



# **OUTPATIENT PHARMACY**

## **PHARMACIST'S USER MANUAL**

Version 7.0  
December 2007

(Revised April 2011)



## 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
04/11	i, vi, vii, viii, 5, 8, 10, 27-27b, 28, 30, 39-39ooo, 54-54t, 58, 59, 60-60l, 78, 82, 159, 163, 167-180	PSO*7*251	The following changes are included in this patch: - Outpatient List Manager Screen Views - Added HP and H to Hold Status - Removed DC code; Added DF, DE, DP, DD and DA - Added to Hidden Action List: IN - Removed DC code; Added DF, DE, DP, DD and DA, and - Added HP and H to Hold Status - Replaced Medication Short Profile - Inserted enhanced Order checks, Outpatient Pharmacy generated order checks - Added IN to Screen Scrape - Modified New Order Screen Scrape - Inserted Drug Allergy Screens - Updated Glossary and Index to start on odd pages (G. Tucker, PM; 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)

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

# 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
DA	Auto discontinued due to admission
DP	Discontinued by provider through CPRS

The Status column may also reflect the type of Discontinue action performed on the order:

DF	Discontinued due to edit by a provider through CPRS
DE	Discontinued due to edit via backdoor Pharmacy
DC	Discontinued via backdoor Pharmacy
DD	Discontinued due to death



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 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] automatically.	Toggles the menu of actions to be displayed/not displayed
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 prescription 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.
IN	Intervention Menu
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], Non-VA Meds Report [NV], or

<b>Action</b>	<b>Description</b>
Patient Information [PI]	Shows patient information, allergies, adverse reactions, and pending clinic appointments.
Pull Rx [PP]	Action taken to pull prescription(s) early from suspense.
Reprint [RP]	Reprints the label.
View Reject [REJ]	Allows the user to view and resolve the Refill Too Soon or Drug Utilization Review returned by the third party payer for a specific prescription/fill claim.
Unhold [UH]	Removes an order from a hold status.
Verify [VF]	Allows the pharmacist to verify an order a pharmacy technician has entered.

#### Speed Actions

These Outpatient Pharmacy actions are referred to as “speed actions” and appear on the medication profile screen. These actions can be applied to one or more orders at a time.

<b>Action</b>	<b>Description</b>
Reprint [RP]	Reprints the label.
Renew [RN]	A continuation of a medication authorized by the provider.
Refill [RF]	A second or subsequent filling authorized by the provider.
Reprint Signature [RS]	Reprints the signature log.
Discontinue [DC]	Status used when an order was made inactive either by a new order or by the request of a physician.
Release [RL]	Action taken at the time the order is filled and ready to be given to the patient.
Pull Rx [PP]	Action taken to pull prescription(s) early from suspense.
Inpat. Profile [IP]	Action taken to view an Inpatient Profile.
CM	Action taken to manually queue to CMOP.
Fill/Rel Date Disply [RDD]	Switch between displaying the FILL DATE column and the LAST RELD column.

Display Remote [DR] Action taken to display a patient’s remote prescriptions.

## Other Outpatient Pharmacy ListMan Actions

<b>Action</b>	<b>Description</b>
Exit [EX]	Exit processing pending orders.
AC	Accept.
BY	Bypass.
ED	Edit.
FN	Finish.

## Other Screen Actions

<b>Action</b>	<b>Description</b>
Edit/Enter Allergy/ADR Data [EA]	Provides access to the Adverse Reaction Tracking package to allow entry and/or edit of allergy adverse reaction data for the patient. See the Adverse Reaction Tracking package documentation for more information on allergy/ADR processing.
Detailed Allergy Display [DA]	Displays a detailed listing of the selected item from the patient's allergy/ADR list. Entry to the Edit Allergy/ADR Data action is provided with this list also.
Patient Record Update [PU]	Allows editing of patient data such as SSN, birth date, address, phone, and outpatient narrative. Patient data can also be updated using the <i>Update Patient Record</i> menu option. If implementing Other Language Modifications, either can be used to set a patient's other language preference.
New Order [NO]	Allows new orders to be entered for the patient.
Exit Patient List [EX]	Exit patient's Patient Information screen so that a new patient can be selected.



## Chapter 10: 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:

<b>Code</b>	<b>Status/Description</b>
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
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)



For the *Patient Prescription Processing*, *Complete Orders from OERR*, and *Action Profile (132 COLUMN PRINTOUT)* options, 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))”.

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### Example: Medication Profile – Short Format

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 REF FILL	DAY REM SUP
-----REFILL TOO SOON/DUR REJECTS (Third Party)-----						
1	2390	DIGOXIN (LANOXIN) 0.05MG CAP	90 A>	02-16	02-16	3 90
2	2391	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) -----						
GINKGO 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//

Order #4 is highlighted (reverse video) to indicate that it has recently expired.

