORAL  
 (2)                      Drug: INDOMETHACIN 25MG CAP  
 (3)                      \*Dosage: 25 (MG)  
    Verb: TAKE  
    Dispense Units: 1  
    Noun: CAPSULE  
    \*Route: ORAL  
    \*Schedule: TID  
 (4)Pat Instructions:  
    SIG: TAKE ONE CAPSULE BY MOUTH THREE TIMES A DAY  
 (5) Patient Status: OPT NSC  
 (6)                      Issue Date: 02/13/08                      (7) Fill Date: 02/13/08  
    Last Fill Date: 02/13/08 (Window)  
 +                      Enter ?? for more actions  
 DC    Discontinue                      PR    (Partial)                      RL    (Release)  
 ED    Edit                                      RF    (Refill)                      RN    (Renew)  
 Select Action: Next Screen// VF    VF

PSOPATIENT,TWO

ID#:000-00-0000    RX #2531

RX #	DRUG	QTY	ST	ISSUE DATE	LAST FILL	REF REM	DAY SUP
-----ACTIVE-----							
1 2528\$	AMINOPHYLLINE 200MG TAB	120	A	02-13	02-13	11	30
2 2529\$	ASPIRIN 325MG EC TAB	30	A	02-13	02-13	11	30
-----NON-VERIFIED-----							
3 2527\$	CIMETIDINE 300MG TAB	30	N	02-13	02-13	11	30
4 2531\$	INDOMETHACIN 25MG CAP	90	N	02-13	02-13	11	30
5 2530\$	WARFARIN 2.5MG TAB	30	N	02-13	02-13	11	30

Press RETURN to Continue:

```

***SIGNIFICANT*** Drug Interaction with Prospective Drug:
                        INDOMETHACIN 25MG CAP and

      Local RX#: #2530
      DRUG: WARFARIN 2.5MG TAB (ACTIVE)
      SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
Processing Status: Released locally on 02/13/08@08:55:32 (Window)
      Last Filled On: 02/13/08

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// No

Do you want to Intervene? Y// NO

RX: 2531                PATIENT: PSOPATIENT,TWO (000-00-0000)
STATUS: Non-Verified    CO-PAY STATUS
      DRUG: INDOMETHACIN 25MG CAP
      QTY: 90           30 DAY SUPPLY
      SIG: TAKE ONE CAPSULE BY MOUTH THREE TIMES A DAY
      LATEST: 02/13/2008                # OF REFILLS: 11  REMAINING: 11
      ISSUED: 02/13/08                  PROVIDER:
      LOGGED: 02/13/08                  CLINIC: NOT ON FILE
      EXPIRES: 02/13/09                 DIVISION: HINES (499)
      CAP: SAFETY                       ROUTING: WINDOW
      ENTRY BY: OPCLERK,ONE             VERIFIED BY:

PATIENT STATUS : OPT NSC                COPIES : 1
Now doing remote order checks. Please wait...
Remote data not available - Only local order checks processed.

Press Return to Continue...

EDIT: (Y/N/P): N// O
VERIFY FOR PSOPATIENT,TWO ? (Y/N/Delete/Quit): Y// NO
.
.
      OR

Do you want to Intervene? Y// ES

Now creating Pharmacy Intervention
for INDOMETHACIN 25MG CAP

PROVIDER:      PSOPROVIDER,TWO      TPP      119
RECOMMENDATION:      NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

RX: 2531                PATIENT: PSOPATIENT,TWO (000-00-0000)
STATUS: Non-Verified    CO-PAY STATUS
      DRUG: INDOMETHACIN 25MG CAP
      QTY: 90           30 DAY SUPPLY
      SIG: TAKE ONE CAPSULE BY MOUTH THREE TIMES A DAY
      LATEST: 02/13/2008                # OF REFILLS: 11  REMAINING: 11
      ISSUED: 02/13/08                  PROVIDER:
      LOGGED: 02/13/08                  CLINIC: NOT ON FILE
      EXPIRES: 02/13/09                 DIVISION: HINES (499)
      CAP: SAFETY                       ROUTING: WINDOW
      ENTRY BY: OPCLERK, ONE             VERIFIED BY:

PATIENT STATUS : OPT NSC                COPIES : 1
Now doing remote order checks. Please wait...
Remote data not available - Only local order checks processed.

```

Press Return to Continue...

EDIT: (Y/N/P): N// O

VERIFY FOR PSOPATIENT,TWO ? (Y/N/Delete/Quit): Y// YES

.

## Reinstating A Discontinued Order – Critical Interaction

```
Rx #: 2473
(1) *Orderable Item: AMINOPHYLLINE TAB
(2) Drug: AMINOPHYLLINE 200MG TAB
(3) *Dosage: 200 (MG)
    Verb: TAKE
    Dispense Units: 1
    Noun: TABLET
    *Route: ORAL
    *Schedule: Q6H
(4) Pat Instructions:
    SIG: TAKE ONE TABLET BY MOUTH EVERY 6 HOURS
(5) Patient Status: SC LESS THAN 50%
(6) Issue Date: 06/25/07 (7) Fill Date: 06/25/07
    Last Fill Date: 02/12/08 (Window)
+ Enter ?? for more actions
DC Discontinue PR (Partial) RL Release
ED (Edit) RF (Refill) RN Renew
Select Action: Next Screen// DC Discontinue
Are you sure you want to Reinstate? NO// YES

Comments: TESTING
Nature of Order: SERVICE CORRECTION// S
=====

2473 AMINOPHYLLINE 200MG TAB
Now Processing Enhanced Order Checks! Please Wait...

***CRITICAL*** Drug Interaction with Prospective Drug:
                AMINOPHYLLINE 200MG TAB and

    Local RX#: 2527
    Drug: CIMETIDINE 300MG (ACTIVE)
    SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
Processing Status: Released locally on 02/13/08@08:55:32 (Window)
    Last Filled On: 02/13/08

Concurrent cimetidine and theophylline derivative therapy may result in elevated
theophylline derivative concentration levels, prolonged elimination half-life, and
decreased clearance.

Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// NO

PI Patient Information SO Select Order
PU Patient Record Update NO New Order
PI Patient Information SO Select Order
Select Action: Quit// 5

Medication Profile Feb 14, 2008@11:43:17 Page: 1 of 1
PSOPATIENT, TEN <A>
PID: 000-00-0000 Ht (cm): _____ (_____)
DOB: JAN 1,1922 (86) Wt (kg): _____ (_____)
SEX: MALE

# RX # DRUG QTY ST DATE FILL REM SUP
-----
1 2472 CIMETIDINE 300MG TAB 60 A 06-25 02-12 11 30
2 2526 INDINAVIR 400MG CAP 90 A 02-12 02-12 11 30
3 2469 RIFAMPIN 300MG CAP 120 A 06-25 02-12 11 30
-----ACTIVE-----
```

```

4 2525          WARFARIN 5MG TAB          30 A  02-12 02-12  11  30
-----DISCONTINUED-----
5 2473          AMINOPHYLLINE 200MG TAB    120 DC 06-25 02-12  11  30
6 2533          AMIODARONE 200MG TAB      180 DC 02-14 02-14  11  30
7 2465          ASPIRIN 325MG EC TAB       30 DC 06-25 02-12  11  30
8 2471          CARBAMAZEPINE 200MG TAB     90 DC 06-25 02-12  11  30
9 2524          WARFARIN 2.5MG TAB         90 DC 02-12 02-12  11  30
      Enter ?? for more actions

ED   (Edit)          RF   (Refill)          RN   Renew
.
.
      Or

Do you want to Continue? Y// ES

Do you want to Process medication
AMINOPHYLLINE 200MG TAB: P// ROCESS

Enter your Current Signature Code:      SIGNATURE VERIFIED

Now creating Pharmacy Intervention
for AMINOPHYLLINE 200MG TAB

PROVIDER:      OPROVIDER, ELEVEN      EPP
RECOMMENDATION:      NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

Prescription #2473 REINSTATED!
Prescription #2473 Filled:  JUN 25, 2007Printed: JUN 25, 2007Released:
** Do you want to print the label now? N// O

ED   (Edit)          RF   (Refill)          RN   Renew
.

```

## Reinstating A Discontinued Order – Significant Interaction

```

Rx #: 2465
(1) *Orderable Item: ASPIRIN TAB,EC
(2)      Drug: ASPIRIN 325MG EC TAB <DIN>
(3)      *Dosage: 325 (MG)
          Verb: TAKE
          Dispense Units: 1
          Noun: TABLET
          *Route: ORAL
          *Schedule: QAM
(4)Pat Instructions:
          SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
(5) Patient Status: SC LESS THAN 50%
(6)      Issue Date: 06/25/07          (7) Fill Date: 06/25/07
          Last Fill Date: 02/12/08 (Window)
+      Enter ?? for more actions
DC Discontinue      PR   (Partial)          RL   Release
ED (Edit)          RF   (Refill)          RN   Renew
Select Action: Next Screen// DC Discontinue
Are you sure you want to Reinstate? NO// YES

Comments: TESTING
Nature of Order: SERVICE CORRECTION//      S
=====

2465 ASPIRIN 325MG EC TAB
Now Processing Enhanced Order Checks! Please Wait...

```

```

***SIGNIFICANT*** Drug Interaction with Prospective Drug:
                    ASPIRIN 325MG EC TAB and

    Local RX#: 2524
    Drug: WARFARIN 2.5MG TAB (ACTIVE)
    SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
    Processing Status: Released locally on 02/12/07@08:55:32 (Window)
    Last Filled On: 02/12/07

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// No

Do you want to Intervene? Y// NO

Prescription #2465 REINSTATED!
  Prescription #2465 Filled: JUN 25, 2007Printed: JUN 25, 2007Released:
    ** Do you want to print the label now? N//
.
.
  OR

Do you want to Intervene? Y// YES

Do you want to Process medication
CARBAMAZEPINE 200MG TAB: P// ROCESS

Enter your Current Signature Code:    SIGNATURE VERIFIED

Now creating Pharmacy Intervention
for CARBAMAZEPINE 200MG TAB

PROVIDER:    OPPROVIDER, ELEVEN      EPP
RECOMMENDATION:    NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

Prescription #2471 REINSTATED!
  Prescription #2471 Filled: JUN 25, 2007Printed: JUN 25, 2007Released:
    ** Do you want to print the label now? N// O
.

```

## Editing An Order – Creating a New Order – Critical Interaction

Medication Profile		Feb 14, 2008@12:26:38	Page: 1 of 2					
OPPATIENT, ONE			<A>					
PID: 000-00-0000		Ht (cm): _____	(_____)					
DOB: JAN 1,1922 (86)		Wt (kg): _____	(_____)					
SEX: MALE								
#	RX #	DRUG	QTY	ST	ISSUE DATE	LAST FILL	REF REM	DAY SUP
-----ACTIVE-----								
1	2473	AMINOPHYLLINE 200MG TAB	120	A	06-25	02-12	11	30
2	2537	ASPIRIN 325MG EC TAB	30	A	02-14	02-14	11	30
3	2471	CARBAMAZEPINE 200MG TAB	90	A	06-25	02-12	11	30
4	2472	CIMETIDINE 300MG TAB	60	A	06-25	02-12	11	30
5	2526	INDINAVIR 400MG CAP	90	A	02-12	02-12	11	30
6	2469	RIFAMPIN 300MG CAP	120	A	06-25	02-12	11	30
-----DISCONTINUED-----								
7	2533	AMIODARONE 200MG TAB	180	DC	02-14	02-14	11	30
8	2536	DIPYRIDAMOLE 25MG TAB	30	DE	02-14	02-14	11	30
9	2524	WARFARIN 2.5MG TAB	90	DC	02-12	02-12	11	30
+ Enter ?? for more actions								

```

DC  Discontinue      PR  Partial      RL  Release
ED  Edit             RF  Refill       RN  Renew
Select Action: Next Screen// ED

Rx #: 2537
(1) *Orderable Item: ASPIRIN TAB,EC
(2) Drug: ASPIRIN 325MG EC TAB <DIN>
(3) *Dosage: 325 (MG)
    Verb: TAKE
    Dispense Units: 1
    Noun: TABLET
    *Route: ORAL
OP Medications (ACTIVE) Feb 14, 2008@12:26:38 Page: 1 of 2
OPPATIENT, ONE <A>
PID: 000-00-0000 Ht(cm): _____ (_____)
DOB: JAN 1,1922 (86) Wt(kg): _____ (_____)

*Schedule: QAM
(4)Pat Instructions:
    SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
(5) Patient Status: SC LESS THAN 50%
(6) Issue Date: 02/14/08 (7) Fill Date: 02/14/08
    Last Fill Date: 02/14/08 (Window)
+ Enter ?? for more actions
DC  Discontinue      PR  Partial      RL  Release
ED  Edit             RF  Refill       RN  Renew
Select Action: Next Screen// 1

Current Orderable Item: ASPIRIN TAB,EC
Select PHARMACY ORDERABLE ITEM NAME: ASPIRIN// AMIODARONE AMIODARONE TAB

New Orderable Item selected. This edit will create a new prescription!

Press Return to Continue...

-----
Duplicate Drug in Local Rx:

Rx #: 2533
Drug: AMIODARONE 200MG TAB
SIG: TAKE TWO TABLETS BY MOUTH THREE TIMES A DAY
QTY: 180 Refills remaining: 11
Provider: OP PROVIDER,TEN Issued: 02/14/08
Status: Discontinued Last filled on: 02/14/08
Processing Status: Released locally on 02/14/08@08:55:32 (Window)
Days Supply: 30
-----

Press Return to Continue:
Now Processing Enhanced Order Checks! Please Wait...

***CRITICAL*** Drug Interaction with Prospective Drug:
AMIODARONE 200MG TAB and

Local RX#: 2526
Drug: INDINAVIR 400MG CAP (ACTIVE)
SIG: TAKE ONE CAPSULES EVERY 8 HOURS
Processing Status: Released locally on 02/12/08@08:55:32 (Window)
Last Filled On: 02/12/08

The concurrent administration of amiodarone with indinavir,(1) nelfinavir,(2)
ritonavir,(3) or tipranavir coadministered with ritonavir(4) may result in increased
levels, clinical effects, and toxicity of amiodarone.

Display Professional Interaction Monograph? N//No

Do you want to Continue? Y// NO

Rx #: 2537
(1) *Orderable Item: ASPIRIN TAB,EC

```

```

(2)          Drug: ASPIRIN 325MG EC TAB <DIN>
(3)          *Dosage: 325 (MG)
              Verb: TAKE
              Dispense Units: 1
              Noun: TABLET
              *Route: ORAL
              *Schedule: QAM
OP Medications (ACTIVE)      Feb 14, 2008@12:27:09      Page: 1 of 2
OPPATIENT, ONE              <A>
  PID: 000-00-0000          Ht (cm): _____ (_____)
  DOB: JAN 1,1922 (86)      Wt (kg): _____ (_____)

(4)Pat Instructions:
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
(5) Patient Status: SC LESS THAN 50%
(6) Issue Date: 02/14/08      (7) Fill Date: 02/14/08
    Last Fill Date: 02/14/08 (Window)
+      Enter ?? for more actions
DC Discontinue      PR Partial      RL Release
ED Edit            RF Refill        RN Renew
Select Action: Next Screen//
.
OR

Do you want to Continue? Y// ES

Do you want to Process medication
AMIODARONE 200MG TAB: P// ROCESS

Enter your Current Signature Code:      SIGNATURE VERIFIED

Now creating Pharmacy Intervention
for AMIODARONE 200MG TAB

PROVIDER:      PSOPROVIDER, THREE      TPP
RECOMMENDATION:      NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O
.

```

## Editing An Order – Creating a New Order – Significant Interaction

```

Rx #: 2537
(1) *Orderable Item: ASPIRIN TAB,EC
(2)          Drug: ASPIRIN 325MG EC TAB <DIN>
(3)          *Dosage: 325 (MG)
              Verb: TAKE
              Dispense Units: 1
              Noun: TABLET
              *Route: ORAL
              *Schedule: QAM
OP Medications (ACTIVE)      Feb 14, 2008@12:27:09      Page: 1 of 2
OPPATIENT,TWO              <A>
  PID: 000-00-0000          Ht (cm): _____ (_____)
  DOB: JAN 1,1922 (86)      Wt (kg): _____ (_____)

(4)Pat Instructions:
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
(5) Patient Status: SC LESS THAN 50%
(6) Issue Date: 02/14/08      (7) Fill Date: 02/14/08
    Last Fill Date: 02/14/08 (Window)
+      Enter ?? for more actions
DC Discontinue      PR Partial      RL Release
ED Edit            RF Refill        RN Renew
Select Action: Next Screen// EDIT Edit

```



```

Select fields by number:  (1-19): 1

Current Orderable Item: ASPIRIN TAB,EC
Select PHARMACY ORDERABLE ITEM NAME: ASPIRIN// AMIODARONE  AMIODARONE      TAB

New Orderable Item selected. This edit will create a new prescription!

Press Return to Continue...

-----
Duplicate Drug in Local Rx:

      Rx #: 2533
      Drug: AMIODARONE 200MG TAB
      SIG: TAKE TWO TABLETS BY MOUTH THREE TIMES A DAY
      QTY: 180                      Refills remaining: 11
      Provider: OPProvider,TEN          Issued: 02/14/08
      Status: Discontinued              Last filled on: 02/14/08
      Processing Status: Released locally on 02/14/08@08:55:32 (Window)
                                      Days Supply: 30
-----

Press Return to Continue:
Now Processing Enhanced Order Checks! Please Wait...

***SIGNIFICANT*** Drug Interaction with Prospective Drug:
                  AMIODARONE 200MG TAB and

      Local RX#: 2469
      Drug: CIPROFLOXACIN 750MG TAB (ACTIVE)
      SIG: TAKE ONE TABLET EVERY 12 HOURS
      Processing Status: Released locally on 02/12/08@08:55:32 (Window)
      Last Filled On: 02/12/08

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? N//No

Do you want to Intervene? Y// ES

Now creating Pharmacy Intervention
for AMIODARONE 200MG TAB

PROVIDER:      OPProvider,ELEVEN      EPP
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O
.
.
OR
Do you want to Intervene? Y// NO

You have changed the Orderable Item from
ASPIRIN to AMIODARONE.
Do You want to Edit the SIG? NO// YES
Available Dosage(s)
  1. 200MG
  2. 400MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 200MG

You entered 200MG is this correct? Yes// YES
VERB: TAKE// TAKE
DISPENSE UNITS PER DOSE(TABLET): 1// 1
.

```

## Backdoor New Order Entry by Non-Pharmacist – Critical Interaction with Non-VA Med plus Significant Interaction with Local Rx

```
Enter ?? for more actions
PU Patient Record Update          NO New Order
PI Patient Information             SO Select Order
Select Action: Quit// NO    New Order

Eligibility: SERVICE CONNECTED 50% to 100%    SC%: 80
RX PATIENT STATUS: SC//
DRUG: WARFARIN
  Lookup: GENERIC NAME
        1  WARFARIN 2.5MG TAB          BL110
        2  WARFARIN 5MG TAB           BL110
CHOOSE 1-2: 2  WARFARIN 5MG TAB          BL110

Now Processing Enhanced Order Checks! Please Wait...

***Critical*** Drug Interaction with Prospective Drug:
                WARFARIN 5MG TAB and

                Non-VA Med: CIMETIDINE 300MG TAB
                Dosage: ONE TABLET Schedule: AT BEDTIME

The pharmacologic effects of warfarin may be increased resulting in severe bleeding.

Display Professional Interaction Monograph? No// No

***SIGNIFICANT*** Drug Interaction with Prospective Drug:
                WARFARIN 5MG TAB and

                Local RX#: 2443
                Drug: IBUPROFEN 600MG TAB (ACTIVE)
                SIG: TAKE ONE TABLET BY MOUTH THREE TIMES DAILY
Processing Status: Released locally on 11/08/07@08:55:32 (Window)
Last Filled On: 11/08/07

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// Yes

Device: Home// <Home would print to screen, or a specific device could be specified>

Professional Monograph
Drug Interaction with WARFARIN and IBUPROFEN

MONOGRAPH TITLE: Anticoagulants/NSAIDs

SEVERITY LEVEL: 3-Moderate Interaction: Assess the risk to the patient and take action
as needed.

MECHANISM OF ACTION: The exact mechanism is unknown. Some NSAIDs may displace
anticoagulants from plasma protein binding sites. NSAIDs also have the potential to
produce gastrointestinal ulceration and bleeding. Some NSAIDs may impair platelet
function and prolong bleeding times.

CLINICAL EFFECTS: In some patients, NSAIDs have been associated with an increase in the
hypoprothrombinemic effect to anticoagulants.

PREDISPOSING FACTORS: None determined.

PATIENT MANAGEMENT: If concurrent therapy with anticoagulants and NSAIDs is warranted,
patients should be monitored for an increased hypoprothrombinemic response when NSAIDs
are added to the patient's drug regimen. In addition to routine monitoring of INR values,
the patient should be observed for signs of increased effect, including bruising or
bleeding. The time of highest risk for a coumarin-type drug interaction is when the
```

precipitant drug is initiated or discontinued. Consult with the prescriber before initiating, altering the dose of, or discontinuing either drug.

**DISCUSSION:** The effects of NSAIDs on the hypoprothrombinemic response to anticoagulants appears to vary between patients as well as with different NSAIDs. Documentation is frequently contradictory - while studies have shown several NSAIDs to have no effect on the pharmacokinetics of warfarin, case reports have documented increased effects with and without bleeding when these same NSAIDs were administered concurrently with warfarin. While celecoxib has been shown not to affect platelet aggregation or bleeding times and had no effects on the anticoagulant effect of warfarin in healthy subjects, increased prothrombin times and bleeding episodes, some of which were fatal, have been reported, predominantly in the elderly, in patients receiving concurrent therapy with celecoxib and warfarin. Rofecoxib has been shown to increase prothrombin times in subjects who received concurrent warfarin therapy. If concurrent therapy with anticoagulants and NSAIDs is warranted, it would be prudent to monitor patients closely for increased anticoagulant effects.

**REFERENCES:**

1. Thilo D, Nyman D. A study of the effects of the anti-rheumatic drug ibuprofen (Brufen) on patients being treated with the oral anti-coagulant phenprocoumon (Marcoumar). *J Int Med Res* 1974;2:276-8.
2. Boekhout-Mussert MJ, Loeliger EA. Influence of ibuprofen on oral anti-coagulant with phenprocoumon. *J Int Med Res* 1974;2:279-83.
3. Penner JA, Abbrecht PH. Lack of interaction between ibuprofen and warfarin. *Curr Ther Res Clin Exp* 1975 Dec;18(6):862-71.
4. Michot F, Ajdacic K, Glaus L. A double-blind clinical trial to determine if an interaction exists between diclofenac sodium and the oral anticoagulant acenocoumarol (nicoumalone). *J Int Med Res* 1975;3(3):153-7.
5. Marbet GA, Duckert F, Walter M, Six P, Airenne H. Interaction study between phenprocoumon and flurbiprofen. *Curr Med Res Opin* 1977;5(1):26-31.
6. Slaterry JT, Levy G, Jain A, McMahon FG. Effect of naproxen on the kinetics of elimination and anticoagulant activity of a single dose of warfarin. *Clin Pharmacol Ther* 1979 Jan;25(1):51-60.
7. Jain A, McMahon FG, Slaterry JT, Levy G. Effect of naproxen on the steady-state serum concentration and anticoagulant activity of warfarin. *Clin Pharmacol Ther* 1979 Jan;25(1):61-6.
8. Loftin JP, Vesell ES. Interaction between sulindac and warfarin: different results in normal subjects and in an unusual patient with a potassium-losing renal tubular defect. *J Clin Pharmacol* 1979 Nov-Dec; 19(11-12):733-42.
9. Carter SA. Potential effect of sulindac on response of prothrombin-time to oral anticoagulants. *Lancet* 1979 Sep 29;2(8144):698-9.
10. Ross JR, Beeley L. Sulindac, prothrombin time, and anticoagulants. *Lancet* 1979 Nov 17;2(8151):1075.
11. Stricker BH, Delhez JL. Interactions between flurbiprofen and coumarins. *Br Med J (Clin Res Ed)* 1982 Sep 18;285(6344):812-3.
12. Dahl SL, Ward JR. Pharmacology, clinical efficacy, and adverse effects of piroxicam, a new nonsteroidal anti-inflammatory agent. *Pharmacotherapy* 1982 Mar-Apr;2(2):80-90.
13. Rhodes RS, Rhodes PJ, Klein C, Sintek CD. A warfarin-piroxicam drug interaction. *Drug Intell Clin Pharm* 1985 Jul-Aug;19(7-8):556-8.
14. Flessner MF, Knight H. Prolongation of prothrombin time and severe gastrointestinal bleeding associated with combined use of warfarin and ketoprofen. *JAMA* 1988 Jan 15;259(3):353.
15. Griffin MR, Piper JM, Daugherty JR, Snowden M, Ray WA. Nonsteroidal anti-inflammatory drug use and increased risk for peptic ulcer disease in elderly persons. *Ann Intern Med* 1991 Feb 15;114(4):257-63.
16. Gabriel SE, Jaakkimainen L, Bombardier C. Risk for serious gastrointestinal complications related to use of nonsteroidal anti-inflammatory drugs. A meta-analysis. *Ann Intern Med* 1991 Nov 15; 115(10):787-96.
17. Shorr RI, Ray WA, Daugherty JR, Griffin MR. Concurrent use of nonsteroidal anti-inflammatory drugs and oral anticoagulants places elderly persons at high risk for hemorrhagic peptic ulcer disease. *Arch Intern Med* 1993 Jul 26;153(14):1665-70.
18. Hilleman DE, Mohiuddin SM, Lucas BD, Jr. Nonsteroidal antiinflammatory drug use in patients receiving warfarin: emphasis on nabumetone. *Am J Med* 1993 Aug 9;95(2A):30S-34S.
19. Mieszczyk C, Winther K. Lack of interaction of ketoprofen with warfarin. *Eur J Clin Pharmacol* 1993;44(2):205-6.
20. Celebrex (celecoxib) US prescribing information. Pfizer Inc. December, 2006. 21. Vioxx (rofecoxib) US prescribing information. Merck & Co., Inc. March, 2004.

