

# INPATIENT MEDICATIONS

## **NURSE'S USER MANUAL**

Version 5.0 December 1997

(Revised October 2016)

(This page included for two-sided copying.)

# Revision History

Date	Revised	Patch	Description
	Pages	Number	•
10/2016		PSJ*5*317	Updated Revision History and Table of Contents
	<u>9</u>		Added Hidden action - 'PD' action.
	<u>10</u>		Added Drug IEN and PADE Stock Item Indicator
	<u>25</u>		Added Section 4.1.9 PADE Main Menu Option.
	10 25 51		Added PADE Stock and Ward Stock Items Added Inpatient Order Entry profile - 'PD' flag.
	<u>61</u>		Added inpatient Order Entry profile - 1 D mag.
			(S. Soldan PM; R.Walters, Tech Writer)
08/2016	i-v	PSJ*5*315	Updated Revision History and Table of Contents
	24		Added text for new Duration of Administration prompt to Inpatient Order Entry option
	128		Added text for requesting additional user activity for entering specific information in the new Duration of Administration prompt
			(D. Connolly, PM; E. Phelps, Tech Writer)
06/2016	i.	PSJ*5*313	Update Revision History and Table of Contents
	88-89		Added language to Section 4.5.7 re changes to IV Additive and Orderable Item. Added example: Multiple items for an Orderable Item. Added Example: Multiple IV Additives for same order with multiple items attached to the Orderable Item.  Updated Revison History and TOC (A.Zak, Analyst, L. Ramos, Tech Writer)
04/2016	i,v-vi	PSJ*5*281	Update Revision History
	19, 20,		Update Table of Contents
	28, 47,		Update screen captures
	56, 65,		Add OI & DD Enh Order Check
	66, 67		Moved content from sections 4.10.1 - 4.10.4 to section 4.9
	93, 94,		
	95, 96,		Add Allergy Order Check
	97, 98,		Add Clinical Reminders
	99, 100,		Update Glossary
	101, 102,		Update Index
	103, 104,		(H. Cross, PM; S. Heiress, M.Danneeru, Tech Writer)
	105, 106,		
	107, 108,		
	109, 110,		
	111, 112,		
	113, 114,		

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Date	Revised Pages	Patch Number	Description
	115, 116,	rumber	
	117, 118,		
	117, 116, 119, 120,		
	121, 122, 123		
	185,186		
	188, 195, 197		
	197		
05/2015	69	PSJ*5*259	Added verbiage to section 4.5.3 Verify
			(A. Sessler, PM; G. Werner, Tech Writer)
03/2014	All	PSJ*5*252	Renumbered all pages & format heading alignment
	i-iv, v-vi		Update Revision History and Table of Contents
	1		Added to the Related Manuals
	40-41		Added Bottle
	47		Update screen
	50, 80		Added reference to Order Checks
	107		Added 4.10.4. Dosing Order Checks
	98, 102,		Update or delete content
	163-164		
	173, 174		Update Glossary
	179-181		Update Index
	100	PSJ*5*297	Updated the last paragraph
		Remedy	
	85-86	Ticket	Added text for placing orders for CPRS Inpatient Medications
		#844215	(C. Powell, PM; S. Heiress, Tech Writer)
12/2013	i-iv, 29, 29a-	PSJ*5*279	Added IV Bag Logic, Infusion Rate T@0, Pre-Exchange
	29b, 48, 48a-		Report, and Missing Dose Request Printer functionalities.
	48d, 74m,		Updated Glossary and Index. (R. Santos, PM; B. Thomas, Tech Writer)
	74x, 127, 127a-127b,		(K. Santos, I W. D. Thomas, Teen Wilter)
	139-142		
04/2013	i-x, 11, 12,	PSJ*5*275	Added Clinic Orders functionality
2 2010	13-14, 14a,		(R. Singer, PM; B. Thomas, Tech Writer)
	16d-16f,		
	74m-74x, 77,		
	98, 100-101,		
01/2012	140-141	DOIMENCE	TY 1 ( 1D · · · TY )
01/2013	i	PSJ*5*260,	Updated Revision History
	v	PSJ*5*268	Updated Table of Contents
	5		Fix text wrapping (Page 1 of 1) in screen
	vii, 9, 11		Added new option Check Drug Interaction & Display Drug

Date	Revised Pages	Patch Number	Description
			Allergies
	10, 20, 140		Change label for OCI
	16, 16a, 16c,		Added Creatinine Clearance (CrCl) and Body Surface Area
	26, 40, 40a,		(BSA)
	40c, 41-42,		
	52, 57, 67,		
	71, 74a, 74c,		
	74d, 77, 99,		
	104, 106,		
	107, 111, 114		
	73a-73d		Added new section for Check Drug Interactions function
	74f-74f1		Added Clinic Orders information
	74f2		Drug allergy update
	124		Added Hidden Action Check Interactions & Display Drug
			Allergies, and update OCI
	125-138		Updated Glossary
	139-142		Updated Index
			(D.McCance, PM; S. Heiress, Tech Writer)
09/2012	i-iii, 12, 12a-	PSJ*5*267	Added No Allergy Assessment logic
	12b,		
	14, 14a-14b,		
	16d-16f,		Updated Special Instructions/Other Print Info
	24b-24d, 26-		
	27, 27a-27b,		(R. Singer, PM; B. Thomas, Tech Writer)
	30, 30a-30b,		
	59, 59a-59b		
01/0010	131	DOI: II. E. II. O. E. A	
01/2012	i-iv	PSJ*5*254	W. 1 . 177.11 . CO
	v-vi		Updated Table of Contents
	10		Added Order Checks/Interventions (OCI) to "Hidden
	20		Actions" section Defined OCI Indicator
	23		Updated Schedule Type text
	35		Updated text under Interventions Menu
	47, 53, 60		Updated Pharmacy Interventions for Edit, Renew, and Finish
	.,, 55, 55		orders
	74d		Added note to Drug-Drug Interactions
	74f-74g		Added note to Drug-Allergy Interactions
	74k		Added "Display Pharmacist Intervention" section
	741		Defined Historical Overrides/Interventions
	124, 127,		Updated Glossary
	131, 133, 134		
	137-140		Updated Index
			(R. Singer, PM; C. Bernier, Tech Writer)
09/2011	65	PSJ*5*235	Updated 'Note' section regarding Expected First Dose
			Scott PM, G. Werner Tech Writer)

Date	Revised Pages	Patch Number	Description
07/2011	Cover Page	PSJ*5*243	Removed the acronym PD on Cover page
			Update Revision History
	i, 16		Update Index
	140		Revised the existing display in the <i>Non-Verified/Pending</i> Orders [PSJU VBW] option from a pure alphabetic listing of
			patient names, to a categorized listing by priority. Added
			"priority" to Index.
04/2011	i	PSJ*5*181	(N. Goyal, PM; E. Phelps/John Owczarzak, Tech Writers) Updated Revision History
04/2011	v-vi	133 3 101	Updated Table of Contents
	12		New Example: Patient Information Screen
	13		New Example: Non-Verified/Pending Orders
	15-16d		Updated: Example: Short Profile, HOURS OF RECENTLY
	13 100		DC/EXPIRED field (#7) and INPATIENT WARD
			PARAMETERS file (#59.6) information, and Example: Profile.
	18		Updated "Select DRUG:"
	20		New Example: Dispense Drug with Possible Dosages and
	20		New Example: Dispense Drug with Local Possible Dosages
	26-27		New Example: New Order Entry
	33-34b		New Example: New Order Entry (Clinic Location)
	35-39		New Examples of all the New Interventions
	40-40d		Updated the View Profile and New Example: Profile View
	46		New Medication Profile Discontinue Type Codes
	67		New Example: Flagged Order
	71		New Example: Inpatient Profile
	72-73		Updated Order Checks
	74		New Example: Local Outpatient Order Display and New Example: Remote Outpatient Order Display
	74a-74c		Duplicate Therapy
	74d-74f		Drug-Drug Interaction
	74f-74g		CPRS Order Checks
	105		Updated Example: Authorized Absence/Discharge Summary
			(continued)
	119-120		CPRS Order checks: How they work
	121-122		Error Messages
	123-136		Glossary - fix page numbering
	137-140		Index - new entries and fix page numbering
0.6/2010		Darie	(C.Flegel, S. Heiress, Tech Writer)
06/2010	i-vi, 22-23,	PSJ*5*113	Added new Order Validation Requirements.
	23a-23b, 24,		Removed Duplicate Order Check Enhancement functionality,
	24a-24b,		PSJ*5*175 (removed in a prior patch).
	74a-74b,		
	74e-74f,		Miscellaneous corrections.
	133, 136- 137		Wiscentaneous corrections.
			(R. Singer, DM, B. Thomas, Tech Writer)
	77, 100, 103, 108-110,		( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
	100-110,		

Date	Revised Pages	Patch Number	Description
	112, 114		
12/2009	60a, 60b vi	PSJ*5*222	Added description of warning displayed when finishing a Complex Unit Dose Order with overlapping admin times. Corrected page numbers in Table of Contents. (E. Wright, PM; R. Sutton, Tech Writer)
07/2009	48	PSJ*5*215	When Dispense Drug is edited for an active Unit Dose, an entry is added to the activity log.  (G. Tucker, PM; S. B. Scudder, Tech Writer)
02/2009	125	PSJ*5*196	Update to IV Duration (A. Scott, PM; G. Werner, Tech Writer)
08/2008	19-37, 58- 59, 65, 134	PSJ*5*134	Inpatient Medication Route changes added, plus details on IV type changes for infusion orders from CPRS, pending renewal functions, and expected first dose changes.  (S. Templeton, PM; G. O'Connor, Tech Writer)
10/2007	iv, 74a-74d	PSJ*5*175	Modified outpatient header text for display of duplicate orders.  Added new functionality to Duplicate Drug and Duplicate Class definitions.
	5, 12, 16- 17, 26, 34-38, 41-42, 72-73	PSJ*5*160	Modifications for remote allergies, to ensure all allergies are included when doing order checks using VA Drug Class; Analgesic order checks match against specific class only; check for remote data interoperability performed when entering patient's chart; and list of remote allergies added to Patient Information screen.
			(R. Singer, PM; E. Phelps/C. Varney, Tech Writer)
07/2007	79a-79b, 86a-86b, 92a- 92b	PSJ*5*145	On 24-Hour, 7-Day, and 14-Day MAR Reports, added prompt to include Clinic Orders when printing by Ward or Ward Group. Also added prompt to include Ward Orders when printing by Clinic or Clinic Group.  (R. Singer, PM; E. Phelps, Tech. Writer)
05/2007	24	PSJ*5*120	Modified Inpatient Medications V. 5.0 to consider the duration the same way as all other stop date parameters, rather than as an override.  (R. Singer, PM; E. Phelps, Tech. Writer)
12/2005	1, 73-74b	PSJ*5*146	Remote Data Interoperability (RDI) Project: Removed document revision dates in Section 1. Introduction. Updated Section 4.9. Order Checks, to include new functionality for remote order checking.  (E. Williamson, PM; M. Newman, Tech. Writer)
01/2005	All	PSJ*5*111	Reissued entire document to include updates for Inpatient Medications Orders for Outpatients and Non-Standard Schedules.  (S. Templeton, PM, R. Singer, PM, M. Newman, Tech. Writer)

(This page included for two-sided copying.)

## **Table of Contents**

1	In	trod	uction	1
2	Oı	rient	ation	3
3			anager	
	3.1		ng List Manager	
	3.2		den Actions	
4	Oı	rder	Options	12
_	4.1		ler Entry	
	4.2		1-Verified/Pending Orders	
	4.3		atient Order Entry	
	4.4	_	DE Main Menu Option	
	4.5		ient Actions	
		.5.1	Patient Record Update	
		.5.1	New Order Entry	
		.5.3	Detailed Allergy/ADR List	
		.5.4	View Profile	
	4	.5.5	Patient Information	
	4	.5.6	Select Order	62
	4.6	Ord	ler Actions	64
	4	.6.1	Discontinue	64
	4	.6.2	Edit	66
	4	.6.3	Verify	73
	4	.6.4	Hold	74
	4	.6.5	Renew	
		.6.6	Activity Log	
		.6.7	Finish	
		.6.8	Flag	
		.6.9	Speed Actions	
	4.7		continue All of a Patient's Orders	
	4.8	Hol	d All of a Patient's Orders	92
	4.9	Inp	atient Profile	93
	4.10	Ord	ler Checks	95
	4	.10.1	Clinic Orders	120
		.10.2	Order Validation Checks	
		.10.3	1 2	
		.10.4		
	4.11	Che	eck Drug Interactions	127
	4.12	Pha	rmacy - Edit Clinic Med Orders Start Date/Time	129

	4.12.1	Search Med Orders Date Entry	130
	4.12.2	· · · · · · · · · · · · · · · · · · ·	
	4.12.3		
	4.12.4	J	
	4.12.5	$\epsilon$	
	4.12.6	•	
	4.12.7	1	
	4.12.8	$\mathcal{E}$ 1 $\mathcal{I}$ $\mathcal{E}$	
_	4.12.9		
5		enance Options	
		t Inpatient User Parameters	
	5.2 Edi	t Patient's Default Stop Date	141
6	Outpu	t Options	143
	6.1 PA	tient Profile (Unit Dose)	143
	6.2 Rej	oorts Menu	144
	6.2.1	24 Hour MAR	144
	6.2.2	7 Day MAR	152
	6.2.3	14 Day MAR	
	6.2.4	Action Profile #1	
	6.2.5	Action Profile #2	
	6.2.6 6.2.7	AUthorized Absence/Discharge Summary Extra Units Dispensed Report	
	6.2.8	Free Text Dosage Report	
	6.2.9	INpatient Stop Order Notices	
	6.2.10	1 1	
	6.2.11		
		gn Labels (Unit Dose)	
		pel Print/Reprint	
7	Inquir	ries Options	181
	_	spense Drug Look-Up	
		ndard Schedules	
8		Order Checks: How They Work	
J		RS Order Checks Introduction	
		der Check Data Caching	
9			
7		Messages or Information	
1Λ			
10		nry	
11	Indov		201

Since the documentation is arranged in a topic oriented format and the screen options are not, a menu tree is provided below for the newer users who may need help finding the explanations to the options.

### **Menu Tree**

## **Topic-Oriented Section**

	Align Labels (Unit Dose)	Output Options
	Discontinue All of a Patient's Orders	Order Options
EUP	Edit Inpatient User Parameters	Maintenance Options
	Hold All of a Patient's Orders	Order Options
IOE	Inpatient Order Entry	Order Options
IPF	Inpatient Profile	Order Options
	Check Drug Interaction	Order Options
	INQuiries Menu	Inquiries Option
	Dispense Drug Look-Up	Inquiries Option
	Standard Schedules	Inquiries Option
	Label Print/Reprint	Output Options
	Non-Verified/Pending Orders	Order Options
	Order Entry	Order Options
	PAtient Profile (Unit Dose)	Output Options
	Reports Menu	Output Options
	24 Hour MAR	Output Options
	7 Day MAR	Output Options
	14 Day MAR	Output Options
	Action Profile #1	Output Options
	Action Profile #2	Output Options
	AUthorized Absence/Discharge	Output Options
	Summary	
	Extra Units Dispensed Report	Output Options
	Free Text Dosage Report	Output Options
	INpatient Stop Order Notices	Output Options
	Medications Due Worksheet	Output Options
	Patient Profile (Extended)	Output Options

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### 1 Introduction

The Inpatient Medications package provides a method of management, dispensing, and administration of inpatient drugs within the hospital. Inpatient Medications combines clinical and patient information that allows each medical center to enter orders for patients, dispense medications by means of Pick Lists, print labels, create Medication Administration Records (MARs), and create Management Reports. Inpatient Medications also interacts with the Computerized Patient Record System (CPRS) and the Bar Code Medication Administration (BCMA) packages to provide more comprehensive patient care.

This user manual is written for the Nursing Staff, the Automated Data Processing Application Coordinator (ADPAC), and other healthcare staff for managing, dispensing, and administering medications to the patients within the hospital. The main text of the manual outlines patients' ordering options for new and existing orders, editing options, output options, and inquiry options.

The Inpatient Medications documentation is comprised of several manuals. These manuals are written as modular components and can be distributed independently and are listed below.

Nurse's User Manual V. 5.0
Pharmacist's User Manual V. 5.0
Supervisor's User Manual V. 5.0
Technical Manual/Security Guide V. 5.0
Pharmacy Ordering Enhancements (POE) Phase 2 Release Notes V. 1.0
Pharmacy Ordering Enhancements (POE) Phase 2 Installation Guide V. 1.0
Dosing Order Check User Manual
VistA to MOCHA Interface Document

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### 2 Orientation

Within this documentation, several notations need to be outlined.

• Menu options will be italicized.

**Example:** *Inpatient Order Entry* indicates a menu option.

• Screen prompts will be denoted with quotation marks around them.

**Example:** "Select DRUG:" indicates a screen prompt.

• Responses in bold face indicate what the user is to type in.

**Example:** Printing a MAR report by group (**G**), by ward (**W**), clinic (**C**), or patient (**P**).

Text centered between arrows represents a keyboard key that needs to be pressed in order for
the system to capture a user response or move the cursor to another field. <Enter> indicates
that the Enter key (or Return key on some keyboards) must be pressed. <Tab> indicates that
the Tab key must be pressed.

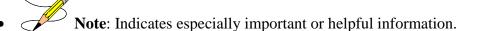
**Example:** Press **<Tab>** to move the cursor to the next field.

Press **<Enter>** to select the default.

• Text depicted with a black background, displayed in a screen capture, designates reverse video or blinking text on the screen.

### **Example:**

(9) Admin Times: 01-09-15-20
\*(10) Provider: PSJPHARMACIST,ONE



• Options are locked with a particular security key. The user must hold the particular security key to be able to perform the menu option.

**Example:** When the nurse holds the PSJ RNURSE key, it will be possible to take any available actions on selected Unit Dose or IV orders and verify non-verified orders.

• Some of the menu options have several letters that are capitalized. By entering in the letters and pressing **Enter**>, the user can go directly to that menu option (the letters do not have to be entered as capital letters).

**Example:** From the *Unit Dose Medications* option: the user can enter **INQ** and proceed directly into the *INQuiries Menu* option.

- ?, ??? One, two, or three question marks can be entered at any of the prompts for on-line help. One question mark elicits a brief statement of what information is appropriate for the prompt. Two question marks provide more help, plus the hidden actions and three question marks will provide more detailed help, including a list of possible answers, if appropriate.
- ^ Caret (up arrow or a circumflex) and pressing **<Enter>** can be used to exit the current option.

## 3 List Manager

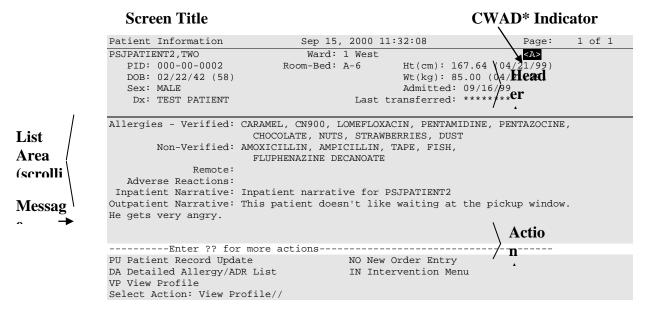
The new screen, which was designed using List Manager, has dramatically changed from the previous version.

This new screen will give the user:

- More pertinent information
- Easier accessibility to vital reports and areas of a patient's chart the user may wish to see.

Please take the time to read over the explanation of the screen and the actions that can now be executed at the touch of a button. This type of preparation before using List Manager is effective in saving time and effort.

## **Inpatient List Manager**



<sup>\*</sup> Crises, Warnings, Allergies, and Directives (CWAD)

**Screen Title:** The screen title changes according to what type of information List Manager is displaying (e.g., Patient Information, Non-Verified Order, Inpatient Order Entry, etc).

**CWAD Indicator:** This indicator will display when the crises, warnings, allergies, and directives information has been entered for the patient. (This information is entered via the Text Integration Utilities (TIU) package.) When the patient has Allergy/Adverse Drug Reaction (ADR) data defined, an "<A>" is displayed to the right of the ward location to alert the user of the existence of this information.