Orders #5,7,10 are highlighted (reverse video) to indicate that they were recently discontinued.

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

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

## 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-----

-----  
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 “Using The Pharmacy Intervention Menu” for more details.

# Chapter 14: Processing Interactions

---

This chapter describes the option used for processing drug interactions.

## Process Drug/Drug Interactions

### [PSO INTERACTION VERIFY]

Using this option, information for medications that have been marked as a drug/drug interaction can be processed. This allows prescriptions with drug/drug interactions to be processed, deleted, or bypassed. To complete any of these actions, an assigned signature code, which will not appear on the screen, must be entered. 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.

Legacy VistA Drug/Drug Interactions have been enhanced to utilize First DataBank's (FDB) Drug Information Framework (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.

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:

**Example: 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.
```

**Example: 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
```



### Example: 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
```

### Example: 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.
```

### Example: 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.
```

### Example: 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
```

### Example: 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.
```

### Example: 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.

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

#### **Example: 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
.
.
.

```

### Example: 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  
.

### Example: 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
.
.

```

### Example: 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

.

### Example: 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//

.

.

.

### Example: 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
.
.
```

### Example: 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:
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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
.
.
.

```

### Example: 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

```



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//  
 .  
 .  
 .



### Example: 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//
.
.
.
```

### Example: 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//

.
.
.

```

### Example: 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//  
 .  
 .  
 .

### Example: 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//
.
.
.

```

### Example: Copying An Order – Critical Interaction

```

OP Medications (ACTIVE)      Feb 14, 2008@09:20:04      Page:      1 of      3
OPPATIENT,TWO                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: OP PROVIDER, 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.

.  
.  
.

### Example: 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	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
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//

.  
.

### Example: 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 REF FILL	DAY REM	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
.
.

```

### Example: Verifying an Order – Significant Drug Interaction

```

OP Medications (NON-VERIFIED) Feb 13, 2008@08:51:40          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 #: 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

          ISSUE  LAST REF DAY
          QTY ST  DATE  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
          -----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
.
.
.

```

### Example: 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	ISSUE DATE	LAST FILL	REF REM	DAY SUP
-----ACTIVE-----								
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
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: 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 #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

### Example: 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
.
.

```

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

```

Medication Profile      Feb 14, 2008@12:26:38      Page:      1 of      2
OPPATIENT, ONE
  PID: 000-00-0000      Ht (cm): _____ (_____)
  DOB: JAN 1,1922 (86)  Wt (kg): _____ (_____)
  SEX: MALE

#  RX #      DRUG      QTY ST  ISSUE  LAST REF DAY
                                DATE  FILL REM 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
  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: 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...

***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
.
.

```

### Example: 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
.
.
```

**Example: 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: WARFAR
  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:**

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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:

### Example: 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//

.  
.  
.



# Example: Pharmacist Verifying Order with Two 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

                                ISSUE  LAST REF DAY
                                QTY ST  DATE  FILL REM 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
  
```



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.

### Example: 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: WARFAR
  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

```

## 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 24,200
+      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
.
.
```



# 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 120 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 as 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:

### Example: 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)
=====
```

### Example: 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
=====
```

### Example: 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
```

### Example: 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 system will display the following information for the numbered list of orders:

- Prescription number (if applicable)
- Dispense Drug (Orderable item if dispense drug not assigned to order)
- Indicate if the order is pending (with text 'Pending Order')

See example below.

```
1. Pending order  AMLODIPINE 5MG/ATORVASTATIN 10MG
2. RX #2426  LOVASTATIN 40MG TAB
```

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.
```

If the user fails to accept the order that is being processed or exits before accepting the order, the system shall not discontinue the order(s) selected.

The message displayed to the user shall contain:

- Indicate that discontinuance was for Duplicate Therapy
- The prescription number or text 'Pending order' if order status is pending.
- Dispense Drug (Orderable item if dispense drug not assigned to order)
- Ending with text 'NOT Discontinued.'

See examples below:

```
Duplicate Therapy RX #2710 CIMETIDINE 300MG TAB NOT Discontinued.
```

```
Duplicate Therapy Pending Order RANITIDINE 150MG TAB NOT Discontinued.
```

Once the order being processed is accepted and there were orders selected for discontinuation, the system shall inform the user when the discontinuation occurs.

The message displayed to the user shall contain:

- Indicate that discontinuance was for Duplicate Therapy
- The prescription number or text 'Pending order' if order status is pending.
- Dispense Drug (Orderable item if dispense drug not assigned to order)
- Ending with text 'has been discontinued.'

See examples below.

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

```
Duplicate Therapy Pending Order RANITIDINE 150MG TAB has been discontinued...
```

See Therapeutic Duplication examples below:

**Example: 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//
.
.
.
```

**Example: 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//

**Example: 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:

.  
.  
.

**Example: 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//
.
.
.

```

#### Example: 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
.
.
.

```

### Example: 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  Y es

          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...
.