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Do you want to Intervene? Y// ES

```

Now creating Pharmacy Intervention
for WARFARIN 5MG TAB

PROVIDER:      OPPROVIDER,ELEVEN      EPP
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O
.
.

      OR
Do you want to Intervene? Y// NO

VERB: TAKE
Available Dosage(s)
      1. 5MG
      2. 10MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list:

```

## Finishing a Pending Order by Non-Pharmacist

```

***Critical*** Drug Interaction with Prospective Drug:
                WARFARIN 5MG TAB and

                Non-VA Med: CIMETIDINE 300MG TAB
                Dosage: ONE TABLET      Schedule: AT BEDTIME

The pharmacologic effects of warfarin may be increased resulting in severe bleeding.

Display Professional Interaction Monograph? No// No

***SIGNIFICANT*** Drug Interaction with Prospective Drug:
                WARFARIN 5MG TAB and

                Local RX#: 2443
                Drug: IBUPROFEN 600MG TAB (ACTIVE)
                SIG: TAKE ONE TABLET BY MOUTH THREE TIMES DAILY
Processing Status: Released locally on 11/08/07@08:55:32 (Window)
Last Filled On: 11/08/07

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// No

Do you want to Intervene? Y// ES

Now creating Pharmacy Intervention
for WARFARIN 5MG TAB

PROVIDER:      OPPROVIDER,ELEVEN      EPP
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O
.
.

      OR
Do you want to Intervene? Y// NO

```

Rx # 2559                      03/04/08  
OPPATIENT,ONE                      #90  
TAKE ONE TABLET BY MOUTH EVERY EVENING

WARFARIN 5MG TAB  
OERRPROVIDER,ONE                      PSOPHARMACIST,ONE  
# of Refills: 3

SC Percent: 80%  
Disabilities: NONE STATED

Was treatment for a Service Connected condition? YES//  
.

## Pharmacist Verifying order with 2 drug interactions

OP Medications (NON-VERIFIED) Mar 04, 2008@11:55:21                      Page: 1 of 2

OPPATIENT,ONE                      <A>  
PID: 666-00-0000                      Ht (cm): \_\_\_\_\_ (\_\_\_\_\_)  
DOB: JAN 1,1910 (98)                      Wt (kg): \_\_\_\_\_ (\_\_\_\_\_)

Rx #: 2560  
(1) \*Orderable Item: WARFARIN TAB  
(2) Drug: WARFARIN 5MG TAB  
(3) \*Dosage: 5 (MG)  
Verb: TAKE  
Dispense Units: 1  
Noun: TABLET  
\*Route: ORAL  
\*Schedule: QPM  
(4) Pat Instructions:  
SIG: TAKE ONE TABLET BY MOUTH EVERY EVENING  
(5) Patient Status: SC  
(6) Issue Date: 03/04/08                      (7) Fill Date: 03/04/08  
Last Fill Date: 03/04/08 (Window)  
+ Enter ?? for more actions  
DC Discontinue PR (Partial) RL (Release)  
ED Edit RF (Refill) RN (Renew)  
Select Action: Next Screen// VF VF

OPPATIENT,ONE                      ID#:666-00-0000 RX #2560

RX #	DRUG	QTY	ST	ISSUE DATE	LAST FILL	REF REM	DAY SUP
-----ACTIVE-----							
1 2550	IBUPROFEN 600MG TAB	270	A	03-03	03-04	3	90
-----NON-VERIFIED-----							
2 2560	WARFARIN 5MG TAB	90	N	03-04	03-04	3	90
-----PENDING-----							
3	FAMOTIDINE 20MG TAB	QTY: 180		ISDT: 03-04>	REF: 3		
4	INDOMETHACIN 25MG CAP	QTY: 270		ISDT: 03-04	REF: 3		
5	LOVASTATIN 10MG TAB	QTY: 90		ISDT: 03-03	REF: 3		
6	NIFEDIPINE 90MG SA TAB	QTY: 90		ISDT: 03-03	REF: 3		

-----Non-VA MEDS (Not dispensed by VA)-----  
CIMETIDINE 300MG TAB 300MG TWICE A DAY                      Date Documented: 03/03/08  
Press RETURN to Continue:

\*\*\*Critical\*\*\* Drug Interaction with Prospective Drug:  
WARFARIN 5MG TAB and

Non-VA Med: CIMETIDINE 300MG TAB  
Dosage: ONE TABLET                      Schedule: AT BEDTIME

The pharmacologic effects of warfarin may be increased resulting in severe bleeding.

Display Professional Interaction Monograph? No// No

\*\*\*SIGNIFICANT\*\*\* Drug Interaction with Prospective Drug:  
WARFARIN 5MG TAB and

Local RX#: 2443  
Drug: IBUPROFEN 600MG TAB (ACTIVE)  
SIG: TAKE ONE TABLET BY MOUTH THREE TIMES DAILY  
Processing Status: Released locally on 11/08/07@08:55:32 (Window)  
Last Filled On: 11/08/07

\*\*\* REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS

Display Professional Interaction Monograph? No// No

Do you want to Intervene? Y// NO

RX: 2560 PATIENT: OPPATIENT,ONE (666-00-0000)  
STATUS: Non-Verified  
DRUG: WARFARIN 5MG TAB  
QTY: 90 90 DAY SUPPLY  
SIG: TAKE ONE TABLET BY MOUTH EVERY EVENING  
LATEST: 03/04/2008 # OF REFILLS: 3 REMAINING: 3  
ISSUED: 03/04/08 PROVIDER:  
LOGGED: 03/04/08 CLINIC: BARB'S CLINIC  
EXPIRES: 03/05/09 DIVISION: HINES (499)  
CAP: SAFETY ROUTING: WINDOW  
ENTRY BY: OERRPROVIDER,ONE VERIFIED BY:

ACTIVITY LOG:

# DATE REASON RX REF INITIATOR OF ACTIVITY

=====

1 03/04/08 PATIENT INST.ORIGINAL  
COMMENTS: Patient Instructions Not Sent By Provider.  
PATIENT STATUS : SC COPIES : 1  
EDIT: (Y/N/P): N// NO  
VERIFY FOR OPPATIENT,ONE ? (Y/N/Delete/Quit): Y// ES

PI Patient Information

SO Select Order

Medication Profile Mar 04, 2008@11:55:31 Page: 1 of 1  
OPPATIENT,ONE <A>  
PID: 666-00-0000 Ht(cm): \_\_\_\_\_ (\_\_\_\_\_)  
DOB: JAN 1,1910 (98) Wt(kg): \_\_\_\_\_ (\_\_\_\_\_)  
SEX: FEMALE Non-VA Meds on File Last entry on 03/03/08  
ISSUE LAST REF DAY  
# RX # DRUG QTY ST DATE FILL REM SUP

-----ACTIVE-----

1	2550	IBUPROFEN 600MG TAB	270	A	03-03	03-04	3	90
2	2560	WARFARIN 5MG TAB	90	A	03-04	03-04	3	90

-----PENDING-----

3	FAMOTIDINE 20MG TAB	QTY: 180	ISDT: 03-04>	REF: 3
4	INDOMETHACIN 25MG CAP	QTY: 270	ISDT: 03-04	REF: 3
5	LOVASTATIN 10MG TAB	QTY: 90	ISDT: 03-03	REF: 3
6	NIFEDIPINE 90MG SA TAB	QTY: 90	ISDT: 03-03	REF: 3

-----Non-VA MEDS (Not dispensed by VA)-----  
CIMETIDINE 300MG TAB 300MG TWICE A DAY Date Documented: 03/03/08

Enter ?? for more actions  
PU Patient Record Update NO New Order  
PI Patient Information SO Select Order  
Select Action: Quit//  
.

For orders with multiple drug interactions, the user is presented with a drug interaction monograph display prompt and intervention prompt after each drug interaction warning is displayed.

## Multiple Drug Interactions

```
Another New Order for OPPATIENT,ONE? YES//

Eligibility: SERVICE CONNECTED 50% to 100%      SC%: 60
              PRISONER OF WAR
RX PATIENT STATUS: SC//
DRUG: WARFARIN
  Lookup: GENERIC NAME
          1  WARFARIN (COUMADIN) NA 2.5MG TAB      BL110
          2  WARFARIN 5MG TAB                      BL110
CHOOSE 1-2: 1  WARFARIN (COUMADIN) NA 2.5MG TAB      BL110

Now Processing Enhanced Order Checks!  Please Wait...

-----
***Critical*** Drug Interaction with Prospective Drug:
                WARFARIN 2.5MG TAB and

          Local RX#: 2376
          Drug: CIMETIDINE 300MG TAB (ACTIVE)
          SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
Processing Status: Released locally on 11/08/07@08:55:32 (Window)
Last Filled On: 11/08/07

The pharmacologic effects of warfarin may be increased resulting in severe bleeding.
-----
Display Professional Interaction Monograph? No// No

-----
***SIGNIFICANT*** Drug Interaction with Prospective Drug:
                WARFARIN 2.5MG TAB and

          Local RX#: 2378
          Drug: ASPIRIN 325MG EC TAB (ACTIVE)
          SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
Processing Status: Released locally on 11/08/07@08:55:32 (Window)
Last Filled On: 11/08/07

*** REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL EFFECTS
-----
Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// YES

Do you want to Process medication
CIMETIDINE 300MG TAB P// ROCESS

Enter your Current Signature Code:      SIGNATURE VERIFIED
Remote data not available - Only local order checks processed.

Press Return to Continue...

Now creating Pharmacy Intervention
for CIMETIDINE 300MG TAB

PROVIDER: OPPROVIDER, ONE
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O
.
```

Now Processing Enhanced Order Checks! Please wait...

-----  
\*\*\*Critical\*\*\* Drug Interaction with Prospective Drug:  
WARFARIN (COUMADIN) NA 5MG TAB and

Local Rx#: 509974  
Drug: AMIODARONE 200MG TAB (SUSPENDED)  
SIG: TAKE ONE TABLET BY MOUTH THREE TIMES A DAY  
Processing Status: Not released locally (Window)  
Last Filled On: 11/08/06

Pending Drug: AMIODARONE HCL (PACERONE) 200MG TAB  
SIG: TAKE ONE TABLET BY MOUTH EVERY 8 HOURS

The concurrent administration of amiodarone and an anticoagulant may result in an increase in the clinical effects of the anticoagulant and an increased risk of bleeding.(1-22) It may take several weeks of concurrent therapy before the full effects of this interaction are noted. The effect of amiodarone on anticoagulant levels may continue for several months after amiodarone is discontinued.

-----  
Display Interaction Monograph? No// NO

-----  
\*\*\*Critical\*\*\* Drug Interaction with Prospective Drug:  
WARFARIN (COUMADIN) NA 5MG TAB

Local Rx#: 502214  
Drug: KETOCONAZOLE 200MG TAB (ACTIVE)  
SIG: TAKE ONE TABLET BY MOUTH THREE TIMES A DAY  
Processing Status: Not released locally (Window)  
Last Filled On: 11/08/06

The anticoagulant effect of warfarin may be increased.

-----  
Display Interaction Monograph? No// NO

-----  
\*\*\*Critical\*\*\* Drug Interaction with Prospective Drug:  
WARFARIN (COUMADIN) NA 5MG TAB and

Non-VA Med: CIMETIDINE 300MG TAB  
Dosage: 300MG Schedule: TWICE A DAY

The pharmacologic effects of warfarin may be increased resulting in severe bleeding.

-----  
Display Interaction Monograph? No// NO

-----  
\*\*\*Significant\*\*\* Drug Interaction with Prospective Drug:  
WARFARIN (COUMADIN) NA 5MG TAB and

Location: <Remote facility name> Remote Rx#: 502211  
Drug: ASPIRIN 325MG EC TAB (ACTIVE)  
SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING  
Last Filled On: 11/08/06

Non-VA Med: ASPIRIN 325MG EC TAB  
Dosage: 325MG Schedule: EVERY MORNING

\*\*\* REFER TO MONOGRAPH FOR SIGNIFICANT INTERACTION CLINICAL

Display Interaction Monograph? No// NO

Do you want to Continue? Y// ES



```
Do you want to Process medication
WARFARIN (COUMADIN) NA 5MG TAB: P// ROCESS

Enter your Current Signature Code:      SIGNATURE VERIFIED

Now creating Pharmacy Intervention
for  WARFARIN (COUMADIN) NA 5MG TAB

PROVIDER:
RECOMMENDATION:      NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O
```

## 1. Therapeutic Duplication

This section describes enhancements to the existing VistA Duplicate Class order checks.

The current VistA Duplicate Class checks have been enhanced using the FDB business rules and database, as well as the FDB Enhanced Therapeutic Classification (ETC) system. The Duplicate Class check will now be referred to as the Duplicate Therapy order check. This order check will continue to be performed against active, pending, non-verified orders on hold (initiated through pharmacy or CPRS), expired and discontinued orders. The timeframe for inclusion of expired and discontinued orders is determined by the display rules on the medication profile. This check will be performed on active Non-VA Medication orders.

No changes have been made to the existing user actions for Duplicate Therapy order checks. Users will continue to have the ability to discontinue the order. The existing order will only be discontinued upon acceptance of the order being processed. No discontinue actions can be performed on remote outpatient orders, Non-VA medications, discontinued, and expired orders or orders placed on provider hold through CPRS. If the CANCEL DRUG IN SAME CLASS outpatient site parameter is set to 'No', no discontinue action is allowed on any duplicate class order.

Any remote Outpatient order (from another VAMC or Department of Defense (DoD) facility) using data from Health Data Repository Historical (HDR-Hx) or Health Data Repository- Interim Messaging Solution (HDR-IMS) that has been expired for 30 days or less will be included in the list of medications to be checked.

FDB custom tables will be used to store custom changes to the duplication allowance for a FDB therapeutic classification. Each duplicate therapy class is assigned a duplication allowance. The duplication allowance for a therapeutic allowance determines whether or not the therapeutic duplication warning will be displayed to the user.

The Vendor's (currently FDB) Enhanced Therapeutic Classification (ETC) System is now used in place of the VA Drug Class for the Duplicate Therapy (formerly duplicate class) order checks.

Duplicate Therapy order checks will no longer be processed in pairs. Each duplicate therapy warning includes as many outpatient medication orders that it applies to.

A duplicate therapy warning is only displayed if the number of duplicate therapy matches exceeds the duplication allowance specified for the FDB duplicate therapy class.

The following processes use the enhanced functionality:

- Entering a new outpatient medication order through pharmacy options
- Finishing a pending outpatient medication order
- Renewing an outpatient medication order
- When a new outpatient medication order is created via an edit
- Verification of an outpatient medication order entered or finished by a non-pharmacist
- Copy of an outpatient medication order
- Reinstatement of an outpatient medication order

See illustrations below:

### Local Rx

```
=====
*** THERAPEUTIC DUPLICATION(S) *** FAMOTIDINE 20MG TAB with

      Local Rx#: 2561
      Drug: CIMETIDINE 300MG TAB (DISCONTINUED)
      SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
      QTY: 30                      Days Supply: 30
Processing Status: Released locally on 3/4/08@08:55:32 (Window)
      Last Filled On: 11/08/06

Class(es)Involved in Therapeutic Duplication(s): Peptic Ulcer Agents, Histamine-2
Receptor Antagonists (H2 Antagonists)
=====
```

### Remote Rx

```
=====
*** THERAPEUTIC DUPLICATION(S) *** SUCRALFATE 1GM TAB with

      LOCATION: <VA OR DOD FACILITY>      Remote Rx#: 65343
      Drug: RANITIDINE HCL 150MG TAB (EXPIRED)
      SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
      QTY: 180                      Days Supply: 90
      Last Filled On: 11/08/06

Class(es)Involved in Therapeutic Duplication(s): Peptic Ulcer Agents
=====
```

### Pending Order

```
*** THERAPEUTIC DUPLICATION(S) *** NIZATIDINE 150MG CAP with

      Pending Drug: FAMOTIDINE 20MG TAB
      SIG: TAKE ONE TABLET BY TWICE DAILY

Class(es)Involved in Therapeutic Duplication(s): Peptic Ulcer Agents
```

## Non-VA Med Order

```
=====
*** THERAPEUTIC DUPLICATION(S) *** FAMOTIDINE 20MG TAB with

      Non-VA Med: CIMETIDINE 300MG TAB
      Dosage: 300MG      Schedule: TWICE A DAY

Class(es)Involved in Therapeutic Duplication(s): Peptic Ulcer Agents, Histamine-2
Receptor Antagonists (H2 Antagonists)
=====
```

If the CANCEL DRUG IN SAME CLASS outpatient site parameter is set to 'No', the following information is shown for the duplicate therapy warning:

```
=====
*** THERAPEUTIC DUPLICATION(S) *** NIZATIDINE 150MG CAP with

      Local Rx #2561 (ACTIVE) for CIMETIDINE 300MG TAB

      Local Rx #2572 (PROVIDER HOLD) for SUCRALFATE 1MG TAB

      Remote Rx #2571 (DISCONTINUED) for RANITIDINE HCL 150MG TAB

      Pending Order for FAMOTIDINE 20MG TAB

      Non-VA Med Order for CIMETIDINE 300MG TAB

Class(es)Involved in Therapeutic Duplication(s): PEPTIC ULCER AGENTS, HISTAMINE-2
RECEPTOR ANTAGOINSTS (H2 ANTAGONISTS)
```

If there is more than one remote, local, pending or Non-VA med order involved in the therapeutic duplication, the order details will be displayed one after the other.

If the same drugs are involved in multiple therapeutic duplications, a single therapeutic duplication warning will be displayed and multiple therapeutic classes will be listed.

If the CANCEL DRUG IN SAME CLASS outpatient site parameter is set to 'No', no discontinue action prompt will be presented.

After all the therapeutic duplication warnings are displayed and if the CANCEL DRUG IN SAME CLASS outpatient site parameter is set to 'Yes', the user will be asked if they want to discontinue any of the orders.

See Examples:

```
Discontinue RX #2580A SUCRALFATE 1GM TAB? Y/N
```

```
Discontinue Pending Order SUCRALFATE 1GM TAB? Y/N
```

The system will only allow a discontinuation action on active, pending, non-verified and orders placed on hold by pharmacy.

The discontinuation of selected orders by the system will occur at the time the user accepts the order that is being processed.

```
Discontinue order(s)? Y/N  Y es

1. RX #2577 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB
2. RX #2581 CHOLESTYRAMINE 9GM PACKETS

Select (1-2): 1 Duplicate Therapy RX #2577 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB will be
discontinued after the acceptance of the new order.
```

```
Discontinue order(s)? Y/N  Y es

1. RX #2577 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB
2. Pending Order CHOLESTYRAMINE 9GM PACKETS

Select (1-2): 2 Duplicate Therapy Pending Order CHOLESTYRAMINE 9GM PACKETS will be
discontinued after the acceptance of the new order.
```

See Therapeutic Duplication examples below:

**Finishing pending order – Therapeutic Duplication with Non-VA med and discontinued order -No discontinue action allowed.**

```
*(1) Orderable Item: FAMOTIDINE TAB ***(N/F)*** <DIN>
(2)      CMOP Drug: FAMOTIDINE 20MG TAB ***(N/F)*** <DIN>
(3)      *Dosage: 20 (MG)
          Verb: TAKE
          Dispense Units: 1
          Noun: TABLET
          *Route: ORAL
+      Enter ?? for more actions
BY Bypass      DC Discontinue
ED Edit        FN Finish
Select Item(s): Next Screen// FN  Finish

=====
*** THERAPEUTIC DUPLICATION(S) *** FAMOTIDINE 20MG TAB with

      Local Rx#: 2561
      Drug: CIMETIDINE 300MG TAB (DISCONTINUED)
      SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
      QTY: 30      Days Supply: 30
      Processing Status: Released locally on 3/4/08@08:55:32 (Window)
      Last Filled On: 11/08/06

-----
      Non-VA Med: CIMETIDINE 300MG TAB
      Dosage: 300MG      Schedule: TWICE A DAY

Class(es)Involved in Therapeutic Duplication(s): Peptic Ulcer Agents, Histamine-2
Receptor Antagonists (H2 Antagonists)
=====

Press Return to Continue:

Rx # 2570      03/07/08
PSOPATIENT,ONE      #180
TAKE ONE TABLET BY MOUTH TWICE A DAY

FAMOTIDINE 20MG TAB
PSOPROVIDER,ONE      PSOPHARMACIST,ONE
# of Refills: 3

      SC Percent: 80%
      Disabilities: NONE STATED

Was treatment for a Service Connected condition? YES//
Are you sure you want to Accept this Order? NO//
```

**New Order Entry Backdoor – Therapeutic Duplication with pending and active order.  
Discontinue action shown..**

```
PU Patient Record Update          NO New Order
PI Patient Information            SO Select Order
Select Action: Quit// no    New Order

Eligibility: SERVICE CONNECTED 50% to 100%      SC%: 80
RX PATIENT STATUS: SC//
DRUG: Nizatidine
      Lookup: DRUG  GENERIC NAME
NIZATIDINE 150MG CAP              GA302
      ...OK? Yes//      (Yes)
=====
*** THERAPEUTIC DUPLICATION(S) *** NIZATIDINE 150MG CAP with

      Local Rx#: 2549
      Drug: CIMETIDINE 300MG TAB (ACTIVE)
      SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
      QTY: 30                      Days Supply: 30
      Processing Status: Released locally on 3/4/09@08:55:32 (Window)
      Last Filled On: 11/08/06
-----
      Pending Drug: FAMOTIDINE 20MG TAB
      SIG: TAKE ONE TABLET BY TWICE DAILY

Class(es)Involved in Therapeutic Duplication(s): Peptic Ulcer Agents, Histamine-2
Receptor Antagonists (H2 Antagonists)
=====
Discontinue order(s)? Y/N No

Press Return to Continue...

Available Dosage(s)
      1. 150MG
      2. 300MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list:
.
.

      OR

Discontinue order(s)? Y/N Yes

      1. Pending Order FAMOTIDINE 20MG TAB
      2. RX #2549 CIMETIDINE 300MG TAB

Select (1-2): 2 RX #2549 CIMDTIDINE 300MG TAB will be discontinued after the acceptance
of the new order.

Available Dosage(s)
      1. 150MG
      2. 300MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 150MG

You entered 150MG is this correct? Yes//      YES
VERB: TAKE
DISPENSE UNITS PER DOSE(TABLET): 1// 1
Dosage Ordered: 150MG

NOUN: TABLET
ROUTE: PO//      ORAL      PO MOUTH
Schedule:
This is a required response. Enter '^' to exit
Schedule: BID (TWO TIMES A DAY)
LIMITED DURATION (IN DAYS, HOURS OR MINUTES):
CONJUNCTION:
```

PATIENT INSTRUCTIONS:

(TAKE ONE TABLET BY MOUTH TWO TIMES A DAY)

DAYS SUPPLY: (1-90): 60//

QTY ( ) : 360// 180

COPIES: 1// 1

# OF REFILLS: (0-3): 3//

PROVIDER: PSOPROVIDER,ONE

CLINIC: BARB'S CLINIC 2

MAIL/WINDOW: WINDOW// WINDOW

METHOD OF PICK-UP:

REMARKS:

ISSUE DATE: TODAY// (MAR 12, 2008)

FILL DATE: (3/12/2008 - 3/13/2009): TODAY// (MAR 12, 2008)

Nature of Order: WRITTEN// W

WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No// NO

Rx # 2580 03/12/08

PSOPATIENT,ONE #180

TAKE ONE TABLET BY MOUTH TWO TIMES A DAY

NIZATIDINE 150MG CAP

PSOPROVIDER,ONE PSOPHARMACIST,ONE

# of Refills: 3

SC Percent: 80%

Disabilities: NONE STATED

Was treatment for a Service Connected condition?

This is a required response. Enter '^' to exit

Was treatment for a Service Connected condition? NO

Is this correct? YES//

-Duplicate Therapy RX #2549 CIMETIDINE 300MG TAB has been discontinued...

Another New Order for PSOPATIENT,ONE? YES//

**Finishing Pending Order – Therapeutic Duplication with Non-Verified and Active orders. One drug is involved in both therapeutic duplications. One duplication allowance value is greater than '0'.**

```

-----ACTIVE-----
1 2577      AMLODIPINE 5MG/ATORVASTATIN 10MG TAB  90 A  03-07 03-07   3  90
2 2578      ITRACONAZOLE 100MG CAP                60 A  03-07 03-07   0  30
3 2576      SUCRALFATE 1MG TAB                    120 A  03-07 03-07   0  30
-----NON-VERIFIED-----
4 2581      CHOLESTYRAMINE 9GM PACKETS             60 N  03-12 03-12  11  30
-----PENDING-----
5 SIMVASTATIN 20MG TAB                            QTY: 30          ISDT: 03-12  REF:  6

Enter ?? for more actions

ED  Edit                                FN  Finish

Pending OP Orders (ROUTINE)  Mar 12, 2008@07:54:21          Page:  1 of  3
OPPATIENT, THREE                                     <A>
  PID: 666-44-4444                                Ht(cm):  _____ (_____)
  DOB: JUL 3,1949 (58)                            Wt(kg):  51.36 (10/01/1996)

CPRS Order Checks:
  CRITICAL drug-drug interaction: ITRACONAZOLE & SIMVASTATIN
  (ITRACONAZOLE CAP,ORAL 100MG TAKE ONE CAPSULE BY MOUTH EVERY 12 HOURS
  [ACTIVE])
  Overriding Provider: PSOPROVIDER,ONE
  
```

```

Overriding Reason: TESTING

CRITICAL drug-drug interaction: ITRACONAZOLE & SIMVASTATIN
ITRACONAZOLE CAP,ORAL 100MG PO BID [ACTIVE])
Overriding Provider: PSOPROVIDER,ONE
Overriding Reason: TESTING

Duplicate drug class order: ANTILIPEMIC AGENTS (CHOLESTYRAMINE 9GM
PACKETS TAKE ONE PACKET BY MOUTH TWICE A DAY DISSOLVE IN WATER OR
JUICE. [PENDING])

+          Enter ?? for more actions
BY Bypass                                DC Discontinue
ED Edit                                  FN Finish
Select Item(s): Next Screen// FN Finish

===== THERAPEUTIC
DUPLICATION(S) *** SIMVASTATIN 20MG TAB with

      Local Rx#: 2577
      Drug: AMLODIPINE 5MG/ATORVASTATIN 10MG TAB (ACTIVE)
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
      QTY: 90                                Days Supply: 90
Processing Status: Released locally on 3/7/08@08:55:32 (Window)
Last Filled On: 03/07/08

-----

      Local Rx#: 2581
      Drug: CHOLESTYRAMINE 9GM PACKETS (NON-VERIFIED)
      SIG: TAKE ONE PACKET BY MOUTH TWICE A DAY DISSOLVE IN WATER
            OR JUICE.
      QTY: 60                                Days Supply: 30
Processing Status: Not released locally (Window)
Last Filled On: 11/08/06
Class(es)Involved in Therapeutic Duplication(s): HMGCo-A Reductase Inhibitors,
Antihyperlipidemics

=====
Discontinue order(s)? Y/N Y es

1. RX #2577 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB
2. RX #2581 CHOLESTYRAMINE 9GM PACKETS

Select (1-2): 1 RX #2577 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB will be discontinued
after the acceptance of the new order.

Rx # 2582                                03/12/08
TEST,D                                  #30
TAKE ONE TABLET BY MOUTH EVERY EVENING

SIMVASTATIN 20MG TAB
PSOPROVIDER,ONE                        PSOPHARMACIST,ONE
# of Refills: 6

This Rx has been flagged by the provider as: NO COPAY

Was treatment related to Agent Orange exposure? YES//

Are you sure you want to Accept this Order? NO// YES

METHOD OF PICK-UP:
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No// NO

-Duplicate Therapy RX #2577 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB has been discontinued...

Press Return to Continue:
.