**Note:** This data may be displayed using the Detailed Allergy/ADR List action). Crises, warnings, and directives are displayed respectively, "<C>","<W>","<D>". This data may be displayed using the CWAD hidden action. Any combination of the four indicators can display.

**Header Area:** The header area is a "fixed" (non-scrollable) area that displays the patient's demographic information. This also includes information about the patient's current admission. The status and type of order are displayed in the top left corner of the heading, and will include the priority (if defined) for pending orders.

**List Area**: (scrolling region): This is the section that will scroll (like the previous version) and display the information that an action can be taken on. The Allergies/Reactions line includes non-verified and verified Allergy/ADR information as defined in the Allergy package. The allergy data is sorted by type (DRUG, OTHER, FOOD). If no data is found for a category, the heading is displayed as "Allergies/Reactions: No Allergy Assessment". The Inpatient and Outpatient Narrative lines may be used by the inpatient pharmacy staff to display information specific to the current admission for the patient.

**Message Window:** This section displays a plus sign (+), if the list is longer than one screen, and informational text (i.e., Enter ?? for more actions). If the plus sign is entered at the action prompt, List Manager will "jump" forward to the next screen. The plus sign is only a valid action if it is displayed in the message window.

**Action Area:** The list of valid actions available to the user display in this area of the screen. If a double question mark (??) is entered at the "Select Action:" prompt, a "hidden" list of additional actions that are available will be displayed.

### 3.1 Using List Manager

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

- For Inpatient Medications, the List Manager gives the user the following:
- Capability to browse through a list of orders.
- Capability to take action(s) against those items.

- Capability to print MARs, labels, and profiles from within the *Inpatient Order Entry* option.
- Capability to select a different option than the option being displayed.

#### 3.2 Hidden Actions

A double question mark (??) can be entered at the "Select Action:" prompt for a list of all actions available. Typing the name(s) or synonym(s) at the "Select Action:" prompt enters the actions.

The following is a list of generic List Manager actions with a brief description. The synonym for each action is shown, followed by the action name and description.

<b>Synonym</b>	<u>Action</u>	<b>Description</b>
+	Next Screen	Moves to the next screen
-	Previous Screen	Moves to the previous screen
UP	Up a Line	Moves up one line
DN	Down a line	Moves down one line
FS	First Screen	Moves to the first screen
LS	Last Screen	Moves to the last screen
GO	Go to Page	Moves to any selected page in the list
RD	Re Display Screen	Redisplays the current screen
PS	Print Screen	Prints the header and the portion of the list currently displayed
PT	Print List	Prints the list of entries currently displayed
SL	Search List	Finds selected text in list of entries
Q	Quit	Exits the screen
ADPL	Auto Display (On/Off)	Toggles the menu of actions to be displayed/not displayed automatically
>	Shift View to Right	Shifts the view on the screen to the right
<	Shift View to Left	Shifts the view on the screen to the left

The following is a list of Inpatient Medications specific hidden actions with a brief description. The synonym for each action is shown followed by the action name and description.

<b>Synonym</b>	<u>Action</u>	<u>Description</u>
MAR	MAR Menu	Displays the MAR Menu
24	24 Hour MAR	Shows the 24 Hour MAR
7	7 Day MAR	Shows the 7 Day MAR
14	14 Day MAR	Shows the 14 Day MAR
MD	Medications Due Worksheet	Shows the Worksheet

Synonym	Action	<u>Description</u>
LBL	Label Print/Reprint	Displays the Label Print/Reprint Menu
ALUD	Align Labels (Unit Dose)	Aligns the MAR label stock on a printer
LPUD	Label Print/Reprint	Allows print or reprint of a MAR label
ALIV	Align Labels (IV)	Aligns the IV bag label stock on a printer
ILIV	Individual Labels (IV)	Allows print or reprint of an IV bag label
SLIV RSIV	Scheduled Labels (IV)	Allows print of the scheduled IV bag label
KSIV	Reprint Scheduled Labels (IV)	Allows reprint of scheduled IV bag labels
OTH	Other Pharmacy Options	Displays more pharmacy options
PIC	Pick List Menu	Displays the Pick List Menu
EN	Enter Units Dispensed	Allows entry of the units actually dispensed for a Unit Dose order
EX	Extra Units Dispensed	Allows entry of extra units dispensed for a Unit Dose order
PL	Pick List	Creates the Pick List report
RRS	Report Returns	Allows the entry of units returned for a Unit
		Dose order
RPL	Reprint Pick List	Allows reprint of a pick list
SND	Send Pick list to ATC	Allows a pick list to be sent to the ATC
		(Automated Tablet Counter)
UP	Update Pick List	Allows an update to a pick list
RET	Returns/Destroyed Menu	Displays the Returns/Destroyed options
RR	Report Returns	Allows entry of units returned for a Unit
		Dose order
RD	Returns/Destroyed Entry (IV)	Allows entry of units returned or destroyed for an order
PRO	Patient Profiles	Displays the Patient Profile Menu
IP	Inpatient Medications Profile	Generates an Inpatient Profile for a patient
IV	IV Medications Profile	Generates an IV Profile for a patient
UD	Unit Dose Medications Profile	Generates a Unit Dose Profile for a patient
OP	Outpatient Prescriptions	Generates an Outpatient Profile for a patient
AP1	Action Profile #1	Generates an Action Profile #1
AP2	Action Profile #2	Generates an Action Profile #2
EX	Patient Profile (Extended	Generates an Extended Patient Profile
CWAD	CWAD Information	Displays the crises, warnings, allergies, and directives information on a patient
DA	Display Drug Allergies	Displays signs/symptoms of an allergy associated to a med order
CK	Check Interaction	Allows a user to perform order checks against the patient's active medication profile with or without a prospective drug.

The following actions are available while in the Unit Dose Order Entry Profile.

<b>Synonym</b>	<b>Action</b>	<b>Description</b>
DC	Speed Discontinue	Speed discontinue one or more orders (This is also available in the <i>Inpatient Order Entry</i> and <i>Order Entry (IV) options.</i> )
RN	Speed Renew	Speed renewal of one or more orders
SF	Speed Finish	Speed finish one or more orders
SV	Speed Verify	Speed verify one or more orders

The following actions are available while viewing an order.

<b>Synonym</b>	<u>Action</u>	<u>Description</u>
СО	Copy an order	Allows the user to copy an active, discontinued, or expired Unit Dose order
DIN	Drug Restriction/Guideline Information	Displays the Drug Restriction/Guideline Information for both the Orderable Item and Dispense Drug
I	Mark Incomplete	Allows the user to mark a Non-Verified Pending order incomplete
JP	Jump to a Patient	Allows the user to begin processing another patient
N	Mark Not to be Given	Allows the user to mark a discontinued or expired order as not to be given
OCI	Overrides/Interventions	Indicates there are associated CPRS Overrides and/or Pharmacist Interventions. When the OCI displays on the Order Detail screen, the user can type "OCI" to display associated CPRS Provider Overrides and/or Pharmacist Interventions.

From the Inpatient Order Entry screen, the user can access PADE Activity via the PD action, which displays all of the PADE transactions.

#### Example: Hidden Action (PD PADE Activity) Inpatient Order Entry screen display

```
CAPTOPRIL TAB

Give: 75MG PO TID

LEVOTHYROXINE TAB

Give: 0.025MG BY MOUTH *Q8H

Enter ?? for more actions

PU Patient Record Update

NO New Order Entry

Enter RETURN to continue or '^' to exit:

The following actions are also available:

+ Next Screen

PS Print Screen

OTH Other Pharmacy Options
```

-	Previous Screen	PT	Print List	DC	Speed Discontinue	
UP	Up a Line	SL	Search List	RN	Speed Renew	
DN	Down a Line	Q	Quit	SF	Speed Finish	
FS	First Screen	ADPL	<pre>Auto Display(On/Off)</pre>	SV	Speed Verify	
LS	Last Screen	MAR	MAR Menu	CWAD	CWAD Information	
GO	Go to Page	LBL	Label Print/Reprint	CK	Check Interactions	
RD	Re Display Screen	JP	Jump to a Patient	IN	Intervention Menu	
PD	PADE Activity					
Enter RETURN to continue or '^' to exit:						

### **Drug IEN and PADE Stock Item Indicator**

From Hidden Actions, and from the VistA Pick List, the user can view the drug name from the drug Internal Entry Number (IEN) field.

Also, if the medication listed is a PADE stock item, the word "PADE" will be added to the VistA Pick List report.

Example: Pick List with Drug IEN and PADE stock item indicator

` '	LIST REPORT	03/18/15 11:19	
	1 through 03/20/15 15:00	Page: 12 )	
Team: ** N/F **			
Room-Bed Patient	0.7	Units Units	
Medication	81	U/D Needed Disp'd	
======================================	ARD: BCMA ========	=======================================	
422-1 IAPATIENT, ONE (1234):			
ASCORBIC ACID 250MG TAB (1353) Give: 250MG PO DAILY	C PADE ATC	1 1 1	
Start: 03/13/15 14:02	Stop: 04/12/15 14:00	10	
Start: 03/13/13 14.02	στορ. 04/12/13 14.00		
HEPARIN 5000 UNITS/ML INJ 1ML (154) Give: 5000UNIT/1ML SC Q8H		<del></del>	
0+ 00/40/45 44-04		14-22	
Start: 03/13/15 14:01	Stop: 04/12/15 14:00		
LEVOTHYROXINE 0.025MG (989)  Give: 0.025MG BY MOUTH DAI		1 1	
		0900	
Start: 03/18/15 10:25	Stop: 06/26/15 24:00		
MORPHINE SULFATE 10MG SYRINGE (322)	D DADE	1 2	
Give: 10MG/1ML IV BID PRN		1 2	
Start: 03/18/15 10:26	Stop: 06/26/15 24:00		

(This page included for two-sided copying.)

## 4 Order Options

The *Unit Dose Medications* option is used to access the order entry, patient profiles, and various reports, and is the main starting point for the Unit Dose system.

#### **Example: Unit Dose Menu**

```
Select Unit Dose Medications Option: ?
          Align Labels (Unit Dose)
          Discontinue All of a Patient's Orders
   ECO
         Edit Clinic Med Orders Start Date/Time
   EUP
         Edit Inpatient User Parameters
   ESD
         Edit Patient's Default Stop Date
         Hold All of a Patient's Orders
   TOE
         Inpatient Order Entry
   IPF
         Inpatient Profile
         Act On Existing Orders
         Check Drug Interaction
         INQuiries Menu ...
          Label Print/Reprint
          Non-Verified/Pending Orders
          Order Entry
          PAtient Profile (Unit Dose)
          PIck List Menu ...
          Reports Menu ...
```

Within the Inpatient Medications package there are three different paths the nurse can take to enter a new order or take action on an existing order. They are (1) *Order Entry*, (2) *Non-Verified/Pending Orders* and (3) *Inpatient Order Entry*. Each of these paths differs by the prompts that are presented. Once the nurse has reached the point of entering a new order or selecting an existing order, the process becomes the same for each path.



**Note**: When the selected order type (non-verified or pending) does not exist (for that patient) while the user is in the *Non-Verified/Pending Orders* option, the user cannot enter a new order or take action on an existing order for that patient.

Patient locks and order locks are incorporated within the Inpatient Medications package. When a user (User 1) selects a patient through any of the three paths, *Order Entry*, *Non-Verified/Pending Orders*, or *Inpatient Order Entry*, and this patient has already been selected by another user (User 2), the user (User 1) will see a message that another user (User 2) is processing orders for this patient. This will be a lock at the patient level within the Pharmacy packages. When the other user (User 2) is entering a new order for the patient, the user (User 1) will not be able to access the patient due to a patient lock within the VistA packages. A lock at the order level is issued when an order is selected through Inpatient Medications for any action other than new order entry. Any users attempting to access this patient's order will receive a message that another user is working on this order. This order-level lock is within the VistA packages.

The three different paths for entering a new order or taking an action on an existing order are summarized in the following sections.

# 4.1 Order Entry [PSJU NE]

The *Order Entry* option allows the nurse to create, edit, renew, hold, and discontinue Unit Dose orders while remaining in the Unit Dose Medications module. The *Order Entry* option functions almost identically to the *Inpatient Order Entry* option, but does not include IV orders on the profile and only Unit Dose orders may be entered or processed.

The *Order Entry* [PSJU NE] option also allows for processing of clinic orders. New clinic orders cannot be created. Clinic orders are displayed separately from non-clinic orders.

After selecting the *Order Entry* option from the *Unit Dose Medications* option, the nurse will be prompted to select the patient. At the "Select PATIENT:" prompt, the user can enter the patient's name or enter the first letter of the patient's last name and the last four digits of the patient's social security number (e.g., P0001).

Before the Patient Information screen displays, if the patient selected has no allergy assessment on file, the following prompt displays to the pharmacist/user:

"NO ALLERGY ASSESSMENT exists for this patient! Would you like to enter one now?"

- If the pharmacist/user enters 'YES,' he/she is prompted to enter the allergy information.
- If the pharmacist/user enters 'NO,' a pharmacist intervention is created, with a type of 'NO ALLERGY ASSESSMENT.' The pharmacist/user is then prompted for Provider and Recommendation information.

**Note:** If the selected patient is Sensitive, Discharged, both Sensitive and Discharged, or Deceased, there are variations in the Order Entry process and in the prompts that display to the pharmacist/user.

#### Example: Pharmacist Answers 'Yes' and Enters Allergy Information

```
...OK? Yes// Y (Yes)

LATEX OK? Yes// (Yes)
```

#### Example: Pharmacist Answers 'No' and Intervention is Created

```
Select PATIENT: PSJPATIENT1, ONE

NO ALLERGY ASSESSMENT exists for this patient!

Would you like to enter one now? No// N (No)

Now creating Pharmacy Intervention

PROVIDER:

Select one of the following:

1 UNABLE TO ASSESS
2 OTHER

RECOMMENDATION: ^

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

Press Return to continue...
```

The Patient Information Screen is displayed:

#### **Example: Patient Information Screen**

```
Patient Information Feb 10, 2011@10:44:55
TESTYPATNM, TEST Ward: GEN MED
PID: 666-00-0423 Room-Bed: Ht(c
DOB: 01/01/50 (61) Wt(k
                                                                        Page:
                                                                                   1 of
                                                            Ht(cm): _
                                                               Wt(kg): _
                                              Admitted: 02/13/07
   Sex: MALE
                                              Last transferred: *****
    Dx: OBSERVATION
Allergies - Verified: PENICILLIN, ASPIRIN
         Non-Verified:
   Adverse Reactions:
 Inpatient Narrative:
Outpatient Narrative:
           Enter ?? for more actions
PU Patient Record Update NO New Order Entry DA Detailed Allergy/ADR List IN Intervention Mer
                                              IN Intervention Menu
VP View Profile
Select Action: View Profile//
```

The nurse can now enter a Patient Action at the "Select Action: View Profile//" prompt in the Action Area of the screen.

# 4.2 Non-Verified/Pending Orders [PSJU VBW]

The *Non-Verified/Pending Orders* option allows easy identification and processing of non-verified and/or pending orders. This option will also show pending and pending renewal orders,

which are orders from CPRS that have not been finished by Pharmacy Service. Unit Dose and IV orders are displayed using this option.

The *Non-Verified/Pending Orders* [PSJU VBW] option also allows for processing of clinic orders. New clinic orders cannot be created. Clinic orders are displayed separately from non-clinic orders.

If this is the first time into this option, the first prompt will be: Select IV ROOM NAME. If not, then the first prompt is "Display an Order Summary? NO//". A **YES** answer will allow the nurse to view an Order Summary of Pending/Non-Verified Order Totals by Ward Group, Clinic Group, and Clinic. The Pending IV, Pending Unit Dose, Non-Verified IV, and Non-Verified Unit Dose totals are then listed by Ward Group, Clinic Group, and Clinic. The nurse can then specify whether to display Non-Verified Orders, Pending Orders or both.

A ward group indicates inpatient nursing units (wards) that have been defined as a group within Inpatient Medications to facilitate processing of orders. A clinic group is a combination of outpatient clinics that have been defined as a group within Inpatient Medications to facilitate processing of orders.

#### **Example: Non-Verified/Pending Orders**

Non-Verified/Pending Orders Select IV ROOM NAME: TST ISC ROOM							
You are signed on under the TST ISC ROOM IV ROOM							
Enter IV LABEL device: HOME// COMPUTER ROOM							
Enter IV REPORT device: HOME	// COM	PUTER ROOM					
Display an Order Summary? NO// YES							
Searching for Pending and Non-Verified orders							
Pending/Non-Verified Order Totals by Ward Group/Clinic Location							
	Pending Non-Verified						
Ward Group/Clinic Location	IV	UD	IV	UD			
Ward Groups							
GEN MED	5	5	0	3			
TST 1 Group	1	3	0	0			
TST 3	0	2	0	0			
^OTHER	5	27	1	5			
Clinics							
45 CLINIC PATTERN	5	0	0	0			
1) Non-Verified Orders 2) Pending Orders							
Select Order Type(s) (1-2):							

**Note**: The Ward Group of ^OTHER includes all orders from wards that do not belong to a ward group. Use the *Ward Group Sort* option to select ^OTHER.

Next, the nurse can select which packages to display: Unit Dose Orders, IV Orders, or both, provided this user holds the PSJ RNFINISH and the PSJI RNFINISH keys. If the user holds only one of the RNFINISH keys, then either Unit Dose or IV orders will be displayed.

The next prompt allows the nurse to select non-verified and/or pending orders for a group (G), ward (W), clinic (C), patient (P), or priority (PR). When group is selected, a prompt to select by ward group (W) or clinic group (C) displays.

If ward or ward groups is selected, patients will be listed by wards, then by priority, then by teams, and then by patient name. Patients that have one or more STAT pending orders will be listed first, followed by patients with one or more ASAP pending orders, and then all other patients that have only ROUTINE pending orders. Within each priority, the patient listing is sorted alphabetically by team and then by patient name.

When priority is selected, only patients with the selected priority will display, listed by team and then by patient name.

Before the Patient Information screen displays, if the patient selected has no allergy assessment on file, the following prompt displays to the pharmacist/user:

"NO ALLERGY ASSESSMENT exists for this patient! Would you like to enter one now?"

- If the pharmacist/user enters 'YES,' he/she is prompted to enter the allergy information.
- If the pharmacist/user enters 'NO,' a pharmacist intervention is created, with a type of 'NO ALLERGY ASSESSMENT.' The pharmacist/user is then prompted for Provider and Recommendation information.



**Note:** If the selected patient is Sensitive, Discharged, both Sensitive and Discharged, or Deceased, there are variations in the process and in the prompts that display to the pharmacist/user.

#### Example: Pharmacist Answers 'Yes' and Enters Allergy Information

```
Now checking the National Drug File - Generic Names (#50.6)

Now checking the National Drug File - Trade Names (#50.67)

Now checking the INGREDIENTS (#50.416) file for matches...

...OK? Yes// Y (Yes)

LATEX OK? Yes// (Yes)
```

#### Example: Pharmacist Answers 'No' and Intervention is Created

```
Select PATIENT: PSJPATIENT1, ONE
NO ALLERGY ASSESSMENT exists for this patient!
Would you like to enter one now? No// N (No)
Now creating Pharmacy Intervention
PROVIDER:
    Select one of the following:
        1 UNABLE TO ASSESS 2 OTHER
RECOMMENDATION: ^
See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.
Press Return to continue...
1) Unit Dose Orders
2) IV Orders
Select Package(s) (1-2): 1-2
Select by GROUP (G), WARD (W), CLINIC (C), PATIENT (P), or PRIORITY (PR): PATIENT <Enter>
Select by WARD GROUP (W) or CLINIC GROUP (C): WARD <Enter>
Select PATIENT: PSJPATIENT1,ONE 000-00-0001 08/18/20 B-12 1 EAST
Select PATIENT: <Enter>
```

A profile prompt is displayed asking the nurse to choose a profile for the patient. The nurse can choose a short, long, or no profile. If **NO** profile is chosen, the orders for the patient selected will be displayed, for finishing or verification, by login date with the earliest date showing first. When a pending Unit Dose order has a STAT priority, this order will always be displayed first in the profile view and will be displayed in blinking reverse video. If a profile is chosen, the orders will be selected from this list for processing (any order may be selected). The following example displays a short profile.