```

### Example: 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.
.
.
.

```

### Example: 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// ...  
.

**Example: 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:
.
.
```



**Example: 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.

# Chapter 19: Ordering/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 display 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 ...*
- *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 therapy, drug-drug interaction, and drug-drug allergy.

With the introduction of enhanced Order checks (PSO\*7\*251) , 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
- Local & Remote 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 (Drug Interactions and Duplicate Therapy):

1. System - When a system level error occurs, no Drug Interaction or Duplicate Therapy order checks that utilize the COTS database (FDB) will be performed. Other order checks, such as Allergy/ADRs, Duplicate Drug (for outpatient only) and the new CPRS order checks, etc. that are performed entirely within VISTA will continue to be executed.
2. Drug - When a drug level error occurs, no Drug Interaction or Duplicate Therapy order checks will be performed for a specific drug. Drug level errors can occur for the prospective drug (drug being processed) or the profile drug. If a drug level error occurs on the prospective drug, no profile drug errors will be displayed. The only exception to this is when you are processing an IV order with multiple prospective drugs (i.e. multiple IV Additives). Profile drug level errors will only be shown once per patient session.

There are two reasons that a drug level error is generated; the drug is not matched to NDF or the drug is matched to NDF, but the VA Product to which it is matched does not have a GCNSEQNO assigned or the GCNSEQNO assigned does not match up to the GCNSEQNO in the COTS database. The latter (GCNSEQNO mismatch) is rare.

See table below for an explanation of the errors:

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 Remote Drug: <DRUG NAME>, please complete a manual check for Drug Interactions and Duplicate Therapy.  Remote order indicator		If this error message is displayed, it means that the VA product that the local or remote drug being ordered/ or on the local or remote 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.

Error Level	Error Message	Reason	Why message is being displayed.
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.
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.

See Examples below to illustrate error sequences.

#### Example: 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:
.
.
.

```

### Example: 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//
.
.
.
```

### Example: 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...

Order Checks could not be done for Drug: RANITIDINE 150MG TAB, please complete
a manual check for Drug Interactions and Duplicate Therapy.

=====
*** 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 03/07/08@08:55:32 (Window)
      Last Filled On: 11/08/06

-----

      Local Rx#: 2573
      Drug: NIZATIDINE 150MG CAP (ACTIVE)
      SIG: TAKE ONE CAPSULE BY MOUTH TWICE A DAY
      QTY: 180                      Days Supply: 90
      Processing Status: Released locally on 03/07/08@08:55:32 (Window)
      Last Filled On: 11/08/06
```

```

-----
Local Rx#: 2599
Drug: FAMOTIDINE 20MG TAB (PROVIDER HOLD)
SIG: TAKE ONE TABLET BY MOUTH TWICE A DAY
QTY: 180 Days Supply: 90
Processing Status: Released locally on 03/07/08@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)
=====
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:

### Example: 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

```



### Example: 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:

#### Example: 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: <only if data present>
```

### Duplicate Drug order check for Non-VA Medications

#### Example: 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
```

### Duplicate Drug Order Check business rules:

- 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.
- 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.
- 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.
- If the DRUG CHECK FOR CLERK outpatient site parameter is set to NO, and a clerk (no PSORPH key) is finishing a pending order:

- 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.
- When the VERIFICATION outpatient site parameter is set to YES and the duplicate drug is a remote order
  - A duplicate drug warning will be displayed
  - The clerk will be allowed to finish the order
  - The finished order will have a status of non-verified
- When the VERIFICATION outpatient site parameter is set to NO, the clerk will not be allowed to finish the order.
- 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.
- 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.
- 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.

#### Example: 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:  
 .  
 .

### Example: 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//

```

### Example: 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...
.
.

```

**Example: 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//

```



**Example: 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: .
```

**Example: 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)

CPRS 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)

CPRS 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
-----
1 2608      ASPIRIN 81MG EC TAB          30 A   03-24 03-24 11 30
-----
2 2609      ASPIRIN 325MG EC TAB          30 N   03-24 03-24 5 30
-----
.
.
.

```

### Example: 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
```

-----

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//

.  
.   
.

### Example: 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
```

-----

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...

### Example: 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                                <A>
  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                                <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 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 03/12/08PSOPATIENT,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 PSOAUTRF 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 appears asking if the user wants to update the address. Also, for the *Patient Prescription Processing*, *Complete Orders from OERR*, and *Action Profile (132 COLUMN PRINTOUT)* options, if a temporary address has no end date, the following text is now displayed: "(Temp address from XXX 99,9999 till (no end date))".

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

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



## Entering a New Order

Actions display in the action area of the screen. Actions with parentheses ( ) around them are invalid actions for that order. A double question mark (??) displays all the actions available, including the Outpatient Pharmacy actions described in the section "Using List Manager." If one of the hidden actions is selected and it is invalid, a message will display in the message window. Outpatient Pharmacy hidden actions are displayed with the letters OP next to the action.