```

**Renewing an order –Therapeutic Duplication involving 5 drugs, one therapy class and only one order can be discontinued.**

```
+      Enter ?? for more actions
DC   Discontinue      PR   Partial      RL   Release
ED   Edit             RF   Refill       RN   Renew
Select Action: Next Screen// rn   Renew
FILL DATE:  (3/12/2008 - 3/13/2009): TODAY//   (MAR 12, 2008)
MAIL/WINDOW: WINDOW// WINDOW
METHOD OF PICK-UP:
Nature of Order: WRITTEN//           W
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No//   NO

Now Renewing Rx # 2580   Drug: SUCRALFATE 1GM TAB

=====
*** THERAPEUTIC DUPLICATION(S) *** SUCRALFATE 1GM TAB with

      Local Rx#: 2574
      Drug: CIMETIDINE 300MG TAB (DISCONTINUED)
      SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
      QTY: 180           Days Supply: 90
Processing Status: Released locally on 3/7/08@08:55:32   (Window)
Last Filled On: 03/07/08
-----

      Local Rx#: 2573
      Drug: NIZATIDINE 150MG CAP (HOLD)
      SIG: TAKE ONE CAPSULE BY MOUTH TWICE A DAY
      QTY: 180           Days Supply: 90
Processing Status: Released locally on 3/7/08@08:55:32   (Window)
Last Filled On: 03/07/08
-----

      LOCATION: <VA OR DOD FACILITY>   Remote Rx#: 65343
      Drug: RANITIDINE HCL 150MG TAB (EXPIRED)
      SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
      QTY: 180           Days Supply: 90

Class(es)Involved in Therapeutic Duplication(s): Peptic Ulcer Agents, Histamine-2
Receptor Antagonists (H2 Antagonists)

=====
Discontinue RX #2573 NIZATIDINE 150MG CAP? Y/N   No

Press Return to Continue:

2580A      SUCRALFATE 1MG TAB      QTY: 360
# OF REFILLS: 3   ISSUED: 03-12-08
SIG: TAKE ONE TABLET BY MOUTH FOUR TIMES A DAY
FILLED: 03-12-08
ROUTING: WINDOW      PHYS: PSOPROVIDER,ONE

Edit renewed Rx ? Y// n   NO

      SC Percent: 80%
      Disabilities: NONE STATED

Was treatment for a Service Connected condition? NO//
.
```



## Verification of Non-Verified Order

```
OP Medications (NON-VERIFIED) Mar 12, 2008@09:02:56          Page: 1 of 2
PSOPATIENT,ONE                                             <A>
  PID: 666-00-0000                                         Ht(cm): _____ (_____)
  DOB: JAN 1,1910 (98)                                    Wt(kg): _____ (_____)

      Rx #: 2573
(1) *Orderable Item: NIZATIDINE CAP,ORAL
(2)      Drug: NIZATIDINE 150MG CAP
(3)      *Dosage: 150 (MG)
      Verb: TAKE
      Dispense Units: 1
      Noun: CAPSULE
      *Route: ORAL
      *Schedule: BID
(4)Pat Instructions:
      SIG: TAKE ONE CAPSULE BY MOUTH TWICE A DAY
(5) Patient Status: SC
(6)      Issue Date: 03/07/08                (7) Fill Date: 03/07/08
      Last Fill Date: 03/07/08 (Window)
+      Enter ?? for more actions
DC Discontinue      PR (Partial)                RL (Release)
ED Edit            RF (Refill)                  RN (Renew)
Select Action: Next Screen// VF   VF

RX: 2573          PATIENT: PSOPATIENT,ONE (666-00-0000)
STATUS: Non-Verified
      DRUG: NIZATIDINE 150MG CAP
      QTY: 180      90 DAY SUPPLY
      SIG: TAKE ONE CAPSULE BY MOUTH TWICE A DAY
      LATEST: 03/07/2008                # OF REFILLS: 3  REMAINING: 3
      ISSUED: 03/07/08                PROVIDER:
      LOGGED: 03/07/08                CLINIC: NOT ON FILE
      EXPIRES: 03/08/09                DIVISION: HINES (499)
      CAP: SAFETY                      ROUTING: WINDOW
      ENTRY BY: PSOPROVIDER,ONE        VERIFIED BY:

PATIENT STATUS : SC                      COPIES : 1

Press RETURN to Continue:
=====
*** THERAPEUTIC DUPLICATION(S) *** NIZATIDINE 150MG CAP with

      Local Rx#: 2580A
      Drug: SUCRALFATE 1GM TAB (ACTIVE)
      SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
      QTY: 180                Days Supply: 90
      Processing Status: Released locally on 3/12/08@08:55:32 (Window)
      Last Filled On: 03/12/08

Class(es)Involved in Therapeutic Duplication(s): Peptic Ulcer Agents

=====
Discontinue RX #2580A SUCRALFATE 1GM TAB ? Y/N No

Press Return to Continue:
EDIT: (Y/N/P): N// O
VERIFY FOR PSOPATIENT,ONE ? (Y/N/Delete/Quit): Y// ES
.
```

## Copying an Existing Order

```
New OP Order (COPY)           Mar 12, 2008@09:15:48           Page:      1 of      2
PSOPATIENT,TWO                                     <A>
  PID: 000-00-0000                                Ht(cm): 182.88 (04/13/2005)
  DOB: JAN 1,1945 (63)                            Wt(kg): 77.27 (04/13/2005)

      Orderable Item: AMLODIPINE/ATORVASTATIN TAB
(1)      Drug: AMLODIPINE 5MG/ATORVASTATIN 10MG TAB
(2) Patient Status: OPT NSC
(3)      Issue Date: MAR 12,2008                (4) Fill Date: MAR 12,2008
      Verb: TAKE
(5) Dosage Ordered: ONE TABLET
      Route: ORAL
      Schedule: QAM
(6)Pat Instruction:
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
(7)      Days Supply: 30                        (8)      QTY ( ): 30
(9)      # of Refills: 11                      (10)     Routing: WINDOW
(11)     Clinic:
(12)     Provider: PSOPROVIDER,ONE              (13)     Copies: 1
+      Enter ?? for more actions
AC  Accept                                     ED  Edit
Select Action: Next Screen// AC  Accept
-----
Duplicate Drug in Local Rx:

      Rx #: 2584
      Drug: AMLODIPINE 5MG/ATORVASTATIN 10MG TAB
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
      QTY: 30                                Refills remaining: 11
      Provider: OPPROVIDER, ONE                Issued: 03/12/07
      Status: ACTIVE                           Last filled on: 03/12/07
Processing Status: Released locally on 03/12/07@08:55:32 (Window)
                        Days Supply: 30
-----
Discontinue Rx #2584 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB? Y/N YES

Rx #2584 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB will be discontinued after the acceptance
of the new order.

=====
*** THERAPEUTIC DUPLICATION(S) *** AMLODIPINE 5MG/ATORVASTATIN 10MG TAB with

      Pending Drug: LOVASTATIN 20MG TAB
      SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME FOR HIGH CHOLESTEROL

      Pending Drug: NIFEDIPINE 10MG CAP
      SIG: TAKE ONE CAPSULE BY MOUTH THREE TIMES A DAY

Class(es)Involved in Therapeutic Duplication(s): Calcium Channel Blockers, HMGCo-A
Reductase Inhibitors

=====
Discontinue order(s)? Y/N Yes

      1. Pending Order NIFEDIPINE 10MG CAP
      2. Pending Order LOVASTATIN 20MG TAB

Select (1-2): 1-2 Pending Order NIFEDIPINE 10MG CAP will be discontinued after the
acceptance of the new order.
Pending Order LOVASTATIN 20MG TAB will be discontinued after the acceptance of the new
order.

Nature of Order: WRITTEN//      W
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No//      NO
```

```

Rx # 2585          03/12/08
PSOPATIENT,TWO T          #30
TAKE ONE TABLET BY MOUTH EVERY MORNING

AMLODIPINE 5MG/ATORVASTATIN 10MG TAB
PSOPROVIDER,ONE          PSOPHARMACIST,ONE
# of Refills: 11

          SC Percent: 40%
          Disabilities: NONE STATED

Was treatment for Service Connected condition? NO//

Is this correct? YES// ...

- Duplicate Drug Rx 2584 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB has been discontinued...
- Duplicate Therapy Pending Order NIFEDIPINE 10MG CAP has been discontinued...
- Duplicate Therapy Pending Order LOVASTATIN 20MG TAB has been discontinued...
.

```

## Reinstating a Discontinued Order

```

          Rx #: 2586
(1) *Orderable Item: CIMETIDINE TAB
(2)          Drug: CIMETIDINE 300MG TAB
(3)          *Dosage: 300 (MG)
          Verb: TAKE
          Dispense Units: 1
          Noun: TABLET
          *Route: ORAL
          *Schedule: QHS
(4)Pat Instructions:
          SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
(5) Patient Status: OPT NSC
(6) Issue Date: 03/12/08          (7) Fill Date: 03/12/08
          Last Fill Date: 03/12/08 (Window)
+ Enter ?? for more actions
DC Discontinue          PR (Partial)          RL Release
ED (Edit)          RF (Refill)          RN Renew
Select Action: Next Screen// dc Discontinue
Are you sure you want to Reinstate? NO// y YES

Comments: testing duplicate therapy check
Nature of Order: SERVICE CORRECTION//          S

=====
*** THERAPEUTIC DUPLICATION(S) *** CIMETIDINE 300MG TAB with

          Local Rx#: 2576
          Drug: SUCRALFATE 1GM TAB (ACTIVE)
          SIG: TAKE ONE TABLET BY MOUTH FOUR TIMES A DAY
          QTY: 1200          Days Supply: 30
          Processing Status: Released locally on 3/7/08@08:55:32 (Window)
          Last Filled On: 03/07/08

Class(es)Involved in Therapeutic Duplication(s): Peptic Ulcer Agents
=====
Discontinue RX # 2576 SUCRALFATE 1GM TAB? Y/N NO - Prescription was not discontinued...

Prescription #2586 REINSTATED!
Prescription #2586 Filled: MAR 12, 2008Printed:          Released:
          Either print the label using the reprint option
          or check later to see if the label has been printed.
.

```

## Creating a New Order – Editing the Orderable Item

```
Rx #: 2594
(1) *Orderable Item: ENALAPRIL TAB ***(N/F)***
(2) Drug: ENALAPRIL 5MG TAB ***(N/F)***
(3) *Dosage: 5 (MG)
    Verb: TAKE
    Dispense Units: 1
    Noun: TABLET
    *Route: ORAL
    *Schedule: QAM
(4) Pat Instructions:
    SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
(5) Patient Status: SC
(6) Issue Date: 03/12/08 (7) Fill Date: 03/12/08
    Last Fill Date: 03/12/08 (Window)
+ Enter ?? for more actions
DC Discontinue PR Partial RL Release
ED Edit RF Refill RN Renew
Select Action: Next Screen// 1

Current Orderable Item: ENALAPRIL TAB

Select PHARMACY ORDERABLE ITEM NAME: ENALAPRIL// dip
1 DIPHENHYDRAMINE CREAM,TOP
2 DIPHENHYDRAMINE CAP,ORAL
3 DIPYRIDAMOLE TAB
CHOOSE 1-3: 3 DIPYRIDAMOLE TAB

New Orderable Item selected. This edit will create a new prescription!

Press Return to Continue...

DRUG NAME REQUIRED!

Instructions:

The following Drug(s) are available for selection:
1. DIPYRIDAMOLE 25MG TAB
2. DIPYRIDAMOLE 50MG TAB

Select Drug by number: (1-2): 1
=====
*** THERAPEUTIC DUPLICATION(S) *** DIPYRIDAMOLE 25MG TAB with

    Local Rx#: 2560
    Drug: WAFFARIN 5MG TAB (ACTIVE)
    SIG: TAKE ONE TABLET BY MOUTH EVERY EVENING
    QTY: 90 Days Supply: 90
    Processing Status: Released locally on 3/4/08@08:55:32 (Window)
    Last Filled On: 03/04/08

Class(es)Involved in Therapeutic Duplication(s): Antiplatelet Drugs, Antithrombotic Drugs
=====
Discontinue RX # 2560 WAFFARIN 5MG TAB? Y/N NO -Prescription was not discontinued...

You have changed the Orderable Item from ENALAPRIL to
DIPYRIDAMOLE.

Do You want to Edit the SIG? NO// y YES
Available Dosage(s)
1. 25MG
2. 50MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 25MG
```

You entered 25MG is this correct? Yes// YES

VERB: TAKE// TAKE

DISPENSE UNITS PER DOSE(TABLET): 1// 1

Dosage Ordered: 25MG

NOUN: TABLET// TABLET

ROUTE: ORAL// ORAL

Schedule: QAM// tid (THREE TIMES A DAY)

LIMITED DURATION (IN MONTHS, WEEKS, DAYS, HOURS OR MINUTES):

CONJUNCTION:

New OP Order (ROUTINE)

Mar 12, 2008@10:58:24

Page: 1 of 2

PSOPATIENT,ONE

PID: 666-00-0000

Ht(cm): \_\_\_\_\_ (\_\_\_\_\_)

DOB: JAN 1,1910 (98)

Wt(kg): \_\_\_\_\_ (\_\_\_\_\_)

Orderable Item: DIPYRIDAMOLE TAB

(1) Drug: DIPYRIDAMOLE 25MG TAB

(2) Patient Status: SC

(3) Issue Date: MAR 12,2008

(4) Fill Date: MAR 12,2008

(5) Dosage Ordered: 25 (MG)

Verb: TAKE

Dispense Units: 1

Noun: TABLET

Route: ORAL

Schedule: TID

(6)Pat Instruction:

SIG: TAKE ONE TABLET BY MOUTH THREE TIMES A DAY

(7) Days Supply: 90

(8) QTY (TAB): 180

(9) # of Refills: 3

(10) Routing: WINDOW

+ This change will create a new prescription!

AC Accept

ED Edit

Select Action: Next Screen// ac Accept

Nature of Order: SERVICE CORRECTION//

S

WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No// NO

Rx # 2595

03/12/08

PSOPATIENT,ONE

#180

TAKE ONE TABLET BY MOUTH THREE TIMES A DAY

DIPYRIDAMOLE 25MG TAB

PSOPROVIDER,ONE

PSOPHARMACIST,ONE

# of Refills: 3

The Pharmacy Orderable Item has changed for this order. Please review any existing SC or Environmental Indicator defaults carefully for appropriateness.

SC Percent: 80%

Disabilities: NONE STATED

Was treatment for a Service Connected condition? YES//

Is this correct? YES// ...

.

## Cancel drug in same class parameter set to No

```
PSOPATIENT,ONE                                     <A>
PID: 666-00-0000                                Ht(cm): _____ (_____)
DOB: JAN 1,1910 (98)                            Wt(kg): _____ (_____)
SEX: FEMALE                                     Non-VA Meds on File    Last entry on 03/03/08
                                                    ISSUE  LAST REF DAY
#  RX #      DRUG                                QTY ST  DATE  FILL  REM  SUP
-----ACTIVE-----
1 2562      AMINOPHYLLINE 200MG TAB              360 A   03-04 03-04   3  90
2 2567      CAPTOPRIL 12.5MG TAB                 180 A   03-06 03-06   3  90
3 2563      CISAPRIDE 10MG                      90 A    03-06 03-06   3  90
4 2568      DIGOXIN 0.125MG                     30 A    03-06 03-06   3  90
5 2550      IBUPROFEN 600MG TAB                 270 A   03-03 03-04   3  90
6 2560      WARFARIN 5MG TAB                     90 A    03-04 03-04   3  90
-----DISCONTINUED-----
7 2561      CIMETIDINE 300MG TAB                 90 DC   03-04 03-04   3  90
-----HOLD-----
+      Enter ?? for more actions
PU Patient Record Update                        NO  New Order
PI Patient Information                          SO  Select Order
Select Action: Next Screen// NO  New Order

Eligibility: SERVICE CONNECTED 50% to 100%      SC%: 80
RX PATIENT STATUS: SC//
DRUG: NIZATIDINE
  Lookup: GENERIC NAME
NIZATIDINE 150MG CAP                          GA301
  ...OK? Yes// (Yes)

=====
*** THERAPEUTIC DUPLICATION(S) *** NIZATIDINE 150MG CAP with

  Local Rx #2561 (ACTIVE) for CIMETIDINE 300MG TAB

  Local Rx #2572 (PROVIDER HOLD) for SUCRALFATE 1MG TAB

  Remote Rx #2571 (DISCONTINUED) for RANITIDINE HCL 150MG TAB

  Pending Order FAMOTIDINE 20MG TAB

  Non-VA Med Order for CIMETIDINE 300MG TAB

Class(es) Involved in Therapeutic Duplication(s): PEPTIC ULCER AGENTS, HISTAMINE-2
RECEPTOR ANTAGONISTS (H2 ANTAGONISTS)
=====
VERB: TAKE
Available Dosage(s)
  1. 150MG
  2. 300MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list:
.
```

## Entering a New Order – Not accepting order, duplicate therapy not discontinued

```
Select Action: Quit// NO  New Order

Eligibility: NSC      SC%: 5
RX PATIENT STATUS: OPT NSC//
DRUG: FAMOTIDINE
  Lookup: GENERIC NAME
FAMOTIDINE 20MG TAB                          GA301
  ...OK? Yes// (Yes)

  Restriction/Guideline(s) exist. Display? : (N/D/O/B): No// NO
Now doing allergy checks. Please wait...
```

Now Processing Enhanced Order Checks! Please wait...

-----  
\*\*\* THERAPEUTIC DUPLICATION(S) \*\*\* FAMOTIDINE 20MG TAB with

Local RX#: 2586A  
Drug: CIMETIDINE 300MG TAB (DISCONTINUED)  
SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME  
QTY: 90 Days Supply: 30  
Processing Status: Released locally on 3/12/08@08:55:32 (Window)  
Last Filled On: 03/12/08

-----  
Press Return to Continue:

Local RX#: 2710  
Drug: RANITIDINE HCL 150MG TAB (ACTIVE)  
SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY  
QTY: 60 Days Supply: 30  
Processing Status: Released locally on 6/1/09@08:55:32 (Window)  
Last Filled On: 06/01/09

-----  
Press Return to Continue:

Class(es)Involved in Therapeutic Duplication(s): Peptic Ulcer Agents, Histamine-2  
Receptor Antagonists (H2 Antagonists)

=====

Press Return to Continue:

Discontinue Rx #2710 for RANITIDINE HCL 150MG TAB Y/N ? YES

Duplicate Therapy RX #2710 RANITIDINE HCL 150MG TAB will be discontinued after the  
acceptance of the new order.

=====

VERB: TAKE  
Available Dosage(s)  
1. 20MG  
2. 40MG

Select from list of Available Dosages, Enter Free Text Dose  
or Enter a Question Mark (?) to view list: 1 20MG

You entered 20MG is this correct? Yes// YES  
VERB: TAKE  
DISPENSE UNITS PER DOSE(TABLET): 1// 1  
Dosage Ordered: 20MG

NOUN: TABLET  
ROUTE: PO// ORAL PO MOUTH  
Schedule: BID// QAM (EVERY MORNING )  
LIMITED DURATION (IN DAYS, HOURS OR MINUTES):  
CONJUNCTION:  
PATIENT INSTRUCTIONS:

(TAKE ONE TABLET BY MOUTH EVERY MORNING )

DAYS SUPPLY: (1-90): 30// ^  
RX DELETED  
Duplicate Therapy RX #2710 RANITIDINE HCL 150MG TAB NOT Discontinued.

## Allergy/ADR Order Checks (PSO\*7\*251)

This section will detail the Allergy/ADR order check display within Outpatient Pharmacy.

Legacy Outpatient Pharmacy displays the same allergy/ADR warning twice if drug class(es) and drug ingredient(s) are defined for the allergy/ADR. The drug class is listed on one display and the drug ingredient on the other. The user is also prompted to intervene for both warnings. Local and remote Allergy/ADRs are combined.

If no Allergy Assessment has been documented for the patient for whom the medication order is being processed, an intervention dialog is available for each order. Only one warning will be displayed for an Allergy/ADR. If no intervention is chosen, the standard order entry dialog will resume.

See examples below:

### Remote Allergy/ADR – New Order Entry Backdoor – Both Ingredient and Drug Class defined for Allergy/ADR

```
Select Action: Quit// NO    New Order

PATIENT STATUS: SC//
DRUG: DILTIAZEM
  Lookup: GENERIC NAME
    1  DILTIAZEM (DILACOR XR) 240MG SA CAP          CV200      N/F      This
drug will not be processed without Drug Request Form 10-7144
    2  DILTIAZEM (INWOOD) 120MG SA CAP              CV200
    3  DILTIAZEM (INWOOD) 180MG SA CAP              CV200
    4  DILTIAZEM (INWOOD) 240MG SA CAP              CV200
    5  DILTIAZEM (INWOOD) 300MG SA CAP              CV200
Press <RETURN> to see more, '^' to exit this list, '^ ^' to exit all lists, OR
CHOOSE 1-5: 1  DILTIAZEM (DILACOR XR) 240MG SA CAP          CV200      N/F      This drug will
not be processed without Drug Request Form 10-7144

Now doing allergy checks.  Please wait...

A Drug-Allergy Reaction exists for this medication and/or class!

Drug: DILTIAZEM (DILACOR XR) 240MG SA CAP
Ingredients: DILTIAZEM (REMOTE SITE(S)),
Class: CV200 CALCIUM CHANNEL BLOCKERS (REMOTE SITE(S))

Do you want to Intervene? Y// NO

VERB: TAKE
Available Dosage(s)
    1. 240MG
    2. 480MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list:
.
.
OR

Do you want to Intervene? Y// ES

Now creating Pharmacy Intervention
for DILTIAZEM (DILACOR XR) 240MG SA CAP

PROVIDER:      PSOPROVIDER,THREE      TPP      119
RECOMMENDATION:      NO CHANGE
```



See 'Pharmacy Intervention Menu' if you want to delete this intervention or for more options.

Would you like to edit this intervention ? N// O

VERB: TAKE

Available Dosage(s)

1. 240MG
2. 480MG

Select from list of Available Dosages, Enter Free Text Dose  
or Enter a Question Mark (?) to view list:

## Local Allergy/ADR – New Order Entry Backdoor - Only Drug Class defined.

Another New Order for PSOPATIENT, TEN? YES//

Eligibility: NSC

RX PATIENT STATUS: OPT NSC//

DRUG: SEPTRA

Lookup: GENERIC NAME

SEPTRA DS TAB AM650

...OK? Yes// (Yes)

Now doing allergy checks. Please wait...

A Drug-Allergy Reaction exists for this medication and/or class!

Drug: SEPTRA DS TAB

Class: AM650 SULFONAMIDE/RELATED ANTIMICROBIALS (LOCAL)

Do you want to Intervene? Y// ES

Now creating Pharmacy Intervention  
for SEPTRA DS TAB

PROVIDER: PSOPROVIDER,FOUR FPP 119

RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this intervention or for more options.

Would you like to edit this intervention ? N// O

Available Dosage(s)

1. 1 TABLET
2. 2 TABLETS

Select from list of Available Dosages, Enter Free Text Dose  
or Enter a Question Mark (?) to view list: 1 1 TABLET

You entered 1 TABLET is this correct? Yes// YES

VERB: TAKE

ROUTE: PO// ORAL PO MOUTH

Schedule: BID (TWICE A DAY)

LIMITED DURATION (IN DAYS, HOURS OR MINUTES):

.

## Local & Remote Allergy/ADR – Multi-ingredients, Pending Order

```
ED  Edit                      FN  Finish
Select Item(s): Next Screen//  NEXT SCREEN

Pending OP Orders (ROUTINE)   Mar 24, 2008@21:56:03           Page:    2 of    3
PSOPATIENT,THREE                                     <A>
  PID: 000-00-0000                      Ht(cm): 167.64 (06/10/1993)
  DOB: FEB 2,1939 (69)                  Wt(kg): 68.18 (06/10/1993)
+

*(1) Orderable Item: SULFAMETHOXAZOLE/TRIMETHOPRIM TAB
(2)      Drug: SULFAMETHOXAZOLE/TRIMETHOPRIM DS TAB
      Verb: TAKE
(3)      *Dosage: 1 TABLET
      *Route: ORAL
      *Schedule: Q12H
(4) Pat Instruct:
  Provider Comments:
    Instructions: TAKE 1 TABLET PO Q12H
    SIG: TAKE 1 TABLET BY MOUTH EVERY 12 HOURS
(5) Patient Status: OPT NSC
(6)      Issue Date: MAR 24,2008      (7) Fill Date: MAR 24,2008
+      Enter ?? for more actions
BY Bypass                      DC  Discontinue
ED  Edit                      FN  Finish
Select Item(s): Next Screen// FN  Finish

Now doing allergy checks.  Please wait...

A Drug-Allergy Reaction exists for this medication and/or class!

Drug: SULFAMETHOXAZOLE/TRIMETHOPRIM DS TAB
  Ingredients: SULFAMETHOXAZOLE (LOCAL), TRIMETHOPRIM (LOCAL)
  Class: AM650 SULFONAMIDE/RELATED ANTIMICROBIALS (LOCAL AND REMOTE SITE(S))

Do you want to Intervene? Y// ES

Now creating Pharmacy Intervention
for SULFAMETHOXAZOLE/TRIMETHOPRIM DS TAB

PROVIDER:    PSOPROVIDER, 11      PP      119
RECOMMENDATION:    NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

Rx # 2611                      03/24/08
PSOPATIENT,THREE                      #20
TAKE 1 TABLET BY MOUTH EVERY 12 HOURS

SULFAMETHOXAZOLE/TRIMETHOPRIM DS TAB
PSOPROVIDER, 11                      PSOPHARMACIST,TWO
# of Refills: 1

Are you sure you want to Accept this Order? NO// Y
.
```

# Chapter 21: Processing a Prescription

---

This chapter describes the menu and options used in processing prescriptions.