#### **Example: Short Profile**

```
Pending/Non-Verified Order Totals by Ward Group/Clinic Location
                                                    Pending
                                                                                        Non-Verified
                                                      Pending Nor
UD IV
Ward Group/Clinic Location IV
Ward Groups
                                               56
                                                              75
                                                                                      10
BCMA
                                              5
1
1
0
                                                                5
                                                                                      0 2
GEN MED
                                                                                                          0
                                                              18
TEST AGAIN
                                                                                      0
0
0
0
                                                                4
TST 1 GROUP
                                                            4
10
TST 2 GROUP
                                                                                                          0
TST 3
                                                0
                                                                 2
                                               6
                                                                                                           4
                                                              32
^OTHER
Clinics
                                               5 0
1 0
0
45 CLINIC PATTERN
                                                                                        0
                                                                                                            0
BARBARA'S CLINIC
                                                                                         0
                                                                                                            0
BECKY'S CLINIC
1) Non-Verified Orders
2) Pending Orders
Select Order Type(s) (1-2): 1
1) Unit Dose Orders
2) IV Orders
Select Package(s) (1-2): 1
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): gROUP
Select by WARD GROUP (W) or CLINIC GROUP (C): WARD
Select WARD GROUP: bcma
PHARMACY
...a few moments, please.....
ORDERS NOT VERIFIED BY A PHARMACIST - BCMA
 No. TEAM
                                                 PATIENT
 1 Not Found BCMA, EIGHTY-PATIENT (0080)
2 Not Found BCMA, EIGHTYFIVE-PATIENT (0088)
3 Not Found BCMA, EIGHTYFIVE-PATIENT (0085)
4 Not Found BCMA, EIGHTYFIVE-PATIENT (0086)
5 Not Found BCMA, EIGHTYTHREE-PATIENT (0083)
6 Not Found BCMA, EIGHTY HREE-PATIENT (0083)
7 Not Found BCMA, FIFTEN-PATIENT (0015)
8 Not Found BCMA, FIFTYTHEE-PATIENT (0053)
9 Not Found BCMA, FIFTYTWO-PATIENT (0053)
10 Not Found BCMA, FORTYTWO-PATIENT (0042)
11 Not Found BCMA, FOURTEEN-PATIENT (0042)
12 Not Found BCMA, FOURTEEN-PATIENT (0094)
13 Not Found BCMA, NINETY-PATIENT (0090)
14 Not Found BCMA, NINETY-PATIENT (0092)
15 Not Found BCMA, ONE HUNDRED-PATIENT (0007)
16 Not Found BCMA, SEVENTYSEVEN-PATIENT (0077)
17 Not Found BCMA, SIXTEEN-PATIENT (0016)
18 Not Found BCMA, TEN-PATIENT (0010)
3elect 1 - 18: 1
Select 1 - 18: 1
Do you want to print a profile for the patient? NO// y YES
SHORT, LONG, or NO Profile? SHORT// SHORT
Select PRINT DEVICE: home; 80; 9999 COMPUTER ROOM
```

```
INPATIENT MEDICATIONS 03/16/11 10:32
              VAMC: ZZ ALBANY-PRRTP (500PA)
BCMA, EIGHTY-PATIENT Ward: BCMA PID: 666-33-0080 Room-Bed: 12-B
                                         Ht(cm): 167.64 (03/30/09)
   DOB: 04/07/35 (75)
                                           Wt(kg): 90.00 (03/30/09)
                                         Admitted: 02/07/02
   Sex: FEMALE
   Dx: HIGH FEVER
  CrCL: <Not Found>
                                         BSA (m2): 2.05
 Allergies: CODEINE, ASPIRIN, CAFFEINE, STRAWBERRIES
  ADR:
     ENOXAPARIN 30MG/0.3ML/SYR INJ
       Give: XXX SC XXX@09-13
                                        5 **** **** N
  2 MULTIVITAMINS/MINERALS TAB
        Give: ONE TABLET PO QAM
                                         ? **** **** N
     PREDNISONE TAB
       Give: 2000MG PO NOW
 DOCUSATE NA CAP,ORAL
                                         ? **** **** p
        Give: 100MG PO OAM
                                         ? **** **** P
     ACETAMINOPHEN TAB
        Give: 325MG PO Q6H
       in CISPLATIN 250MG IN 0.9% NACL 250 ML ? **** ***** P
      in CISPLATIN 250MG IN 0.9% NACL 250 ML 10? **** ***** P
      in CISPLATIN 250MG IN 0.9% NACL 250 ML 10? ***** ***** P
      in DOPAMINE 400MG/D5W 1600MCG/ML 250 ML ? **** **** in DOPAMINE IN 200ML D5W 200 ML 50MCG/KG/? **** ****
  9
                                                      Р
 10
 11 HEPARIN/SODIUM CHLORIDE INJ,SOLN ? **** **** P
        Give: IV CONTINUOUS DRIP
View ORDERS (1-11): 1
Patient: BCMA, EIGHTY-PATIENT Status: NON-VERIFIED
Orderable Item: ENOXAPARIN 30MG/0.3ML/SYR INJ
 Instructions:
Dosage Ordered: XXX
                                       Start: 04/05/10 13:00
    Duration:
    Med Route: SUBCUTANEOUS (SC)
                                       Stop: 07/14/10 24:00
 Schedule Type: NOT FOUND
    Schedule: XXX@09-13
  (No Admin Times)
    Provider: PHARMACIST, ONE [w]
                                     Units Units Inactive
                                 U/D Disp'd Ret'd Date
 Dispense Drugs
 ENOXAPARIN 30MG/0.3ML INJ SYRINGE 0.3ML 1 0 0
ORDER NOT VERIFIED
Self Med: NO
Entry By: PHARMACIST, ONE
                                         Entry Date: 04/05/10 14:36
Enter RETURN to continue or '^' to exit:
Select profile type for order processing.
SHORT, LONG, or NO Profile? SHORT//
                               SHORT
Non-Verified/Pending Orders Mar 16, 2011@10:33:08 Page: 1 of 2
Admitted: 02/07/02
 Sex: FEMALE
                        Admitted: 02/07/02
Last transferred: *******
   Dx: HIGH FEVER
 CrCL: <Not Found>
                                       BSA (m2): 2.05
```

```
-----NON-VERIFIED------
  1 ENOXAPARIN 30MG/0.3ML/SYR INJ
                                      C 04/05 07/14 N
       Give: XXX SC XXX@09-13
  2 MULTIVITAMINS/MINERALS TAB
                                      C 09/21 12/20 N
       Give: ONE TABLET PO QAM
    PREDNISONE TAB
                                      O 09/21 10/21 N
      Give: 2000MG PO NOW
          4 DOCUSATE NA CAP,ORAL
Give: 100MG PO QAM
                                      ? **** ***** P
  5 ACETAMINOPHEN TAB
      Give: 325MG PO Q6H
   -----Enter ?? for more actions-----
PI Patient Information SO Select Order
PU Patient Record Update NO New Order Entry
Select Action: Next Screen//
```

The orders on the profile are sorted first by status (ACTIVE, NON-VERIFIED, NON-VERIFIED COMPLEX, PENDING RENEWALS, PENDING COMPLEX, PENDING, RECENTLY DISCONTINUED/EXPIRED), then alphabetically by SCHEDULE TYPE. Pending orders with a priority of STAT are listed first and are displayed in a bold and blinking text for easy identification. After SCHEDULE TYPE, orders are sorted alphabetically by DRUG (the drug name listed on the profile), and then in descending order by START DATE.

#### **Example: Short Profile**

```
Sex: MALE
                           Admitted: 12/11/01
 CrCL: <Not Found>
                           BSA (m2):
  Dx: HE IS A PAIN.
                       Last transferred: 12/11/01
 ----ACTIVE-----
 1 CEFAZOLIN 1 GM
                            C 06/12 06/22 H
    CEFAZOLIN 1 GM
in 5% DEXTROSE 50 ML Q8H
 2 CIMETIDINE TAB
                           C 06/12 07/12 A
     Give: 300MG PO BID
   FUROSEMIDE TAB
                           C 06/01 06/15 HP
    Give: 40MG PO QAM
 C 06/14 06/28 N
     Give: 25MG PO BID
    HALOPERIDOL TAB
    Give: 5MG PO BID
 6 HEPARIN/DEXTROSE INJ, SOLN
                           ? **** **** P
     Give: IV
 7 LACTULOSE SYRUP
                           ? **** **** P NF
     Give: 10GM/15ML PO BID PRN
 8 FOLIC ACID TAB C 06/14 06/16 D
 Give: 1MG PO QAM
9 GENTAMICIN 80 MG
                            C 06/12 06/12 D
    in 5% DEXTROSE 100 ML Q8H
 10 ISONIAZID TAB
                           C 04/03 04/17 DF
     Give: 300MG PO QD
 11 POTASSIUM CHLORIDE 10MEQ
                          C 06/12 06/12 DA
    in 5% DEXTROSE 1000 ML Q8H
                         C 06/12 06/12 DD
 12 POTASSIUM CHLORIDE 40 MEQ
    in 5% DEXTROSE 250 ML 120 ml/hr
```

```
13 PROPRANOLOL TAB
                                              C 06/15 06/20 DP
         Give: 40MG PO O6H
       THIAMINE TAB
                                              C 04/03 04/17 E
         Give: 100MG PO BID
X - Represents the value set in either the ward or system parameter
      Enter ?? for more actions
PI Patient Information
                                     SO Select Order
PU Patient Record Update
                                     NO New Order Entry
```

The HOURS OF RECENTLY DC/EXPIRED field (#7) has been created in the INPATIENT WARD PARAMETERS file (#59.6). The Inpatient Medications profiles will display the recently discontinued/expired orders that fall within the number of hours specified in this field. The value defined in this field will take precedence over the Inpatient System parameter. The inpatient ward parameter allows for a minimum value of one (1) hour and a maximum value of one hundred twenty (120) hours. The Inpatient Ward Parameters Edit [PSJ IWP EDIT] option allows the user to edit this new ward parameter. If this parameter is not set the software will use the value in the HOURS OF RECENTLY DC/EXPIRED field (#26.8) in the PHARMACY SYSTEM file (#59.7). If neither parameter is set the software will default to twenty-four (24) hours.

The HOURS OF RECENTLY DC/EXPIRED field (#26.8) has been created in the PHARMACY SYSTEM file (#59.7). The Inpatient Medications profiles will display the recently discontinued/expired orders that fall within the number of hours specified in this field. This parameter allows for a minimum value of one (1) hour and a maximum value of one hundred twenty (120) hours. The Systems Parameters Edit [PSJ SYS EDIT] option includes the ability for a user to edit this inpatient site parameter. If neither parameter is set the software will default to twenty-four (24) hours.

On the medication profile in the status column the codes and the action they represent are as follows.

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

- Active Α
- N Non-Verified
- O On Call (IV orders only)
- I Incomplete
- HP Placed on hold by provider through CPRS
- Н Placed on hold via backdoor Pharmacy
- Е **Expired**
- Discontinued by provider through CPRS
- Discontinued due to edit via backdoor Pharmacy (Unit Dose orders only)
- Discontinued via backdoor Pharmacy (IV & UD); discontinued due to edit via D backdoor Pharmacy (IV)

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

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

#### **Example: Profile**

```
Inpatient Order Entry Jun 12, 2006@23:12:54 Page: 1 of 1
PSJPATIENT11, ONE Ward: 2ASM

PID: 000-55-3421 Room-Bed: 102-1 Ht(cm): _____ (_____)
DOB: 12/02/23 (82) Wt(kg): 100.00 (06/24/03)
Sex: MALE Admitted: 12/11/01
    Dx: HE IS A PAIN.
                                        Last transferred: 12/11/01
  CrCL: <Not Found>
                                                BSA (m2):
                     - - - - - - A C T I V E - -
       CEFAZOLIN 1 GM
                                                 C 06/12 06/22 H
       in 5% DEXTROSE 50 ML Q8H
      CIMETIDINE TAB
                                                C 06/12 07/12 A
         Give: 300MG PO BID
     FUROSEMIDE TAB
                                                C 06/01 06/15 HP
       Give: 40MG PO QAM
          CAPTOPRIL TAB
                                                 C 06/14 06/28 N
         Give: 25MG PO BID
        -----PENDING RENEWALS---
                                                 ? **** **** P 06/14
     HALOPERIDOL TAR
       Give: 5MG PO BID
           ? **** **** p
     HEPARIN/DEXTROSE INJ, SOLN
         Give: IV
                                                ? **** **** P NF
       LACTULOSE SYRUP
         Give: 10GM/15ML PO BID PRN
  ----- RECENTLY DISCONTINUED/EXPIRED (LAST 24 HOURS) ------
   8 FOLIC ACID TAB C 06/14 06/16 D Give: 1MG PO OAM
         Give: 1MG PO QAM
  9 GENTAMICIN 80 MG
                                                C 06/12 06/12 D
       in 5% DEXTROSE 100 ML Q8H
     ISONIAZID TAB
                                                C 04/03 04/17 DF
        Give: 300MG PO QD
       POTASSIUM CHLORIDE 10MEQ
in 5% DEXTROSE 1000 ML Q8H
POTASSIUM CHLORIDE 40 MEQ
in 5% DEXTROSE 250 ML 120 ml/hr
PROPRANOLOL TAB
Give: 40MG PO Q6H
THJAMINE TAB
  11 POTASSIUM CHLORIDE 10MEQ
                                              C 06/12 06/12 DA
                                                C 06/12 06/12 DD
  13 PROPRANOLOL TAB
                                                C 06/15 06/20 DP
     THIAMINE TAB
                                                 C 04/03 04/17 E
         Give: 100MG PO BID
Enter ?? for more actions
PI Patient Information SO Select Order
PU Patient Record Update NO New Order Entry
```

The nurse can enter a Patient Action at the "Select Action: Quit//" prompt in the Action Area of the screen or choose a specific order or orders.

When the nurse holds the PSJ RNURSE key, it will be possible to take any available actions on selected Unit Dose or IV orders and verify non-verified orders.

The following keys may be assigned if the user already holds the PSJ RNURSE key:

PSJ RNFINISH key will allow the nurse to finish Unit Dose orders.
PSJI RNFINISH key will allow the nurse to finish IV orders.

# 4.3 Inpatient Order Entry [PSJ OE]

The *Inpatient Order Entry* [PSJ OE]option, if assigned, allows the nurse to create, edit, renew, hold, and discontinue Unit Dose and IV orders, as well as put existing IV orders on call for any patient, while remaining in the Unit Dose Medications module.

The *Inpatient Order Entry* [PSJ OE] option also allows for processing of clinic orders. New clinic orders cannot be created. Clinic orders are displayed separately from non-clinic orders.

When the user accesses the *Inpatient Order Entry* option from the Unit Dose Medications module for the first time within a session, a prompt is displayed to select the IV room in which to enter orders. When only one active IV room exists, the system will automatically select that IV room. The user is then given the label and report devices defined for the IV room chosen. If no devices have been defined, the user will be given the opportunity to choose them. If this option is exited and then re-entered within the same session, the current label and report devices are shown. The following example shows the option re-entered during the same session.

#### **Example: Inpatient Order Entry**

```
Select Unit Dose Medications Option: IOE Inpatient Order Entry
You are signed on under the BIRMINGHAM ISC IV ROOM
Current IV LABEL device is: NT TELNET TERMINAL
Current IV REPORT device is: NT TELNET TERMINAL
Select PATIENT: PSJPATIENT1
```

At the "Select PATIENT:" prompt, the user can enter the patient's name or enter the first letter of the patient's last name and the last four digits of the patient's social security number (e.g., P0001).

Before the Patient Information screen displays, if the patient selected has no allergy assessment on file, the following prompt displays to the pharmacist/user:

"NO ALLERGY ASSESSMENT exists for this patient! Would you like to enter one now?"

- If the pharmacist/user enters 'YES,' he/she is prompted to enter the allergy information.
- If the pharmacist/user enters 'NO,' a pharmacist intervention is created, with a type of 'NO ALLERGY ASSESSMENT.' The pharmacist/user is then prompted for Provider and Recommendation information.

**Note:** If the selected patient is Sensitive, Discharged, both Sensitive and Discharged, or Deceased, there are variations in the Order Entry process and in the prompts that display to the pharmacist/user.

#### Example: Pharmacist Answers 'Yes' and Enters Allergy Information

#### Example: Pharmacist Answers 'No' and Intervention is Created

```
Select PATIENT: PSJPATIENT1, ONE

NO ALLERGY ASSESSMENT exists for this patient!

Would you like to enter one now? No// N (No)

Now creating Pharmacy Intervention

PROVIDER:

Select one of the following:

1 UNABLE TO ASSESS
2 OTHER

RECOMMENDATION: ^

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

Press Return to continue...
```

#### The Patient Information Screen is displayed:

#### **Example: Patient Information Screen**

```
Patient Information
                            Sep 12, 2000 10:36:38
                                                          Page:
                                                                  1 of
PSJPATIENT1, ONE
                             Ward: 1 EAST
                   Ward: I EAS
Room-Bed: B-12
   PID: 000-00-0001
                                                Ht(cm): _
   DOB: 08/18/20 (80)
                                                Wt(kq):
  Sex: MALE
                                             Admitted: 05/03/00
   Dx: TESTING
                                      Last transferred: ******
 Allergies/Reactions: No Allergy Assessment
 Remote:
Adverse Reactions:
 Inpatient Narrative: INP NARR...
 Outpatient Narrative:
         Enter ?? for more actions
PU Patient Record Update
                                    NO New Order Entry
                                    IN Intervention Menu
DA Detailed Allergy/ADR List
VP View Profile
Select Action: View Profile//
```

The nurse can now enter a Patient Action at the "Select Action: View Profile//" prompt in the Action Area of the screen.

The DURATION OF ADMINISTRATION prompt in the *Inpatient Order Entry* [PSJ OE] option calculates the appropriate removal times for medications requiring removal and displays them for verification by the Pharmacist.

# **Example: Explanation of Duration of Administration Prompt**

```
The Duration of Administration is the period of time the medication remains on the patient before removal. If this medication order requires a drug-free period prior to the next administration, enter a Duration of Administration here.

If this medication order does not require a drug-free period prior to the next administration, this field should be left blank.

Enter the number of hours the medication will remain on the patient in the Duration of Administration field. The BCMA user will be prompted to remove the medication after the Duration of Administration period.

The Duration of Administration cannot match or exceed the order frequency (the period of time between two Admin Times), except for BID, TID and QID schedules.
```

# 4.4 PADE Main Menu Option

A new menu option, the Pharmacy Automated Dispensing Equipment (PADE) Main Menu, has been added to Unit Dose Medications. The PADE menu option allows the user to transmit inpatient medication orders to PADE so that the user has the most current information necessary to manage and dispense medications.

This menu has the following four options:

```
SA PADE Send Area SetupSS PADE System Setup
```

- IN PADE Inbound Inventory Setup
- SC PADE Send Surgery Cases

# 4.5 Patient Actions

The Patient Actions are the actions available in the Action Area of the List Manager Screen. These actions pertain to the patient information and include editing, viewing, and new order entry.

# 4.5.1 Patient Record Update

The Patient Record Update action allows editing of the Inpatient Narrative and the Patient's Default Stop Date and Time for Unit Dose Order entry.

#### **Example: Patient Record Update**

```
Patient Information
                              Sep 12, 2000 14:39:07
                                                               Page:
                                                                        1 of
PSJPATIENT1, ONE
                                Ward: 1 EAST
   PID: 000-00-0001 Room-Bed: B-12
DOB: 08/18/20 (80)
                                                    Ht(cm): _
                                                    Wt(kg): _
   Sex: MALE
                                                  Admitted: 05/03/00
                                          Last transferred: ******
    Dx: TESTING
 Allergies/Reactions: No Allergy Assessment
 Adverse Reactions:
 Inpatient Narrative: INP NARR ...
 Outpatient Narrative:
          Enter ?? for more actions
PU Patient Record Update
DA Detailed Allergy/ADR List
                                       NO New Order Entry
                                       IN Intervention Menu
VP View Profile
Select Action: View Profile// PU
INPATIENT NARRATIVE: INP NARR...// Narrative for Patient PSJPATIENT1
UD DEFAULT STOP DATE/TIME: SEP 21,2000@24:00//
```

The "INPATIENT NARRATIVE: INP NARR...//" prompt allows the nurse to enter information in a free text format, up to 250 characters.