### Example: Entering a New Order

```
Select Option: RX (Prescriptions)

      Orders to be completed for all divisions: 14

Do you want an Order Summary? No//
```

A summary list of the number of pending orders can be displayed by Division or by each Clinic within the Division where the user is signed on. This is helpful when completing batch orders. In this example, an individual patient name is entered.

```
      Patient Prescription Processing
      Barcode Rx Menu ...
      Complete Orders from OERR
      Discontinue Prescription(s)
      Edit Prescriptions
      List One Patient's Archived Rx's
      Manual Print of Multi-Rx Forms
      Reprint an Outpatient Rx Label
      Signature Log Reprint
      View Prescriptions

Select Rx (Prescriptions) Option: PATient Prescription Processing
Select PATIENT NAME: OPPATIENT16,ONE  OPPATIENT16,ONE  4-3-41  000246802
      YES      SC VETERAN
Patient is enrolled to receive ScripTalk 'talking' prescription labels.

Eligibility: SC
RX PATIENT STATUS: SERVICE CONNECTED//  <Enter>
-----example continues-----
```

A detailed explanation of the different parts of the screen can be found under "List Manager Options" at the beginning of this manual. The Patient Information screen displays the information on two pages. Only the second screen is shown in this example.

### Example: Entering a New Order (continued)

Patient Information	May 22, 2001 10:44:38	Page: 2 of 2
OPPATIENT16,ONE		
PID: 000-24-6802	Ht(cm): 177.80 (02/08/1999)	
DOB: APR 3,1941 (60)	Wt(kg): 90.45 (02/08/1999)	
SEX: MALE		
+		
Allergies:		
Remote: ASPIRIN, NON-OPIOID ANALGESICS		
Adverse Reactions:		
Enter ?? for more actions		
EA Enter/Edit Allergy/ADR Data	PU Patient Record Update	
DD Detailed Allergy/ADR List	EX Exit Patient List	
Select Action: Quit// <Enter>		

Although the default option is “Quit” at the "Select Action" prompt, pressing the Enter key here quits the Patient Information screen and displays the Medication Profile. This Medication Profile includes any Non-VA Med orders documented via the CPRS GUI application.

Medication Profile	May 22, 2001 10:44:56	Page: 1 of 1
OPPATIENT16,ONE		
PID: 000-24-6802	Ht(cm): 177.80 (02/08/1999)	
DOB: APR 3,1941 (60)	Wt(kg): 90.45 (02/08/1999)	
		ISSUE LAST REF DAY
# RX #	DRUG	QTY ST DATE FILL REM SUP
-----ACTIVE-----		
1 503902	ACETAMINOPHEN 500MG TAB	60 A> 05-22 05-22 3 30
2 503886\$	DIGOXIN (LANOXIN) 0.2MG CAP	60 A> 05-07 05-07 5 30
-----PENDING-----		
3 AMPICILLIN 250MG CAP	QTY: 40	ISDT: 05-29 REF: 0
Enter ?? for more actions		
PU Patient Record Update	NO New Order	
PI Patient Information	SO Select Order	
Select Action: Quit//		

If a double question mark (??) is entered at the above “Select Action” prompt, the following hidden actions 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//	OTH OTH	
--- Other OP Actions ---			
-----example continues-----			

Typing in the letters **NO** creates a new order.

**Example: Entering a New Order (continued)**

```
Medication Profile          Mar 29, 2011@14:34:27          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:
RX PATIENT STATUS: SC LESS THAN 50%//
DRUG: ACETAMINOPHEN
  Lookup: GENERIC NAME
    1  ACETAMINOPHEN 160MG/5ML LIQUID          CN103          NATL FORM; 480 M
L/BT (NDC)
    2  ACETAMINOPHEN 325MG TAB                CN103          NATL FORM; DU: INCREMEN
TS OF 100 ONLY *** AUTOMED & SCRIPTPRO ***
    3  ACETAMINOPHEN 325MG/BUTALBITAL 50MG TAB          CN103          N/F          N
ATL N/F
    4  ACETAMINOPHEN 500MG TAB                CN103          NATL FORM; DU: INCREMEN
TS OF 100 ONLY*** AUTOMED & SCRIPTPRO ***
    5  ACETAMINOPHEN 650MG RTL SUPP          CN103          NATL FORM (IEN)

CHOOSE 1-5: 5  ACETAMINOPHEN 650MG RTL SUPP          CN103          NATL FORM (IEN
)

Now doing allergy checks.  Please wait...

Now Processing Enhanced Order Checks!  Please wait...

Press return to continue:

=====
*** THERAPEUTIC DUPLICATION(S) *** ACETAMINOPHEN 650MG RTL SUPP with

      Local RX#: 2054930
      Drug: ACETAMINOPHEN 500MG TAB (Active)
      SIG: TAKE ONE TABLET BY MOUTH EVERY FOUR HOURS AS NEEDED
      QTY: 180                      Days Supply: 30
      Processing Status: Not released locally (Window)
      Last Filled On: 03/29/11

Class(es) Involved in Therapeutic Duplication(s): Non-Narcotic
Analgesic/Antipyretic, Non-Salicylate
=====

Press Return to continue:
Discontinue Rx #2054930 ACETAMINOPHEN 500MG TAB Y/N ?
```

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.