## Rx (Prescriptions)

### [PSO RX]

The *Rx (Prescriptions)* menu allows the pharmacist to manipulate information that pertains to prescriptions. Actions are taken on prescriptions via this menu. Some previous options, such as renew, refill, edit, release, are now actions in the *Patient Prescription Processing* option found on this menu. Also, data now must be entered for the individual fields that are used to build a Sig.

Default values are also displayed for possible dosages, schedules, med routes, and patient instructions. When possible, default quantities are calculated using data entered into specific fields during medication order entry.

The following options are available on this menu:

- *Patient Prescription Processing*
- *Barcode Rx Menu ...*
- *Complete Orders from OERR*
- *Discontinue Prescription(s)*
- *Edit Prescriptions*
- *ePharmacy Menu ...*
- *Third Party Payer Rejects - View/Process*
- *Third Party Payer Rejects - Worklist*
- *List One Patient's Archived Rx's*
- *Manual Print of Multi-Rx Forms*
- *Reprint an Outpatient Rx Label*
- *Signature Log Reprint*
- *View Prescriptions*

## Patient Prescription Processing

### [PSO LM BACKDOOR ORDERS]

This option is used to process outpatient medication through OERR V. 3.0. The *Patient Prescription Processing* option is found on the *Outpatient Pharmacy Manager Menu* and the *Pharmacist Menu* under the *Rx (Prescriptions)* option. This option uses List Manager features to allow the outpatient pharmacy manager and pharmacist to perform the following actions on a prescription without leaving this option.

- Enter a new Rx
- Discontinue
- Edit
- Refill
- Renew
- Hold
- Unhold
- Order a partial
- Release
- Reprint
- Copy
- Verify a prescription
- Show a profile
- View activity log
- Pull early from suspense

When a new drug order is processed (new, renewal, finish, verify, copy, or an edit that creates a new order), order checks are performed. These include checking for duplicate drug, duplicate drug class, drug-drug interaction, and drug-drug allergy.

With the introduction of enhanced Order checks, Outpatient Pharmacy generated order checks are displayed in this sequence:

- System Errors
- Duplicate Drug
- Clozapine
- Allergy/ADR (local & remote) or Non-Assessment
- CPRS checks generated backdoor (3 new checks)
- Drug Level Errors
- Local & Remote Critical Drug Interactions
- Local & Remote Significant Drug Interactions
- Order Level Error Messages – Drug Interactions
- Local & Remote Duplicate Therapy
- Order Level Error Messages – Duplicate Therapy

Additionally, the order check display sequence is applied to the following processes:

- Backdoor new order entry
- Finishing a pending order
- When renewing an outpatient medication order
- Creating a new order when editing an outpatient medication order
- Verifying an outpatient medication order.
- Copying an outpatient medication order
- Reinstating a discontinued outpatient medication order.

There are two levels of error messages associated with enhanced order checking:

1. **System** - When such an error occurs no drug interaction or duplicate therapy order checks will be performed. Other order checks that do not use the COTS database (FDB) will still be performed such as allergy/ADRs, duplicate drug (for outpatient only), and new CPRS order checks, etc.
2. **Drug** - The second error level is for the drug and no drug interaction/duplicate therapy order checks will be performed for a specific drug. When you are processing an order, you may see a drug level error for a drug that is on the profile. This indicates that a drug interaction or duplicate therapy order check will not be performed for the drug in the order you are processing against this profile drug. Profile drug errors will only be shown once per patient session. So if you process several more orders, you will not see the error again. However, if you exit the option and at some later time reselect this patient to process new orders or take action on any existing orders, you will be shown the profile drug error once again.

If a drug level error occurs on the drug in the order you are processing, no profile drug errors will be displayed. No order checks (duplicate therapy or drug interaction) will occur for the processing drug (prospective drug). The only exception to this is when you are processing an IV order with multiple prospective drugs (i.e. multiple additives).

See table below for an explanation of the errors:

<b>Error Level</b>	<b>Error Message</b>	<b>Reason</b>	<b>Why message is being displayed.</b>
System	No Enhanced Order Checks can be performed.	Vendor Database cannot be reached.	The connectivity to the vendor database has gone down. A MailMan message is sent to the G. PSS ORDER CHECKS mail group when the link goes down and when it comes back up.
System	No Enhanced Order Checks can be performed.	The connection to the vendor database has been disabled.	A user has executed the Enable/Disable Vendor Database Link [PSS ENABLE/DISABLE DB LINK] option and disabled the interface.
System	No Enhanced Order Checks can be performed	Vendor database updates are being processed	The vendor database (custom and standard data) is being updated using the DATUP (Data Update) process.
Drug	Enhanced Order Checks cannot be performed for Local or Local Outpatient Drug: <DRUG NAME>	Drug not matched to NDF	The local drug being ordered/ or on profile has not been matched to NDF. Matching the drug to a VA Product will eliminate this message.

Error Level	Error Message	Reason	Why message is being displayed.
Drug	Order Checks could not be done for Drug: <DRUG NAME>, please complete a manual check for Drug Interactions and Duplicate Therapy.		If this error message is displayed, it means that the VA product that the local drug being ordered/or on profile does not have a GCNSEQNO or in rare cases, the GCNSEQNO assigned to the VA Product does not match up with a GCNSEQNO in the vendor database.
Drug	Enhanced Order Checks cannot be performed for Orderable Item: <OI NAME>	No active Dispense Drug found	Highly unlikely that this error would be seen. At the time the order check was being performed the orderable item did not have an active dispense drug associated.

See examples below to illustrate error sequences.

#### New Order Entry – System Level Error

```
Select Action: Quit// NO    New Order

Eligibility: SC LESS THAN 50%    SC%: 40
RX PATIENT STATUS: SC LESS THAN 50%//
DRUG: AMLOD
  Lookup: GENERIC NAME
        1  AMLODIPINE 10MG/BENAZAPRIL 20MG TAB          CV400
        2  AMLODIPINE 5MG/ATORVASTATIN 10MG TAB        CV200
CHOOSE 1-2: 1  AMLODIPINE 10MG/BENAZAPRIL 20MG TAB        CV400

Now Processing Enhanced Order Checks! Please wait...

No Enhanced Order Checks can be performed.
  Reason:  Vendor database cannot be reached.

Press Return to Continue...

Available Dosage(s)

1 TABLET
2 TABLETS

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 1 TABLET

You entered 1 TABLET is this correct? Yes//    YES
VERB: TAKE
ROUTE: PO//
        1  PO  ORAL (BY MOUTH)          PO
        2  PO  ORAL          PO
CHOOSE 1-2: 1  ORAL (BY MOUTH)          PO  MOUTH
Schedule: Q4H (EVERY 4 HOURS)
LIMITED DURATION (IN DAYS, HOURS OR MINUTES):
CONJUNCTION:
.
```

#### Drug Error Message – Finishing Pending Outpatient Order

```
+          Enter ?? for more actions
BY Bypass          DC Discontinue
ED Edit           FN Finish
Select Item(s): Next Screen// FN  Finish
```

```

Now Processing Enhanced Order Checks! Please wait...

Enhanced Order Checks cannot be performed for Local Drug: WARFARIN 5MG TAB
Reason: Drug not matched to NDF

Press Return to Continue...

Was treatment for Service Connected condition? YES//

Are you sure you want to Accept this Order? NO//
.

```

## Renewing an Order – Therapeutic Duplication – Drug Level Error

```

+          Enter ?? for more actions
DC  Discontinue      PR  Partial          RL  Release
ED  Edit            RF  Refill           RN  Renew
Select Action: Next Screen// rn  Renew
FILL DATE:  (3/12/2008 - 3/13/2009): TODAY//  (MAR 12, 2008)
MAIL/WINDOW: WINDOW// WINDOW
METHOD OF PICK-UP:
Nature of Order: WRITTEN//          W
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No//  NO

Now Renewing Rx # 2580   Drug: SUCRALFATE 1GM TAB

Press Return to Continue...

Now Processing Enhanced Order Checks! Please wait...

Enhanced Order Checks cannot be performed for Local Drug: RANITIDINE 150MG TAB
Reason: No GCNSEQNO exists for VA Product

=====
*** THERAPEUTIC DUPLICATION *** Local Rx for SUCRALFATE 1GM TAB with Local Rx for
CIMETIDINE 300MG TAB and Local Rx for NIZATIDINE 150MG CAP and Local Rx for FAMOTIDINE
20MG TAB

          Rx: #2574
          Drug: CIMETIDINE 300MG TAB
          SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
          QTY: 180                      Refills remaining: 3
          Provider: PSOPROVIDER,ONE          Issued: 02/12/08
          Status: Discontinued              Last filled on: 03/07/08
          Processing Status: Released locally on 03/07/08@08:55:32 (Window)
                                          Days Supply: 90
-----

          Rx: #2573
          Drug: NIZATIDINE 150MG CAP
          SIG: TAKE ONE CAPSULE BY MOUTH TWICE A DAY
          QTY: 180                      Refills remaining: 3
          Provider: PSOPROVIDER,ONE          Issued: 03/07/08
          Status: Hold                      Last filled on: 03/07/08
          Processing Status: Released locally on 03/07/08@08:55:32 (Window)
                                          Days Supply: 90
-----

          Rx: #2599
          Drug: FAMOTIDINE 20MG TAB
          SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
          QTY: 180                      Refills remaining: 3
          Provider: PSOPROVIDER,ONE          Issued: 03/07/08
          Status: Provider Hold              Last filled on: 03/07/08
          Processing Status: Released locally on 03/07/08@08:55:32 (Window)
                                          Days Supply: 90

Duplicate Therapy Class(es): Peptic Ulcer Agents

```

```

=====
Discontinue RX #2573 NIZATIDINE 150MG CAP? Y/N No

Press Return to Continue:

2580A          SUCRALFATE 1GM TAB          QTY: 360
# OF REFILLS: 3  ISSUED: 03-12-08
SIG: TAKE ONE TABLET BY MOUTH FOUR TIMES A DAY
FILLED: 03-12-08
ROUTING: WINDOW      PHYS: PSOPROVIDER,ONE

Edit renewed Rx ? Y// n NO

      SC Percent: 80%
      Disabilities: NONE STATED

Was treatment for a Service Connected condition? NO//
.

```

## Duplicate Drug Order Check

The Duplicate Drug warning displays the following information for a local or remote outpatient medication order:

### Local Rx

```

Duplicate Drug in Local Rx:

      Rx #: 2608
      Drug: ASPIRIN 81MG EC TAB
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
      QTY: 30          Refills remaining: 11
      Provider: PSOPROVIDER,TEN          Issued: 03/24/08
      Status: Active          Last filled on: 03/24/08
      Processing Status: Released locally on 3/24/08@08:55:32 (Window)
                        Days Supply: 30

```

### Remote Rx

```

Duplicate Drug in Remote Rx:

      LOCATION NAME: <NAME OF FACILITY>
      Rx #: 2608
      Drug: ASPIRIN 81MG EC TAB
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
      QTY: 30          Refills remaining: 11
      Provider: PSOPROVIDER,TEN          Issued: 03/24/08
      Status: Active          Last filled on: 03/24/08
                        Days Supply: 30

```

Duplicate Drug order check for Pending Orders:

### Pending Order

```

DUPLICATE DRUG in a Pending Order for:

      Drug: ALLOPURINOL 300MG TAB
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
      QTY: 180          # of Refills: 3
      Provider: PSOPROVIDER,TEN          Issue Date: 03/24/08@14:44:15
      Provider Comments:

```



## Duplicate Drug order check for Non-Va Medications

### Non-VA Med Order

Duplicate Drug in a Non-VA Med Order for

```
Drug: CIMETIDINE 300MG TAB
Dosage: 300MG
Schedule: AT BEDTIME
Medication Route: MOUTH
Start Date: <NOT ENTERED>      CPRS Order #: 13554
Documented By: PSOPROVIDER,TEN on Mar 24, 2008@14:44:15
Order Check #1:
SIGNIFICANT drug-drug interaction: CIMETIDINE & PROPRANOLOL (PROPRANOLOL
TAB 40MG PO QID [PENDING])
Overriding Provider: PSOPROVIDER,TEN
Reason:<NOT ENTERED>
Statement/Explanation/Comments:
Patient wants to buy from Non-VA pharmacy
```

### Duplicate Drug Order Check business rules:

- a. If the DRUG CHECK FOR CLERK outpatient site parameter is set to NO, the system will not prompt a clerk (no PSORPH key) to discontinue the order when a Duplicate Drug order check occurs.
- b. If the DRUG CHECK FOR CLERK outpatient site parameter is set to NO, and a new order is being entered by a clerk (no PSORPH key) via the pharmacy backdoor, the order being processed will be deleted by the system immediately after the duplicate drug warning is displayed.
- c. If the duplicate drug is a remote order, the system will allow the clerk to process the new order after the display of the duplicate drug warning.
- d. If the DRUG CHECK FOR CLERK outpatient site parameter is set to NO, and a clerk (no PSORPH key) is finishing a pending order:
  - d1. When the VERIFICATION outpatient site parameter is set to YES and the duplicate drug is a local order, the system will return the user back to the detailed order ListMan display with the available actions of Accept/Edit/Discontinue.
  - d2. When the VERIFICATION outpatient site parameter is set to YES and the duplicate drug is a remote order
    - d2a. A duplicate drug warning will be displayed
    - d2b. The clerk will be allowed to finish the order
    - d2c. The finished order will have a status of non-verified
  - d3. When the VERIFICATION outpatient site parameter is set to NO, the clerk will not be allowed to finish the order.
  - d4. If the DRUG CHECK FOR CLERK outpatient site parameter is set to Yes, a clerk (no PSORPH key) will see the same discontinue prompts as a pharmacist.
- e. If the VERIFICATION outpatient site parameter is set to YES when reinstating an order, no duplicate message will be displayed and the reinstated order will have a non-verified status.

- f. No discontinuation prompt will be displayed for a duplicate Non-VA medication order in any situation.

After the Duplicate Drug warning is displayed, the system will ask the user if they wish to discontinue the order.

#### **Active Order**

Discontinue RX #2580A SUCRALFATE 1GM TAB? Y/N

#### **Pending Order**

Discontinue Pending Order for ALLOPURINOL 300MG? Y/N

If the user chooses not to discontinue the displayed order when entering a new order via the pharmacy backdoor, the system will delete the order being entered (prospective drug).

If the user chooses not to discontinue the displayed order when finishing a pending order, the system will redisplay the pending order and prompt them to accept, edit or discontinue the order.

If the DRUG CHECK FOR CLERK outpatient site parameter is set to NO, and if the clerk (no PSORPH key) is copying an order, the system will return them back to the detailed order ListMan display where the copy action was initiated.

If the DRUG CHECK FOR CLERK outpatient site parameter is set to NO and the VERIFICATION outpatient site parameter is set to YES when a clerk (no PSORPH key) is reinstating a discontinued order for a medication for which an active local order exists, the system will delete the active order and reinstate the discontinued order.

If the DRUG CHECK FOR CLERK outpatient site parameter is set to NO and the VERIFICATION outpatient site parameter is set to NO when a clerk is reinstating a discontinued order for a medication for which an active local order exists, the system will display a duplicate drug warning, but the order will not be reinstated.

If the DRUG CHECK FOR CLERK outpatient site parameter is set to YES or NO and the VERIFICATION outpatient site parameter is set to NO when a clerk is reinstating a discontinued order for a medication for which a remote order exists, the system will display a duplicate drug warning and the reinstated order will be assigned an active status.

If the DRUG CHECK FOR CLERK outpatient site parameter is set to YES or NO and the VERIFICATION outpatient site parameter is set to YES when a clerk is reinstating a discontinued order, the system will not display a duplicate drug warning and the reinstated order will be assigned a non-verified status.

If a duplicate drug warning is displayed for a medication order, it will not be included in a duplicate therapy order check.

The following examples illustrate the conditions described above.

## Duplicate Pending Order

```
Pending OP Orders (ROUTINE)   Mar 24, 2008@13:52:04           Page:    1 of    2
PSOPATIENT,FOUR               <NO ALLERGY ASSESSMENT>
  PID: 000-00-0000             Ht(cm): 168.91 (04/11/2006)
  DOB: MAY 20,1966 (41)       Wt(kg): 68.18 (09/06/2006)

Order Checks:
  Duplicate drug order: ASPIRIN TAB,EC 325MG TAKE ONE TABLET BY MOUTH EVERY
  MORNING [ACTIVE]
  Overriding Provider: PSOPROVIDER,TEN
  Overriding Reason: TESTING DUPLICATE THERAPY FUNCTIONALITY

*(1) Orderable Item: ASPIRIN TAB,EC
(2)      Drug: ASPIRIN 325MG EC TAB <DIN>
(3)      *Dosage: 325 (MG)
          Verb: TAKE
          Dispense Units: 1
          Noun: TABLET
          *Route: ORAL
          *Schedule: QAM
+      Enter ?? for more actions
BY Bypass                      DC Discontinue
ED Edit                        FN Finish
Select Item(s): Next Screen// FN Finish

-----
Duplicate Drug in Local Rx:

          RX #: 2603
          Drug: ASPIRIN 325MG EC TAB
          SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
          QTY: 30                      Refills remaining: 11
          Provider: PSOPROVIDER,TEN      Issued: 03/24/08
          Status: Active                  Last filled on: 03/24/08
          Processing Status: Released locally on 3/24/08@08:55:32 (Window)
                                          Days Supply: 30
-----
Discontinue RX #2603 ASPIRIN 325MG EC TAB? Y/N NO -Prescription was not discontinued...

Pending OP Orders (ROUTINE)   Mar 24, 2008@13:52:45           Page:    1 of    2
PSOPATIENT,FOUR               <NO ALLERGY ASSESSMENT>
  PID: 000-00-0000             Ht(cm): 168.91 (04/11/2006)
  DOB: MAY 20,1966 (41)       Wt(kg): 68.18 (09/06/2006)

Order Checks:
  Duplicate drug order: ASPIRIN TAB,EC 325MG TAKE ONE TABLET BY MOUTH EVERY
  MORNING [ACTIVE]
  Overriding Provider: PSOPROVIDER,TEN
  Overriding Reason: TESTING DUPLICATE THERAPY FUNCTIONALITY

*(1) Orderable Item: ASPIRIN TAB,EC
(2)      Drug: ASPIRIN 325MG EC TAB <DIN>
(3)      *Dosage: 325 (MG)
          Verb: TAKE
          Dispense Units: 1
          NOUN: TABLET
          *Route: ORAL
          *Schedule: QAM
+      Enter ?? for more actions
AC Accept                      ED Edit                      DC Discontinue
Select Item(s): Next Screen//
.
.
OR

Discontinue RX #2603 ASPIRIN 325MG EC TAB? Y/N YES

RX #2603 ASPIRIN 325MG EC TAB will be discontinued after the acceptance of the new order.
```

```

Rx # 2604                      03/24/08
PSOPATIENT,FOUR                #30
TAKE ONE TABLET BY MOUTH EVERY MORNING

ASPIRIN 325MG EC TAB
PSOPROVIDER,TEN                PSOPHARMACIST,ONE
# of Refills: 11

      SC Percent: 100%
      Disabilities: NONE STATED

Was treatment for a Service Connected condition? YES// YES
Are you sure you want to Accept this Order? NO// YES
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No//    NO

      -Duplicate Drug Rx #2603 ASPIRIN 325MG EC TAB has been discontinued...

Press Return to Continue:
.

```

### New Order Entry Backdoor – Duplicate Drug

```

Eligibility: SERVICE CONNECTED 50% to 100%      SC%: 100
RX PATIENT STATUS: OPT NSC//
DRUG: aspirin
  Lookup: DRUG  GENERIC NAME
          1  ASPIRIN 325MG EC TAB                CN103
          2  ASPIRIN 325MG SUPPOSITORY            CN103
          3  ASPIRIN 325MG TAB                    CN103
          4  ASPIRIN 650MG/BUTALBITAL 50MG TAB    CN103
          5  ASPIRIN 81MG EC TAB                  CN103
Press <RETURN> to see more, '^' to exit this list, '^ ^' to exit all lists, OR
CHOOSE 1-5: 1  ASPIRIN 325MG EC TAB                CN103
  Restriction/Guideline(s) exist.  Display? : (N/D): No//    NO
-----
Duplicate Drug in Local Rx:

      RX #: 2604
      Drug: ASPIRIN 325MG EC TAB
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
      QTY: 30                      Refills remaining: 11
      Provider: PSOPROVIDER,TEN          Issued: 03/24/08
      Status: Active                    Last filled on: 03/24/08
      Processing Status: Released locally on 3/24/08@08:55:32 (Window)
                                      Days Supply: 30
-----
Discontinue RX #2604 ASPIRIN 325MG EC TAB? Y/N NO -Prescription was not discontinued...

RX DELETED

      OR

Discontinue RX #2604 ASPIRIN 325MG EC TAB? Y/N YES

RX #2604 ASPIRIN 325MG EC TAB will be discontinued after the acceptance of the new order.

VERB: TAKE
Available Dosage(s)
  1. 325MG
  2. 650MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 325MG

You entered 325MG is this correct? Yes//    YES

```

```

VERB: TAKE
DISPENSE UNITS PER DOSE(TABLET): 1// 1
Dosage Ordered: 325MG

NOUN: TABLET
ROUTE: PO// ORAL PO MOUTH
Schedule: bid (TWICE A DAY)
LIMITED DURATION (IN DAYS, HOURS OR MINUTES):
CONJUNCTION:
PATIENT INSTRUCTIONS:

(TAKE ONE TABLET BY MOUTH TWICE A DAY)

DAYS SUPPLY: (1-90): 30//
QTY ( TAB ) : 60// 60
COPIES: 1// 1
# OF REFILLS: (0-11): 11//
PROVIDER: PSOPROVIDER,TEN
CLINIC:
MAIL/WINDOW: WINDOW// WINDOW
METHOD OF PICK-UP:
REMARKS:
ISSUE DATE: TODAY// (MAR 24, 2008)
FILL DATE: (3/24/2008 - 3/25/2009): TODAY// (MAR 24, 2008)
Nature of Order: WRITTEN// W
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No// NO

Rx # 2605 03/24/08
PSOPATIENT,FOUR #60
TAKE ONE TABLET BY MOUTH TWICE A DAY

ASPIRIN 325MG EC TAB
PSOPROVIDER,TEN PSOPHARMACIST,ONE
# of Refills: 11

SC Percent: 100%
Disabilities: NONE STATED

Was treatment for a Service Connected condition? n NO
Is this correct? YES//

-Duplicate Drug RX #2604 ASPIRIN 325MG EC TAB has been discontinued...

Another New Order for PSOPATIENT,FOUR? YES//
.

```

### Editing Dispense Drug – Create New Order

```

Rx #: 2605A
(1) *Orderable Item: ASPIRIN TAB,EC
(2) Drug: ASPIRIN 325MG EC TAB <DIN>
(3) *Dosage: 325 (MG)
Verb: TAKE
Dispense Units: 1
Noun: TABLET
*Route: ORAL
*Schedule: BID
(4)Pat Instructions:
SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
(5) Patient Status: OPT NSC
(6) Issue Date: 03/24/08 (7) Fill Date: 03/24/08
Last Fill Date: 03/24/08 (Window)
+ Enter ?? for more actions
DC Discontinue PR Partial RL Release
ED Edit RF Refill RN Renew
Select Action: Next Screen// ED Edit

```

```

Select fields by number: (1-19): 2
DRUG: ASPIRIN 325MG EC TAB// ASPIRIN 8

  Lookup: GENERIC NAME
ASPIRIN 81MG EC TAB          CN103
    ...OK? Yes//      (Yes)

TRADE NAME:
-----
Duplicate Drug in Local Rx:

      Rx #: 2606
      Drug: ASPIRIN 81MG EC TAB
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
      QTY: 30                      Refills remaining: 11
      Provider: PSOPROVIDER,TEN          Issued: 03/24/08
      Status: Active                    Last filled on: 03/24/08
      Processing Status: Released locally on 03/24/08@08:55:32 (Window)
                                      Days Supply: 30
-----
Discontinue RX #2606 ASPIRIN 81MG EC TAB? Y/N NO -Prescription was not discontinued...
.
.
  OR

Discontinue RX #2606 ASPIRIN 81MG EC TAB? Y/N YES

RX #2606 ASPIRIN 81MG EC TAB will be discontinued after the acceptance of the new order.

You have changed the dispense drug from
ASPIRIN 325MG EC TAB to ASPIRIN 81MG EC TAB.

Current SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
Do You want to Edit the SIG? YES//
Available Dosage(s)
  1. 81MG
  2. 162MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 81MG

You entered 81MG is this correct? Yes// YES
This edit will discontinue the duplicate Rx & change the dispensed drug!
Do You Want to Proceed? NO// YES

VERB: TAKE// TAKE
DISPENSE UNITS PER DOSE(TABLET): 1// 1
Dosage Ordered: 81MG

NOUN: TABLET// TABLET
ROUTE: ORAL// ORAL
Schedule: BID// QAM (EVERY MORNING)
LIMITED DURATION (IN MONTHS, WEEKS, DAYS, HOURS OR MINUTES):
CONJUNCTION:

New OP Order (ROUTINE)          Mar 24, 2008@14:10:20          Page: 1 of 2
PSOPATIENT,FOUR                  <NO ALLERGY ASSESSMENT>
  PID: 000-00-0000              Ht(cm): 168.91 (04/11/2006)
  DOB: MAY 20,1966 (41)        Wt(kg): 68.18 (09/06/2006)

      Orderable Item: ASPIRIN TAB,EC
(1)          Drug: ASPIRIN 81MG EC TAB
(2) Patient Status: OPT NSC
(3)   Issue Date: MAR 24,2008          (4) Fill Date: MAR 24,2008
(5) Dosage Ordered: 81 (MG)
      Verb: TAKE
      Dispense Units: 1
      Noun: TABLET
      Route: ORAL
      Schedule: QAM

```

```

(6)Pat Instruction:
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
(7)   Days Supply: 30                      (8)   QTY (TAB): 60
(9)   # of Refills: 11                     (10)  Routing: WINDOW
+      This change will create a new prescription!
AC   Accept                               ED   Edit
Select Action: Next Screen// AC   Accept

Nature of Order: SERVICE CORRECTION//      S
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No//   NO

Rx # 2607                      03/24/08
PSOPATIENT,FOUR                #60
TAKE ONE TABLET BY MOUTH EVERY MORNING

ASPIRIN 81MG EC TAB
PSOPROVIDER,TEN                PSOPHARMACIST,ONE
# of Refills: 11

      SC Percent: 100%
      Disabilities: NONE STATED

Was treatment for a Service Connected condition? YES//
Is this correct? YES// ...

-Duplicate Drug RX #2606 ASPIRIN 81MG EC TAB has been discontinued...
.