The "UD DEFAULT STOP DATE/TIME:" prompt is the date and time entry to be used as the default value for the STOP DATE/TIME of the Unit Dose orders during order entry and renewal processes. This value is used only if the corresponding ward parameter is enabled. The order entry and renewal processes will sometimes change this date and time.

**Note**: If the Unit Dose order, being finished by the nurse, is received from CPRS and has a duration assigned, the UD DEFAULT STOP DATE/TIME is displayed as the Calc Stop Date/Time.

When the SAME STOP DATE ON ALL ORDERS parameter is set to Yes, the module will assign the same default stop date for each patient. This date is initially set when the first order is

entered for the patient, and can change when an order for the patient is renewed. This date is shown as the default value for the stop date of each of the orders entered for the patient.



**Note**: If this parameter is not enabled, the user can still edit a patient's default stop date. Unless the parameter is enabled, the default stop date will not be seen or used by the module.

Examples of Valid Dates and Times:

- JAN 20 1957 or 20 JAN 57 or 1/20/57 or 012057
- T (for TODAY), T+1 (for TOMORROW), T+2, T+7, etc.
- T-1 (for YESTERDAY), T-3W (for 3 WEEKS AGO), etc.
- If the year is omitted, the computer uses CURRENT YEAR. Two-digit year assumes no more than 20 years in the future, or 80 years in the past.
- If only the time is entered, the current date is assumed.
- Follow the date with a time, such as JAN 20@10, T@10AM, 10:30, etc.
- The nurse may enter a time, such as NOON, MIDNIGHT, or NOW.
- The nurse may enter NOW+3' (for current date and time plus 3 minutes--the apostrophe following the number indicates minutes).
- Time is REQUIRED in this response.

# 4.5.2 New Order Entry

# **Unit Dose**

The New Order Entry action allows the nurse to enter new Unit Dose and IV orders for the patient depending upon the order option selected (*Order Entry*, *Non-Verified Pending Orders*, or *Inpatient Order Entry*). Only one user is able to enter new orders on a selected patient due to the patient lock within the VistA applications. This minimizes the chance of duplicate orders.

For Unit Dose order entry, a response must be entered at the "Select DRUG:" prompt. The nurse can select a particular drug or enter a pre-defined order set.

Depending on the entry in the "Order Entry Process:" prompt in the *Inpatient User Parameters Edit* option, the nurse will enter a regular or abbreviated order entry process. The abbreviated order entry process requires entry into fewer fields than regular order entry. Beside each of the prompts listed below, in parentheses, will be the word regular, for regular order entry and/or abbreviated, for abbreviated order entry.

# • "Select DRUG:" (Regular and Abbreviated)

Nurses select Unit Dose medications directly from the DRUG file. The Orderable Item for the selected drug will automatically be added to the order, and all Dispense Drugs entered for the order must be linked to that Orderable Item. If the Orderable Item is edited, data in the DOSAGE ORDERED field and the DISPENSE DRUG field will be deleted. If multiple Dispense Drugs

are needed in an order, they may be entered by selecting the DISPENSE DRUG field from the edit list before accepting the new order. After each Dispense Drug is selected, it will be checked against the patient's current medications for duplicate therapy, drug-drug/drug-allergy interactions, dangerous meds for patient >64, Aminoglycoside ordered, and Glucophage lab results order checks. (See Section 4.9 Order Checks for more information.)



Note: No special order checks are performed for specific drugs (e.g., Clozapine). Orders for Clozapine or similar special meds entered through Inpatient Medications will not yield the same results that currently occur when the same order is entered through Outpatient Pharmacy (including eligibility checks and national rollup to the National Clozapine Coordinating Center (NCCC). Any patients requiring special monitoring should also have an order entered through Outpatient Pharmacy at this time.

The nurse can enter an order set at this prompt. An order set is a group of pre-written orders. The maximum number of orders is unlimited. Order sets are created and edited using the Order Set Enter/Edit option found under the Supervisor's Menu.

Order sets are used to expedite order entry for drugs that are dispensed to all patients in certain medical practices or for certain procedures. Order sets are designed to be used when a recognized pattern for the administration of drugs can be identified. For example:

- A pre-operative series of drugs administered to all patients undergoing a certain surgical procedure.
- A certain series of drugs to be dispensed to all patients prior to undergoing a particular radiographic procedure.
- A certain group of drugs, prescribed by a provider for all patients, that is used for treatment on a certain medical ailment or emergency.

Order sets allow rapid entering of this repetitive information, expediting the whole order entry process. Experienced users might want to set up most of their common orders as order sets.

Order set entry begins like other types of order entry. At the "Select DRUG:" prompt, S.NAME should be entered. The **NAME** represents the name of a predefined order set. The characters **S.** tell the software that this will not be a single new order entry for a single drug, but a set of orders for multiple drugs. The S. is a required prefix to the name of the order set. When the user types the characters S.?, a list of the names of the order sets that are currently available will be displayed. If **S.** (**Spacebar**> and **Enter**>) is typed, the previous order set is entered.

After the entry of the order set, the software will prompt for the Provider's name and Nature of Order. After entry of this information, the first order of the set will automatically be entered. The options available are different depending on the type of order entry process that is enabledregular, abbreviated, or ward. If regular or abbreviated order entry is enabled, the user will be shown one order at a time, all fields for each order of the order set and then the "Select Item(s): Next Screen //" prompt. The user can then choose to take an action on the order. Once an action is taken or bypassed, the next order of the order set will be entered automatically. After entry of

all the orders in the order set, the software will prompt for more orders for the patient. At this point the user can proceed exactly as in new order entry, and respond accordingly.

When a drug is chosen, if an active drug text entry for the Dispense Drug and/or Orderable Item linked to this drug exists, then the prompt, "Restriction/Guideline(s) exist. Display?:" will be displayed along with the corresponding defaults. The drug text indicator will be **<DIN>** and will be displayed on the right hand corner on the same line as the Orderable Item. This indicator will be highlighted.

If the Dispense Drug or Orderable Item has a non-formulary status, this status will be displayed on the screen as "\*N/F\*" beside the Dispense Drug or Orderable Item.

## **Overrides/Interventions (OCI):**

When the OCI displays on the Order Detail screen, it indicates there are associated CPRS Provider Overrides and/or Pharmacist Interventions for this order. The Overrides/Interventions <OCI> will display on the same line as the Orderable Item field, to the left of the drug text indicator <DIN> (if it exists).

```
*(1)Orderable Item: METRONIDAZOLE TAB
                                                                  <OCI><DIN>
     Instructions: 250MG
*(2)Dosage Ordered: 250MG
                                                  (3)Start: 07/11/11 15:33
        Duration:
       Med Route: ORAL
                                          REQUESTED START: 07/11/11 16:00
                                                  (5) Stop: 07/25/11 15:33
 (6) Schedule Type: CONTINUOUS
*(8) Schedule: Q36H
(9) Admin Times:
*(10) Provider: PSJPROVIDER,ONE[es]
 (11) Special Instructions:
                                                  U/D
 (12) Dispense Drug
                                                            Inactive Date
    METRONIDAZOLE 250MG TAB
    Enter ?? for more actions
        Enter ?? for more actions
ED Edit
                                     AC ACCEPT
Select Item(s): Next Screen// AC ACCEPT
```

If the OCI displays on the Order Detail screen, the user can type "OCI" to display the CPRS Provider Overrides and/or Pharmacist Interventions associated with the order, as well as any historical overrides and interventions, if applicable.

## • "DOSAGE ORDERED:" (Regular and Abbreviated)

To allow pharmacy greater control over the order display shown for Unit Dose orders on profiles, labels, MARs, etc., the DOSAGE ORDERED field is not required if only one Dispense Drug exists in the order. If more than one Dispense Drug exists for the order, then this field is required.

When a Dispense Drug is selected, the selection list/default will be displayed based on the Possible Dosages and Local Possible Dosages.

# **Example: Dispense Drug with Possible Dosages**

```
Select DRUG: BACLOFEN
Lookup: GENERIC NAME
BACLOFEN 10 MG TAB MS200
...OK? Yes// (Yes)
```

```
Now doing allergy checks.Please wait...

Now processing Clinical Reminder Order Checks.Please wait ...

Now Processing Enhanced Order Checks!Please wait...

Press Return to continue......

Available Dosage(s)

1. 5MG
2. 10MG
3. 15MG
4. 20MG
5. 30MG
6. 40MG

Select from list of Available Dosages or Enter Free Text Dose:
```

All Local Possible Dosages will be displayed within the selection list/default.

#### **Example: Dispense Drug with Local Possible Dosages**

```
Select DRUG: GENTAMICIN SULFATE 0.1% CREAM DE101 DERM CLINIC ONLY
...OK? Yes// (Yes)

Now doing allergy checks. Please wait...

Now processing Clinical Reminder Order Checks. Please wait ...

Press Return to continue......

Available Dosage(s)

1.

2. SMALL AMOUNT

3. THIN FILM
4. MODERATE AMOUNT
5. LIBERAL AMOUNT

Select from list of Available Dosages or Enter Free Text Dose:
```

**Note:** If an order contains multiple Dispense Drugs, Dosage Ordered should contain the total dosage of the medication to be administered.

The user has the flexibility of how to display the order view on the screen. When the user has chosen the drug and when no Dosage Ordered is defined for an order, the order will be displayed as:

# **Example: Order View Information when Dosage Ordered is not Defined**

```
DISPENSE DRUG NAME
Give: UNITS PER DOSE MEDICATION ROUTE SCHEDULE
```

When the user has chosen the drug and Dosage Ordered is defined for the order, it will be displayed as:

#### **Example: Order View Information when Dosage Ordered is Defined**

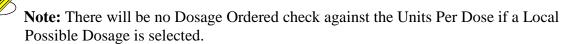
```
ORDERABLE ITEM NAME DOSE FORM
Give: DOSAGE ORDERED MEDICATION ROUTE SCHEDULE
```

The DOSAGE ORDERED and the UNITS PER DOSE fields are modified to perform the following functionality:

- Entering a new backdoor order:
  - 1. If the Dosage Ordered entered is selected from the Possible Dosages or the Local Possible Dosages, the user will not be prompted for the Units Per Dose. Either the BCMA Units Per Dose or the Dispense Units Per Dose, defined under the Dispense Drug, will be used as the default for the Units Per Dose.
  - 2. If a free text dose is entered for the Dosage Order, the user will be prompted for the Units Per Dose. A warning message will display when the entered Units Per Dose does not seem to be compatible with the Dosage Ordered. The user will continue with the next prompt
- Finishing pending orders:
  - 1. If the Dosage Ordered entered is selected from the Possible Dosages or the Local Possible Dosages, the user will not be prompted for the Units Per Dose. Either the BCMA Units Per Dose or the Dispense Units Per Dose, defined under the Dispense Drug, will be used as the default for the Units Per Dose.
  - 2. If a free text dose was entered for the pending order, the UNITS PER DOSE field will default to 1. A warning message will display when the Units Per Dose does not seem to be compatible with the Dosage Ordered when the user is finishing/verifying the order.

# • Editing order:

Any time the DOSAGE ORDERED or the UNITS PER DOSE field is edited, a
check will be performed and a warning message will display when the Units Per
Dose does not seem to be compatible with the Dosage Ordered. Neither field will be
automatically updated.



## • "UNITS PER DOSE:" (Regular)

This is the number of units (tablets, capsules, etc.) of the selected Dispense Drug to be given when the order is administered.

When a selection is made from the dosage list provided at the "DOSAGE ORDERED:" prompt, then this "UNITS PER DOSE:" prompt will not be displayed unless the selection list/default contains Local Possible Dosages. If a numeric dosage is entered at the "DOSAGE ORDERED:" prompt, but not from the selection list, then the default for "UNITS PER DOSE:" will be calculated as follows: DOSAGE ORDERED/STRENGTH = UNITS PER DOSE and will not be displayed.

If free text or no value is entered at the "DOSAGE ORDERED:" prompt, the "UNITS PER DOSE:" prompt will be displayed. When the user presses **Enter>** past the "UNITS PER

DOSE:" prompt, without entering a value, a "1" will be stored. A warning message will be generated when free text is entered at the "DOSAGE ORDERED:" prompt and no value or an incorrect value is entered at the "UNITS PER DOSE:" prompt.

# • "MED ROUTE:" (Regular and Abbreviated)

Inpatient Medications uses the medication route provided by CPRS as the default when finishing an IV order, and transmits any updates to an order's medication route to CPRS.

Inpatient Medications determines the default medication route for a new order entered through Inpatient Medications, and sends the full Medication Route name for display on the BCMA VDL.

This is the administration route to be used for the order. If a Medication Route is identified for the selected Orderable Item, it will be used as the default for the order. Inpatient Medications applies the Medication Route provided by CPRS as the default when finishing an IV order.

- If no medication route is specified, Inpatient Medications will use the Medication Route provided by CPRS as the default when finishing an IV order.
- If updates are made to the medication route, Inpatient Medications will transmit any updates to an order's Medication Route to CPRS.
- Inpatient Medications determines the default Medication Route for a new order.
- Inpatient Medications sends the full Medication Route name for display on the BCMA VDL.

# • Sequence of Schedule Type and Schedule Prompts:

Prior to PSJ\*5\*113, the order of the prompts in Inpatient Medications order entry was Schedule Type followed by Schedule. The sequence of the prompts was changed so that the Schedule prompt falls before the Schedule Type prompt.

# • Schedule Validation Requirement One

When a schedule is selected at the Schedule Field, the system shall default the Schedule Type for the schedule entered from the Administration Schedule File into the order.

## • Schedule Validation Requirement Two

If the user changes the schedule, a warning message will be generated stating that the administration times and the schedule type for the order will be changed to reflect the defaults for the new schedule selected. The warning message: "This change in schedule also changes the ADMIN TIMES and SCHEDULE TYPE of this order" shall appear.

# • Schedule Validation Check Three

If the schedule type is changed from Continuous to PRN during an edit, the system shall automatically remove any administration times that were associated with the schedule so that the order will not include administration times.

## • "SCHEDULE:" (Regular and Abbreviated)

This defines the frequency the order is to be administered. Schedules must be selected from the ADMINISTRATION SCHEDULE file, with the following exceptions:

• Schedule containing PRN: (Ex. TID PC PRN). If the schedule contains PRN, the base schedule must be in the ADMINISTRATION SCHEDULE file.

- Day of week schedules (Ex. MO-FR or MO-FR@0900)
- Admin time only schedules (Ex. 09-13)

While entering a new order, if a Schedule is defined for the selected Orderable Item, that Schedule is displayed as the default for the order.

# • "SCHEDULE TYPE:" (Regular)

This defines the type of schedule to be used when administering the order. If the Schedule Type entered is one-time, the ward parameter, DAYS UNTIL STOP FOR ONE-TIME, is accessed to determine the stop date. When the ward parameter is not available, the system parameter, DAYS UNTIL STOP FOR ONE-TIME, will be used to determine the stop date. When neither parameter has been set, one-time orders will use the ward parameter, DAYS UNTIL STOP DATE/TIME, to determine the stop date instead of the start and stop date being equal.

When a new order is entered or an order entered through CPRS is finished by pharmacy, the default Schedule Type is determined as described below:

- If no Schedule Type has been found and a Schedule Type is defined for the selected Orderable Item, that Schedule Type is used for the order.
- If no Schedule Type has been found and the schedule contains PRN, the Schedule Type is PRN.
- If no Schedule Type has been found and the schedule is "ON CALL", "ON-CALL" or "ONCALL", the Schedule Type is ON CALL.
- Schedules meant to cause orders to display as ON CALL in BCMA must be defined in the ADMINISTRATION SCHEDULE (#51.1) file with a schedule type equal to "ON CALL."
- For all others, the Schedule Type is CONTINUOUS.

**Note:** During backdoor order entry, the Schedule Type entered is used unless the schedule is considered a ONE-TIME schedule. In that case, the Schedule Type is changed to ONE TIME.

# • **ADMINISTRATION TIME:**" (Regular)

This defines the time(s) of day the order is to be given. Administration times must be entered in a two or four digit format. If you need to enter multiple administration times, they must be separated by a dash (e.g., 09-13 or 0900-1300). If the schedule for the order contains "PRN", all Administration Times for the order will be ignored. In new order entry, the default Administration Times are determined as described below:

- If Administration Times are defined for the selected Orderable Item, they will be shown as the default for the order.
- If Administration Times are defined in the INPATIENT WARD PARAMETERS file for the patient's ward and the order's schedule, they will be shown as the default for the order.

• If Administration Times are defined for the Schedule, they will be shown as the default for the order.

#### • Order Validation Checks:

The following order validation checks will apply to Unit Dose orders and to intermittent IV orders.

**Note:** IV orders do not have Schedule Type.

#### • Order Validation Check One

For intermittent IV orders, references to an order's Schedule Type will refer to either the TYPE OF SCHEDULE from the Administration Schedule file (#51.1), or PRN for schedule names in PRN format, or CONTINUOUS for schedule names in Day of Week format.

## • Order Validation Check Two

The system shall use the schedule type of the schedule from the Administration Schedule file independent of the schedule name when processing an order to determine if administration times are required for a particular order.

## • Order Validation Check Three

If an order has the Schedule Type of Continuous, the Schedule entered is NOT in Day of Week (Ex. MO-FR) or PRN (Ex. TID PC PRN) format, and the frequency associated with the schedule is one day (1440 minutes) or less, the system will not allow the number of administration times associated with the order to be greater than the number of administration times calculated for that frequency. The system will allow for the number of administration times to be LESS than the calculated administration times for that frequency but not less than one administration time. (For example, an order with a schedule of BID is associated with a frequency of 720 minutes. The frequency is divided into 1440 minutes (24 hours) and the resulting calculated administration time is two. For this order, the number of administration times allowed may be no greater than two, but no less than one. Similarly, a schedule frequency of 360 minutes must have at least one administration time but cannot exceed four administration times.)

If an order has the Schedule Type of Continuous, the Schedule entered is NOT in Day of Week (Ex. MO-FR) or PRN (Ex. TID PC PRN) format, and the frequency associated with the schedule is **greater than one day** (1440 minutes) and evenly divisible by 1440, only one administration time is permitted. (For example, an order with a schedule frequency of 2880 minutes must have ONLY one administration time. If the frequency is greater than 1440 minutes and not evenly divisible by 1440, no administration times will be permitted.)

The system shall present warning/error messages to the user if the number of administration times is less than or greater than the maximum admin times calculated for the schedule or if no administration times are entered. If the number of administration

times entered is less than the maximum admin times calculated for the schedule, the warning message: "The number of admin times entered is fewer than indicated by the schedule." shall appear. In this case, the user will be allowed to continue after the warning. If the number of administration times entered is greater than the maximum admin times calculated for the schedule, the error message: "The number of admin times entered is greater than indicated by the schedule." shall appear. In this case, the user will not be allowed to continue after the warning. If no admin times are entered, the error message: "This order requires at least one administration time." shall appear. The user will not be allowed to accept the order until at least one admin time is entered.

#### Order Validation Check Four

If an order has a Schedule Type of Continuous and is an Odd Schedule {a schedule whose frequency is not evenly divisible by or into 1440 minutes (1 day)}, the system shall prevent the entry of administration times. For example, Q5H, Q17H – these are not evenly divisible by 1440. In these cases, the system shall prevent access to the administration times field. No warning message is presented.

#### • Order Validation Check Five

If an order has a Schedule Type of Continuous with a non-odd frequency of greater than one day, (1440 minutes) the system shall prevent more than one administration time, for example, schedules of Q72H, Q3Day, and Q5Day.

If the number of administration times entered exceeds one, the error message: "This order requires one admin time" shall appear. If no administration times are entered, the error message: "This order requires at least one administration time." shall appear. The user will not be allowed to accept the order until at least one admin time is entered.

## • Order Validation Check Six

If an order has a Schedule Type of One Time, or if an order is entered with a schedule that is defined in the schedule file as One Time, the system shall prevent the user from entering more than one administration time.