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.

Please Note: More than one ingredient and more than one VA Drug Class may be associated with an Allergy/ADR.

See output below:

```
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))
```

After the Allergy/ADR warning is displayed, the system ask the user if they want to intervene.

If the user chooses to intervene after the Allergy/ADR warning is displayed, the intervention dialog will launch.

If the user chooses not to intervene after the Allergy/ADR warning is displayed, the order entry dialog will start.

**Example: 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:

.  
.

#### Example: 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):.

```

### Example: 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
.

```

### CPRS Order Checks

Three CPRS order checks have been added to the list of order checks performed within the Outpatient Pharmacy application.

- Aminoglycoside Ordered
- Dangerous Meds for Patient >64
- Glucophage –Lab Results

Please Note: See Appendix 5 for details on each order check as taken from CPRS (OERR) documentation.

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.

The following information is displayed for the Aminoglycoside Ordered order check:

- Order Check Name
- Text message displaying an estimated CrCL if available or a message that it is not.

```

***Aminoglycoside Ordered***

Aminoglycoside - est. CrCl: <VALUE> (CREAT: <result> BUN: <result>) [Est. CrCl
Based on modified Cockcroft-Gault equation using Adjusted Body Weight (if ht >
60 in)].

```

**-OR-**

```

***Aminoglycoside Ordered***

Aminoglycoside - est. CrCl: <Unavailable> (<Results Not Found>) [Est. CrCl
Based on modified Cockcroft-Gault equation using Adjusted Body Weight (if ht >
60

```

The following information is displayed for the Dangerous Meds for Patient >64 order check:

- Order Check Name
- Text message displaying a message if patient is greater than 64 and has been prescribed Amitriptyline

```
***Dangerous Meds for Patient >64***
```

```
Patient is <age>. Amitriptyline can cause cognitive impairment and loss of balance in older patients. Consider other antidepressant medications on formulary.
```

**-OR-**

Text message displaying a message if patient is greater than 64 and has been prescribed Chlorpropamide

```
***Dangerous Meds for Patient >64***
```

```
Patient is <age>. 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.
```

**-OR-**

Text message displaying a message if patient is greater than 64 and has been prescribed Dipyridamole

```
***Dangerous Meds for Patient >64***
```

```
Patient is <age>. 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.
```

The following information is displayed for the Glucophage Lab Results order check:

- Order Check Name
- Text message displaying a serum creatinine does not exist or it is greater than 1.5

```
***Metformin Lab Results***
```

```
Metformin - no serum creatinine within past 60 days.
```

**-OR-**

```
***Metformin Lab Results***
```

```
Metformin - Creatinine results: <creatinine greater than 1.5 w/in past <x> days>
```



## Examples of CPRS Order Checks

### Example: 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//
.
.
.
```

### Example: 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//

```

**Example: 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 do 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

.  
.  
.

### Example: 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 an 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//
.

```

### Example: 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
.
.
.
```

### Example: 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//
.
.
.

```

**Example: 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.

```

The list of available possible dosages shown after order checks is linked to the drug ordered. One of the dosages listed may be chosen or a different, free text dosage may be entered. Confirmation of the dosage is required and the value entered is displayed again to allow the user to confirm that it is correct.

```
Available Dosage(s)
  1. 250MG
  2. 500MG
  3. 1000MG

Select from list of Available Dosages, Enter Free Text Dose
or Enter a Question Mark (?) to view list: 3 500MG

You entered 500MG is this correct? Yes// <Enter> YES
```

For numeric dosages, the Dispense Units Per Dose value is calculated based on the strength of the dosage ordered divided by the strength of the medication ordered. The 500 mg Dosage Ordered will require two 250 mg capsules. The Dosage Ordered is re-displayed after the Dispense Units to allow the entry to be double-checked.

```
DISPENSE UNITS PER DOSE(CAPSULES): 2// <Enter> 2
Dosage Ordered: 500MG
```

If a Route has not been associated with the Dispense Drug, the default Route of PO or Oral will be displayed. A different Route can be entered or it can be deleted at this point if needed. The Route is not required to complete a prescription. If the abbreviation entered is in the MEDICATION ROUTES file, the entry will be expanded in the Sig based on the OUTPATIENT EXPANSION field.

```
ROUTE: PO// <Enter> ORAL PO MOUTH
or
ROUTE: PO// @ <Enter to delete>
```