```

#### Clerk Entering New Order via Backdoor – Drug Check for Clerk Parameter set to No

```

PI Patient Information          SO Select Order
Select Action: Quit// NO      New Order

Eligibility: SERVICE CONNECTED 50% to 100%      SC%: 100
RX PATIENT STATUS: OPT NSC//
DRUG: ASPIRIN 81
  Lookup: GENERIC NAME
ASPIRIN 81MG EC TAB          CN103
  ...OK? Yes//      (Yes)

-----
Duplicate Drug in Local Rx:

      Rx #: 2608
      Drug: ASPIRIN 81MG EC TAB
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
      QTY: 30                      Refills remaining: 11
      Provider: PSOPROVIDER,TEN          Issued: 03/24/08
      Status: Active                    Last filled on: 03/24/08
      Processing Status: Released locally on 3/24/08@08:55:32 (Window)
                                      Days Supply: 30
-----
RX DELETED

Another New Order for PSOPATIENT,FOUR? YES//
.

```

#### Clerk Entering New Order via Backdoor – Drug Check for Clerk Parameter set to No – Duplicate Drug – Discontinued Status

```

Eligibility: SERVICE CONNECTED 50% to 100%      SC%: 100
RX PATIENT STATUS: OPT NSC//
DRUG: ASPIRIN
  Lookup: GENERIC NAME
1 ASPIRIN 325MG EC TAB          CN103

```

```

2  ASPIRIN 325MG SUPPOSITORY          CN103
3  ASPIRIN 325MG TAB                  CN103
4  ASPIRIN 650MG/BUTALBITAL 50MG TAB CN103
5  ASPIRIN 81MG EC TAB                CN103
Press <RETURN> to see more, '^' to exit this list, '^'^' to exit all lists, OR
CHOOSE 1-5: 1  ASPIRIN 325MG EC TAB    CN103
  Restriction/Guideline(s) exist.  Display? : (N/D): No//  NO
-----
Duplicate Drug in Local Rx:

      Rx #: 2605A
      Drug: ASPIRIN 325MG EC TAB
      SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
      QTY: 60                      Refills remaining: 11
      Provider: PSOPROVIDER,TEN      Issued: 03/24/08
      Status: Discontinued (Edit)    Last filled on: 03/24/08
      Processing Status: Released locally on 3/24/08@08:55:32 (Window)
                                      Days Supply: 30
-----

Press Return to Continue:
.
```

### Clerk Finishing Pending Order – Drug Check for Clerk parameter set to No

```

ED  (Edit)                      FN  Finish

Pending OP Orders (ROUTINE)  Mar 24, 2008@14:35:21      Page:    1 of    3
PSOPATIENT,FOUR              <NO ALLERGY ASSESSMENT>
  PID: 000-00-0000           Ht(cm): 168.91 (04/11/2006)
  DOB: MAY 20,1966 (41)      Wt(kg): 68.18 (09/06/2006)

Order Checks:
  Duplicate drug order: ASPIRIN TAB,EC  81MG TAKE ONE TABLET BY MOUTH EVERY
  MORNING [ACTIVE]
  Overriding Provider: PSOPROVIDER,TEN
  Overriding Reason: TESTING

  Duplicate drug class order:(ASPIRIN TAB,EC  325MG
  TAKE ONE TABLET BY MOUTH EVERY MORNING [UNRELEASED])
  Overriding Provider: PSOPROVIDER,TEN
  Overriding Reason: TESTING

*(1) Orderable Item: ASPIRIN TAB,EC
(2)      Drug: ASPIRIN 81MG EC TAB
(3)      *Dosage: 81 (MG)
+      Enter ?? for more actions
BY Bypass                      DC (Discontinue)
ED (Edit)                      FN  Finish
Select Item(s): Next Screen// FN  Finish

-----
Duplicate Drug in Local Rx:

      Rx #: 2608
      Drug: ASPIRIN 81MG EC TAB
      SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
      QTY: 30                      Refills remaining: 11
      Provider: PSOPROVIDER,TEN      Issued: 03/24/08
      Status: Active                  Last filled on: 03/24/08
      Processing Status: Released locally on 3/24/08@08:55:32 (Window)
                                      Days Supply: 30
-----

Pending OP Orders (ROUTINE)  Mar 24, 2008@14:35:25      Page:    1 of    3
PSOPATIENT,FOUR              <NO ALLERGY ASSESSMENT>
  PID: 000-00-0000           Ht(cm): 168.91 (04/11/2006)
  DOB: MAY 20,1966 (41)      Wt(kg): 68.18 (09/06/2006)

Order Checks:
```



```

Duplicate drug order: ASPIRIN TAB,EC 81MG TAKE ONE TABLET BY MOUTH EVERY
MORNING [ACTIVE]
Overriding Provider: PSOPROVIDER,TEN
Overriding Reason: TESTING

Duplicate drug class order: NON-OPIOID ANALGESICS (ASPIRIN TAB,EC 325MG
TAKE ONE TABLET BY MOUTH EVERY MORNING [UNRELEASED])
Overriding Provider: PSOPROVIDER,TEN
Overriding Reason: TESTING

*(1) Orderable Item: ASPIRIN TAB,EC
(2) Drug: ASPIRIN 81MG EC TAB
(3) *Dosage: 81 (MG)
+ Enter ?? for more actions
AC Accept ED Edit DC Discontinue
Select Item(s): Next Screen// DC Discontinue

Nature of Order: SERVICE CORRECTION// S

Requesting PROVIDER: PSOPROVIDER,TEN// LBB 119
Comments: Per Pharmacy Request Replace

Press Return to :

PI Patient Information SO Select Order

PU Patient Record Update NO New Order
PI Patient Information SO Select Order
Select Action: Quit// 2

Medication Profile Mar 24, 2008@14:36:28 Page: 1 of 1
PSOPATIENT,FOUR <NO ALLERGY ASSESSMENT>
PID: 000-00-0000 Ht(cm): 168.91 (04/11/2006)
DOB: MAY 20,1966 (41) Wt(kg): 68.18 (09/06/2006)
SEX: MALE

# RX # DRUG QTY ST DATE FILL REM SUP
-----ACTIVE-----
1 2608 ASPIRIN 81MG EC TAB 30 A 03-24 03-24 11 30
-----NON-VERIFIED-----
2 2609 ASPIRIN 325MG EC TAB 30 N 03-24 03-24 5 30
.

```

### Duplicate with Non-VA Med – No Action Required

```

DRUG: CIMETIDINE
Lookup: GENERIC NAME
1 CIMETIDINE 100MG TAB GA301
2 CIMETIDINE 200MG TAB GA301
3 CIMETIDINE 300MG TAB GA301 90 DAY SUPPLY
4 CIMETIDINE 400MG TAB GA301
5 CIMETIDINE 800MG TAB GA301
CHOOSE 1-5: 3 CIMETIDINE 300MG TAB GA301 90 DAY SUPPLY
-----
Duplicate Drug in a Non-VA Med Order for

Drug: CIMETIDINE 300MG TAB
Dosage: 300MG
Schedule: AT BEDTIME
Medication Route: MOUTH
Start Date: CPRS Order #: 13554
Documented By: PSOPROVIDER,TEN on Mar 24, 2008@14:44:15
Order Check #1:
SIGNIFICANT drug-drug interaction: CIMETIDINE & PROPRANOLOL (PROPRANOLOL
TAB 40MG PO QID [PENDING])
Overriding Provider: PSOPROVIDER,TEN
Reason:
Statement/Explanation/Comments:
Patient wants to buy from Non-VA pharmacy

```

-----  
Press Return to Continue:

VERB: TAKE

Available Dosage(s)

- 1. 300MG
- 2. 600MG

Select from list of Available Dosages, Enter Free Text Dose  
or Enter a Question Mark (?) to view list: 1 300MG

You entered 300MG is this correct? Yes//

### Duplicate Drug with Pending Order

Another New Order for PSOPATIENT,FOUR? YES//

Eligibility: SERVICE CONNECTED 50% to 100% SC%: 100

RX PATIENT STATUS: OPT NSC//

DRUG: ALLOPURINOL

Lookup: GENERIC NAME

- |   |                       |       |
|---|-----------------------|-------|
| 1 | ALLOPURINOL 100MG TAB | MS400 |
| 2 | ALLOPURINOL 300MG TAB | MS400 |

CHOOSE 1-2: 2 ALLOPURINOL 300MG TAB MS400

-----  
DUPLICATE DRUG in a Pending Order for:

Drug: ALLOPURINOL 300MG TAB

SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING

QTY: 180 # of Refills: 3

Provider: PSOPROVIDER,TEN Issue Date: 03/24/08@14:44:15

Provider Comments:

-----  
Discontinue Pending Order for ALLOPURINOL 300MG? Y/N YES

Pending Order for ALLOPURINOL 300MG will be discontinued after the acceptance of the new order.

VERB: TAKE

Available Dosage(s)

- 1. 300MG
- 2. 600MG

Select from list of Available Dosages, Enter Free Text Dose  
or Enter a Question Mark (?) to view list: 1 300MG

You entered 300MG is this correct? Yes// YES

VERB: TAKE

DISPENSE UNITS PER DOSE(TABLET): 1// 1

Dosage Ordered: 300MG

NOUN: TABLET

ROUTE: PO// ORAL PO MOUTH

Schedule: QAM// (EVERY MORNING)

LIMITED DURATION (IN DAYS, HOURS OR MINUTES):

CONJUNCTION:

PATIENT INSTRUCTIONS:

(TAKE ONE TABLET BY MOUTH EVERY MORNING)

DAYS SUPPLY: (1-90): 30//

QTY ( TAB ) : 30// 30

COPIES: 1// 1

# OF REFILLS: (0-11): 11//

PROVIDER: PSOPROVIDER,TEN

CLINIC:

MAIL/WINDOW: WINDOW// WINDOW

METHOD OF PICK-UP:

## REMARKS:

ISSUE DATE: TODAY// (MAR 24, 2008)

FILL DATE: (3/24/2008 - 3/25/2009): TODAY// (MAR 24, 2008)

Nature of Order: WRITTEN// W

Rx # 2610 03/24/08  
 PSOPATIENT,FOUR #30  
 TAKE ONE TABLET BY MOUTH EVERY MORNING

ALLOPURINOL 300MG TAB  
 PSOPROVIDER,TEN PSOPHARMACIST,ONE  
 # of Refills: 11

SC Percent: 100%  
 Disabilities: NONE STATED

Was treatment for a Service Connected condition? y YES

Is this correct? YES//

- Duplicate Drug Pending Order for ALLOPURINOL 300MG has been discontinued...

**Copying an Existing Order**

RN Renew

Select Action: Next Screen// CO CO

OP Medications (ACTIVE) Mar 12, 2008@09:15:48 Page: 1 of 2

PSOPATIENT,TWO

&lt;A&gt;

PID: 000-00-0000

Ht(cm): 182.88 (04/13/2005)

DOB: JAN 1,1945 (63)

Wt(kg): 77.27 (04/13/2005)

Rx #: 2584\$

(1) \*Orderable Item: AMLODIPINE/ATORVASTATIN TAB

(2) Drug: AMLODIPINE 5MG/ATORVASTATIN 10MG TAB

Verb: TAKE

(3) \*Dosage: ONE TABLET

\*Route: ORAL

\*Schedule: QAM

(4)Pat Instructions:

SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING

(5) Patient Status: OPT NSC

(6) Issue Date: 03/12/08

(7) Fill Date: 03/12/08

Last Fill Date: 03/12/08 (Window)

Last Release Date:

(8) Lot #:

Expires: 03/13/09

MFG:

+ Enter ?? for more actions

AC Accept

ED Edit

New OP Order (COPY)

Mar 12, 2008@09:15:48

Page: 1 of 2

PSOPATIENT,TWO

&lt;A&gt;

PID: 000-00-0000

Ht(cm): 182.88 (04/13/2005)

DOB: JAN 1,1945 (63)

Wt(kg): 77.27 (04/13/2005)

Orderable Item: AMLODIPINE/ATORVASTATIN TAB

(1) Drug: AMLODIPINE 5MG/ATORVASTATIN 10MG TAB

(2) Patient Status: OPT NSC

(3) Issue Date: MAR 12,2008

(4) Fill Date: MAR 12,2008

Verb: TAKE

(5) Dosage Ordered: ONE TABLET

Route: ORAL

Schedule: QAM

(6)Pat Instruction:

SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING

(7) Days Supply: 30

(8) QTY ( ): 30

(9) # of Refills: 11

(10) Routing: WINDOW

(11) Clinic:

```

(12)          Provider: PSOPROVIDER,ONE          (13)  Copies: 1
+          Enter ?? for more actions
AC  Accept          ED  Edit
Select Action: Next Screen// AC  Accept
-----
Duplicate Drug in Local RX:

          Rx #: 2584
          Drug: AMLODIPINE 5MG/ATORVASTATIN 10MG TAB
          SIG: TAKE ONE TABLET BY MOUTH EVERY MORNING
          QTY: 30          Refills remaining: 11
          Provider: OPPROVIDER, ONE          Issued: 03/12/07
          Status: ACTIVE          Last filled on: 03/12/07
          Processing Status: Released locally on 3/12/07@08:55:32 (Window)
                                Days Supply: 30
-----
Discontinue Rx #2584 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB? Y/N YES

Rx #2584 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB will be discontinued after the acceptance
of the new order.

Nature of Order: WRITTEN//          W
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No//  NO

Rx # 2585          03/12/08
PSOPATIENT,TWO T          #30
TAKE ONE TABLET BY MOUTH EVERY MORNING

AMLODIPINE 5MG/ATORVASTATIN 10MG TAB
PSOPROVIDER,ONE          PSOPHARMACIST,ONE
# of Refills: 11

          SC Percent: 40%
          Disabilities: NONE STATED

Was treatment for Service Connected condition? NO//

Is this correct? YES// ...

- Duplicate Drug Rx #2584 AMLODIPINE 5MG/ATORVASTATIN 10MG TAB has been discontinued...

```

The CPRS Auto Refill field can be updated using the *Pharmacy Systems Parameter Edit* [PSS MGR] option. This parameter works in conjunction with the PSOUATRF security key.

- When the CPRS Auto Refill field is set to YES and the PSOAUTRF security key has been assigned to at least one user, all refills placed in CPRS by the provider are processed and suspended with the next fill date and all routing is set to Mail automatically.
- When the CPRS Auto Refill field is set to NO or if the PSOAUTRF security key is not assigned, the manual refill process is required.

If the auto refill process fails, the order will not be processed and will require manual refilling. A MailMan message will be sent to the holders of the PSOAUTRF key describing the reason for not filling the auto refill. All of the refill activity, manual or automatic, is recorded in the Activity Log entry notes.

With Patch PSO\*7\*233, when a name is selected, if the patient's address is flagged with a Bad Address Indicator, a warning message is displayed. If the user has proper authorization (i.e., the PSO SITE

parameter “EDIT PATIENT DATA” is set to Yes or the user holds the new PSO ADDRESS UPDATE security key), a prompt displays asking if the user wants to update the address.

Following the installation of patches PSO\*7\*207 and OR\*3\*238 (Remote Data Interoperability (RDI) trigger patch), order checks will be made using additional data from the Health Data Repository Interim Messaging Solution (HDR-IMS) and the HDR-Historical (HDR-Hx). This will contain both Outpatient orders from other VAMCs as well as from Department of Defense (DoD) facilities, if available. All remote prescription statuses will be included in order checking for a new order being processed from within backdoor Outpatient Pharmacy and for new orders being placed by CPRS or by Inpatient Medications. Any remote Outpatient order that has been expired or discontinued for 30 days or less will be included in the list of medications to be checked.

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



For the *Patient Prescription Processing*, if a temporary address has no end date, the following text is displayed in the Status column: “(Temp address from XXX 99,9999 till (no end date))”.

The check for remote data availability is performed upon entering the patient’s profile, rather than on each order, to ensure that both remote data and local data are used for order checking.



**Note:** Once the above patches have been installed, a new comment for remote order checks, “Now processing Enhanced Order Checks! Please wait...” has been added to the screen. The previous comment, “Now doing order checks. Please wait...” is replaced by: “Now doing allergy checks. Please wait...”

The following will not be included in order checks (after patch PSO\*7\*243):

- Prescriptions with a status of “DELETED” in the STATUS field in the PRESCRIPTION file from a remote facility
- Prescriptions with a missing expiration date, unless the ISSUE DATE field of the PRESCRIPTION file is within the past year

Remote order checking added (after patch PSO\*7\*243):

- For drug class when orders are placed for locally defined drugs
- Allergy Analgesic class order checks only match against the specific 5-character class if the class begins with “CN10”

If for any reason remote order checks cannot be performed, the following message displays:

Remote data not available - Only local order checks processed.



**Note:** For remote order checking, if the remote order does not have a VA PRODUCT file VUID, then it will not be included in drug-drug order checks.

This option also prompts for International Classification of Diseases--9th edition (ICD-9) Diagnosis Codes (maximum of eight). Along with the PROVIDER key, the VistA Outpatient Pharmacy application evaluates the IBB Clinical Indicator Data Capture (CIDC) Insurance Switch to determine if CIDC prompts appear. This allows sites to choose whether to collect CIDC data.

These new ICD-9 Diagnosis Code prompts only appear when the:

1. User entering the prescription holds the PROVIDER key.
2. IBB CIDC Insurance Switch is set to 'YES'. (Yes = Prompt user for ICD-9 Diagnosis Codes)

User response to the ICD-9 Diagnosis Code prompts is optional.

This option is also found on the *Pharmacy Technician's Menu*, but with limited actions. A pharmacy technician can only enter a new order, refill, copy, renew, reprint, release, order a partial, or pull early from suspense.

When an order is an ePharmacy order (determined to be third party billable), the billing data is sent to ECME when an order is finished. ECME sends a message back to Outpatient Pharmacy displaying the status of the claim. This message displays for new, edited, copied, and renewed ePharmacy orders.

```
Is this correct? YES// <Enter>
-Rx 100003869A has been discontinued...

Prescription 100003919 successfully submitted to ECME for claim generation.

Claim Status:
IN PROGRESS-Waiting to start
IN PROGRESS-Waiting for packet build
IN PROGRESS-Packet being built
IN PROGRESS-Waiting for transmit
IN PROGRESS-Transmitting
E PAYABLE
```



## CPRS Order Checks

The following CPRS order checks have been added to the existing list of order checks performed in the Outpatient Pharmacy application.

- Aminoglycoside Ordered
- Dangerous Meds for Patient >64
- Glucophage –Lab Results



**Note:** Please see the CPRS (OERR) documentation for details on each order check.

The CPRS order checks shall be incorporated in the following Outpatient Pharmacy order entry processes:

- Entering a new order via backdoor pharmacy options
- Finishing a pending order
- Renewing an order
- Editing an order which results in a new order being created.
- Verifying an order
- Copying an order
- Reinstating a discontinued order

No user action/intervention shall be required after a CPRS order check warning is displayed.

See examples below:

### New Order Entry – Backdoor – Dangerous Meds for Patient >64 for Dipyridamole

```
Select Action: Quit// NO   New Order

Eligibility: NSC
RX PATIENT STATUS: OPT NSC//
DRUG: DIPYRIDAMOLE
  Lookup: GENERIC NAME
    1  DIPYRIDAMOLE 25MG TAB          BL117
    2  DIPYRIDAMOLE 50MG TAB          BL117
CHOOSE 1-2: 1  DIPYRIDAMOLE 25MG TAB          BL117

***DANGEROUS MEDS FOR PATIENT >64***

Patient is 78.  Older patients can experience adverse reactions at high doses of
Dipyridamole (e.g., headache, dizziness, syncope, GI intolerance.)  There is also
questionable efficacy at lower doses.

VERB: TAKE
Available Dosage(s)
    1. 25MG
    2. 50MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1 25MG

You entered 25MG is this correct? Yes//   YES
VERB: TAKE
DISPENSE UNITS PER DOSE(TABLET): 1// 1
Dosage Ordered: 25MG

NOUN: TABLET
ROUTE: PO//
```

## Finishing a Pending Order – Dangerous Meds for Patient >64 for Amitriptyline

```
Pending OP Orders (ROUTINE)   Mar 25, 2008@15:29:09           Page:    1 of    2
PSOPATIENT,NINE                                     <A>
  PID: 000-00-0000                                Ht(cm): 177.80 (10/14/2005)
  DOB: JAN 1,1930 (78)                            Wt(kg): 136.36 (10/14/2005)

*(1) Orderable Item: AMITRIPTYLINE TAB
(2)      Drug: AMITRIPTYLINE 25MG TAB
(3)      *Dosage: 25 (MG)
          Verb: TAKE
          Dispense Units: 1
          Noun: TABLET
          *Route: ORAL
          *Schedule: QHS
(4) Pat Instruct:
  Provider Comments:
    Instructions: TAKE ONE TABLET PO QHS
    SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
(5) Patient Status: OPT NSC
(6)      Issue Date: MAR 25,2008          (7) Fill Date: MAR 25,2008
+      Enter ?? for more actions
BY Bypass                                DC Discontinue
ED Edit                                  FN Finish
Select Item(s): Next Screen// FN  Finish

***DANGEROUS MEDS FOR PATIENT >64***

Patient is 78. Amitriptyline can cause cognitive impairment and loss of balance in older
patients. Consider other antidepressant medications on formulary.

Rx # 2612                                03/25/08
PSOPATIENT,NINE                                #30
TAKE ONE TABLET BY MOUTH AT BEDTIME

AMITRIPTYLINE 25MG TAB
PSOPROVIDER,TEN                                PSOPHARMACIST,22
# of Refills: 3

Are you sure you want to Accept this Order? NO// YES
WAS THE PATIENT COUNSELED: NO//
.
```

## Renewing an Order – Dangerous Meds for Patient >64 for Chlorpropamide

```

Rx #: 2613$
(1) *Orderable Item: CHLORPROPAMIDE TAB
(2)      Drug: CHLORPROPAMIDE 250MG TAB
(3)      *Dosage: 250 (MG)
          Verb: TAKE
          Dispense Units: 1
          Noun: TABLET
          *Route: ORAL
          *Schedule: BID
(4) Pat Instructions:
  SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
(5) Patient Status: OPT NSC
(6)      Issue Date: 03/25/08          (7) Fill Date: 03/25/08
      Last Fill Date: 03/25/08 (Mail)
+      Enter ?? for more actions
DC Discontinue                                PR Partial                                RL Release
ED Edit                                  RF Refill                                  RN Renew
Select Action: Next Screen// RN  Renew

FILL DATE: (3/25/2008 - 3/26/2009): TODAY// (MAR 25, 2008)
MAIL/WINDOW: WINDOW// WINDOW
```

METHOD OF PICK-UP:  
Nature of Order: WRITTEN// W  
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No// NO

Now Renewing Rx # 2613 Drug: CHLORPROPAMIDE 250MG TAB

\*\*\*DANGEROUS MEDS FOR PATIENT >64\*\*\*

Patient is 78. Older patients may experience hypoglycemia with Chlorpropamide due to its long duration and variable renal secretion. They may also be at increased risk for Chlorpropamide-induced SIADH.

2613A CHLORPROPAMIDE 250MG TAB QTY: 60  
# OF REFILLS: 3 ISSUED: 03-25-08  
SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY  
.

### Creating New Order from Edit – Glucophage Lab Results for Metformin

\* (1) Orderable Item: METFORMIN TAB, ORAL  
(2) Drug: METFORMIN 500MG TAB  
(3) \*Dosage: 500 (MG)  
Verb: TAKE

ED Edit FN Finish  
Select Item(s): Next Screen// NEXT SCREEN

BY Bypass DC Discontinue  
Pending OP Orders (ROUTINE) Mar 25, 2008@15:33:47 Page: 2 of 3  
PSOPATIENT,NINE <A>

PID: 000-00-0000 Ht(cm): 177.80 (10/14/2005)  
DOB: JAN 1,1930 (78) Wt(kg): 136.36 (10/14/2005)

+ Dispense Units: 1  
Noun: TABLET  
\*Route: ORAL  
\*Schedule: Q12H

(4) Pat Instruct:  
Provider Comments:  
Instructions: TAKE ONE TABLET PO Q12H  
SIG: TAKE ONE TABLET BY MOUTH EVERY 12 HOURS

(5) Patient Status: OPT NSC  
(6) Issue Date: MAR 25,2008 (7) Fill Date: MAR 25,2008  
(8) Days Supply: 30 (9) QTY (TAB): 60  
Provider ordered 2 refills

(10) # of Refills: 2 (11) Routing: MAIL  
(12) Clinic: BARB'S CLINIC

+ Enter ?? for more actions

ED Edit FN Finish  
Select Item(s): Next Screen// ED Edit  
\* Indicates which fields will create a new Order  
Select Field to Edit by number: (1-15): 3

Press Return to :

Available Dosage(s)  
1. 500MG  
2. 1000MG

Select from list of Available Dosages, Enter Free Text Dose  
or Enter a Question Mark (?) to view list: 500MG// 2 1000MG

You entered 1000MG is this correct? Yes// YES  
VERB: TAKE// TAKE  
DISPENSE UNITS PER DOSE(TABLETS): 2// 2  
Dosage Ordered: 1000MG

NOUN: TABLETS// TABLETS  
 ROUTE: ORAL// ORAL  
 Schedule: Q12H// QHS (AT BEDTIME)  
 LIMITED DURATION (IN DAYS, HOURS OR MINUTES):  
 CONJUNCTION:

Pending OP Orders (ROUTINE) Mar 25, 2008@15:34:08 Page: 1 of 3  
 PSOPATIENT,NINE <A>  
 PID: 000-00-0000 Ht(cm): 177.80 (10/14/2005)  
 DOB: JAN 1,1930 (78) Wt(kg): 136.36 (10/14/2005)

CPRS Order Checks:  
 Duplicate drug class order: ORAL HYPOGLYCEMIC AGENTS,ORAL (CHLORPROPAMIDE  
 TAB 250MG TAKE ONE TABLET BY MOUTH TWICE A DAY [PENDING])  
 Overriding Provider: PSOPROVIDER,TEN  
 Overriding Reason: testing

Metformin - no serum creatinine within past 60 days.  
 Overriding Provider: PSOPROVIDER,TEN  
 Overriding Reason: testing

\*(1) Orderable Item: METFORMIN TAB,ORAL  
 (2) Drug: METFORMIN 500MG TAB  
 (3) \*Dosage: 1000 (MG)  
 Verb: TAKE

+ This change will create a new prescription!  
 AC Accept ED Edit DC Discontinue  
 Select Item(s): Next Screen// AC Accept

\*\*\*Metformin Lab Results\*\*\*

Metformin - no serum creatinine within past 60 days.