If more than one administration time is entered, the error message: "This is a One Time Order - only one administration time is permitted." shall appear. No administration times are required.

#### • Order Validation Check Seven

For an order with a Schedule Type of Continuous where no doses/administration times are scheduled between the order's Start Date/Time and the Stop Date/Time, the system shall present a warning message to the user and not allow the order to be accepted or verified until the Start/Stop Date Times, schedule, and/or administration times are adjusted so that at least one dose is scheduled to be given.

If the stop time will result in no administration time between the start time and stop time, the error message: "There must be an admin time that falls between the Start Date/Time and Stop Date/Time." shall appear.

# • "SPECIAL INSTRUCTIONS:" (Regular and Abbreviated)

These are the Special Instructions (using abbreviations whenever possible) needed for the administration of this order. This field allows unlimited characters For new order entry, when Special Instructions are added, the nurse is prompted whether to flag this field for display in a BCMA message box. When finishing orders placed through CPRS, where the Provider Comments are not too long to be placed in this field, the nurse is given the option to copy the comments into this field. Should the nurse choose to copy and flag these comments for display in a BCMA message box on the Virtual Due List (VDL), an exclamation mark "!" will appear in the order next to this field.

The following menu choices regarding copying of provider comments are available:

- Y Yes (copy) This will copy Provider Comments into the Special Instructions field
- N No (don't copy) This will bypass copying Provider Comments
- ! Copy and flag for display in a BCMA Message Box This will copy Provider Comments into the Special Instructions field and flag for display in a BCMA Message Box
- **E** Copy and Edit This will copy Provider Comments into the Special Instructions field and open in a word processing window for editing

#### **Example: Special Instructions**

```
PROVIDER COMMENTS:
This text is Provider Comments.
    Select one of the following:
                Yes (copy)
                No (don't copy)
                 Copy and flag for display in a BCMA Message Box
                 Copy and Edit
Copy the Provider Comments into Special Instructions (Yes/No/!/E): e Copy and Edit
SPECIAL INSTRUCTIONS:
This text is Provider Comments.
 EDIT? NO// y YES
==[ WRAP ]==[ INSERT ]=======< SPECIAL INSTRUCTIONS >====== [ <PF1>H=Help ]====
For Low Magnesium***Magnesium <2.4 give 11gm; Mag <2.2 give 2 gm: mag < 2
give 3 gm; Mag < 1.8 give 2 x 2gm** Then Recheck Magnesium
Would you like to flag the Special Instructions field for display in a BCMA
Message box?
    Select one of the following:
                 Yes
                 Nο
Flag the Special Instructions (Yes/No):
```

Note: For "DONE" Orders (CPRS Med Order) only, the Provider Comments are automatically placed in the SPECIAL INSTRUCTIONS field. If the Provider Comments are greater than 180 characters, Special Instructions will display "REFERENCE PROVIDER COMMENTS IN CPRS FOR INSTRUCTIONS."

**Note:** The up arrow character "^" is not allowed in Special Instructions. If detected, the following prompts appear:

# Example: Prompts when "A" is detected in Special Instructions

# • "START DATE/TIME:" (Regular and Abbreviated)

This is the date and time the order is to begin. For Inpatient Medications orders, the Start Date/Time is initially assigned to the CLOSEST ADMINISTRATION TIME, NEXT ADMINISTRATION TIME or NOW (which is the login date/time of the order), depending on the value of the DEFAULT START DATE CALCULATION field in the INPATIENT WARD PARAMETERS file. Start Date/Time may not be entered prior to 7 days from the order's Login Date.

# • "EXPECTED FIRST DOSE:" (Regular and Abbreviated)

Inpatient Medications no longer displays an expected first dose for orders containing a schedule with a schedule type of One-time. The system also no longer displays an expected first dose for orders containing a schedule with a schedule type of On-call. The Inpatient Medications application performs the following actions.

- Modifies order entry to allow entry of a Day-of-Week schedule in the following format: days@schedule name. For example, MO-WE-FR@BID or TU@Q6H.
- Translates the schedule into the appropriate administration times. For example, MO-WE-FR@BID is translated to MO-WE-FR@10-22.
- Modifies the expected first dose calculation to accept the new format of schedules. For example, MO-WE-FR@BID or MO@Q6H.
- Accepts the new formatted schedules from CPRS. For example, MO-WE-FR@BID or TU@Q6H.

Translates a schedule received in the new format from CPRS into the appropriate schedule and administration times.

# • "STOP DATE/TIME:" (Regular)

This is the date and time the order will automatically expire. The system calculates the default Stop Date/Time for order administration based on the STOP TIME FOR ORDER site parameter. The default date shown is the least of (1) the <IV TYPE> GOOD FOR HOW MANY DAYS site parameter (where <IV TYPE> is LVPs, PBs, etc.), (2) the NUMBER OF DAYS FOR IV ORDER field (found in the IV ADDITIVES file) for all additives in this order, (3) the DAY (nD) or DOSE (nL) LIMIT field (found in the PHARMACY ORDERABLE ITEM file) for the orderable item associated with this order or (4) the duration received from CPRS (if applicable). The Site Manager or Application Coordinator can change any fields. This package initially calculates a default Stop Date/Time, depending on the INPATIENT WARD PARAMETERS file except for one-time orders and Inpatient orders for Outpatients.

For a one-time order, the ward parameter, DAYS UNTIL STOP FOR ONE-TIME, is accessed. When this parameter is not available, the system parameter, DAYS UNTIL STOP FOR ONE-TIME, will be used to determine the stop date. When neither parameter has been set, the ward parameter, DAYS UNTIL STOP DATE/TIME, will be used instead of the start and stop date being equal.

# • "PROVIDER:" (Regular and Abbreviated)

This identifies the provider who authorized the order. Only users identified as active Providers, who are authorized to write medication orders, may be selected.

# • "SELF MED:" (Regular and Abbreviated)

Identifies the order as one whose medication is to be given for administration by the patient. This prompt is only shown if the 'SELF MED' IN ORDER ENTRY field of the INPATIENT WARD PARAMETERS file is set to On.

## • "NATURE OF ORDER:" (Regular and Abbreviated)

This is the method the provider used to communicate the order to the user who entered or took action on the order. Nature of Order is defined in CPRS. Written will be the default for new orders entered. When a new order is created due to an edit, the default will be Service Correction. The following table shows some Nature of Order examples.

Nature of Order	Description	Prompted for Signature in CPRS	Chart Copy Printed?
Written	The source of the order is a written doctor's order	No	No
Verbal	A doctor verbally requested the order	Yes	Yes
Telephoned	A doctor telephoned the service to request the order	Yes	Yes
Service Correction	The service is discontinuing or adding new orders to carry out the intent of an order already received	No	No

Duplicate	This applies to orders that are discontinued because they are a duplicate of another order	No	Yes
Policy	These are orders that are created as a matter of hospital policy	No	Yes

The Nature of Order abbreviation will display on the order next to the Provider's Name. The abbreviations will be in lowercase and enclosed in brackets. Written will display as [w], telephoned as [p], verbal as [v], policy as [i], electronically entered as [e], and service correction as [s]. If the order is electronically signed through the CPRS package <u>AND</u> the CPRS patch OR\*3\*141 is installed on the user's system, then [es] will appear next to the Provider's Name instead of the Nature of Order abbreviation.

#### **Example: New Order Entry**

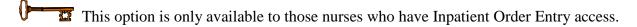
```
Patient Information Apr 26, 2012@12:34:57
PSJPATIENT1,ONE Ward: GENERAL
PID: 000-00-0202 Room-Bed: GENMED-2 Ht
                                                            Page:
                                                                    1 of
                                                   Ht(cm): ___
   DOB: 05/16/70 (41)
                                                    Wt(kg):
                                                Admitted: 10/12/10
   Sex: FEMALE
                                        Last transferred: ******
    Dx: LUNG CANCER
Allergies - Verified: LATEX
       Non-Verified:
  Adverse Reactions:
 Inpatient Narrative:
Outpatient Narrative:
         Enter ?? for more actions
DA Detailed Allergy/ADR List
                                      IN Intervention Menu
VP View Profile
Select Action: View Profile// View Profile
SHORT, LONG, or NO Profile? SHORT// NO PROFILE
                            Apr 26, 2012@12:35:21
Inpatient Order Entry
                                                                     1 of
                                                            Page:
                             Ward: GENERAL
PSJPATIENT1,ONE
                                                                    Α
   PID: 000-00-0202
                             Room-Bed: GENMED-2
                                                    Ht(cm): _
                                                    Wt(kg):
   DOB: 05/16/70 (41)
   Sex: FEMALE
                                               Admitted: 10/12/10
    Dx: LUNG CANCER
                                        Last transferred: ******
  CrCL: <Not Found>
                                                BSA (m2):
Select from list of Available Dosages or Enter Free Text Dose: 2 SLIDING SCALE
You entered SLIDING SCALE is this correct? Yes// YES
MED ROUTE: SUBCUTANEOUS// SQ
    1 SUBCUTANEOUS SQ
        SUBCUTANEOUS
                            SC
        SUBCUTANEOUS ABDOMEN
                                    SUBCUT ABD
CHOOSE 1-3: 1 SUBCUTANEOUS
SCHEDULE: TID
    1 TID
               09-13-17
    2 TID 01-02-03-04
CHOOSE 1-2: 1 09-13-17
SCHEDULE TYPE: CONTINUOUS//
ADMIN TIMES: 09-13-17//
SPECIAL INSTRUCTIONS:
  No existing text
  Edit? NO// YES
```

```
==[ WRAP ]==[ INSERT ]======< SPECIAL INSTRUCTIONS >====== [ <PF1>H=Help ]====
BELOW.
VERY INSULIN SENSITIVE:
FOR BG= 159-199 [GIVE 1 UNIT]
FOR BG= 200-249 [GIVE 2 UNITS]
FOR BG= 250-299 [GIVE 3 UNITS]
FOR BG= 300-349 [GIVE 4 UNITS]
FOR BG= >349
             [GIVE 5 UNITS] AND CONTACT HO
NORMAL INSULIN SENSITIVE:
FOR BG= 159-199 [GIVE 1 UNIT]
FOR BG= 200-249 [GIVE 3 UNITS]
FOR BG= 250-299 [GIVE 4 UNITS]
FOR BG= 300-349 [GIVE 7 UNITS]
FOR BG= >349
             [GIVE 8 UNITS] AND CONTACT HO
VERY INSULIN RESISTANT:
FOR BG= 159-199 [GIVE 2 UNITS]
FOR BG= 200-249 [GIVE 4 UNITS]
Apr 26, 2012@12:50:48
Would you like to flag the Special Instructions field for display in a BCMA
Message box?
    Select one of the following:
         Υ
                   Yes
         N
                   No
Flag the Special Instructions (Yes/No): YES Yes
START DATE/TIME: APR 26,2012@12:51// APR 26,2012@12:51
STOP DATE/TIME: MAY 10,2012@12:51//
                                    MAY 10,2012@12:51
Expected First Dose: APR 26,2012@13:00
PROVIDER: McCOY, BONES//
NON-VERIFIED UNIT DOSE
                            Apr 26, 2012@12:50:48
                                                          Page:
                                                                  1 of
PSJPATIENT1,ONE
                               Ward: GENERAL
                                                                  Α
                                                   Ht(cm):
   PID: 000-00-0202
                            Room-Bed: GENMED-2
   DOB: 05/16/70 (41)
                                                   Wt(kg): _
 (1)Orderable Item: INSULIN, ASPART, HUMAN 100UNT/ML INJ
     Instructions:
 (2)Dosage Ordered: SLIDING SCALE
         Duration:
                                                   (3)Start: 04/26/12 12:51
        Med Route: SUBCUTANEOUS
                                                   (5) Stop: 05/10/12 12:51
 (6) Schedule Type: CONTINUOUS
 (9) Admin Times: 09-13-17
       Schedule: TID
(8)
        Provider: McCOY, BONES
 (11) Special Instructions!: (see below)
     CHECK INSULIN SENSITIVITY DESIGNATED BY PROVIDER AND ADMINISTER SCALE AS
     BELOW.
     VERY INSULIN SENSITIVE:
     FOR BG= 159-199 [GIVE 1 UNIT]
         Enter ?? for more actions
ED Edit
                                      AC ACCEPT
Select Item(s): Next Screen// AC ACCEPT
NATURE OF ORDER: WRITTEN//
...transcribing this non-verified order....
                            Apr 26, 2012@12:50:54
NON-VERIFIED UNIT DOSE
                                                                  1 of
                                                          Page:
PSJPATIENT1, ONE
                                Ward: GENERAL
```

```
Room-Bed: GENMED-2 Ht(cm): ____(___
   PID: 000-00-0202
   DOB: 05/16/70 (41)
                                                     Wt(kg): ___
*(1)Orderable Item: INSULIN, ASPART, HUMAN 100UNT/ML INJ
     Instructions:
*(2)Dosage Ordered: SLIDING SCALE
                                                    (3)Start: 04/26/12 12:51
         Duration:
        Med Route: SUBCUTANEOUS
                                                    (5) Stop: 05/10/12 12:51
 (6) Schedule Type: CONTINUOUS
        Schedule: TID
 (9) Admin Times: 09-13-17
       Provider: McCOY, BONES [w]
*(10)
 (11) Special Instructions: (see below)
     CHECK INSULIN SENSITIVITY DESIGNATED BY PROVIDER AND ADMINISTER SCALE AS
     BELOW.
     VERY INSULIN SENSITIVE:
        Enter ?? for more actions
DC Discontinue ED Edit
                                                 AL Activity Logs
HD (Hold)
FL Flag
                     RN (Renew)
VF Verify
Select Item(s): Next Screen// VF Verify
...a few moments, please.....
Pre-Exchange DOSES:
ORDER VERIFIED.
Enter RETURN to continue or '^' to exit:
```

# $\underline{IV}$

For IV order entry, the nurse must bypass the "Select DRUG:" prompt (by pressing **<Enter>**) and then choosing the IV Type at the "Select IV TYPE:" prompt. The following are the prompts that the nurse can expect to encounter while entering a new IV order for the patient.



#### • "Select IV TYPE:"

IV types are admixture, piggyback, hyperal, syringe, and chemotherapy. An admixture is a Large Volume Parenteral (LVP) solution intended for continuous parenteral infusion. A piggyback is a small volume parenteral solution used for intermittent infusion. Hyperalimentation (hyperal) is long-term feeding of a protein-carbohydrate solution. A syringe IV type order uses a syringe rather than a bottle or a bag. Chemotherapy is the treatment and prevention of cancer with chemical agents.

When an order is received from CPRS, Inpatient Medications will accept and send updates to IV Types from CPRS. When an IV type of Continuous is received, Inpatient Medications defaults to an IV type of Admixture. However, when an IV type of Intermittent is received, Inpatient Medications defaults to an IV type of piggyback.

# • "Select ADDITIVE:"

There can be any number of additives for an order, including zero. An additive or additive synonym can be entered. If the Information Resources Management Service (IRMS) Chief/Site Manager or Application Coordinator has defined it in the IV ADDITIVES file, the nurse may enter a quick code for an additive. The quick code allows the user to pre-define certain fields,

thus speeding up the order entry process. The **entire** quick code name must be entered to receive all pre-defined fields in the order.

**Note:** Drug inquiry is allowed during order entry by entering two question marks (??) at the STRENGTH prompt for information on an additive or solution.

When an additive is chosen, if an active drug text entry for the Dispense Drug and/or Orderable Item linked to this additive exists, then the prompt, "Restriction/Guideline(s) exist. Display?:" will be displayed along with the corresponding defaults. The drug text indicator will be <**DIN**> and will be displayed on the right side of the IV Type on the same line. This indicator will be highlighted.

If the Dispense Drug tied to the Additive or the Orderable Item has a non-formulary status, this status will be displayed on the screen as "\*N/F\*" beside the Additive or Orderable Item.

## • "BOTTLE:"

The bottle number is used to specify in which the additive will be included for the IV order. If this field is blank, it means that the additive will be included in all bottles.

A pending order from CPRS can have an additive bottle value such as "1" (1 Bag/Day), blank (All bags), or "See Comments" (which bottle number(s) to place the additive in, is entered in the Provider Comments). During the finishing process, the user can enter/edit a specific value for the bottle number(s). If the bottle number for an additive contains "See Comments", the user must replace it with either the specific bottle number(s) or enter an "@" to remove the "See Comments" to indicate that the additive will be included in all bottles.

## • "Select SOLUTION:"

There can be any number of solutions in an order, depending on the type. It is even possible to require zero solutions when an additive is pre-mixed with a solution. If no solutions are chosen, the system will display a warning message, in case it is an oversight, and gives the opportunity to add one. The nurse may enter an IV solution or IV solution synonym.

When a solution is chosen, if an active drug text entry for the Dispense Drug and/or Orderable Item linked to this solution exists, then the prompt, "Restriction/Guideline(s) exist. Display?:" will be displayed along with the corresponding defaults. The drug text indicator will be <**DIN**> and will be displayed on the right side of the IV Type on the same line. This indicator will be highlighted.

If the Dispense Drug tied to the Solution or the Orderable Item has a non-formulary status, this status will be displayed on the screen as "\*N/F\*" beside the Solution or Orderable Item.

## • "INFUSION RATE:"

42

The infusion rate is the rate at which the IV is to be administered. This value, in conjunction with the total volume of the hyperal or the admixture type, is used to determine the time covered by one bag; hence, the system can predict the bags needed during a specified time of coverage. This

field is free text for piggybacks. For admixtures, a number that will represent the infusion rate must be entered. The nurse can also specify the # of bags per day that will be needed. This will automatically populate the NUMBER OF LABELS PER DAY (NLPD) field.

**Example:** 125 = 125 ml/hr (IV system will calculate bags needed per day), 125@2 = 125 ml/hr with 2 labels per day, Titrate@1 = Titrate with 1 label per day. The format of this field is either a number only or free text only, or [FREE TEXT@NUMBER OF LABELS PER DAY.]

## **Intermittent IV Orders**

The schedule and administration times for intermittent orders are used to determine the number of daily scheduled labels. The use of the @ symbol for intermittent IV orders is not allowed.

## **Continuous IV Orders**

A 2-digit numeric field is added to the NON-VERIFIED ORDERS file (#53.1) and to the IV (#100) multiple of the PHARMACY PATIENT file (#55).

- Printed IV labels do not display the NLPD field regardless of value.
- The NLPD field, if populated, determines the number of labels that will print when the *Scheduled Labels (IV)* [PSJI LBLS] option is run for continuous IV orders.
- The NLPD field is not sent to BCMA.
- When an Infusion Rate is received from CPRS in the format Rate@Labels, the "@" symbol is used to separate the Infusion Rate into its respective INFUSION RATE and NLPD component fields.
- The number of labels per day is always shown next to the infusion rate, when the infusion rate is free text or the number of labels has been entered by the user, or when the number of labels has been received from CPRS. The INFUSION RATE field must be selected when editing. There is no field number reference for NLPD.
- Edits to the NLPD field never create a new order.
- The NLPD field is not populated when the number of labels is system calculated based on a numeric infusion rate.
- The following rules apply to the use of the "@" symbol in the Infusion Rate: The number entered after the "@" symbol populates the NLPD field. Anything entered before the "@" symbol displays in the INFUSION RATE field. The "@" symbol will not be visible in the display of the Infusion Rate.

#### **Example:**

```
INFUSION RATE: 50 ml/hr// Titrate@0

NUMBER OF LABELS PER DAY: 0//
```

When the infusion rate is entered as free text, a minimum of two characters is required for the order level validation for Infusion rate for Inpatient Medications or CPRS orders.

#### **Example:**

```
INFUSION RATE: 50 ml/hr// INFUSE SLOWLY
```

When the infusion rate is numeric, the NLPD is optional. When entering free text in THE INFUSION RATE field, the NLPD is required with no default. Numeric entry of 0-99 is allowed; all other entries are invalid.

A new order is not created when a change is made to the NLPD field.

When the INFUSION RATE field is selected, an NLPD prompt displays.

#### **Example:**

```
NUMBER OF LABELS PER DAY: //
```

An abbreviation entered in the INFUSION RATE field is replaced with expanded text, if the abbreviation has been defined in the INFUSION INSTRUCTIONS file (#53.47.)