A default schedule associated with the Orderable Item of the drug ordered is displayed at the “Schedule:” prompt. The default can be accepted or a different free text schedule can be entered. Free text entries cannot contain more than two spaces or be more than twenty characters long. Entries will be compared against a list of common abbreviations, first in the ADMINISTRATION SCHEDULE file and then in the MEDICATION INSTRUCTION file, and expanded if the entry matches. Any entry not found in the list of common abbreviations will be displayed in the Sig as entered.

```
Schedule: QID// (FOUR TIMES A DAY)
```

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



### Example: Using the Copy Action

Medication Profile		Jun 04, 2001 15:49:09		Page: 1 of 1		
OPPATIENT6,ONE PID: 000-13-5790 DOB: FEB 8,1922 (79)				Ht(cm): 175.26 (08/10/1999) Wt(kg): 75.45 (08/10/1999)		
#	RX #	DRUG	QTY	ST	ISSUE DATE	LAST REF DAY
-----ACTIVE-----						
1	503911\$	AMPICILLIN 250MG CAP	80	A	05-25	06-01 0 10
2	503901	LISINOPRIL 10MG TAB	150	A>	05-17	05-17 2 30
Enter ?? for more actions PU Patient Record Update NO New Order PI Patient Information SO Select Order Select Action: Quit// SO Select Order <i>[Or enter the order number here, e.g. 1]</i> Select Orders by number: (1-2): 1						

Actions in parentheses, like Refill in the example below, are not available for the order.

OP Medications (ACTIVE)		Jun 04, 2001 15:50:49		Page: 1 of 3	
OPPATIENT6,ONE PID: 000-13-5790 DOB: FEB 8,1922 (79)				Ht(cm): 175.26 (08/10/1999) Wt(kg): 75.45 (08/10/1999)	
Rx #: 503911\$					
(1) *Orderable Item: AMPICILLIN CAP,ORAL *** (N/F)***					
(2) Drug: AMPICILLIN 250MG CAP *** (N/F)***					
(3) *Dosage: 500 (MG)					
Verb: TAKE					
Dispense Units: 2					
Noun: CAPSULES					
*Route: ORAL					
*Schedule: QID					
(4) Pat Instructions: Prov Comments					
Provider Comments: Prov Comments					
SIG: TAKE TWO CAPSULES BY MOUTH FOUR TIMES A DAY PROV COMMENTS					
(5) Patient Status: OUTPT NON-SC					
(6) Issue Date: 05/25/01 (7) Fill Date: 06/01/01					
+ Enter ?? for more actions					
DC	Discontinue	PR	Partial	RL	Release
ED	Edit	RF	(Refill)	RN	Renew
Select Action: Next Screen//CO CO					

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

After “CO” is entered, the heading on the screen changes to “New OP Order (COPY)” and the available actions are limited to “Accept” or “Edit”.

### Example: Using the Copy Action (continued)

New OP Order (COPY)		Jun 04, 2001 15:51:32		Page: 1 of 2	
OPPATIENT6,ONE			<b>&lt;A&gt;</b>		
PID: 000-13-5790			Ht(cm): 175.26 (08/10/1999)		
DOB: FEB 8,1922 (79)			Wt(kg): 75.45 (08/10/1999)		
<p>Orderable Item: AMPICILLIN CAP,ORAL *** (N/F)***</p> <p>(1) Drug: AMPICILLIN 250MG CAP *** (N/F)***</p> <p>(2) Patient Status: OUTPT NON-SC</p> <p>(3) Issue Date: JUN 4,2001 (4) Fill Date: JUN 4,2001</p> <p>(5) Dosage Ordered: 500 (MG)</p> <p>Verb: TAKE</p> <p>Dispense Units: 2</p> <p>Noun: CAPSULES</p> <p>Route: ORAL</p> <p>Schedule: QID</p> <p>(6)Pat Instruction: Prov Comments</p> <p>SIG: TAKE TWO CAPSULES BY MOUTH FOUR TIMES A DAY PROV COMMENTS</p> <p>(7) Days Supply: 10 (8) QTY (CAP): 80</p> <p>+ Enter ?? for more actions</p> <p>AC Accept ED Edit</p> <p>Select Action: Next Screen// <b>AC</b> Accept</p>					

Once the copied order is accepted, the previous order information displays.

```
Duplicate Drug in Local Rx:

Rx #: 503911
Drug: AMPICILLIN 250MG CAP
SIG: TAKE TWO CAPSULES BY MOUTH FOUR TIMES A DAY PROV

COMMENTS

QTY: 80                      Refills remaining: 0
Provider: OPPROVIDER4,TWO    Issued: 05/25/01
Status: Active                Last filled on: 06/01/01
Processing Status: Released locally on 06/01/01@11:34:13 (Window)
                               Days Supply: 10

Discontinue Rx # 503911? YES

Duplicate Drug will be discontinued after the acceptance of the new order.

Now doing order checks. Please wait...
Nature of Order: WRITTEN// <Enter> W
WAS THE PATIENT COUNSELED: NO// <Enter> NO

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

-----example continues-----
```

The new order information is displayed and, once verified, the old order is discontinued.