Rx # 2614 03/25/08  
 PSOPATIENT,NINE #1440  
 TAKE TWO TABLETS BY MOUTH AT BEDTIME

METFORMIN 500MG TAB  
 PSOPROVIDER,TEN PSOPHARMACIST,22  
 # of Refills: 2

Are you sure you want to Accept this Order? NO// YES  
 Nature of Order: SERVICE CORRECTION//  
 .

### Verifying an Order – Dangerous Meds for Patient >64 for Dipyridamole

OP Medications (NON-VERIFIED) Mar 25, 2008@15:39:03 Page: 1 of 2  
 PSOPATIENT,NINE <A>  
 PID: 000-00-0000 Ht(cm): 177.80 (10/14/2005)  
 DOB: JAN 1,1930 (78) Wt(kg): 136.36 (10/14/2005)

Rx #: 2615\$

(1) \*Orderable Item: DIPYRIDAMOLE TAB  
 (2) Drug: DIPYRIDAMOLE 25MG TAB  
 (3) \*Dosage: 25 (MG)  
 Verb: TAKE  
 Dispense Units: 1  
 Noun: TABLET  
 \*Route: ORAL  
 \*Schedule: QHS

(4)Pat Instructions:  
 SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME

(5) Patient Status: OPT NSC  
 (6) Issue Date: 03/25/08 (7) Fill Date: 03/25/08  
 Last Fill Date: 03/25/08 (Mail)

+ Enter ?? for more actions

DC Discontinue PR (Partial) RL (Release)  
 ED Edit RF (Refill) RN (Renew)  
 Select Action: Next Screen// VF VF

RX: 2615 PATIENT: PSOPATIENT,NINE (000-00-0000)  
 STATUS: Non-Verified CO-PAY STATUS  
 DRUG: DIPYRIDAMOLE 25MG TAB  
 QTY: 30 30 DAY SUPPLY  
 SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME  
 LATEST: 03/25/2008 # OF REFILLS: 3 REMAINING: 3  
 ISSUED: 03/25/08 PROVIDER:  
 LOGGED: 03/25/08 CLINIC: BARB'S CLINIC  
 EXPIRES: 03/26/09 DIVISION: HINES (499)  
 CAP: SAFETY ROUTING: MAIL  
 ENTRY BY: PSOPROVIDER,TEN VERIFIED BY:

#### ACTIVITY LOG:

#	DATE	REASON	RX REF	INITIATOR OF ACTIVITY
1	03/25/08	PATIENT INST.ORIGINAL		
COMMENTS: Patient Instructions Not Sent By Provider.				
PATIENT STATUS : OPT NSC COPIES : 1				

Press RETURN to Continue:

\*\*\*DANGEROUS MEDS FOR PATIENT >64\*\*\*

Patient is 78. Older patients can experience adverse reactions at high doses of Dipyridamole (e.g., headache, dizziness, syncope, GI intolerance.) There is also questionable efficacy at lower doses.

EDIT: (Y/N/P): N// O

VERIFY FOR PSOPATIENT,NINE ? (Y/N/Delete/Quit): Y// ES

## Copying an Order – Aminoglycoside Ordered – Gentamicin

Select Action: Next Screen// CO CO

OP Medications (ACTIVE) Mar 25, 2008@15:46:18 Page: 1 of 2  
 PSOPATIENT,NINE <A>  
 PID: 000-00-0000 Ht(cm): 177.80 (10/14/2005)  
 DOB: JAN 1,1930 (78) Wt(kg): 136.36 (10/14/2005)

Rx #: 2616\$  
 (1) \*Orderable Item: GENTAMICIN INJ,SOLN  
 (2) Drug: GENTAMICIN 40MG/ML 2ML VI  
 Verb: INJECT  
 (3) \*Dosage: 80MG  
 \*Route: INTRAMUSCULAR  
 \*Schedule: Q8H  
 (4)Pat Instructions:  
 SIG: INJECT 80MG IM EVERY 8 HOURS  
 (5) Patient Status: OPT NSC  
 (6) Issue Date: 03/25/08 (7) Fill Date: 03/25/08  
 Last Fill Date: 03/25/08 (Window)  
 Last Release Date: (8) Lot #:  
 Expires: 04/24/08 MFG:  
 + Enter ?? for more actions

AC Accept ED Edit

New OP Order (COPY) Mar 25, 2008@15:46:18 Page: 1 of 2  
 PSOPATIENT,NINE <A>  
 PID: 000-00-0000 Ht(cm): 177.80 (10/14/2005)  
 DOB: JAN 1,1930 (78) Wt(kg): 136.36 (10/14/2005)

```

Orderable Item: GENTAMICIN INJ,SOLN
(1) Drug: GENTAMICIN 40MG/ML 2ML VI
(2) Patient Status: OPT NSC
(3) Issue Date: MAR 25,2008 (4) Fill Date: MAR 25,2008
Verb: INJECT
(5) Dosage Ordered: 80MG
Route: INTRAMUSCULAR
Schedule: Q8H
(6)Pat Instruction:
SIG: INJECT 80MG IM EVERY 8 HOURS
(7) Days Supply: 10 (8) QTY (VI): 10
(9) # of Refills: 0 (10) Routing: WINDOW
(11) Clinic: SHIRL-2
(12) Provider: PSOPROVIDER,TEN (13) Copies: 1
+ Enter ?? for more actions
AC Accept ED Edit
Select Action: Next Screen// AC Accept

***Aminoglycoside Ordered***

Aminoglycoside - est. CrCl: <Unavailable> (<Results Not Found>) [Est.
CrCl based on modified Cockcroft-Gault equation using Adjusted Body
Weight (if ht > 60 in)]

Nature of Order: WRITTEN// W
WAS THE PATIENT COUNSELED: NO// NO

Do you want to enter a Progress Note? No// NO

Rx # 2617 03/25/08
PSOPATIENT,NINE #10
INJECT 80MG IM EVERY 8 HOURS

GENTAMICIN 40MG/ML 2ML VI
PSOPROVIDER,TEN PSOPHARMACIST,22
# of Refills: 0

Is this correct? YES//
.

```

## Reinstating a Discontinued Order – Glucophage Lab Results for Metformin

```

Rx #: 2614$
(1) *Orderable Item: METFORMIN TAB,ORAL
(2) Drug: METFORMIN 500MG TAB
(3) *Dosage: 1000 (MG)
Verb: TAKE
Dispense Units: 2
Noun: TABLETS
*Route: ORAL
*Schedule: QHS
(4)Pat Instructions:
SIG: TAKE TWO TABLETS BY MOUTH AT BEDTIME
(5) Patient Status: OPT NSC
(6) Issue Date: 03/25/08 (7) Fill Date: 03/25/08
Last Fill Date: 03/25/08 (Mail)
+ Enter ?? for more actions
DC Discontinue PR (Partial) RL Release
ED (Edit) RF (Refill) RN Renew
Select Action: Next Screen// DC Discontinue
Are you sure you want to Reinstate? NO// YES

Comments: TESTING
Nature of Order: SERVICE CORRECTION// S
=====
2614 METFORMIN 500MG TAB

```

Now Processing Enhanced Order Checks! Please wait...

\*\*\*Metformin Lab Results\*\*\*

Metformin - Creatinine results: <creatinine greater than 1.5 w/in past <x> days>

Prescription #2614 REINSTATED!

Prescription #2614 Filled: MAR 25, 2008Printed: MAR 25, 2008Released:

Either print the label using the reprint option  
or check later to see if the label has been printed.

.

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



If a double question mark (??) had been entered at the above “Select Action” prompt, the following hidden actions would display in the action area. Actions that apply only to outpatient orders are followed by (OP).

```

The following actions are also available:
RP  Reprint (OP)          OTH  Other OP Actions      DR  Display Remote
RN  Renew (OP)           DN   Down a Line          QU  Quit
DC  Discontinue (OP)     RD   Re Display Screen   LS  Last Screen
RL  Release (OP)         PT   Print List          FS  First Screen
RF  Refill (OP)          PS   Print Screen        GO  Go to Page
PP  Pull Rx (OP)         >    Shift View to Right +   Next Screen
IP  Inpat. Profile (OP)  <    Shift View to Left -   Previous Screen
RS  Reprint Sig Log      SL   Search List        ADPL Auto Display(On/Off)
                                   IN   Intervention Menu
CM  Manual Queue to CMOP RDD Fill/Rel Date Disply UP  Up a Line
Select Action: Quit//

```

-----example continues-----

Typing in the letters **NO** creates a new order.

#### Example: Entering a New Order (continued)

```

Medication Profile          May 22, 2006 10:44:56          Page: 1 of 1
(Patient information is displayed here.)
:
:

Enter ?? for more actions
PU  Patient Record Update          NO  New Order
PI  Patient Information            SO  Select Order
Select Action: Quit// NO  New Order

Eligibility: SC
RX PATIENT STATUS: SERVICE CONNECTED// <Enter>
DRUG: ACETAMINOPHEN
Lookup: GENERIC NAME
1  ACETAMINOPHEN 1000MG TABLET          CN100
2  ACETAMINOPHEN 160MG/5ML LIQUID        CN103
3  ACETAMINOPHEN 325MG TABLET          CN103      INFECTIOUS DISEASE
RESTRICTED TO
4  ACETAMINOPHEN 650MG SUPPOS.          CN103
5  ACETAMINOPHEN AND CODEINE 30MG        CN101
Press <RETURN> to see more, '^' to exit this list, '^ ^' to exit all lists, OR
CHOOSE 1-5: 1  1000MG TABLET          CN100

CHOOSE 1-5: 1  ACETAMINOPHEN 100MG/ML (SF) ORAL SUSP          CN103
Now doing allergy checks. Please wait...
Now Processing Enhanced Order Checks! Please wait...
Press Return to continue...:

*** THERAPEUTIC DUPLICATION *** ACETAMINOPHEN 100MG/ML (SF) ORAL SUSP with
Local Rx for ACETAMINOPHEN 500MG TAB
RX: 500610
Drug: ACETAMINOPHEN 500MG TAB
SIG: TAKE TWO TABLETS BY MOUTH EVERY 6 HOURS AS NEEDED
QTY: 240                      Refills remaining: 11
Provider: PROGRAMMER,TWENTYEIGHT          Issued: 03/02/10
Status: Active                      Last filled on: 03/02/10
Processing Status: Not released locally (Window)
Days Supply: 3

```

```
-----
Press Return to Continue:
Discontinue RX # 46309525? NO -Prescription was not discontinued...
```

The system checks the medication selected for any duplicate drugs or classes, interactions, or allergies that are noted in the patient's local and remote record. This also includes any local Non-VA Meds. See the following example of local and remote order checking.

**Example: Entering a New Order (continued)**

```
Now doing remote order checks. Please wait...

-----
*** SAME CLASS *** OF DRUG IN REMOTE RX FOR ASPIRIN 325MG BUFFERED TAB
>> CHEYENNE VAMROC
CLASS: CN103
      Rx #: 712996
      Status: ACTIVE                               Issued: 09/21/05
Processing Status: Released locally on 09/21/05@11:34:13 (Window)
      SIG: TAKE ONE TABLET BY MOUTH EVERY DAY
      QTY: 30
      Provider: PROVIDER, TWO                      Refills remaining: 11
                                                    Last filled on: 09/21/05
                                                    Days Supply: 30
Press Return to continue...<Enter>
Now doing drug interaction and allergy checks. Please wait...
```



If a patient does not have an allergy assessment, the user will have to create an intervention. If the patient already has a prescription for which an Intervention was created, the user will have the option to copy the existing Intervention. For more information about copying an existing Intervention, refer to the *Complete Orders from OERR* section.



If the new order is for Clozapine, there are additional restrictions for filling a prescription. See “Chapter 8: Controlling the Dispensing of Clozapine” for more information.

```
A Drug-Allergy Reaction exists for this medication and/or class!
Drug: ACETAMINOPHEN 325MG TAB
Drug Class: CN103 NON-OPIOID ANALGESICS (REMOTE SITE(S))
Do you want to Intervene? Y// NO
```

## Chapter 26: Verifying Prescriptions

---

This chapter describes the option and methods used for verifying prescriptions.

### Verification

#### [PSO VER]

Pharmacists use the *Verification* menu to verify prescriptions with a non-verified status; obtain a listing of those remaining non-verified prescriptions; or calculate the number of non-verified prescriptions by entering the patient or the clerk.

The following options are available on the *Verification* menu:

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

If the verification site parameter is set to “YES”, new prescriptions entered by a non-pharmacist (i.e., someone who does not hold the PSORPH key) will be put in a non-verified status, entered into the non-verified orders file, and will not be made active (nor will labels be printed) until they are reviewed and verified by a pharmacist. When new and renewed prescriptions for a patient are verified, all labels for that patient will be printed together. If a patient has refills only, these labels will be printed as they are entered.

A pharmacist may choose to verify all entries made by a particular technician rather than all the prescriptions for an individual patient.



Prescriptions in a non-verified status can not be canceled, edited, or deleted through the usual options. If a non-verified prescription is auto canceled on admission, it can be reinstated, but it returns to the non-verified status.

Verifying an ePharmacy order is similar to finishing an order. For an example, see “[Verifying ePharmacy Orders](#)” at the end of the “Verification through Patient Prescription Processing” section.

Incorporating enhanced dosing checks in the verification process (PSO\*7\*251):

- When the VERIFICATION outpatient site parameter is set to ‘Yes’, dosage check warnings are displayed to a user who does not hold the PSORPH key when entering a new outpatient medication order through the backdoor or when finishing a pending order.
- When the VERIFICATION outpatient site parameter is set to ‘No’, dosage check warnings are displayed to a user who does not hold the PSORPH key when entering a new outpatient order through the backdoor.
- When the VERIFICATION outpatient site parameter is set to ‘No’, a user who does not hold the PSORPH key will not be allowed to finish a pending order.

- A user who does not hold the PSORPH key, regardless of how the VERIFICATION outpatient site parameter is set to, shall not be prompted to take any intervention action on a dosage check warning.

The *Patient Prescription Processing* [PSO LM BACKDOOR ORDERS] and *Complete Orders from OERR* [PSO LMOE FINISH] options have been modified to incorporate the above functionality.

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## List Non-Verified Scripts

### [PSO VRPT]

This option allows the user to obtain a list of all scripts remaining in a status of 'Non-Verified' by either patient or entering clerk.

#### Example: Non-verified prescriptions (sorted by patient)

```
Select Outpatient Pharmacy Manager Option: Verification

Select Verification Option: List Non-Verified Scripts
Sort By Patient or Clerk: P// <Enter> ATIENT
DEVICE: HOME// [Select Print Device]

                                NON-VERIFIED PRESCRIPTIONS
                                AS OF JUL 16,2007@14:49:54
                                SORTED BY PATIENT
                                (# indicates Critical Drug Interaction)

Patient name                                Page: 1
Rx #      Issued      Drug                                Entry By
-----
OPPATIENT,FIVE
100001860A   04/01/04  ACETAMINOPHEN 1000MG TABLET                100000000028

OPPATIENT,FOUR
100001591A   07/27/98  ASPIRIN BUFFERED 325MG TAB                    11733

OPPATIENT,ONE
100001853    10/23/02  ERYTHRITYL TETRANIT. 10MG TAB                100000000022

OPPATIENT,TWELVE
100001854    11/25/02  ACETAMINOPHEN 1000MG TABLET                100000000022
100001798A   04/19/99  INSULIN NPH U-100 INJ (PORK)                100

Select Verification Option:
```

The Verification screen appears and “NO” is entered for the edit prompt. By entering “Yes” to the Verify prompt, verification is completed and the prescription is moved from the Non-Verified section to the Active section of the Medication Profile.

```
RX: 101435    PATIENT: OPPATIENT,ONE (000-00-0659)
STATUS: Non-Verified
      DRUG: CALCITRIOL 0.25MCG CAP
      QTY: 180      90 DAY SUPPLY
      SIG: TAKE ONE IV SC INTH TWICE A DAY
      LATEST: 10/26/2004      # OF REFILLS: 3  REMAINING: 3
      ISSUED: 10/26/04      PROVIDER:
      LOGGED: 10/26/04      CLINIC: NOT ON FILE
      EXPIRES: 10/27/05      DIVISION: ALBANY ISC (500)
      CAP: NON-SAFETY      ROUTING: WINDOW
      ENTRY BY: OPPHARMACIST,ONE      VERIFIED BY:

PATIENT STATUS : SC LESS THAN 50%      COPIES : 1
EDIT: (Y/N/P): N// NO
VERIFY FOR TEST,BA ? (Y/N/Delete/Quit): Y// <Enter>
```

# Verifying ePharmacy Orders

Verifying an ePharmacy order is similar to finishing an order. After the user reviews the ePharmacy order and chooses to accept the order, the billing data is sent to ECME, which sends a message back to Outpatient Pharmacy displaying the status of the claim. The ECME section of the Activity Log is also updated.

```
RX: 101435    PATIENT: OPPATIENT,FOUR (000-01-1322P)
STATUS: Non-Verified
      DRUG: ENTEX CAP
      QTY: 10      10 DAY SUPPLY
      SIG: TAKE 25MG BY BY MOUTH EVERY DAY FOR 10 DAYS WITH FOOD
      LATEST: 11/05/2005      # OF REFILLS: 0  REMAINING: 0
      ISSUED: 11/05/2005      PROVIDER:
      LOGGED: 11/05/2005      CLINIC: NOT ON FILE
      EXPIRES: 11/15/2005      DIVISION: ALBANY ISC (500)
      CAP: NON-SAFETY      ROUTING: WINDOW
      ENTRY BY: OPPHARMACIST,ONE      VERIFIED BY:

PATIENT STATUS : SC LESS THAN 50%      COPIES : 1
EDIT: (Y/N/P): N// NO
VERIFY FOR OPPHARMACIST4,THREE ? (Y/N/Delete/Quit): Y// <Enter>

Prescription 100003840 successfully submitted to ECME for claim generation.

Claim Status:
IN PROGRESS-Waiting to start
IN PROGRESS-Gathering claim info
IN PROGRESS-Packet being built
IN PROGRESS-Waiting for transmit
IN PROGRESS-Transmitting
E PAYABLE

Another New Order for OPPATIENT,FOUR? YES//
```

Enhanced dosing checks (PSO\*7\*151) in the verification process examples:

## Verification Parameter set to Yes – Backdoor New Order Entry – No PSORPH key

```
PU Patient Record Update      NO New Order
PI Patient Information      SO Select Order
Select Action: Next Screen// NO New Order

Eligibility: SERVICE CONNECTED 50% to 100%      SC%: 50
RX PATIENT STATUS: SC//
DRUG: CIMETIDINE
  Lookup: GENERIC NAME
    1  CIMETIDINE 100MG TAB      GA301
    2  CIMETIDINE 200MG TAB      GA301
    3  CIMETIDINE 300MG TAB      GA301      90 DAY SUPPLY
    4  CIMETIDINE 400MG TAB      GA301
    5  CIMETIDINE 800MG TAB      GA301
CHOOSE 1-5: 3  CIMETIDINE 300MG TAB      GA301      90 DAY SUPPLY

Now Processing Enhanced Order Checks! Please wait...
VERB: TAKE
Available Dosage(s)
  1. 300MG
  2. 600MG
```



Select from list of Available Dosages, Enter Free Text Dose  
or Enter a Question Mark (?) to view list:  
This is a required response. Enter '^' to exit  
Select from list of Available Dosages, Enter Free Text Dose  
or Enter a Question Mark (?) to view list: 900MG

You entered 900MG is this correct? Yes// YES  
VERB: TAKE  
DISPENSE UNITS PER DOSE(TABLET): 3// 3  
Dosage Ordered: 900MG

NOUN: TABLET  
ROUTE: PO// ORAL PO MOUTH  
Schedule: QID// TID (THREE TIMES DAILY)  
LIMITED DURATION (IN DAYS, HOURS OR MINUTES):  
CONJUNCTION:

CIMETIDINE 300MG TAB: Single dose amount of 900 MILLIGRAMS exceeds the maximum single dose amount of 800 MILLIGRAMS.

CIMETIDINE 300MG TAB: Total dose amount of 2700 MILLIGRAMS/DAY exceeds the dosing range of 400 MILLIGRAMS/DAY to 2400 MILLIGRAMS/DAY.

PATIENT INSTRUCTIONS:

(TAKE THREE TABLETS BY MOUTH THREE TIMES DAILY)

DAYS SUPPLY: (1-90): 90//  
QTY ( TAB ) DISP IN MULTIPLES OF 100: 2160// 270  
COPIES: 1// 1  
# OF REFILLS: (0-3): 3//  
PROVIDER: OPPOVIDER,TWO  
CLINIC:  
MAIL/WINDOW: WINDOW// WINDOW  
METHOD OF PICK-UP:  
REMARKS:  
ISSUE DATE: TODAY// (APR 23, 2008)  
FILL DATE: (4/23/2008 - 4/24/2009): TODAY// (APR 23, 2008)  
Nature of Order: WRITTEN// W

Rx # 2629 04/23/08  
OPPATIENT,THREE #270  
TAKE THREE TABLETS BY MOUTH THREE TIMES DAILY

CIMETIDINE 300MG TAB  
OPTECH,ONE OPTECH,ONE  
# of Refills: 3

SC Percent: 50%  
Disabilities: NONE STATED

Was treatment for a Service Connected condition? NO  
Is this correct? YES//

Another New Order for OPPATIENT,THREE? YES// NO

**Backdoor New Order Entry – Verification Parameter set to No – No PSORPH key**

Select Action: Quit// NO New Order

Eligibility: SERVICE CONNECTED 50% to 100% SC%: 50  
RX PATIENT STATUS: SC//  
DRUG: INDINAVIR  
Lookup: GENERIC NAME  
INDINAVIR 400MG CAP AM800

```

...OK? Yes// (Yes)

Now Processing Enhanced Order Checks! Please wait...

VERB: TAKE
Available Dosage(s)
    1. 400MG
    2. 800MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 1200MG

You entered 1200MG is this correct? Yes// YES
VERB: TAKE
DISPENSE UNITS PER DOSE(CAPSULE): 3// 3
Dosage Ordered: 1200MG

NOUN: CAPSULE
ROUTE: ORAL// ORAL
Schedule: Q8H// (EVERY 8 HOURS)
LIMITED DURATION (IN DAYS, HOURS OR MINUTES):
CONJUNCTION:

    INDINAVIR 400MG CAP: Single dose amount of 1200 MILLIGRAMS exceeds the maximum single
    dose amount of 1000 MILLIGRAMS.

    INDINAVIR 400MG CAP: Total dose amount of 3600 MILLIGRAMS/DAY exceeds the dosing range
    of 800 MILLIGRAMS/DAY to 2400 MILLIGRAMS/DAY.

PATIENT INSTRUCTIONS:

(TAKE THREE CAPSULES BY MOUTH EVERY 8 HOURS)

DAYS SUPPLY: (1-90): 90//
QTY ( CAP ) : 270// 810
COPIES: 1// 1
# OF REFILLS: (0-3): 3//
PROVIDER:
PROVIDER:      OPPROVIDER,TWO
CLINIC:
MAIL/WINDOW: WINDOW// WINDOW
METHOD OF PICK-UP:
REMARKS:
ISSUE DATE: TODAY// (APR 23, 2008)
FILL DATE: (4/23/2008 - 4/24/2009): TODAY// (APR 23, 2008)
Nature of Order: WRITTEN// W

Rx # 2630          04/23/08
OPPATIENT,THREE          #810
TAKE THREE CAPSULES BY MOUTH EVERY 8 HOURS

INDINAVIR 400MG CAP
OPTECH,ONE          OPTECH,ONE
# of Refills: 3

    SC Percent: 50%
    Disabilities: NONE STATED

Was treatment for a Service Connected condition? n NO
Is this correct? YES//

Another New Order for OPPATIENT,THREE? YES// n NO

```

### Finishing a Pending Order – Verification site Parameter set to YES - No PSORPH key

```

Pending OP Orders (ROUTINE) Apr 24, 2008@08:56:23 Page: 1 of 5
OPPATIENT,THREE          <A>
    PID: 666-00-0000          Ht (cm): _____ (_____)
    DOB: JAN 25,1959 (49)          Wt (kg): _____ (_____)

```

Order Checks:

CRITICAL drug-drug interaction: CARBAMAZEPINE & CYCLOSPORINE (CYCLOSPORINE CAP,ORAL 100MG TAKE ONE CAPSULE BY MOUTH TWICE A DAY [ACTIVE])  
 Overriding Provider: OPProvider,TWO  
 Overriding Reason: TESTING VERIFICATION

Duplicate drug class order: ANTICONVULSANTS (PHENYTOIN CAP,SA 100MG TAKE ONE CAPSULE BY MOUTH THREE TIMES A DAY [ACTIVE])  
 Overriding Provider: OPProvider,TWO  
 Overriding Reason: TESTING VERIFICATION

CRITICAL drug-drug interaction: CARBAMAZEPINE & WARFARIN (WARFARIN TAB 2.5MG TAKE ONE TABLET BY MOUTH AT BEDTIME [PENDING])  
 Overriding Provider: OPProvider,TWO

+ Enter ?? for more actions

BY Bypass DC (Discontinue)  
 ED (Edit) FN Finish  
 Select Item(s): Next Screen// FN Finish

Now Processing Enhanced Order Checks! Please wait...