#### Example:

```
INFUSION RATE: 50 ml/hr// T ... Now Expanding Text

Input expanded to Titrate

Press Return to Continue
```

A minimum of 2 characters and a maximum of 30 characters may be entered into the INFUSION RATE field. The special character "^" is not allowed. A warning message displays if the free text entry contains less than the minimum requirement of 2 characters or more than the maximum requirement of 30 characters.

## **Example: Warning Message**

```
INFUSION RATE: 50 ml/hr// P

Free text entries must contain a minimum of 2 characters and a maximum of 30 characters.

INFUSION RATE: 50 ml/hr//
```

The INFUSION INSTRUCTIONS file (#53.47) allows the user to add to or edit the abbreviations or expanded text by storing the infusion rate abbreviations, up to 9 characters, and the associated expanded text, a minimum of 2 characters and a maximum of 30 characters.

Help Text is provided for the infusion rate when ? or ?? is entered.

When an order is received from CPRS, Inpatient Medications accepts infusion rates in both ml/hr and as "infuse over time." In the Order View screen, for orders with an IV Type considered Intermittent, the infusion rate will display as "infuse over" followed by the time. For example, infuse over 30 minutes.



**Note:** If an administration time(s) is defined, the number of labels will reflect the administration time(s) for the intermittent IVPB type orders.

## • "MED ROUTE:" (Regular and Abbreviated)

Inpatient Medications uses the medication route provided by CPRS as the default when finishing an IV order, and transmits any updates to an order's medication route to CPRS.

Inpatient Medications determines the default medication route for a new order entered through Inpatient Medications, and sends the full Medication Route name for display on the BCMA VDL.

This is the administration route to be used for the order. If a Medication Route is identified for the selected Orderable Item, it will be used as the default for the order. Inpatient Medications applies the Medication Route provided by CPRS as the default when finishing an IV order.

- If no medication route is specified, Inpatient Medications will use the Medication Route provided by CPRS as the default when finishing an IV order.
- If updates are made to the medication route, Inpatient Medications will transmit any updates to an order's Medication Route to CPRS.
- Inpatient Medications determines the default Medication Route for a new order.
- Inpatient Medications sends the full Medication Route name for display on the BCMA VDL.

## • "SCHEDULE:"

This prompt occurs on piggyback and intermittent syringe orders. Schedules must be selected from the ADMINISTRATION SCHEDULE file, with the following exceptions:

- Schedule containing PRN: (Ex. TID PC PRN). If the schedule contains PRN, the base schedule must be in the ADMINISTRATION SCHEDULE file.
- Day of week schedules (Ex. MO-FR or MO-FR@0900)
- Admin time only schedules (Ex. 09-13)

#### "ADMINISTRATION TIME:"

This is free text. The pharmacist might want to enter the times of dose administration using military time such as 03-09-15-21. Administration times must be entered in a two or four digit format. If multiple administration times are needed, they must be separated by a dash (e.g., 09-13 or 0900-1300). This field must be left blank for odd schedules, (e.g., Q16H).

## • "OTHER PRINT INFO:"

The system allows a word processing entry of unlimited free text. For new order entry, when Other Print Info is added, the nurse is prompted whether to flag this field for display in a BCMA message box. When finishing orders placed through CPRS, where the Provider Comments are not too long to be placed in this field, the nurse is given the option to copy the comments into

this field. Should the nurse choose to copy and flag these comments for display in a BCMA message box on the VDL, an exclamation mark "!" will appear in the order next to this field.

The following menu choices regarding copying of provider comments are available:

- Y Yes (copy) This will copy Provider Comments into the Other Print Info field.
- N No (don't copy) This will bypass copying Provider Comments.
- ! Copy and flag for display in a BCMA Message Box This will copy Provider Comments into the Other Print Info field and flag for display in a BCMA Message Box.
- E Copy and Edit This will copy Provider Comments into the Other Print Info field and open in a word processing window for editing.

The system enables the nurse to review the provider comments received from CPRS during the finishing of an IV order. A maximum of 60 characters of text is printed on the IV label from Other Print Info. When Other Print Info exceeds 60 characters, the message: "Instructions too long. See Order View or BCMA for full text." appears on the IV label.

Before the nurse enters Other Print Info information, the message: "WARNING, IF OTHER PRINT INFO exceeds one line of 60 characters, 'Instructions too long. See Order View or BCMA for full text.' prints on the IV label instead of the full text."

After the nurse enters Other Print Info information, if the entry exceeds one line of 60 characters, the message: "WARNING OTHER PRINT INFO exceeds one line of 60 characters, 'Instructions too long. See Order View or BCMA for full text.' prints on the IV label instead of the full text."

# **Example: Other Print Info**

```
OTHER PRINT INFO
This text is Other Print Info
Would you like to flag the Other Print Info field for display in a BCMA
Message box?

Select one of the following:

Y
Yes
N
No
Flag the Other Print Info (Yes/No): y Yes
```

**Note:** For "DONE" Orders (CPRS Med Order) <u>only</u>, the Provider Comments are automatically placed in the OTHER PRINT INFO field. If the Provider Comments are greater than 60 characters, Other Print Info will display "REFERENCE PROVIDER COMMENTS IN CPRS FOR INSTRUCTIONS."

# • "START DATE / TIME:"

The system calculates the default Start Date/Time for order administration based on the DEFAULT START DATE CALCULATION field in the INPATIENT WARD PARAMETERS file. This field allows the site to use the NEXT or CLOSEST administration or delivery time, or

NOW, which is the order's login date/time as the default Start Date. When NOW is selected for this parameter, it will <u>always</u> be the default Start Date/Time for IVs. This may be overridden by entering the desired date/time at the prompt.

When NEXT or CLOSEST is used in this parameter and the IV is a continuous-type IV order, the default answer for this prompt is based on the delivery times for the IV room specified for that order entry session. For intermittent type IV orders, if the order has administration times, the start date/time will be the NEXT or CLOSEST administration time depending on the parameter. If the intermittent type IV order does not have administration times, the start date/time will round up or down to the closest hour. The Site Manager or Application Coordinator can change this field.

# • "EXPECTED FIRST DOSE:" (Regular and Abbreviated)

Inpatient Medications no longer displays an expected first dose for orders containing a schedule with a schedule type of One-time. The system also no longer display an expected first dose for orders containing a schedule with a schedule type of On-call. The Inpatient Medications application performs the following actions.

- Modifies order entry to allow entry of a Day-of-Week schedule in the following format: days@schedule name. For example, MO-WE-FR@BID or TU@Q6H.
- Translates the schedule into the appropriate administration times. For example, MO-WE-FR@BID is translated to MO-WE-FR@10-22.
- Modifies the expected first dose calculation to accept the new format of schedules. For example, MO-WE-FR@BID or MO@Q6H.
- Accepts the new formatted schedules from CPRS. For example, MO-WE-FR@BID or TU@Q6H.
- Translates a schedule received in the new format from CPRS into the appropriate schedule and administration times.

## • "STOP DATE / TIME:"

The system calculates the default Stop Date/Time for order administration based on the STOP TIME FOR ORDER site parameter. The default date shown is the least of (1) the <IV TYPE> GOOD FOR HOW MANY DAYS site parameter (where <IV TYPE> is LVPs, PBs, etc.), (2) the NUMBER OF DAYS FOR IV ORDER field (found in the IV ADDITIVES file) for all additives in this order, or (3) the DAY (nD) or DOSE (nL) LIMIT field (found in the PHARMACY ORDERABLE ITEM file) for the orderable item associated with this order. The Site Manager or Application Coordinator can change these fields.

## • "NATURE OF ORDER:"

This is the method the provider used to communicate the order to the user who entered or took action on the order. Nature of Order is defined in CPRS. "Written" will be the default for new orders entered. When a new order is created due to an edit, the default will be Service Correction. The following table shows some Nature of Order examples.

Nature of Order	Description	Prompted for Signature in CPRS?	Chart Copy Printed?
Written	The source of the order is a written doctor's order	No	No
Verbal	A doctor verbally requested the order	Yes	Yes
Telephoned	A doctor telephoned the service to request the order	Yes	Yes
Service Correction	The service is discontinuing or adding new orders to carry out the intent of an order already received	No	No
Duplicate	This applies to orders that are discontinued because they are a duplicate of another order	No	Yes
Policy	These are orders that are created as a matter of hospital policy	No	Yes

The Nature of Order abbreviation will display on the order next to the Provider's Name. The abbreviations will be in lowercase and enclosed in brackets. Written will display as [w], telephoned as [p], verbal as [v], policy as [i], electronically entered as [e], and service correction as [s]. If the order is electronically signed through the CPRS package <u>AND</u> the CPRS patch OR\*3\*141 is installed on the user's system, then [es] will appear next to the Provider's Name instead of the Nature of Order abbreviation.

#### • "Select CLINIC LOCATION:"

This prompt is only displayed for Outpatient IV orders entered through the Inpatient Medications package. The user will enter the hospital location name when prompted.

**Note:** While entering an order, the nurse can quickly delete the order by typing a caret (^) at any one of the prompts listed above except at the "STOP DATE/TIME:" prompt. Once the user has passed this prompt, if the order still needs to be deleted, a caret (^) can be entered at the "Is this O.K.:" prompt.

#### **Example: New Order Entry**

```
Select ADDITIVE: MULT

1 MULTIVITAMIN INJ

2 MULTIVITAMINS

CHOOSE 1-2: 2 MULTIVITAMINS

(The units of strength for this additive are in ML)

Strength: 22 ML

Select ADDITIVE:
Select SOLUTION: 0.9

1 0.9% SODIUM CHLORIDE 100 ML

BCMA

2 0.9% SODIUM CHLORIDE 50 ML

BCMA
```

CHOOSE 1-2: 1 0.9% SODIUM CHLORIDE 100 ML BCMA

Now doing allergy checks. Please wait...

Now processing Clinical Reminder Order Checks. Please wait ...

Now Processing Enhanced Order Checks!Please wait...

This patient is receiving the following orders(s) that have a SIGNIFICANT Drug Interaction with MULTIVITAMINS 2 ML:

WARFARIN INJ C 02/22 03/01 N

Give: 5MG/1VIAL PO 3ID

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

Display Professional Interaction Monograph(s)? NO// YES

DEVICE: HOME//COMPUTER ROOM

Professional Monograph

Drug Interaction with WARFARIN and MULTIVITAMINS

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: Selected Anticoagulants/Alpha Tocopheryl

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

MECHANISM OF ACTION: Unknown.

CLINICAL EFFECTS: Vitamin E may increase the pharmacologic effects of anticoagulants.

PREDISPOSING FACTORS: None determined.

PATIENT MANAGEMENT: Coadministration of vitamin E and anticoagulants

Press Return to continue...

should be avoided. If both drugs are administered, monitor hypoprothrombinemic response to warfarin and adjust the dose of the anticoagulants as indicated. The time of highest risk for a coumarin-type drug interaction is when the precipitant drug is initiated or discontinued. Contact the prescriber before initiating, altering the dose or discontinuing either drug.

DISCUSSION: Vitamin E doses of 800 International Units/day and more have been reported to increase the hypoprothrombinemic effect of warfarin: while doses of 42 International units/day of vitamin E for 30 days have increased the hypoprothrombinemic effect of dicumarol. Agenerase brand of amprenavir capsules and oral solution contain a significant amount of vitamin E. Each 150 mg capsule contains 109 International Units vitamin E, with a total of 1744 International Units of vitamin E in the recommended daily adult dose. Each mL of oral solution contains 46 International Units of vitamin E.

#### REFERENCES

1.Corrigan JJ Jr, Marcus FI. Coagulopathy associated with vitamin E ingestion. JAMA 1974 Dec 2:230(9):1300-1.

Press Return to continue...

```
2.Schrogie JJ. Letter: Coagulopathy and fat-soluble vitamins. JAMA 1976
Apr 7:232(1):19.
3.Corrigan JJ Jr, Ulfers LL. Effect of vitamin E on prothrombin levels
in warfarin-induced vitamin K deficiency. Am J Clin Nutr 1981 Sep:
34(9):1701-5.
4. Anonymous. Vitamin K, vitamin E and the coumarin drugs. Nutr Rev 1982
Jun: 40(6):180-2.
5. Agenerase (amprenavir) Capsules US prescribing information.
GlaxoSmithKline February, 2004.
Copyright 2010 First DataBank, Inc.
Do you want to Intervene with MULTIVITAMINS 2 ML? NO//
INFUSION RATE: 125 INFUSE OF 125 MINUTES
MED ROUTE: IV//
SCHEDULE: OID
ADMINISTRATION TIMES: 09-13-17-21//
REMARKS:
OTHER PRINT INFO:
START DATE/TIME: FEB 26,2010@18:51// (FEB 26, 2010@18:51)
STOP DATE/TIME: MAR 27,2010@23:59
PROVIDER: PROVIDER, ONE
    1 PROVIDER, ONE
                        NEW YORK OP 10BA1/ADP Scholar Extra
ordinaire
    2 PROVIDER, ONEHUNDRED TZB
                                       10BA1/ADP Scholar Extraord
ordinaire
    3 PROVIDER, ONEHUNDREDFIVE 10BA1/ADP Scholar Extraor
dordinaire
    4 PROVIDER, ONEHUNDREDNINETYONE
                                               BM
                                                      10BA1/ADP Schol
ar Extraordinaire
    5 PROVIDER, ONEHUNDREDSIXTYSEVEN
                                                10BA1/ADP Scholar E
xtraordinaire
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1 PROVIDER, ONE NEW YORK OP 10BA1/ADP Scholar E
xtraordinaire
Orderable Item: MULTIVITAMINS INJ
Give: IV QID
100716
[1]0808 7A GEN MED 02/25/10
EIGHT, INPATIENT 726-B
MIII TIVITAMINS 2 MI
0.9% SODIUM CHLORIDE 100 ML
INFUSE OVER 125 MINUTES
OID
09-13-17-21
1[1]
Start date; FEB 25,2010 18:51 Stop date: MAR 27,2010 23:59
Expected First Dose: FEB 25,2010@21:00
Is this O.K.: YES//YES
NATURE OF ORDER: WRITTEN// W
...transcribing this non-verified order....
                Feb 25, 2010@18:54:08 Page: 1 of 2
NON-VERIFIED IV
                             Ward: 7A GEN
EIGHT, INPATIENT
  PID: 666-00-0808 Room-Bed: 726-B
DOB: 01/01/50 (61)
                                                   Ht(cm): ___
                                                   Wt(kg): ____ (__
*(1) Additives:
                           Type: PIGGYBACK
      MULTIVITAMINS 2 ML
 (2) Solutions:
      0.9% SODIUM CHLORIDE 100 ML
                                            (4) Start: 02/26/10 18:51
         Duration:
(3) Infusion Rate: INFUSE OVER 125 MINUTES
```

After entering the data for the order, the system will prompt the nurse to confirm that the order is correct. The IV module contains an integrity checker to ensure the necessary fields are answered for each type of order. The nurse must edit the order to make corrections if all of these fields are not answered correctly. If the order contains no errors, but has a warning, the user will be allowed to proceed.

#### PADE Stock and Ward Stock Items

The VistA Pharmacy Inpatient Order Entry Patient Profile screen contains information on whether or not a drug is a PADE stock item.

New display functions include the following:

- PD = PADE stock item (Medication in the PADE inventory file)
- WP = Ward Stock and PADE stock item

# **Example: Patient Profile Inpatient Order Entry screen display**

```
Inpatient Order Entry Mar 03, 2015@13:38:02
                Ward: 7A GEN
BCMAPATIENT, FOUR
                                                   A
                                     Ht(cm): _____
Wt(kg): ____
  PID: 000-00-0001
                       Room-Bed:
  DOB: 12/25/66 (48)
                                Admitted: 01/12/09
  Sex: FEMALE
  Dx: COUGH
                             Last transferred: ******
                                   BSA (m2): _
 CrCL: <Not Found>
 ----ACTIVE-----
     ALPRAZOLAM TAB
                                    C 03/02 03/09 A PD
     Give: 0.25MG PO BID
    AMPICILLIN CAP, ORAL
                                    C 03/03 03/09 A WP
     Give: 250MG BY MOUTH TID
     3 CAPTOPRIL TAB
      Give: 75MG PO TID
                                    ? **** **** P WS
  4 LEVOTHYROXINE TAB
      Give: 0.025MG BY MOUTH *Q8H
      Enter ?? for more actions
                           SO Select Order
PI Patient Information
PU Patient Record Update
                            NO New Order Entry
Select Action: Quit//
```

# 4.5.3 Detailed Allergy/ADR List

The Detailed Allergy/ADR List action displays a detailed listing of the selected item from the patient's Allergy/ADR List. Entry to the *Edit Allergy/ADR Data* option is provided with this list also.

# • Enter/Edit Allergy/ADR Data

Provides access to the Adverse Reaction Tracking (ART) package to allow entry and/or edit of allergy adverse reaction data for the patient. See the Allergy package documentation for more information on Allergy/ADR processing.

# Select Allergy

Allows the user to view a specific allergy. Intervention Menu



This option is only available to those users who hold the PSJ RPHARM key.

The Intervention Menu action allows entry of new interventions and existing interventions to be edited, deleted, viewed, or printed. Each kind of intervention will be discussed and an example will follow.



**Note**: Interventions can also be dynamically created in response to Order Checks for critical drug-drug interactions and allergy/ADRs. Refer to Section 4.9 Order Checks.

If a change is made to an intervention associated to an inpatient order made in response to critical drug-drug and/or allergy/ADR, the changes are reflected and displayed whenever interventions display.

New interventions entered via the Intervention Menu are at the patient level and are not associated with a particular order. Consequently, new entries made through this menu are not reflected in the OCI listing, the BCMA Display Order detail report, and do not cause highlighting in BCMA.

• New: This option is used to add an entry into the APSP INTERVENTION file.

#### **Example: New Intervention**

```
Patient Information Feb 11, 2011@11:17:44
BCMAPATIENT,FIVE Ward: 3 NORTH
PID: 000-00-5555 Room-Bed: 1-2
                                                                Page:
                                                                         1 of
   PID: 000-00-5555
DOB: 09/16/45 (65)
                                                      Ht(cm): ____(__
                                           Wt(kg):
   Sex: MALE
    Dx: FLUID IN LUNGS
                                         Last transferred: *****
 Allergies/Reactions: NKA
 Inpatient Narrative:
Outpatient Narrative:
          Enter ?? for more actions
PU Patient Record Update
                                         NO New Order Entry
DA Detailed Allergy/ADR List
                                         IN Intervention Menu
VP View Profile
```

```
Select Action: View Profile// IN Intervention Menu
                             --- Intervention Menu ---
DI Delete Pharmacy Intervention
ED Edit Pharmacy Intervention
NE Enter Pharmacy Intervention
                                        PO
                                             Print Pharmacy Intervention
                                        VP View Pharmacy Intervention
Select Item(s): NE Enter Pharmacy Intervention
Select APSP INTERVENTION INTERVENTION DATE: T FEB 11, 2011
 Are you adding 'FEB 11, 2011' as a new APSP INTERVENTION (the 526TH)? No// Y
  (Yes)
   APSP INTERVENTION PATIENT: PRETST, PATTHREE
                                                        8-1-61 000009677
NO NSC VETERAN
  Combat Vet Status: ELIGIBLE
                                                          End Date: 02/12/2015
  APSP INTERVENTION DRUG: CIMETIDINE 200MG TAB
                                                            GA301
PROVIDER: PHARMACIST, LINDA J
INSTITUTED BY: PHARMACY// PHARMACY
INTERVENTION: ?
Answer with APSP INTERVENTION TYPE, or NUMBER
 Do you want the entire 22-Entry APSP INTERVENTION TYPE List? N (No)
INTERVENTION: ALLERGY
RECOMMENDATION: NO CHANGE
WAS PROVIDER CONTACTED: NO NO
RECOMMENDATION ACCEPTED: Y
                            YES
FINANCIAL COST:
REASON FOR INTERVENTION:
  No existing text
  Edit? NO//
ACTION TAKEN:
 No existing text
 Edit? NO//
CLINICAL IMPACT:
No existing text
 Edit? NO//
FINANCIAL IMPACT:
  No existing text
  Edit? NO//
Select APSP INTERVENTION INTERVENTION DATE:
```

• Edit: This option is used to edit an existing entry in the APSP INTERVENTION file.