Medication Profile		Nov 04, 2005@09:24:04		Page: 1 of 1		
OPPATIENT,FOUR						
PID: 000-01-1322P		Ht(cm): _____ (_____)				
DOB: JAN 13,1922 (83)		Wt(kg): _____ (_____)				
SEX: MALE						
#	RX #	DRUG	QTY	ST	ISSUE DATE	LAST REF DAY
-----ACTIVE-----						
OP Medications (ACTIVE)		Nov 04, 2005@09:24:17		Page: 1 of 3		
OPPATIENT,FOUR						
PID: 000-01-1322P		Ht(cm): _____ (_____)				
DOB: JAN 13,1922 (83)		Wt(kg): _____ (_____)				
Rx #: 100003852e						
(1) *Orderable Item: PREDNISONE TAB						
(2) CMOP Drug: PREDNISONE 5MG TAB						
(3) *Dosage: 20 (MG)						
Verb: TAKE						
Dispense Units: 1						
Noun: TABLET						
*Route: ORAL						
*Schedule: QID						
*Duration: 30 (DAYS)						
(4)Pat Instructions: WITH FOOD AVOIDING DAIRY FOODS						
SIG: TAKE ONE TABLET BY BY MOUTH FOUR TIMES A DAY FOR 30 DAYS						
WITH FOOD AVOIDING DAIRY FOODS						
(5) Patient Status: OPT NSC						
Enter ?? for more actions						
DC	Discontinue	PR	Partial	RL	Release	
ED	Edit	RF	Refill	RN	Renew	
Select Action: Next Screen// CO CO						

Once “Copy” is entered, the heading on the screen changes to “New OP Order (COPY)” and the available actions are limited to “Edit” or “Accept.”

New OP Order (COPY)		Nov 04, 2005@09:24:17		Page: 1 of 2	
OPPATIENT,FOUR					
PID: 000-01-1322P		Ht(cm): _____ (_____)			
DOB: JAN 13,1922 (83)		Wt(kg): _____ (_____)			
Orderable Item: PREDNISONE TAB					
(1) CMOP Drug: PREDNISONE 5MG TAB					
(2) Patient Status: OPT NSC					
(3) Issue Date: NOV 4,2005			(4) Fill Date: NOV 4,2005		
(5) Dosage Ordered: 20 (MG)					
Verb: TAKE					
Dispense Units: 1					
Noun: TABLET					
Route: ORAL					
Schedule: QID					
*Duration: 30 (DAYS)					
(6)Pat Instruction: WITH FOOD AVOIDING DAIRY FOODS					
SIG: TAKE ONE TABLET BY BY MOUTH FOUR TIMES A DAY FOR 30					
DAYS WITH FOOD AVOIDING DAIRY FOODS					
+ Enter ?? for more actions					
AC	Accept	ED	Edit		
Select Action: Next Screen// AC Accept					

-----  
Duplicate Drug in Local Rx:

Rx #: 100003852  
Drug: PREDNISON 5MG TAB  
SIG: TAKE ONE TABLET BY BY MOUTH FOUR TIMES A DAY FOR 30  
DAYS WITH FOOD AVOIDING DAIRY FOODS  
QTY: 30 Refills remaining: 5  
Provider: OPPROVIDER4,TWO Issued: 11/04/05  
Status: Active Last filled on: 11/04/05  
Processing Status: Released locally on 11/04/05@11:34:13 (Mail)  
Days Supply: 30  
-----

Discontinue Rx # 100003852? **YES**

Duplicate Drug will be discontinued after the acceptance of the new order.

Now doing order checks. Please wait...

Nature of Order: WRITTEN// **<Enter>** W  
WAS THE PATIENT COUNSELED: NO// **YES**  
WAS COUNSELING UNDERSTOOD: NO// **YES**

Do you want to enter a Progress Note? No// **<Enter>** NO

Rx # 100003853 11/04/05  
OPPATIENT,FOUR #30  
TAKE ONE TABLET BY BY MOUTH FOUR TIMES A DAY FOR 30 DAYS WITH FOOD  
AVOIDING DAIRY FOODS

PREDNISON 5MG TAB  
OPPROVIDER4,TWO OPPHARMACIST4,THREE  
# of Refills: 5

Is this correct? YES// **YES...**  
Reversing prescription 100003852.

Claim Status:  
Reversing and Rebilling a previously submitted claim...  
Reversing...  
IN PROGRESS-Waiting for transmit  
IN PROGRESS-Transmitting  
IN PROGRESS-Waiting to process response  
E REVERSAL ACCEPTED

-Rx 100003852 has been discontinued...