\*\*\*CRITICAL\*\*\* Drug Interaction with Local Rx for INDINAVIR 400MG CAP

RX: #2630  
 Drug: INDINAVIR 400MG CAP  
 SIG: TAKE ONE CAPSULE BY MOUTH EVERY 8 HOURS  
 QTY: 270 Refills remaining: 3  
 Provider: OPProvider, ONE Issued: 02/12/08  
 Status: ACTIVE Last filled on: 02/12/08  
 Processing Status: Released locally on 02/12/08@08:55:32 (Window)  
 Days Supply: 90

The concurrent use of indinavir and carbamazepine may result in higher than anticipated carbamazepine levels, decreased indinavir plasma levels, and antiretroviral therapy failure.(1,2)The concurrent use of amprenavir, fosamprenavir, lopinavir, nelfinavir, and saquinavir may result in decreased levels of these agents and antiretroviral therapy failure.(3-7)The concurrent use of ritonavir and carbamazepine may result in elevated levels of carbamazepine and signs of carbamazepine toxicity.(8-10)

Display Professional Interaction Monograph? No// No

\*\*\*CRITICAL\*\*\* Drug Interaction with Local Rx for WARFARIN 5MG TAB

RX: #2523  
 Drug: WARFARIN 5MG TAB  
 SIG: TAKE TWO TABLETS BY MOUTH AT BEDTIME  
 QTY: 90 Refills remaining: 3  
 Provider: OPProvider, ONE Issued: 02/12/08  
 Status: ACTIVE Last filled on: 02/12/08  
 Processing Status: Released locally on 02/12/08@08:55:32 (Window)  
 Days Supply: 90

The hypoprothrombinemic effect of anticoagulants may be decreased.

Display Professional Interaction Monograph? No// No

\*\*\*CRITICAL\*\*\* Drug Interaction with Local Rx for CYCLOSPRINE 100MG CAP

RX: #2512  
 Drug: CYCLOSPRINE 100MG CAP  
 SIG: TAKE ONE CAPSULE BY MOUTH TWICE A DAY  
 QTY: 180 Refills remaining: 3  
 Provider: OPProvider, ONE Issued: 02/12/08  
 Status: ACTIVE Last filled on: 02/12/08  
 Processing Status: Released locally on 02/12/08@08:55:32 (Window)  
 Days Supply: 90

Decreased levels of cyclosporine, which may result in a decrease in the immunosuppressive effects of cyclosporine.

Display Professional Interaction Monograph? No// No

```

***CRITICAL*** Drug Interaction with Local Rx for AMITRIPTYLINE 25MG TAB

      RX: #2520
      Drug: AMITRIPTYLINE 25MG TAB
      SIG: TAKE ONE TABLET BY MOUTH AT BEDTIME
      QTY: 90                      Refills remaining: 3
      Provider: OPPROVIDER, ONE          Issued: 02/12/08
      Status: ACTIVE                     Last filled on: 02/12/08
      Processing Status: Released locally on 02/12/08@08:55:32 (Window)
                                      Days Supply: 90

Decreased levels of cyclosporine, which may result in a decrease in the immunosuppressive
effects of cyclosporine.

Display Professional Interaction Monograph? No// No

      CARBAMAZEPINE 200MG TAB: Total dose amount of 2400 MILLIGRAMS/DAY exceeds the dosing
      range of 200 MILLIGRAMS/DAY to 1600 MILLIGRAMS/DAY.

Rx # 2631                      04/24/08
OPPATIENT,THREE                #360
TAKE THREE TABLETS BY MOUTH FOUR TIMES A DAY

CARBAMAZEPINE 200MG TAB
OPTECH,ONE                    OPTECH,ONE
# of Refills: 3

      SC Percent: 50%
      Disabilities: NONE STATED

Was treatment for a Service Connected condition? YES//
Are you sure you want to Accept this Order? NO// YES
Press Return to Continue

```

A prescription (Rx) label is generated to inform the pharmacist of a critical drug interaction which has occurred for an outpatient medication order entered by a user who does not hold the PSORPH key.

### Critical Drug Interaction and Dosing Check

```

499 (5/ ) APR 23,2008@15:32
Rx# 2629 has caused a DRUG-DRUG INTERACTION with the following prescription(s):
2523    CRITICAL INTERACTION    WARFARIN 5MG TAB
2519    CRITICAL INTERACTION    PHENYTOIN NA (DILANTIN) 100MG SA CAP
2516    SIGNIFICANT INTERACTION  NIFEDIPINE 10MG CAP
2520    SIGNIFICANT INTERACTION  AMITRIPTYLINE 25MG TAB
MAX SINGLE DOSE AND DAILY DOSE RANGE
This prescription was entered by: PSOTECH,ONE
This prescription requires intervention by a pharmacist
APR 23,2008  Fill 1 of 4
OPPATIENT,TWO  00-0000
TAKE TWO TABLETS BY MOUTH FOUR TIMES DAILY
Qty: 240  PSOTECH,ONE
Tech_____RPh_____
CIMETIDINE 300MG TAB
Routing: WINDOW
Days supply: 90 Cap: SAFETY
Isd: APR 23,2008 Exp: APR 24,2009
Stat SC Clinic: UNKNOWN

```

### Dosing Check Only

```

499 (5/ ) APR 23,2008@15:38
MAX SINGLE DOSE AND DAILY DOSE RANGE
This prescription was entered by: PSOTECH,ONE
This prescription requires intervention by a pharmacist
APR 23,2008  Fill 1 of 4
OPPATIENT,TWO  00-0000

```

TAKE ONE CAPSULE BY MOUTH EVERY 8 HOURS  
 Qty: 270 PSOTECH, ONE  
 Tech \_\_\_\_\_ RPh \_\_\_\_\_  
 INDINAVIR 400MG CAP  
 Routing: WINDOW  
 Days supply: 90 Cap: SAFETY  
 Isd: APR 23,2008 Exp: APR 24,2009  
 Last Fill: N/A  
 Pat. Stat SC Clinic: UNKNOWN

### Finishing a Pending order – Verification site parameter set to No – No PSORPH key

Pending OP Orders (ROUTINE) Apr 24, 2008@09:02:24 Page: 1 of 3  
 OPPATIENT,THREE <A>  
 PID: 666-00-0000 Ht (cm): \_\_\_\_\_ (\_\_\_\_\_)  
 DOB: JAN 25,1959 (49) Wt (kg): \_\_\_\_\_ (\_\_\_\_\_)  
 Order Checks:  
 CRITICAL drug-drug interaction: PHENOBARBITAL & WARFARIN (WARFARIN TAB  
 2.5MG TAKE ONE TABLET BY MOUTH AT BEDTIME [PENDING])  
 Overriding Provider: OPPROVIDER,TWO  
 Overriding Reason: TESTING VERIFICATION  
 CRITICAL drug-drug interaction: PHENOBARBITAL & WARFARIN (Change WARFARIN  
 TAB 5MG TAKE TWO TABLETS BY MOUTH AT BEDTIME [ACTIVE])  
 Overriding Provider: OPPROVIDER,TWO  
 Overriding Reason: TESTING VERIFICATION  
 SIGNIFICANT drug-drug interaction: CYCLOSPORINE & PHENOBARBITAL  
 (CYCLOSPORINE CAP,ORAL 100MG TAKE ONE CAPSULE BY MOUTH TWICE A DAY  
 [ACTIVE])  
 + Enter ?? for more actions  
 BY Bypass DC (Discontinue)  
 ED (Edit) FN (Finish)  
 Select Item(s): Next Screen// FN  
 >>> Finish may not be selected at this point.  
 Select Item(s): Next Screen//  
 .

## Process Order Checks

[PSO ORDER CHECKS VERIFY] formerly (*Process Drug/Drug Interactions* [PSO INTERACTION VERIFY])

All changes applied to drug interaction order checks in the Enhanced Drug-Drug Interaction section shall be applied to the *Process Order Checks* dialogue.

Select Outpatient Pharmacy Manager Option: PROCess Order Checks  
 Select RX with Order Checks: ?  
 Answer with RX VERIFY RX#  
 Choose from:  
 2632 OPPATIENT,TEN 666-00-0000  
 2633 OPPATIENT,TEN 666-00-0000  
 2634 OPPATIENT,TEN 666-00-0000  
 Select RX with Order Checks: 2632 CIMETIDINE 300MG TAB OPPATIENT,TEN  
 66-00-0000  
 OPPATIENT,TEN ID#:666-00-0000 RX #2632  
 RX # DRUG QTY ST ISSUE LAST REF DAY  
 DATE FILL REM SUP

```

-----ACTIVE-----
1 2622          ACETAMINIOPHEN 120MG/COD 12MG/5ML EL      A  04-17 04-17  11  30
                                   Qty: 480
2 2621A          AMITRIPTYLINE 25MG TAB                   30 A  04-17 04-17   5  30
3 2623          AMLODIPINE 5MG/ATORVASTATIN 40MG TAB      30 A  04-17 04-17  11  30
4 2624          HALOPERIDOL 5MG TAB                       60 A  04-18 04-18  11  30
5 2628          WARFARIN 5MG TAB                           18 A  04-18 04-18  11  30
-----DISCONTINUED-----
6 2620          DIPYRIDAMOLE 25MG TAB                       90 DC 03-25 04-17   5  30
-----NON-VERIFIED-----
7 2633          AMIODARONE 200MG TAB                       240 N 04-28 04-28  11  30
8 2632          CIMETIDINE 300MG TAB                       270 N 04-28 04-28  11  30
9 2634          INDINAVIR 400MG CAP                       270 N 04-28 04-28  11  30
-----PENDING-----
10 PREDNISONE 5MG TAB                                QTY: 190      ISDT: 04-18  REF: 11
Press RETURN to Continue:

```

\*\*\*CRITICAL\*\*\* Drug Interaction with Local Rx for WARFARIN 5MG TAB

```

      RX: #2628
      Drug: WARFARIN 5MG TAB
      SIG: TAKE ONE TABLET BY MOUTH IN THE EVENING ON
            MONDAY,WEDNESDAY AND FRIDAY EXCEPT TAKE ONE-HALF
            TABLET ON TUESDAY,THURSDAY,SATURDAY
      QTY: 18                      Refills remaining: 11
      Provider: OP PROVIDER, ONE      Issued: 02/12/08
      Status: ACTIVE                  Last filled on: 02/12/08
                                      Days Supply: 30

```

The pharmacologic effects of warfarin may be increased resulting in severe bleeding.

Display Professional Interaction Monograph? No// No

Do you want to Continue? Y// NO

OPPATIENT,TEN ID#:666-00-0000 RX #2632

RX #	DRUG	QTY ST	ISSUE DATE	LAST REF DATE	FILL	REM	SUP
-----ACTIVE-----							
1 2622	ACETAMINIOPHEN 120MG/COD 12MG/5ML EL	A	04-17	04-17	11	30	
	Qty: 480						
2 2621A	AMITRIPTYLINE 25MG TAB	30 A	04-17	04-17	5	30	
3 2623	AMLODIPINE 5MG/ATORVASTATIN 40MG TAB	30 A	04-17	04-17	11	30	
4 2624	HALOPERIDOL 5MG TAB	60 A	04-18	04-18	11	30	
5 2628	WARFARIN 5MG TAB	18 A	04-18	04-18	11	30	
-----DISCONTINUED-----							
6 2620	DIPYRIDAMOLE 25MG TAB	90 DC	03-25	04-17	5	30	
-----NON-VERIFIED-----							
7 2633	AMIODARONE 200MG TAB	240 N	04-28	04-28	11	30	
8 2632	CIMETIDINE 300MG TAB	270 N	04-28	04-28	11	30	
9 2634	INDINAVIR 400MG CAP	270 N	04-28	04-28	11	30	
-----PENDING-----							
10	PREDNISONE 5MG TAB	QTY: 190	ISDT: 04-18	REF: 11			

Press RETURN to Continue:

CIMETIDINE 300MG TAB: Single dose amount of 900 MILLIGRAMS exceeds the maximum single dose amount of 800 MILLIGRAMS.

CIMETIDINE 300MG TAB: Total dose amount of 2700 MILLIGRAMS/DAY exceeds the dosing range of 400 MILLIGRAMS/DAY to 2400 MILLIGRAMS/DAY.

Do you want to Continue? Y// NO

Select RX with Drug Interaction: ?  
Answer with RX VERIFY RX#

Choose from:

2632	OPPATIENT,TEN	666-00-0000
2633	OPPATIENT,TEN	666-00-0000
2634	OPPATIENT,TEN	666-00-0000

Select RX with Drug Interaction: 2632                      CIMETIDINE 300MG TAB                      OPPATIENT,TEN  
666-00-0000

OPPATIENT,TEN    ID#:666-00-0000    RX #2632

RX #	DRUG	QTY ST	ISSUE DATE	LAST FILL	REF REM	DAY SUP
-----ACTIVE-----						
1 2622	ACETAMINIOPHEN 120MG/COD 12MG/5ML EL	A	04-17	04-17	11	30
	Qty: 480					
2 2621A	AMITRIPTYLINE 25MG TAB	30 A	04-17	04-17	5	30
3 2623	AMLODIPINE 5MG/ATORVASTATIN 40MG TAB	30 A	04-17	04-17	11	30
4 2624	HALOPERIDOL 5MG TAB	60 A	04-18	04-18	11	30
5 2628	WARFARIN 5MG TAB	18 A	04-18	04-18	11	30
-----DISCONTINUED-----						
6 2620	DIPYRIDAMOLE 25MG TAB	90 DC	03-25	04-17	5	30
-----NON-VERIFIED-----						
7 2633	AMIODARONE 200MG TAB	240 N	04-28	04-28	11	30
8 2632	CIMETIDINE 300MG TAB	270 N	04-28	04-28	11	30
9 2634	INDINAVIR 400MG CAP	270 N	04-28	04-28	11	30
-----PENDING-----						
10	PREDNISONE 5MG TAB	QTY: 190	ISDT: 04-18	REF: 11		

Press RETURN to Continue:

CIMETIDINE 300MG TAB: Single dose amount of 900 MILLIGRAMS exceeds the maximum single dose amount of 800 MILLIGRAMS.

CIMETIDINE 300MG TAB: Total dose amount of 2700 MILLIGRAMS/DAY exceeds the dosing range of 400 MILLIGRAMS/DAY to 2400 MILLIGRAMS/DAY.

Do you want to Continue? Y// ES

Do you want to Process or Cancel medication?

Rx #2632    DRUG: CIMETIDINE 300MG TAB: PROCESS// CANCEL MEDICATION

Enter your Current Signature Code:                      SIGNATURE VERIFIED

Nature of Order: SERVICE CORRECTION//                      S

Now creating Pharmacy Intervention  
for CIMETIDINE 300MG TAB

PROVIDER:        OPPROVIDER,ONE                      OPO                      119

RECOMMENDATION:        NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this intervention or for more options.

Would you like to edit this intervention ? N// O

Canceling Rx: 2632        Drug: CIMETIDINE 300MG TAB

...PRESCRIPTION #2632 MARKED DELETED!!

Select RX with Drug Interaction: ?

Answer with RX VERIFY RX#

Choose from:

2633	OPPATIENT,TEN	666-00-0000
2634	OPPATIENT,TEN	666-00-0000

Select RX with Drug Interaction: 2633 AMIODARONE 200MG TAB OPPATIENT,TEN  
666-00-0000

OPPATIENT,TEN ID#:666-00-0000 RX #2633

RX #	DRUG	QTY ST	ISSUE DATE	LAST FILL	REF REM	DAY SUP
-----ACTIVE-----						
1 2622	ACETAMINIOPHEN 120MG/COD 12MG/5ML EL	A	04-17	04-17	11	30
Qty: 480						
2 2621A	AMITRIPTYLINE 25MG TAB	30 A	04-17	04-17	5	30
3 2623	AMLODIPINE 5MG/ATORVASTATIN 40MG TAB	30 A	04-17	04-17	11	30
4 2624	HALOPERIDOL 5MG TAB	60 A	04-18	04-18	11	30
5 2628	WARFARIN 5MG TAB	18 A	04-18	04-18	11	30
-----DISCONTINUED-----						
6 2620	DIPYRIDAMOLE 25MG TAB	90 DC	03-25	04-17	5	30
-----NON-VERIFIED-----						
7 2633	AMIODARONE 200MG TAB	240 N	04-28	04-28	11	30
8 2634	INDINAVIR 400MG CAP	270 N	04-28	04-28	11	30
-----PENDING-----						
9	PREDNISONE 5MG TAB	QTY: 190	ISDT: 04-18	REF: 11		

Press RETURN to Continue:

AMIODARONE 200MG TAB: Total dose amount of 1600 MILLIGRAMS/DAY exceeds the dosing range of 100 MILLIGRAMS/DAY to 400 MILLIGRAMS/DAY.

Do you want to Continue? Y// ES

Do you want to Process or Cancel medication?  
Rx #2633 DRUG: AMIODARONE 200MG TAB: PROCESS//

Enter your Current Signature Code: SIGNATURE VERIFIED

Now creating Pharmacy Intervention  
for AMIODARONE 200MG TAB

PROVIDER: OPPROVIDER,ONE OPO 119  
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this intervention or for more options.

Would you like to edit this intervention ? N// O

OPPATIENT,TEN ID#:666-00-0000 RX #2633

RX #	DRUG	QTY ST	ISSUE DATE	LAST FILL	REF REM	DAY SUP
-----ACTIVE-----						
1 2622	ACETAMINIOPHEN 120MG/COD 12MG/5ML EL	A	04-17	04-17	11	30
Qty: 480						
2 2621A	AMITRIPTYLINE 25MG TAB	30 A	04-17	04-17	5	30
3 2623	AMLODIPINE 5MG/ATORVASTATIN 40MG TAB	30 A	04-17	04-17	11	30
4 2624	HALOPERIDOL 5MG TAB	60 A	04-18	04-18	11	30
5 2628	WARFARIN 5MG TAB	18 A	04-18	04-18	11	30
-----DISCONTINUED-----						
6 2620	DIPYRIDAMOLE 25MG TAB	90 DC	03-25	04-17	5	30
-----NON-VERIFIED-----						
7 2633	AMIODARONE 200MG TAB	240 N	04-28	04-28	11	30
8 2634	INDINAVIR 400MG CAP	270 N	04-28	04-28	11	30
-----PENDING-----						
9	PREDNISONE 5MG TAB	QTY: 190	ISDT: 04-18	REF: 11		

Press RETURN to Continue:

RX: 2633 PATIENT: OPPATIENT,TEN (666-00-0000)  
STATUS: Non-Verified



```

DRUG: AMIODARONE 200MG TAB
QTY: 240      30 DAY SUPPLY
SIG: TAKE TWO TABLETS BY MOUTH FOUR TIMES A DAY
LATEST: 04/28/2008      # OF REFILLS: 11  REMAINING: 11
ISSUED: 04/28/08      PROVIDER:
LOGGED: 04/28/08      CLINIC: NOT ON FILE
EXPIRES: 04/29/09      DIVISION: HINES (499)
CAP: SAFETY      ROUTING: WINDOW
ENTRY BY: OPPROVIDER,ONE      VERIFIED BY:

FILLED: 04/28/08      PHARMACIST:      LOT #:
DISPENSED: 04/28/08      RELEASED:

LABEL LOG:
#  DATE      RX REF      PRINTED BY
=====
1  04/28/08  ORIGINAL      OPCLERK,ONE
COMMENTS: From RX number 2633 Drug-Drug interaction
PATIENT STATUS : OPT NSC      COPIES : 1
EDIT: (Y/N/P): N// ?

Enter Y to change this RX, P to see a profile, or N to procede with
verification.
Select one of the following:

      Y      YES
      N      NO
      P      PROFILE

EDIT: (Y/N/P): N// p  PROFILE

      RX #      DRUG      QTY ST  ISSUE  LAST REF DAY
      -----
      -----ACTIVE-----
1  2622      ACETAMINIOPHEN 120MG/COD 12MG/5ML EL  A  04-17 04-17  11  30
                               Qty: 480
2  2621A      AMITRIPTYLINE 25MG TAB      30 A  04-17 04-17   5  30
3  2623      AMLODIPINE 5MG/ATORVASTATIN 40MG TAB  30 A  04-17 04-17  11  30
4  2624      HALOPERIDOL 5MG TAB      60 A  04-18 04-18  11  30
5  2628      WARFARIN 5MG TAB      18 A  04-18 04-18  11  30
      -----DISCONTINUED-----
6  2620      DIPYRIDAMOLE 25MG TAB      90 DC 03-25 04-17   5  30
      -----NON-VERIFIED-----
7  2633      AMIODARONE 200MG TAB      240 N  04-28 04-28  11  30
8  2634      INDINAVIR 400MG CAP      270 N  04-28 04-28  11  30
      -----PENDING-----
9  PREDNISONE 5MG TAB      QTY: 190      ISDT: 04-18  REF: 11
Press RETURN to Continue:

EDIT: (Y/N/P): N// n NO
VERIFY FOR OPPATIENT,TEN ? (Y/N/Delete/Quit): Y// q  QUIT

Select RX with Drug Interaction:      2633      OPPATIENT,TEN 666-00-0000

OPPATIENT,TEN      ID#:666-00-0000  RX #2633

      RX #      DRUG      QTY ST  ISSUE  LAST REF DAY
      -----
      -----ACTIVE-----
1  2622      ACETAMINIOPHEN 120MG/COD 12MG/5ML EL  A  04-17 04-17  11  30
                               Qty: 480
2  2621A      AMITRIPTYLINE 25MG TAB      30 A  04-17 04-17   5  30
3  2623      AMLODIPINE 5MG/ATORVASTATIN 40MG TAB  30 A  04-17 04-17  11  30
4  2624      HALOPERIDOL 5MG TAB      60 A  04-18 04-18  11  30

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```

5 2628          WARFARIN 5MG TAB                      18 A  04-18 04-18  11  30
-----DISCONTINUED-----
6 2620          DIPYRIDAMOLE 25MG TAB                  90 DC  03-25 04-17   5  30
-----NON-VERIFIED-----
7 2633          AMIODARONE 200MG TAB                  240 N  04-28 04-28  11  30
8 2634          INDINAVIR 400MG CAP                   270 N  04-28 04-28  11  30
-----PENDING-----
9 PREDNISONE 5MG TAB                                QTY: 190          ISDT: 04-18  REF: 11
Press RETURN to Continue:

    AMIODARONE 200MG TAB: Total dose amount of 1600 MILLIGRAMS/DAY exceeds the dosing
    range of 100 MILLIGRAMS/DAY to 400 MILLIGRAMS/DAY.

Do you want to Continue? Y// ES

Do you want to Process or Cancel medication?
Rx #2633  DRUG: AMIODARONE 200MG TAB: PROCESS//

Enter your Current Signature Code:      SIGNATURE VERIFIED

Now creating Pharmacy Intervention
for  AMIODARONE 200MG TAB

PROVIDER:      OPPROVIDER,ONE      LBB      119
RECOMMENDATION: ??
RECOMMENDATION:      NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

OPPATIENT,TEN                                ID#:666-00-0000  RX #2633

      RX #          DRUG                                QTY ST  ISSUE  LAST REF DAY
      DATE  FILL REM SUP
-----
1 2622          ACETAMINIOPHEN 120MG/COD 12MG/5ML EL      A  04-17 04-17  11  30
                               Qty: 480
2 2621A          AMITRIPTYLINE 25MG TAB                  30 A  04-17 04-17   5  30
3 2623          AMLODIPINE 5MG/ATORVASTATIN 40MG TAB      30 A  04-17 04-17  11  30
4 2624          HALOPERIDOL 5MG TAB                      60 A  04-18 04-18  11  30
5 2628          WARFARIN 5MG TAB                        18 A  04-18 04-18  11  30
-----DISCONTINUED-----
6 2620          DIPYRIDAMOLE 25MG TAB                  90 DC  03-25 04-17   5  30
-----NON-VERIFIED-----
7 2633          AMIODARONE 200MG TAB                  240 N  04-28 04-28  11  30
8 2634          INDINAVIR 400MG CAP                   270 N  04-28 04-28  11  30
-----PENDING-----
9 PREDNISONE 5MG TAB                                QTY: 190          ISDT: 04-18  REF: 11
Press RETURN to Continue:

RX: 2633          PATIENT: OPPATIENT,TEN (666-00-0000)
STATUS: Non-Verified
    DRUG: AMIODARONE 200MG TAB
    QTY: 240      30 DAY SUPPLY
    SIG: TAKE TWO TABLETS BY MOUTH FOUR TIMES A DAY
    LATEST: 04/28/2008          # OF REFILLS: 11  REMAINING: 11
    ISSUED: 04/28/08          PROVIDER:
    LOGGED: 04/28/08          CLINIC: NOT ON FILE
    EXPIRES: 04/29/09          DIVISION: HINES (499)
    CAP: SAFETY          ROUTING: WINDOW
    ENTRY BY: OPPROVIDER,ONE  VERIFIED BY:

FILLED: 04/28/08  PHARMACIST:          LOT #:
DISPENSED: 04/28/08  RELEASED:

```

LABEL LOG:

#	DATE	RX REF	PRINTED BY
1	04/28/08	ORIGINAL	OPCLERK,ONE

COMMENTS: From RX number 2633 Drug-Drug interaction  
PATIENT STATUS : OPT NSC COPIES : 1  
EDIT: (Y/N/P): N// O  
VERIFY FOR OPPATIENT,TEN ? (Y/N/Delete/Quit): Y// n NO

Select RX with Drug Interaction: 2633 OPPATIENT,TEN 666-00-0000

OPPATIENT,TEN ID#:666-00-0000 RX #2633

RX #	DRUG	QTY ST	ISSUE DATE	LAST REF DAY	FILL REM SUP
-----ACTIVE-----					
1 2622	ACETAMINIOPHEN 120MG/COD 12MG/5ML EL	A	04-17	04-17	11 30
Qty: 480					
2 2621A	AMITRIPTYLINE 25MG TAB	30 A	04-17	04-17	5 30
3 2623	AMLODIPINE 5MG/ATORVASTATIN 40MG TAB	30 A	04-17	04-17	11 30
4 2624	HALOPERIDOL 5MG TAB	60 A	04-18	04-18	11 30
5 2628	WARFARIN 5MG TAB	18 A	04-18	04-18	11 30
-----DISCONTINUED-----					
6 2620	DIPYRIDAMOLE 25MG TAB	90 DC	03-25	04-17	5 30
-----NON-VERIFIED-----					
7 2633	AMIODARONE 200MG TAB	240 N	04-28	04-28	11 30
8 2634	INDINAVIR 400MG CAP	270 N	04-28	04-28	11 30
-----PENDING-----					
9	PREDNISONE 5MG TAB	QTY: 190	ISDT: 04-18	REF: 11	

Press RETURN to Continue:

AMIODARONE 200MG TAB: Total dose amount of 1600 MILLIGRAMS/DAY exceeds the dosing range of 100 MILLIGRAMS/DAY to 400 MILLIGRAMS/DAY.