#### **Example: Edit an Intervention**

```
Feb 11, 2011@11:52:02
Patient Information
                                                       Page: 1 of 1
PRETST, PATTHREE
                             Ward:
  PID: 000-00-9677
                           Room-Bed:
                                                 Ht(cm): ___
  DOB: 08/01/61 (49)
                                                 Wt(kg): ____(_
  Sex: MALE
                                             Admitted:
                                     Last transferred: ******
   Dx:
 Allergies/Reactions: NKA
 Inpatient Narrative:
Outpatient Narrative:
         Enter ?? for more actions
PU Patient Record Update
                                   NO New Order Entry
DA Detailed Allergy/ADR List
                                   IN Intervention Menu
VP View Profile
Select Action: View Profile// IN Intervention Menu
                         --- Intervention Menu ---
```

```
DI Delete Pharmacy Intervention
                                      PO Print Pharmacy Intervention
ED
    Edit Pharmacy Intervention
                                      VP View Pharmacy Intervention
NE
    Enter Pharmacy Intervention
Select Item(s): ED Edit Pharmacy Intervention
Select INTERVENTION:T SEP 22, 2000
                                           PRETST, PATTHREE WARFARIN 10MG
INTERVENTION DATE: SEP 22,2000// <Enter>
PATIENT: PRETST, PATTHREE// <Enter>
PROVIDER: PSJPROVIDER, ONE // <Enter>
PHARMACIST: PSJNURSE, ONE // <Enter>
DRUG: WARFARIN 10MG// <Enter>
INSTITUTED BY: PHARMACY// <Enter>
INTERVENTION: ALLERGY// <Enter>
OTHER FOR INTERVENTION:
 1>
RECOMMENDATION: NO CHANGE// <Enter>
OTHER FOR RECOMMENDATION:
 1>
WAS PROVIDER CONTACTED: NO// <Enter>
PROVIDER CONTACTED:
RECOMMENDATION ACCEPTED: YES// <Enter>
AGREE WITH PROVIDER: <Enter>
FINANCIAL COST:
REASON FOR INTERVENTION:
 No existing text
Edit? NO//
ACTION TAKEN:
 No existing text
Edit? NO//
CLINICAL IMPACT:
 No existing text
Edit? NO//
FINANCIAL IMPACT:
 No existing text
Edit? NO//
```

• **Delete:** This option is used to delete an entry from the APSP INTERVENTION file. The nurse may only delete an entry that was entered on the same day.

#### **Example: Delete an Intervention**

```
Patient Information
                           Feb 11, 2011@11:52:02
                                                                     1 of
                                                            Page:
PRETST, PATTHREE
                                 Ward:
   PID: 000-00-9677
                           Room-Bed:
                                                     Ht(cm): _
   DOB: 08/01/61 (49)
                                                     Wt(kg): ____
                                                Admitted:
   Sex: MALE
                                        Last transferred: ******
    Dx:
 Allergies/Reactions: NKA
 Inpatient Narrative:
Outpatient Narrative:
         Enter ?? for more actions
PU Patient Record Update
                                      NO New Order Entry
DA Detailed Allergy/ADR List
                                       IN Intervention Menu
VP View Profile
Select Action: View Profile// IN Intervention Menu
                            --- Intervention Menu ---
    Delete Pharmacy Intervention
Edit Pharmacy Intervention
DT
                                      PO Print Pharmacy Intervention
                                       VP View Pharmacy Intervention
NE Enter Pharmacy Intervention
Select Item(s): de Delete Pharmacy Intervention
You may only delete entries entered on the current day.
```

```
Select APSP INTERVENTION INTERVENTION DATE: t FEB 11, 2011
 1 2-11-2011 PRETST, PATTHREE CIMETIDINE 200MG TAB
2 2-11-2011 PRETST, PATTHREE CIMETIDINE 200MG TAB
CHOOSE 1-2: 1 2-11-2011 PRETST, PATTHREE CIMETIDINE 200MG TAB
SURE YOU WANT TO DELETE THE ENTIRE ENTRY? Y YES
Select APSP INTERVENTION INTERVENTION DATE:
```

**View:** This option is used to display Pharmacy Interventions in a captioned format.

#### **Example: View an Intervention**

```
ETERT Information Feb 11, 2011@11:52:02
ETST,PATTHREE Ward:
PID: 000-00-9677 Room-Bed: Ht/cm
DOB: 08/01/61 (49)
Sex: MALE
Patient Information
                                                                           Page: 1 of
PRETST, PATTHREE
                                                                   Admitted:
                                                   Last transferred: ******
     Dx:
 Allergies/Reactions: NKA
 Inpatient Narrative:
Outpatient Narrative:
            Enter ?? for more actions
PU Patient Record Update NO New Order Entry
DA Detailed Allergy/ADR List IN Intervention Menu
VP View Profile
Select Action: View Profile// IN Intervention Menu
                                  --- Intervention Menu --
DI Delete Pharmacy Intervention PO Print Pharmacy Intervention ED Edit Pharmacy Intervention VP View Pharmacy Intervention
NE Enter Pharmacy Intervention
Select Item(s): VP View Pharmacy Intervention
Select APSP INTERVENTION INTERVENTION DATE: T FEB 11, 2011
                                                                                   PRETST, PATTHR
       CIMETIDINE 200MG TAB
ANOTHER ONE:
INTERVENTION DATE: FEB 11, 2011 PATIENT: PRETST, PATTHREE
PROVIDER: PROVIDER, LINDA J PHARMACIST: PHARMACIST, CHRIS
DRUG: CIMETIDINE 200MG TAB INSTITUTED BY: PHARMACY
INTERVENTION: ALLERGY RECOMMENDATION: NO CHANGE
  WAS PROVIDER CONTACTED: NO
                                                RECOMMENDATION ACCEPTED: YES
Select APSP INTERVENTION INTERVENTION DATE:
```

**Print:** This option is used to obtain a captioned printout of Pharmacy Interventions for a certain date range. It will print out on normal width paper and can be queued to print at a later time.

#### **Example: Print an Intervention**

```
Select Unit Dose Medications Option: Inpatient Order Entry
Select PATIENT: BCMA, EIGHTEEN-PATIENT 666-33-0018 04/07/35 7A GEN MED
Last transferred: 06/04/10
  Dx: UPSET
Allergies - Verified: AMPICILLIN, PENICILLIN, STRAWBERRIES
```

```
Non-Verified:
   Adverse Reactions:
 Inpatient Narrative:
Outpatient Narrative:
-----Enter ?? for more actions-----
PU Patient Record Update NO New Order Entry
DA Detailed Allergy/ADR List IN Intervention Menu
VP View Profile
Select Action: View Profile// IN Intervention Menu
                              --- Intervention Menu ---
    Delete Pharmacy Intervention PO Print Pharmacy Intervention

The Delete Pharmacy Intervention PO Print Pharmacy Intervention
DI
                                           PO Print Pharmacy Intervention
ED Edit Pharmacy Intervention
NE Enter Pharmacy Intervention
Select Item(s): PO Print Pharmacy Intervention
  * Previous selection: INTERVENTION DATE from Jun 1,2010
  START WITH INTERVENTION DATE: Jun 1,2010// T-1 (MAR 15, 2011)
  GO TO INTERVENTION DATE: LAST// T (MAR 16, 2011)
DEVICE: home;80;9999 COMPUTER ROOM
PHARMACY INTERVENTION LISTING
                                                 MAR 16,2011 12:37 PAGE 1
INTERVENTION: CRITICAL DRUG INTERACTION
INTERVENTION DATE: MAR 16,2011 PATIENT: BCMA,EIGHTEEN-PATI
PROVIDER: PROVIDER,ONE PHARMACIST: PHARMACIST,TWO
DRUG: INDINAVIR SULFATE 400MG CAP INSTITUTED BY: PHARMACY
                                         PATIENT: BCMA, EIGHTEEN-PATIENT
RECOMMENDATION: NO CHANGE
WAS PROVIDER CONTACTED:
                                         RECOMMENDATION ACCEPTED:
PROVIDER CONTACTED:
INTERVENTION DATE: MAR 16,2011 PATIENT: BCMA,EIGHTEEN-PATIENT PROVIDER: PROVIDER,ONE PHARMACIST: PHARMACIST,TWO DRUG: SIMVASTATIN 20MG TAB INSTITUTED BY: PHARMACY
RECOMMENDATION: NO CHANGE
WAS PROVIDER CONTACTED:
                                        RECOMMENDATION ACCEPTED:
PROVIDER CONTACTED:
SUBTOTAL
                                                                      0
SUBCOUNT
                                                                       Λ
TOTAL
COUNT
                                                     2
DOB: 04/07/35 (75)
                                                          Wt(kg): 100.00 (12/15/08)
                                           Admitted: 01/31/02
   Sex: FEMALE
                                Last transferred: 06/04/10
   Dx: UPSET
Allergies - Verified: AMPICILLIN, PENICILLIN, STRAWBERRIES
        Non-Verified:
  Adverse Reactions:
 Inpatient Narrative:
Outpatient Narrative:
    -----Enter ?? for more actions----
PU Patient Record Update NO New Order Entry
DA Detailed Allergy/ADR List IN Intervention Menu
VP View Profile
Select Action: View Profile//
```

## 4.5.4 View Profile

The View Profile action allows selection of a Long, Short, or NO profile for the patient. The profile displayed in the *Inpatient Order Entry* and *Non-Verified/Pending Orders* options will include IV and Unit Dose orders. The long profile shows all orders, including discontinued and expired orders. The short profile displays recently discontinued or expired orders based on parameter values found in the System parameter and inpatient ward parameter files.

## **Example: Profile View**

```
Inpatient Order Entry Oct 19, 2010@16:41:35 Page: 1 of 3
PSJPATIENT, ELEVEN Ward: 7AS

PID: 666-00-2921 Room-Bed: Ht(cm): _____ (_____)
DOB: 08/09/54 (56) Wt(kg): _____ (_____)
Sex: MALE Admitted: 06/09/10
  Dx: RESPIRATORY DISTRESS

Last transferred: *******
 CrCL: <Not Found>
                                      BSA (m2):
  ----ACTIVE----
  1 ->AMIODARONE TAB
                                      C 10/19 11/18 A
       Give: 400MG PO TID
  2 CIMETIDINE TAB
                                      C 10/19 11/18 R
      Give: 300MG PO QHS
        3 LOVASTATIN TAB
                                      C 10/19 11/18 N NF
     Give: 20MG PO QPM
 ----- NON-VERIFIED COMPLEX------
  4 HALOPERIDOL TAB
                                      C 10/19 11/18 N
       Give: 10MG PO BID
     HALOPERIDOL TAB
                                     C 10/19 11/18 N
     Give: 15MG PO QHS
      5 CIMETIDINE TAB
                                     ? **** **** P 10/19
       Give: 20MG PO QAM
                                      ? **** **** P
  6 PREDNISONE TAB
                                      ? **** ***** D
      PREDNISONE TAB
       Give: 10MG PO QOD
                                      ? **** **** D
      PREDNISONE TAB
      Give: 5MG PO QD
Give: 650MG PO Q4H PRN
       --- RECENTLY DISCONTINUED/EXPIRED (LAST 120 HOURS) -----
  8 ASPIRIN TAB,EC
                                      C 10/19 10/19 D
9 ->NAPROXEN TAB
Give: 250MG PO BID

+ Enter ?? for more actions

PI Patient Information

PU Patient Record Update
Select Action: Next Communication

No New Order To
                                      C 10/19 10/19 D
                              NO New Order Entry
Select Action: Next Screen//
```

The orders on the profile are sorted first by status (ACTIVE, NON-VERIFIED, NON-VERIFIED COMPLEX, PENDING RENEWALS, PENDING COMPLEX, PENDING, RECENTLY DISCONTINUED/EXPIRED), then alphabetically by SCHEDULE TYPE. Pending orders with a priority of STAT are listed first and are displayed in a bold and blinking text for easy identification. After SCHEDULE TYPE, orders are sorted alphabetically by DRUG (the drug name listed on the profile), and then in descending order by START DATE.

#### **Example: Short Profile**

```
Wt(kg). 100.00
Admitted: 12/11/01
  Dx: HE IS A PAIN. Last transferred: 12/11/01 rCL: <Not Found>
  Sex: MALE
 CrCL: <Not Found>
                   ----ACTIVE--
  1 CEFAZOLIN 1 GM
                                   C 06/12 06/22 H
     in 5% DEXTROSE 50 ML Q8H
  2 CIMETIDINE TAB
                                   C 06/12 07/12 A
      Give: 300MG PO BID
    FUROSEMIDE TAB
                                   C 06/01 06/15 HP
      Give: 40MG PO QAM
      Give: 25MG PO BID
  4 CAPTOPRIL TAB
                                  C 06/14 06/28 N
      5 HALOPERIDOL TAB
     Give: 5MG PO BID
 6 HEPARIN/DEXTROSE INJ, SOLN
                                   ? **** **** P
      Give: IV
     LACTULOSE SYRUP
                                   ? **** **** P NF
     Give: 10GM/15ML PO BID PRN
 FOLIC ACID TAB C 06/14 06/16 D Give: 1MG PO OAM
      Give: 1MG PO QAM
 9 GENTAMICIN 80 MG
                                   C 06/12 06/12 D
 in 5% DEXTROSE 100 ML Q8H
10 ISONIAZID TAB
                                   C 04/03 04/17 DF
      Give: 300MG PO OD
 11 POTASSIUM CHLORIDE 10MEQ
in 5% DEXTROSE 1000 ML Q8H
12 POTASSIUM CHLORIDE 40 MEQ
 11 POTASSIUM CHLORIDE 10MEQ
                                  C 06/12 06/12 DA
                                  C 06/12 06/12 DD
     in 5% DEXTROSE 250 ML 120 ml/hr
PROPRANOLOL TAB
Give: 40MG PO Q6H
 13 PROPRANOLOL TAB
                                   C 06/15 06/20 DP
    THIAMINE TAB
                                   C 04/03 04/17 E
      Give: 100MG PO BID
X - Represents the value set in either the ward or system parameter
Enter ?? for more actions
PI Patient Information SO Select Order
PU Patient Record Update NO New Order Entry
```

Sets of Complex Orders with a status of "Pending" or "Non-Verified" will be grouped together in the Profile View. They appear as one numbered list item, as shown in the following examples. Once these orders are made active, they will appear individually in the Profile View, with a status of "Active".

If an order has been verified by pharmacy but has not been verified by nursing, it will be listed under the ACTIVE heading with an arrow (->) to the right of its number. A CPRS Med Order will have a "DONE" priority and will display a "d" to the right of the number on the long profiles. These orders will display under the Non-Active header.

Orders may be selected by choosing the Select Order action, or directly from the profile using the number displayed to the left of the order. Multiple orders may be chosen by entering the

numbers of each order to be included separated by commas (e.g., 1,2,3), or a range of numbers using the dash (e.g., 1-3).

The HOURS OF RECENTLY DC/EXPIRED field (#7) has been created in the INPATIENT WARD PARAMETERS file (#59.6). The Inpatient Medications profiles will display the recently discontinued/expired orders that fall within the number of hours specified in this field. The value defined in this field will take precedence over the Inpatient System parameter. The inpatient ward parameter allows for a minimum value of one (1) hour and a maximum value of one hundred twenty (120) hours. The Inpatient *Ward Parameters Edit* [PSJ IWP EDIT] option allows the user to edit this new ward parameter. If this parameter is not set the software will use the value in the HOURS OF RECENTLY DC/EXPIRED field (#26.8) in the PHARMACY SYSTEM file (#59.7). If neither parameter is set the software will default to twenty-four (24) hours.

The HOURS OF RECENTLY DC/EXPIRED field (#26.8) has been created in the PHARMACY SYSTEM file (#59.7). The Inpatient Medications profiles will display the recently discontinued/expired orders that fall within the number of hours specified in this field. This parameter allows for a minimum value of one (1) hour and a maximum value of one hundred twenty (120) hours. The *Systems Parameters Edit* [PSJ SYS EDIT] option includes the ability for a user to edit this inpatient site parameter. If neither parameter is set the software will default to twenty-four (24) hours.

On the medication profile in the status column the codes and the action they represent are as follows.

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

- A Active
- N Non-Verified
- O On Call (IV orders only)
- I Incomplete
- HP Placed on hold by provider through CPRS
- H Placed on hold via backdoor Pharmacy
- E Expired
- DP Discontinued by provider through CPRS
- DE Discontinued due to edit via backdoor Pharmacy (Unit Dose orders only)
- D Discontinued via backdoor Pharmacy (IV & UD); discontinued due to edit via backdoor Pharmacy (IV)

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

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



**Note:** The START DATE and DRUG sort may be reversed using the INPATIENT PROFILE ORDER SORT prompt in the *Edit Inpatient User Parameters* option.

## **Example: Pending Complex Order in Profile View**

```
Inpatient Order Entry Mar 07, 2004@13:03:55
                                                      Page:
                                                              1 of
  PID: 000-00-0001 Room-Bed: B-12
DOB: 08/18/20 (81)
                          Ward: 1 EAST
PSJPATIENT1, ONE
                                             Ht(cm): _
                                             Wt(kg): _
  Sex: MALE
                                           Admitted: 03/03/04
   Dx: TESTING
                                    Last transferred: ******
  CrCL: 78.1(est.) (CREAT:1.0mg/dL 4/19/12)
                                          BSA (m2): _
      -----PENDING COMPLEX -----
     CAPTOPRIL TAB
                                            ? **** **** P
        Give: 25MG PO QDAILY
       CAPTOPRIL TAB
        Give: 50MG PO BID
       CAPTOPRIL TAB
        Give: 100MG PO TID
        Enter ?? for more actions
                                 SO Select Order
PI Patient Information
PU Patient Record Update
                                  NO New Order Entry
Select Action: Next Screen//
```

## **Example: Non-Verified Complex Order in Profile View**

	Mar 07, 2004@13:03: Ward: 1 EAST	55	Page:	1 of	1	
PID: 000-00-0001	Room-Bed: B-12	Ht(cm):	(_	)		
DOB: 08/18/20 (81)		Wt(ka):		)		
Sex: MALE		Admitted:				
Dx: TESTING	Last tra					
CrCL: 78.1(est.) (CREAT:1.				-		
N O	N - V E R I F I E D	COMPI	L E X			
1 CAPTOPRIL TAB		C 03/26	03/27 N			
Give: 25MG PO QDAII	·Υ					
CAPTOPRIL TAB		C 03/28	03/29 N			
Give: 50MG PO BID						
CAPTOPRIL TAB		C 03/30	03/31 N			
Give: 100MG PO TID		,				
0176. 10010 10 115						
Enter ?? for more a	ctions					
PI Patient Information	SO Selec	t. Order				
PU Patient Record Update		order Entry	J			
Select Action: Next Screen//	110 110 0	Laci Bildi				

# **Example: Active Complex Order in Profile View**

```
Inpatient Order Entry
                          Mar 07, 2004@15:00:05
                                                             1 of
                          Ward: 1 EAST
PSJPATIENT1, ONE
  PID: 000-00-0001
                       Room-Bed: B-12
                                            Ht(cm): _
  DOB: 08/18/20 (81)
                                           Wt(kg):
                                          Admitted: 03/03/04
  Sex: MALE
                                   Last transferred: ******
   Dx: TESTING
 CrCL: 78.1(est.) (CREAT:1.0mg/dL 4/19/12)
                                        BSA (m2): _
         - - - - - - - - - - - A C T I V E - -
    CAPTOPRIL TAB
                                          C 03/26 03/27 A
       Give: 25MG PO QDAILY
      CAPTOPRIL TAB
                                          C 03/28 03/29 A
```

```
Give: 50MG PO BID

3 CAPTOPRIL TAB C 03/30 03/31 A
Give: 100MG PO TID

Enter ?? for more actions

PI Patient Information SO Select Order

PU Patient Record Update NO New Order Entry

Select Action: Next Screen//
```

Orders that are dispensed via Pharmacy Automated Dispensing Equipment (PADE) will display a 'PD' flag to the right of the order status. If an order is dispensed via PADE and is also a Ward Stock item, the 'WP' flag will display.