Prescription 100003853 successfully submitted to ECME for claim generation.

Claim Status:  
IN PROGRESS-Waiting to start  
IN PROGRESS-Waiting for packet build  
IN PROGRESS-Waiting for transmit  
IN PROGRESS-Transmitting  
E PAYABLE

## Discontinued by a Foreground Pharmacy Process

When a CMOP prescription with a status of Transmitted or Retransmitted is discontinued by a foreground Pharmacy process due to a duplicate drug scenario that would trigger the duplicate to be discontinued, then the Processing Status field of the duplicate drug message is highlighted to alert the user.

```
-----  
Duplicate Drug in Local Rx:  
  
      Rx #: 123456789  
      Drug: A AND Z OINTMENT  
      SIG: APPLY 1 TUBE TO AFFECTED AREA TWICE A DAY  
      QTY: 1                      Refills remaining: 5  
      Provider: OPPROVIDER, PROV          Issued: 11/27/09  
      Status: Active                      Last filled on: 11/27/09  
      Processing Status: Transmitted to CMOP on 11/27/09  
                                      Days Supply: 5  
-----
```

In the above example, the line “Processing Status: Transmitted to CMOP on 11/27/09” is bold.

## List One Patient's Archived Rx's

### [PSO ARCHIVE LIST RX'S]

This option shows the basic patient demographics and the prescription numbers and dates of archiving for archived prescriptions for this patient.

## Manual Print of Multi-Rx Forms

### [PSO LM MULTI-RX PRINT]

This option allows the user to reprint the Multi-Rx Refill Request form on laser label stock without having to reprint the entire prescription labels. The user will receive a system confirmation that this form has been queued to print.

Example: Manually Printing Multi-Rx Forms

```
Select Rx (Prescriptions) Option: MANual Print of Multi-Rx Forms  
  
Enter patient to reprint Multi-Rx refill form for: OPPATIENT2,ONE  
  
Select LABEL DEVICE: LEX2  LEX2$PRT  Bay Pines  
  
Multi-Rx form queued to print
```

## Reprint an Outpatient Rx Label

### [PSO RXRPT]

The label reprint function allows a single label or many copies of the same label to be reproduced. When the patient is enrolled in ScripTalk®, a message is displayed to the user indicating this and prompting the user to use the ScripTalk® label for the prescription bottle.

Example: Reprinting an Outpatient Rx Label

```
Select Rx (Prescriptions) Option: REPRINT AN OUTPATIENT RX LABEL

Reprint Prescription Label: 400693          ADHESIVE TAPE WATERPROOF 1IN ROLL
Patient is a ScripTalk patient. Use ScripTalk label for prescription bottle.

Number of Copies? : (1-99): 1// <Enter>
Print adhesive portion of label only? N// <Enter> 0
Comments:

Rx # 400693          06/27/03          #1
OPPATIENT16,ONE

AS DIR ON AFFECTED AREA

ADHESIVE TAPE WATERPROOF 1IN ROLL
OPPROVIDER30,TWO          OPPHARMACIST4,THREE
# of Refills: 2
```

## Signature Log Reprint

### [PSO SIGLOG REPRINT]

This option allows the user to reprint the Signature Log for a prescription. The system will prompt for a prescription number and printer device. The user will receive a system confirmation that this log has been queued to print.

Example: Reprinting a Signature Log

```
Select Rx (Prescriptions) Option: Signature Log Reprint

Reprint Signature Log for Prescription: 100002277A          PREDNISONE 20MG S.T.

Select LABEL DEVICE: LEX2  LEX2$PRT  Bay Pines

Signature Log Reprint queued
```

## View Prescriptions

### [PSO VIEW]

View the most complete information available for a specific prescription. The activity log lists the date, reason, prescription reference (Rx Ref), the initiator of the activity, and comments. The label log lists the date, prescription (Rx Ref), the person who printed it, and comments. Prescriptions with a deleted status cannot be viewed.

# Chapter 21: Verifying Prescriptions

---

This chapter describes the option and methods used for verifying prescriptions.

## Verification

### [PSO VER]

The *Verification* menu is used by pharmacists 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. Once 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 cannot be canceled, edited, or deleted through the usual options. If a non-verified prescription is autocanceled on admission, it can be reinstated, but it returns to the non-verified status.

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.

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.

## 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:
```



## Chapter 22: 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 23: 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.
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	<p>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.</p> <p>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)</p>

# 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>DoD</b>	Department of Defense
<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>ETC</b>	Enhanced Therapeutic Classification
<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>HDR-Hx</b>	Health Data Repository Historical
<b>HDR-IMS</b>	Health Data Repository- Interim Messaging Solution
<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>Acronym/Term</b>	<b>Definition</b>
<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>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).

Acronym/Term	Definition
<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.
<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>Acronym/Term</b>	<b>Definition</b>
<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>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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