Do you want to Continue? Y// ES

Do you want to Process or Cancel medication?  
Rx #2633 DRUG: AMIODARONE 200MG TAB: PROCESS//

Enter your Current Signature Code: SIGNATURE VERIFIED

Now creating Pharmacy Intervention  
for AMIODARONE 200MG TAB

PROVIDER: OPPROVIDER,ONE LBB 119  
RECOMMENDATION: NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this intervention or for more options.

Would you like to edit this intervention ? N// O

OPPATIENT,TEN ID#:666-00-0000 RX #2633

RX #	DRUG	QTY ST	ISSUE DATE	LAST REF DAY	FILL REM SUP
-----ACTIVE-----					
1 2622	ACETAMINIOPHEN 120MG/COD 12MG/5ML EL	A	04-17	04-17	11 30
Qty: 480					
2 2621A	AMITRIPTYLINE 25MG TAB	30 A	04-17	04-17	5 30
3 2623	AMLODIPINE 5MG/ATORVASTATIN 40MG TAB	30 A	04-17	04-17	11 30
4 2624	HALOPERIDOL 5MG TAB	60 A	04-18	04-18	11 30
5 2628	WARFARIN 5MG TAB	18 A	04-18	04-18	11 30
-----DISCONTINUED-----					

6 2620	DIPYRIDAMOLE 25MG TAB	90 DC 03-25 04-17	5 30
-----NON-VERIFIED-----			
7 2633	AMIODARONE 200MG TAB	240 N 04-28 04-28	11 30
8 2634	INDINAVIR 400MG CAP	270 N 04-28 04-28	11 30

-----PENDING-----  
 9 PREDNISONE 5MG TAB QTY: 190 ISDT: 04-18 REF: 11  
 Press RETURN to Continue:

RX: 2633 PATIENT: OPPATIENT,TEN (666-00-0000)  
 STATUS: Non-Verified  
 DRUG: AMIODARONE 200MG TAB  
 QTY: 240 30 DAY SUPPLY  
 SIG: TAKE TWO TABLETS BY MOUTH FOUR TIMES A DAY  
 LATEST: 04/28/2008 # OF REFILLS: 11 REMAINING: 11  
 ISSUED: 04/28/08 PROVIDER:  
 LOGGED: 04/28/08 CLINIC: NOT ON FILE  
 EXPIRES: 04/29/09 DIVISION: HINES (499)  
 CAP: SAFETY ROUTING: WINDOW  
 ENTRY BY: OPPROVIDER,ONE VERIFIED BY:

FILLED: 04/28/08 PHARMACIST: LOT #:  
 DISPENSED: 04/28/08 RELEASED:

LABEL LOG:

#	DATE	RX REF	PRINTED BY
=====			

1 04/28/08 ORIGINAL OPCLERK,ONE  
 COMMENTS: From RX number 2633 Drug-Drug interaction  
 PATIENT STATUS : OPT NSC COPIES : 1  
 EDIT: (Y/N/P): N// O  
 VERIFY FOR OPPATIENT,TEN ? (Y/N/Delete/Quit): Y// d DELETE  
 Nature of Order: SERVICE CORRECTION// S  
 ...PRESCRIPTION #2633 MARKED DELETED!!

Select RX with Drug Interaction: ?  
 Answer with RX VERIFY RX#  
 Choose from:  
 2634 OPPATIENT,TEN 666-00-0000

Select RX with Drug Interaction: 26354 ??

Select RX with Drug Interaction: 2634 INDINAVIR 400MG CAP NEW,OU  
 TPATIENT 666-00-0000

OPPATIENT,TEN ID#:666-00-0000 RX #2634

RX #	DRUG	QTY ST	ISSUE DATE	LAST REF	FILL REM	DAY SUP
-----ACTIVE-----						
1 2622	ACETAMINIOPHEN 120MG/COD 12MG/5ML EL	A	04-17 04-17	11	30	
	Qty: 480					
2 2621A	AMITRIPTYLINE 25MG TAB	30 A	04-17 04-17	5	30	
3 2623	AMLODIPINE 5MG/ATORVASTATIN 40MG TAB	30 A	04-17 04-17	11	30	
4 2624	HALOPERIDOL 5MG TAB	60 A	04-18 04-18	11	30	
5 2628	WARFARIN 5MG TAB	18 A	04-18 04-18	11	30	
-----DISCONTINUED-----						
6 2620	DIPYRIDAMOLE 25MG TAB	90 DC	03-25 04-17	5	30	
-----NON-VERIFIED-----						
7 2634	INDINAVIR 400MG CAP	270 N	04-28 04-28	11	30	
-----PENDING-----						
8 PREDNISONE 5MG TAB		QTY: 190	ISDT: 04-18	REF: 11		

Press RETURN to Continue:

INDINAVIR 400MG CAP: Single dose amount of 1200 MILLIGRAMS exceeds the maximum single

```

dose amount of 1000 MILLIGRAMS.

INDINAVIR 400MG CAP Total dose amount of 3600 MILLIGRAMS/DAY exceeds the dosing range
of 800 MILLIGRAMS/DAY to 2400 MILLIGRAMS/DAY.

Do you want to Continue? Y// ES

Now creating Pharmacy Intervention
for  INDINAVIR 400MG CAP

PROVIDER:      OPPROVIDER,ONE      LBB      119
RECOMMENDATION:      NO CHANGE

See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.

Would you like to edit this intervention ? N// O

RX: 2634          PATIENT: OPPATIENT,TEN (666-00-0000)
STATUS: Non-Verified
  DRUG: INDINAVIR 400MG CAP
  QTY: 270      30 DAY SUPPLY
  SIG: TAKE THREE CAPSULES BY MOUTH EVERY 8 HOURS
  LATEST: 04/28/2008          # OF REFILLS: 11  REMAINING: 11
  ISSUED: 04/28/08          PROVIDER:
  LOGGED: 04/28/08          CLINIC: NOT ON FILE
  EXPIRES: 04/29/09          DIVISION: HINES (499)
  CAP: SAFETY          ROUTING: WINDOW
  ENTRY BY: OPPROVIDER,ONE          VERIFIED BY:

FILLED: 04/28/08  PHARMACIST:          LOT #:
DISPENSED: 04/28/08          RELEASED:

LABEL LOG:
#  DATE      RX REF          PRINTED BY
=====
1  04/28/08  ORIGINAL          OPCLERK,ONE
COMMENTS: From RX number 2634 Drug-Drug interaction
PATIENT STATUS : OPT NSC          COPIES : 1
EDIT: (Y/N/P): N// O
VERIFY FOR OPPATIENT,TEN ? (Y/N/Delete/Quit): Y// ES

Label Printer: TELNET
LABEL: QUEUE/CHANGE PRINTER/HOLD/SUSPEND or '^' to bypass Q// UEUE

Select LABEL DEVICE: null  NULL DEVICE  NULL DEVICE

LABEL(S) QUEUED TO PRINT

```

## Rx Verification by Clerk

### [PSO VR]

The **Rx Verification by Clerk** [PSO VR] option and the **Patient Prescription Processing** [PSO LM BACKDOOR ORDERS] option incorporate the new **Process Order Checks** functionality when processing non-verified orders with critical drug interactions and dosing checks.

When utilizing the **Process Order Checks**, **Rx Verification by Clerk** [PSO VR] or **Patient Prescription Processing** [PSO LM BACKDOOR ORDERS] options and processing multiple critical drug interactions for non-verified orders, the following choices are possible:

```

Do you want to:
1.  Cancel Rx #2476  DRUG: AMIODARONE 200MG TAB
2.  Cancel Rx #2474  DRUG: WARFARIN 5MG TAB
3.  Cancel Both 1 and 2
4.  Activate Both 1 and 2

```

5. Leave Both Pending (do nothing)?: 4 ACTIVATE 1 and 2

The term 'Activate' has changed to 'Process' and the term 'Pending' has changed to 'Non-verified'.

See output with changes below:

```
Do you want to:
1. Cancel Rx #2476 DRUG: AMIODARONE 200MG TAB
2. Cancel Rx #2474 DRUG: WARFARIN 5MG TAB
3. Cancel Both 1 and 2
4. Process Both 1 and 2
5. Leave Both Non-Verified (do nothing)?: 4 Process 1 and 2
```

The **List Non-Verified Scripts** [[PSO VRPT] option now includes Dosage Checks.

### Sorted by Patient

```
Select Verification Option: LIST Non-Verified Scripts
Sort By Patient or Clerk: P// ATIENT
DEVICE: HOME// TELNET Right Margin: 80//

NON-VERIFIED PRESCRIPTIONS
AS OF JUN 25,2007@08:46:10
SORTED BY PATIENT
(# indicates Order Check)

Patient name                                     Page: 1
Rx #      Issued      Drug                                     Entry By
-----
PSOPATIENT, ONE
2467      06/25/07 #AMIODARONE 200MG TAB                      5

PSOPATIENT, TWO
2449      06/20/07 WARFARIN 5MG TAB                          5
2452      06/20/07 ASPIRIN 325MG EC TAB                      5
2456      06/20/07 INDOMETHACIN 25MG CAP                    5
2457      06/20/07 ENALAPRIL 5MG TAB                        5
2458      06/20/07 ACYCLOVIR 200MG CAP                      5
2459      06/20/07 BUPROPRION 150MG TAB,SA                  5
2461      06/20/07 TEMAZEPAM 15MG CAP                        5
```

### Sorted by Clerk

```
NON-VERIFIED PRESCRIPTIONS
AS OF JUN 25,2007@13:09:34
SORTED BY CLERK
(# indicates Order Check)

Patient name                                     Page: 1
Rx #      Issued      Drug      CLERK-> PSOTECH,ONE
-----
PSOPATIENT, ONE
2473      06/25/07 #AMINOPHYLLINE 200MG TAB
```

## Chapter 27: CPRS Order Checks: How They Work

---

### Introduction

In CPRS, Order Checks occur by evaluating a requested order against existing patient data. Most order checks are processed via the CPRS Expert System. A few are processed within the Pharmacy, Allergy Tracking System, and Order Entry packages. Order Checks are a real-time process that occurs during the ordering session and is driven by responses entered by the ordering provider. Order Check messages are displayed interactively in the ordering session.

Order Checks review existing data and current events to produce a relevant message, which is presented to patient caregivers. Order Checks use the CPRS Expert System (OCX namespace), to define logical expressions for this evaluation and message creation. In addition to the expert system Order Checks have some hard-coded algorithms. For example, the drug-drug interaction order check is made via an entry point in the pharmacy package whereas Renal Functions for Patients 65 and Over is defined as a rule in the CPRS Expert System.

### Order Check Data Caching

Data caching was recently added to improve the speed of order checks. Before data caching, order checks could be slow because each order check retrieved data from the other VISTA packages—even if the order checks used the same data. With data caching, the first order check in an ordering session retrieves data from other VISTA packages, uses the data to evaluate whether it should display a warning, and then stores the retrieved data in the ^XTMP(“OCXCACHE” global for five minutes. The order checks that occur in the next five minutes can use the cached data, if it is the appropriate data, instead of retrieving data from the other packages. After five minutes, the cached data expires, and order checks must retrieve new data from the VISTA packages.

For example, before data caching was implemented, if an order check took 3 seconds to retrieve data from other VISTA packages, and there were 12 order checks, clinicians might wait 36 seconds to sign orders. With data caching, the first order check might take 3 seconds to retrieve the data, but subsequent order checks could use the cache and might take only .03 seconds each. That would be 3.33 seconds compared to 36 seconds. The numbers in this example are for illustration only and do not reflect real system speed. However, data caching should speed up order checks.

To avoid using all available disk space for storing data from order checks, there are several ways to clear the ^XTMP(“OCXCACHE” global. ORMTIME removes data from the global when it runs. The suggested frequency for running ORMTIME is every 30 minutes, but not every site runs it that frequently. Kernel clean up utilities also remove data from the cache when they run, which is usually every 24 hours. If needed, users that have access to the programmer’s prompt can manually clear the cache from that prompt by using PURGE^OCXCACHE.

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## Chapter 28: Error Messages

Error Level	Error Message	Reason	Why message is being displayed.
System	No Enhanced Order Checks can be performed.	Vendor Database cannot be reached.	The connectivity to the vendor database has gone down. A MailMan message is sent to the G. PSS ORDER CHECKS mail group when the link goes down and when it comes back up.
System	No Enhanced Order Checks can be performed.	The connection to the vendor database has been disabled.	A user has executed the Enable/Disable Vendor Database Link [PSS ENABLE/DISABLE DB LINK] option and disabled the interface.
System	No Enhanced Order Checks can be performed	Vendor database updates are being processed	The vendor database (custom and standard data) is being updated using the DATUP (Data Update) process.
Drug	Enhanced Order Checks cannot be performed for Local or Local Outpatient Drug: <DRUG NAME>	Drug not matched to NDF	The local drug being ordered/ or on profile has not been matched to NDF. Matching the drug to a VA Product will eliminate this message.
Drug	Order Checks could not be done for <a href="#">Remote</a> Drug: <DRUG NAME>, please complete a manual check for Drug Interactions and Duplicate Therapy.  <a href="#">Remote order indicator</a>		If this error message is displayed, it means that the VA product that the local <a href="#">or remote</a> drug being ordered/or on <a href="#">the local or remote</a> profile does not have a GCNSEQNO or in rare cases, the GCNSEQNO assigned to the VA Product does not match up with a GCNSEQNO in the vendor database.
Drug	Enhanced Order Checks cannot be performed for Orderable Item: <OI NAME>	No active Dispense Drug found	Highly unlikely that this error would be seen. At the time the order check was being performed the orderable item did not have an active dispense drug associated.

Error Level	Error Message	Reason	Why message is being displayed.
Drug	Enhanced Order Checks cannot be performed for Orderable Item: <OI NAME>	No active, marked for IV Fluid Order Entry IV Additive/Solution found	The orderable item associate with an IV Fluid order did not have an active IV Additive/IV Solution marked for IV fluid order entry use at the time the order check was executed. This is another error the user will probably not see.

## Error Information

The text in the error message and reason column will be displayed to the user. The type of error is displayed in column 1.

## Two Levels of Error Messages

**System** When such an error occurs no drug interaction or duplicate therapy order checks will be performed. Other order checks that do not use the COTS database (FDB) will still be performed such as allergy/ADRs, duplicate drug (for outpatient only) and new CPRS order checks, etc.

**Drug** The second error level is for the drug and no drug interaction/duplicate therapy order checks will be performed for a specific drug. When you are processing an order, you may see a drug level error for a drug that is on the profile. This indicates that a drug interaction or duplicate therapy order check will not be performed for the drug in the order you are processing against this profile drug. Profile drug errors will only be shown once per patient session. So if you process several more orders, you will not see the error again. However, if you exit the option and at some later time reselect this patient to process new orders or take action on any existing orders, you will be shown the profile drug error once again.

If a drug level error occurs on the drug in the order you are processing, no profile drug errors will be displayed. No order checks (duplicate therapy or drug interaction) will occur for the processing drug (prospective drug). The only exception to this is when you are processing an IV order with multiple prospective drugs (i.e. multiple additives)

# Glossary

The following table provides definitions for common acronyms and terms used in this manual.

Acronym/Term	Definition
<b>Action Profile</b>	A list of all active and recently canceled or expired prescriptions for a patient sorted by classification. This profile also includes a signature line for each prescription to allow the physician to cancel or renew it.
<b>Activity Log</b>	A log, by date, of changes made to or actions taken on a prescription. An entry is made in this log each time the prescription is edited, canceled, reinstated after being canceled, or renewed. An entry will be made into this log each time a label is reprinted. A CMOP activity log will contain information related to CMOP dispensing activities.
<b>Allergy/ADR Information</b>	Includes non-verified and verified allergy and/or adverse reaction information as defined in the Adverse Reaction Tracking (ART) package. The allergy data is sorted by type (DRUG, OTHER, FOOD). If no data is found for a category, the heading for that category is not displayed.
<b>AMIS</b>	Automated Management Information System
<b>Answer Sheet</b>	An entry in the DUE ANSWER SHEET file. It contains the questions and answers of a DUE questionnaire. This term is also used to refer to the hard copy representation of a DUE ANSWER SHEET entry.
<b>API</b>	Application Programming Interfaces
<b>APSP</b>	Originally Indian Health Service Pharmacy's name space now owned by the Outpatient Pharmacy software.
<b>Bypass</b>	Take no action on a medication order.
<b>CMOP</b>	Consolidated Mail Outpatient Pharmacy.
<b>CPRS</b>	Computerized Patient Record System. CPRS is an entry point in VistA that allows the user to enter all necessary orders for a patient in different packages (e.g., Outpatient Pharmacy, Inpatient Pharmacy, etc.) from a single entry point.
<b>Critical</b>	Interactions with severe consequences that require some type of action (finding facts, contacting prescribers) to prevent potential serious harm.
<b>DATUP</b>	Data Update (DATUP). Functionality that allows the Pharmacy Enterprise Customization System (PECS) to send out custom and standard commercial-off-the-shelf (COTS) vendor database changes to update the two centralized databases at Austin and Martinsburg.
<b>DEA</b>	Drug Enforcement Agency
<b>DEA Special Handling</b>	The Drug Enforcement Agency special Handling code used for drugs to designate if they are over-the counter, narcotics, bulk compounds, supply items, etc.
<b>DHCP</b>	See VistA.

<b>Acronym/Term</b>	<b>Definition</b>
<b>DIF</b>	Drug Information Framework
<b>Dispense Drug</b>	The Dispense Drug name has the strength attached to it (e.g., Acetaminophen 325 mg). The name alone without a strength attached is the Orderable Item name.
<b>Dosage Ordered</b>	After the user has selected the drug during order entry, the dosage ordered prompt is displayed.
<b>Drug/Drug Interaction</b>	The pharmacological or clinical response to the administration of a drug combination different from that anticipated from the known effects of the two agents when given alone.
<b>DUE</b>	Drug Usage Evaluation
<b>Expiration/Stop</b>	The date on which a prescription is no longer active. Typically, this date is 30 days after the issue date for narcotics, 365 days after the issue date for other medications and 365 days after the issue date for supplies.
<b>FDB</b>	First DataBank
<b>Finish</b>	Term used for completing orders from Order Entry/Results Reporting V. 3.0.
<b>GUI</b>	Acronym for Graphical User Interface.
<b>Issue Date</b>	The date on which the prescription was written. This date is usually, but not always, the same as the first fill date. This date cannot be later than the first fill date.
<b>HFS</b>	Host File Server.
<b>Health Insurance Portability and Accountability Act of 1996 (HIPAA)</b>	A Federal law that makes a number of changes that have the goal of allowing persons to qualify immediately for comparable health insurance coverage when they change their employment relationships. Title II, Subtitle F, of HIPAA gives HHS the authority to mandate the use of standards for the electronic exchange of health care data; to specify what medical and administrative code sets should be used within those standards; to require the use of national identification systems for health care patients, providers, payers (or plans), and employers (or sponsors); and to specify the types of measures required to protect the security and privacy of personally identifiable health care information. Also known as the Kennedy-Kassebaum Bill, the Kassebaum-Kennedy Bill, K2, or Public Law 104-191.
<b>JCAHO</b>	Acronym for Joint Commission on Accreditation of Healthcare Organizations
<b>Label/Profile Monitor</b>	A file for each printer which records, in the order in which they were printed, the last 1000 labels or profiles printed on that printer. This allows a rapid reprint of a series of labels or profiles that were damaged by a printer malfunction or other event.
<b>Local Possible Dosages</b>	Free text dosages that are associated with drugs that do not meet all of the criteria for Possible Dosages.

<b>Acronym/Term</b>	<b>Definition</b>
<b>Medication Instruction File</b>	The MEDICATION INSTRUCTION file is used by Unit Dose and Outpatient Pharmacy. It contains the medication instruction name, expansion and intended use.
<b>Medication Order</b>	A prescription.
<b>Medication Profile</b>	A list of all active or recently canceled or expired prescriptions for a patient sorted either by date, drug, or classification. Unlike the action profile, this profile is for information only and does not provide a signature line for a physician to indicate action to be taken on the prescription.
<b>Medication Routes File</b>	The MEDICATION ROUTES file contains medication route names. The user can enter an abbreviation for each route to be used at the local site. The abbreviation will most likely be the Latin abbreviation for the term.
<b>Med Route</b>	The method in which the prescription is to be administered (e.g., oral, injection).
<b>NCCC</b>	Acronym for National Clozapine Coordinating Center.
<b>Non-Formulary Drugs</b>	The medications, which are defined as commercially available drug products not included in the VA National Formulary.
<b>Non-VA Meds</b>	Term that encompasses any Over-the-Counter (OTC) medications, Herbal supplements, Veterans Health Administration (VHA) prescribed medications but purchased by the patient at an outside pharmacy, and medications prescribed by providers outside VHA. All Non-VA Meds must be documented in patients' medical records.
<b>Order</b>	Request for medication.
<b>Orderable Item</b>	An Orderable Item name has no strength attached to it (e.g., Acetaminophen). The name with a strength attached to it is the Dispense drug name (e.g., Acetaminophen 325mg).
<b>Partial Prescription</b>	A prescription that has been filled for a quantity smaller than requested. A possible reason for a partial fill is that a patient is to return to the clinic in ten days but the prescription calls for a thirty-day supply. Partial prescriptions do count as workload but do not count against the total number of refills for a prescription.
<b>Payer</b>	In health care, an entity that assumes the risk of paying for medical treatments. This can be an uninsured patient, a self-insured employer, or a health care plan or Health Maintenance Organization (HMO).
<b>Pending Order</b>	A pending order is one that has been entered by a provider through CPRS without Pharmacy finishing the order. Once Pharmacy has finished the order, it will become active.
<b>Pharmacy Narrative</b>	OUTPATIENT NARRATIVE field that may be used by pharmacy staff to display information specific to the patient.
<b>Polypharmacy</b>	The administration of many drugs together.
<b>POE</b>	Acronym for Pharmacy Ordering Enhancements (POE) project. Patch PSO*7*46 contains all the related changes for Outpatient Pharmacy.

Acronym/Term	Definition
<b>Possible Dosages</b>	Dosages that have a numeric dosage and numeric dispense units per dose appropriate for administration. For a drug to have possible dosages, it must be a single ingredient product that is matched to the DRUG file. The DRUG file entry must have a numeric strength and the dosage form/unit combination must be such that a numeric strength combined with the unit can be an appropriate dosage selection.
<b>Prescription</b>	This term is now referred to throughout the software as medication orders.
<b>Prescription Status</b>	<p>A prescription can have one of the following statuses.</p> <p><b>Active</b> - A prescription with this status can be filled or refilled.</p> <p><b>Canceled</b> - This term is now referred to throughout the software as Discontinued. (See Discontinued.)</p> <p><b>Discontinued</b> - This status is used when a prescription was made inactive either by a new prescription or by the request of a physician.</p> <p><b>Discontinued (Edit)</b> - Discontinued (Edit) is the status used when a medication order has been edited and causes a new order to be created due to the editing of certain data elements.</p> <p><b>Deleted</b> - This status is used when a prescription is deleted. Prescriptions are no longer physically deleted from the system, but marked as deleted. Once a prescription is marked deleted no access is allowed other than view.</p> <p><b>Expired</b> - This status indicates the expiration date has passed.</p> <p>*Note: A prescription that was canceled or has expired more recently than the date specified by the cutoff date, typically 120 days in the past, can still be acted upon.</p> <p><b>Hold</b> - A prescription that was placed on hold due to reasons determined by the pharmacist.</p> <p><b>Non-verified</b> - There are two types of non-verified statuses. Depending on a site parameter, prescriptions entered by a technician do not become active until a pharmacist reviews them. Until such review, they remain non-verified and cannot be printed, canceled or edited except through the <i>Verification</i> menu.</p> <p>The second non-verified status is given to prescriptions when a drug/drug interaction is encountered during the new order entry or editing of a prescription.</p> <p><b>Pending</b> - A prescription that has been entered through OERR.</p> <p><b>Refill</b> - A second or subsequent filling authorized by the provider.</p> <p><b>Suspended</b> - A prescription that will be filled at some future date.</p>
<b>Progress Notes</b>	A component of Text Integration Utilities (TIU) that can function as part of CPRS.
<b>Provider</b>	The person who authorized an order. Only users identified as providers who are authorized to write medication orders may be selected.
<b>Reprinted Label</b>	Unlike a partial prescription, a reprint does not count as workload.
<b>Questionnaire</b>	An entry in the DUE QUESTIONNAIRE file. This file entry contains the set of questions related to a DUE as well as the drugs being evaluated.

<b>Acronym/Term</b>	<b>Definition</b>
<b>Schedule</b>	The frequency by which the doses are to be administered, such as Q8H, BID, NOW, etc.
<b>Sig</b>	The instructions printed on the label.
<b>Significant</b>	The potential for harm is either rare or generally known so that it is reasonable to expect that all prescribers have taken this information into account.
<b>Speed Actions</b>	See Actions.
<b>Suspense</b>	A prescription may not be able to be filled on the day it was requested. When the prescription is entered, a label is not printed. Rather, the prescription is put in the RX SUSPENSE file to be printed at a later date.
<b>Third (3<sup>rd</sup>) Party Claims</b>	Health care insurance claims submitted to an entity for reimbursement of health care bills.
<b>Time In</b>	This is the time that the patient's name was entered in the computer.
<b>Time Out</b>	This is the time that the patient's name was entered on the bingo board monitor.
<b>TIU</b>	Text Integration Utilities; a package for document handling, that includes Consults, Discharge summary, and Progress Notes, and will later add other document types such as surgical pathology reports. TIU components can be accessed for individual patients through the CPRS, or for multiple patients through the TIU interface.
<b>Units per Dose</b>	The number of Units (tablets, capsules, etc.) to be dispensed as a Dose for an order. Fractional numbers will be accepted for medications that can be split.
<b>VistA</b>	Acronym for Veterans Health Information Systems and Technology Architecture, the new name for Decentralized Hospital Computer Program (DHCP).
<b>Wait Time</b>	This is the amount of time it took to fill the prescription. It is the difference between Time In and Time Out. For orders with more than one prescription, the wait time is the same for each.

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