Example: PD and WP Flags for PADE / Ward Stock Items

```
Inpatient Order Entry Dec 16, 2015@16:51:41
MONPATNM, MARILYN
                           Ward: GENERAL
                                                       CAD
                                        Ht(cm): _
Wt(kg): _
  PID: 666-00-0195
                        Room-Bed: GENSUR-2
  DOB: 07/07/67 (48)
  Sex: FEMALE
                                        Admitted: 08/29/11
 1 ACETAMINOPHEN 160MG/5ML LIQUID, ORAL
                                        C 12/02 12/16 A
       Give: 650MG=20.3ML(1 UD CUP) PO Q12H
    FAMCICLOVIR TAB
                                        C 12/03 12/17 A PD
       Give: 250MG PO Q12H
      HALOPERIDOL TAB
                                        C 10/28 12/21 A WP
       Give: 20.25MG PO Q24H
PI Patient Information
                               SO Select Order
                                NO New Order Entry
PU Patient Record Update
Select Action: Next Screen//
```

## 4.5.5 Patient Information

The Patient Information screen is displayed for the selected patient. The header contains the patient's demographic data, while the list area contains Allergy/Adverse Reaction data, including remote data and Pharmacy Narratives. If an outpatient is selected, all future appointments in clinics that allow Inpatient Medications orders will display in the list area, too.

### **Example: Patient Information**

```
Patient Information Sep 13, 2000 15:04:31
                                                   Page:
                                                           1 of
                          Ward: 1 EAST
  PSJPATIENT1,ONE
                                          Ht(cm): ____(__
                                          Wt(kg): _
  Sex: MALE
                                        Admitted: 05/03/00
   Dx: TESTING
                                  Last transferred: *******
Allergies/Reactions: No Allergy Assessment
Remote:
Adverse Reactions:
Inpatient Narrative: Narrative for Patient PSJPATIENT1
 Outpatient Narrative:
        Enter ?? for more actions
PU Patient Record Update NO New Order Entry
DA Detailed Allergy/ADR List
                                IN Intervention Menu
VP View Profile
```

## **Example: Patient Information Screen for Outpatient Receiving Inpatient Medications**

```
Patient Information
                               May 12, 2003 14:27:13
                                                                 Page:
                                                                          1 of
PSJPATIENT3, THREE
PID: 000-00-0003
                            Last Ward: 1 West
                         Last Room-Bed:
                                                      Ht(cm): ____(_
   DOB: 02/01/55 (48)
                                                      Wt(kg):
   Sex: FEMALE
                                              Last Admitted: 01/13/98
    Dx: TESTING
                                                  Discharged: 01/13/98
 Allergies/Reactions: No Allergy Assessment
 Remote:
 Adverse Reactions:
 Inpatient Narrative:
 Outpatient Narrative:
Clinic:
                         Date/Time of Appointment:
Clinic A May 23, 2003/9:00 am Flu Time Clinic June 6, 2003/10:00 am
          Enter ?? for more actions
PU Patient Record Update
DA Detailed Allergy/ADR List
                                         NO New Order Entry
                                        IN Intervention Menu
VP View Profile
Select Action: View Profile//
```

#### 4.5.6 Select Order

The Select Order action is used to take action on a previously entered order by selecting it from the profile, after the patient is selected and length of profile is chosen (i.e., short or long).

### **Example: Selecting an Order**

```
Mar 07, 2002@13:01:56
Inpatient Order Entry
                                                   Page:
                                                           1 of
  PID: 000-00-0001 Room-Bed: B-12
DOB: 08/18/20 (81)
Sex: MAI.F
                         Ward: 1 EAST
PSJPATIENT1,ONE
                                          Ht(cm): ____(_
                                          Wt(kg): ___
                                         Admitted: 05/03/00
  Dx: TESTING
                                 Last transferred: ******
 CrCL: <Not Found>
                                         BSA (m2): __
        - - - - - - - - - - - - A C T I V E - - - - - -
  1 in 0.9% SODIUM CHLORIDE 1000 ML 125 ml/hrC 03/07 03/07 E
  2 in 5% DEXTROSE 50 ML 125 ml/hr C 03/06 03/06 E
3 CEPHAPIRIN 1 GM C 03/04 03/09 A
      in DEXTROSE 5% IN N. SALINE 100 ML QID
  4 ASPIRIN CAP, ORAL
                                        O 03/07 03/07 E
       Give: 650MG PO NOW
 ? **** **** P
  5 in DEXTROSE 10% 1000 ML 125 ml/hr
        Enter ?? for more actions
PI Patient Information
                                 SO Select Order
PU Patient Record Update
                                 NO New Order Entry
Select Action: Quit// 1
               Mar 07, 2002@13:10:46
ACTIVE UNIT DOSE
                                                    Page: 1 of
PSTPATTENT1.ONE
                         Ward: 1 EAST
  PID: 000-00-0001
                                           Ht(cm): ____(_
                       Room-Bed: B-12
  DOB: 08/18/20 (81)
                                           Wt(kg): __
*(1)Orderable Item: ASPIRIN CAP,ORAL
                                                               <DIN>
    Instructions:
*(2)Dosage Ordered: 325MG
       Duration:
                                             *(3)Start: 03/07/02 13:10
```

```
*(4)
       Med Route: ORAL
BCMA ORDER LAST ACTION: 03/07/02 13:09 Given*
                                                *(5) Stop: 03/08/02 24:00
 (6) Schedule Type: CONTINUOUS
        Schedule: OID
*(8)
(9) Admin Times: 09-13-17-21
      Provider: PSJPROVIDER,ONE [es]
*(10)
 (11) Special Instructions:
 (12) Dispense Drug
                                                U/D
                                                          Inactive Date
    ASPIRIN BUFFERED 325MG TAB
                                                1
       Enter ?? for more actions
DC Discontinue ED Edit
                                               AL Activity Logs
но ноја
            VF (Verify)
                       RN Renew
FL (Flag)
Select Item(s): Next Screen//
```

The list area displays detailed order information and allows actions to be taken on the selected order. A number displayed to the left of the field name identifies fields that may be edited. If a field, marked with an asterisk (\*) next to its number, is edited, it will cause this order to be discontinued and a new one created. If a pending order is selected, the system will determine any default values for fields not entered through CPRS and display them along with the data entered by the provider.

The BCMA ORDER LAST ACTION field will only display when an action has been performed through BCMA on this order. This information includes the date and time of the action and the BCMA action status. If an asterisk (\*) appears after the BCMA status, this indicates an action was taken on the prior order that is linked to this order.

Actions, displayed in the Action Area, enclosed in parenthesis are not available to the user. In the example above, the action Verify is not available to the user since it was previously verified.

In the order display for an outpatient with inpatient orders, the clinic location and the appointment date and time will display in the screen header area in the same location that the ward and room-bed information displays for an admitted patient.

Only users with the appropriate keys will be allowed to take any available actions on the Unit Dose or IV order.

## **Example: Order View For An Outpatient With Inpatient Orders**

```
ACTIVE UNIT DOSE
                              Nov 28, 2003@10:55:47
                                                              Page:
PSJPATIENT3, THREE
                              Clinic: CLINIC (PAT)
  JPATIENT3, THREE Clinic: CLINIC (PAT)
PID: 000-00-0003 Clinic Date: 10/31/03 08:00 Ht(cm):
   DOB: 02/01/55 (48)
                                                       Wt(kg): _
*(1)Orderable Item: CAPTOPRIL TAB
                                                                            <DIN>
     Instructions:
*(2)Dosage Ordered: 25MG
                                                      *(3)Start: 10/31/03 08:00
        Med Route: ORAL (BY MOUTH)
                                                      *(5) Stop: 11/29/03 12:56
 (6) Schedule Type: CONTINUOUS
*(8) Schedule: BID
 (9) Admin Times: 08-20
 (10)
       Provider: PSJPROVIDER, ONE [s]
                                                      DURATION:
 (11) Special Instructions:
 (12) Dispense Drug
                                                      U/D
                                                                 Inactive Date
      CAPTOPRIL 25MG TABS
```

```
Enter ?? for more actions
DC Discontinue ED Edit
HD Hold RN Renew
FL Flag VF (Verify)
                                                           AL Activity Logs
Select Item(s): Next Screen//
```

#### 4.6 Order Actions

The Order Actions are the actions available in the Action Area of the List Manager Screen. These actions pertain to the patient's orders and include editing, discontinuing, verifying, etc.

#### 4.6.1 Discontinue

When an order is discontinued, the order's Stop Date/Time is changed to the date/time the action is taken. An entry is placed in the order's Activity Log recording who discontinued the order and when the action was taken. Pending and Non-verified orders are deleted when discontinued and will no longer appear on the patient's profile.



Note: Any orders placed through the Med Order Button cannot be discontinued.

## **Example: Discontinue an Order**

```
1
*(1) Additives:
                         Order number: 65
                                                   Type: ADMIXTURE <DIN>
      POTASSIUM CHLORIDE 40 MEQ
*(2) Solutions:
      0.9% SODIUM CHLORIDE 1000 ML
         Duration: *(4) Start: 03/19/01 11:30
*(3) Infusion Rate: 100 ml/hr
*(5) Med Route: IV
                                                   Stop: 03/26/01 24:00
                                            Last Fill: 03/19/01 14:57
*(7)
         Schedule:
 (8) Admin Times: (9) Provider:
                                                Ouantity: 2
       Provider: PSJPROVIDER,ONE [w] Cum. Doses: 43
 (10) Other Print:
 (11) Remarks:
      Entry By: PSJPROVIDER, ONE
                                             Entry Date: 03/19/01 11:30
        Enter ?? for more actions
DC Discontinue RN Renew ED Edit OC On Call
                                               FL Flag
            AL Activity Logs
Select Item(s): Quit// DC Discontinue
NATURE OF ORDER: WRITTEN// <Enter>
Requesting PROVIDER: PSJPROVIDER, ONE // <Enter>
                                                            PROV
REASON FOR ACTIVITY: TESTING
DISCONTINUED IV Mar 20, 2001@16:38:28

PSJPATIENT1,ONE Ward: 1 EAST

PID: 000-00-0001 Room-Bed: B-12 Ht(cm):

DOB: 08/18/20 (80) W+/kg):
                                                       Page: 1 of
                                               Ht(cm): _____
                                               Wt(kg): _
                Order number: 65
*(1) Additives:
                                                   Type: ADMIXTURE
                                                                      <DIN>
      POTASSIUM CHLORIDE 40 MEQ
*(2) Solutions:
      0.9% SODIUM CHLORIDE 1000 ML
          Duration: *(4) Start: 03/19/01 11:30
*(3) Infusion Rate: 100 ml/hr
```

```
Med Route: IV
                                                 Stop: 03/20/01 16:38
         Schedule:
                                             Last Fill: 03/19/01 14:57
*(7)
 (8)
      Admin Times:
                                              Quantity: 2
        Provider: PSJPROVIDER,ONE
                                       [w] Cum. Doses: 43
*(9)
(10) Other Print:
 (11) Remarks:
     Entry By: PSJPROVIDER, ONE
                                            Entry Date: 03/19/01 11:30
        Enter ?? for more actions
    (Discontinue)
                                                 FL Flag
                       RN (Renew)
  (Edit) OC (On Call)
(Hold) AL Activity Logs
ED
HD (Hold)
Select Item(s): Quit// <Enter> QUIT
```

When an action of DC (Discontinue) is taken on one child order that is part of a Complex Order, a message will display informing the user that the order is part of a Complex Order, and the user is prompted to confirm that the action will be taken on all of the associated child orders.

### **Example: Discontinue a Complex Order**

```
ACTIVE UNIT DOSE
                            Feb 25, 2004@21:25:50
                                                         Page:
                                                                  1 of
PSJPATIENT1,ONE
                              Ward: 1 EAST
  PID: 000-00-0001 Room-Bed: B-12
                                                Ht(cm): _
  DOB: 08/18/20 (80)
                                                Wt(kg): ____
*(1)Orderable Item: ASPIRIN TAB
                                                                      <DIN>
     Instructions:
 *(2)Dosage Ordered: 650MG
                                                  *(3)Start: 03/26/01 14:40
         Duration:
 *(4) Med Route: ORAL
                                                 *(5) Stop: 03/28/01 24:00
 (6) Schedule Type: CONTINUOUS
 *(8) Schedule: QDAILY
 (9) Admin Times: 1440
(10) Provider: PSJPROVIDER,ONE [es]
*(10)
 (11) Special Instructions:
 (12) Dispense Drug
                                                 U/D
                                                          Inactive Date
   ASPIRIN BUFFERED 325MG TAB
      Enter ?? for more actions
DC Discontinue ED (Edit)
                                                 AL Activity Logs
HD Hold
                        RN Renew
                        VF (Verify)
Select Item(s): Next Screen// <Enter>
Select Item(s): Next Screen// DC Discontinue
This order is part of a complex order. If you discontinue this order the
following orders will be discontinued too (unless the stop date has already
been reached).
Press Return to continue... <Enter>
       CAPTOPRIL TAB
                                             C 03/26 03/27 N
       Give: 25MG PO QDAILY
       CAPTOPRIL TAB
                                             C 03/26 03/29 N
       Give: 100MG PO TID
Press Return to continue... <Enter>
Do you want to discontinue this series of complex orders? Yes//
```

## 4.6.2 Edit

This action allows modification of any field shown on the order view that is preceded by a number in parenthesis (#).

## **Example: Edit an Order**

```
ACTIVE UNIT DOSE
                           Sep 13, 2000 15:20:42 Page: 1 of
                             Ward: 1 EAST
PSJPATIENT1, ONE
  PID: 000-00-0001
                            Room-Bed: B-12
                                                  Ht(cm): ____(_
   DOB: 08/18/20 (80)
                                                  Wt(kg): ____
 *(1)Orderable Item: AMPICILLIN CAP
      Instructions:
 *(2)Dosage Ordered: 500MG
        Duration:
                                                   *(3)Start: 09/07/00 15:00
 *(4) Med Route: ORAL
                                                    *(5) Stop: 09/21/00 24:00
 (6) Schedule Type: CONTINUOUS
 *(8) Schedule: QID
      Admin Times: 01-09-15-20
Provider: PSJPROVIDER,ONE [es]
 (9)
 (10)
 (11) Special Instructions:
 (12) Dispense Drug
                                                    U/D
                                                               Inactive Date
    AMPICILLIN 500MG CAP
                                                    1
        Enter ?? for more actions
DC Discontinue ED Edit
HD Hold RN Renew
FL (Flag) VF Verify
                                                   AL Activity Logs
Select Item(s): Next Screen//
```

If a field marked with an asterisk (\*) to the left of the number is changed, the original order will be discontinued, and a new order containing the edited data will be created. The Stop Date/Time of the original order will be changed to the date/time the new edit order is accepted. The old and new orders are linked and may be viewed using the History Log function. When the screen is refreshed, the field(s) that was changed will now be shown in **blinking reverse video** and "This change will cause a new order to be created" will be displayed in the message window.

If the Dispense Drug or Orderable Item has a non-formulary status, this status will be displayed on the screen as "\*N/F\*" beside the Dispense Drug or Orderable Item.



**Note:** The first time a field marked with an asterisk (\*) is selected for editing, if CPRS Provider Overrides and/or Pharmacist Interventions exist for the order, entering Y (Yes) at the prompt: "Order Check Overrides/Interventions exist for this order. Display? (Y/N)? Y//" displays the following:

Heading information first, followed by a summary of the Current CPRS Order Checks overridden by the Provider, as well as the Overriding Provider, plus title, Override Entered By, plus title, Date/Time Entered, and the Override Reason.

## Example: Edit an Order with Provider Overrides/Interventions

```
** Current Provider Overrides for this order **
```

```
Overriding Provider: PSJPROVIDER, ONE (PROVIDER)
Override Entered By: PSJPROVIDER, ONE (PROVIDER)
 Date/Time Entered: 07/11/11 09:45
   Override Reason: testing functionality of PO & PI
 CRITICAL drug-drug interaction: TAMOXIFEN CITRATE 10MG TAB and WARFARIN NA
 (GOLDEN STATE) 1MG TAB [ACTIVE] - The concurrent use of tamoxifen or
 toremifene may increase the effects of anticoagulants. - Monograph Available
 SIGNIFICANT drug-drug interaction: TAMOXIFEN CITRATE 10MG TAB and
 THIORIDAZINE HCL 10MG TAB [UNRELEASED] - Concurrent use of inhibitors of CYP
 P-450-2D6 may decrease the effectiveness of tamoxifen in preventing breast
 cancer recurrence. Concurrent use of amiodarone or thioridazine may increase
 the risk of potentially life-threatening cardiac arrhythmias, including
 torsades de pointes. - Monograph Available
Press RETURN to Continue or '^' to Exit:
______
      ** Current Pharmacist Interventions for this order **
______
Intervention Date/Time: 07/11/11 09:50
Pharmacist: PSJPHARMACIST, ONE
                                       Drug: TAMOXIFEN CITRATE 10MG TAB
Instituted By: PHARMACY
Intervention: CRITICAL DRUG INTERACTION
Originating Package: INPATIENT
```

Once a Complex Order is made active, the following fields may <u>not</u> be edited:

- ADMINISTRATION TIME
- Any field where an edit would cause a new order to be created. These fields are denoted with an asterisk in the Detailed View of a Complex Order.

If a change to one of these fields is necessary, the Complex Order must be discontinued and a new Complex Order must be created.

## **Example: Edit an Order (continued)**

```
NON-VERIFIED UNIT DOSE Sep 13, 2000 15:26:46 Page: 1 of

        JPATIENT1,ONE
        Ward: 1 EAST

        PID: 000-00-0001
        Room-Bed: B-12

PSJPATIENT1,ONE
                               Ward: 1 EAST
                                                    Ht(cm): ____(__
   DOB: 08/18/20 (80)
                                                     Wt(kg): ____
 *(1)Orderable Item: AMPICILLIN CAP
      Instructions:
 *(2)Dosage Ordered: 500MG
                                                      *(3)Start: 09/13/00 20:
          Duration:
 *(4)
         Med Route: ORAL
                                                      *(5) Stop: 09/27/00 24:00
 (6) Schedule Type: CONTINUOUS
 *(8) Schedule: QID
       Admin Times: 01-09-15-20
  (9)
      Provider: PSJPROVIDER, ONE
 (10)
 (11) Special Instructions:
 (12) Dispense Drug
                                                       U/D
                                                                  Inactive Date
      AMPICILLIN 500MG CAP
                                                       1
          This change will cause a new order to be created.
ED Edit
                                        AC ACCEPT
Select Item(s): Next Screen//
```

If the ORDERABLE ITEM or DOSAGE ORDERED fields are edited, the Dispense Drug data will not be transferred to the new order. If the Orderable Item is changed, data in the DOSAGE ORDERED field will not be transferred. New Start Date/Time, Stop Date/Time, Login Date/Time, and Entry Code will be determined for the new order. Changes to other fields (those without the asterisk) will be recorded in the order's activity log.

If the DISPENSE DRUG is edited, an entry in the order's activity log is made to record the change.

If an Orderable Item or Dispense Drug are edited, Enhanced Order Checks are performed.

```
Dx: ADM TO TEST DIETETICS EXTRACT Last transferred: *******
 CrCL: <Not Found>
                                      BSA (m2):
      C 09/11 09/13 A
  1 HALOPERIDOL TAB
  Give: 1MG PO NOW
2 MAXIDE 50/75 TAB
                                      C 09/11 09/13 A
       Give: 50MG PO BID-NOON
  3 WARFARIN TAB
                                     C 09/11 09/13 A
      Give: 2MG PO BID
    AMIKACIN INJ, SOLN
                                     P 09/11 09/13 A
      Give: 500MG/2ML PO BID2 PRN
 ---- RECENTLY DISCONTINUED/EXPIRED (LAST 120 HOURS) -----
5 AMIKACIN INJ,SOLN P 09/11 09/11 DE + Enter ?? for more actions
PU Patient Record Update NO New Order Entry
Select Action:Next Screen// SO Select Order
Select ORDERS (1-5): 1
 ACTIVE UNIT DOSE FROPATNM, MISTER
                                               Page: 1 of 2
*(2)Dosage Ordered: 1MG
       Duration:
                                          *(3)Start: 09/11/12 07:20
     Med Route: ORAL (BY MOUTH)
                                          *(5) Stop: 09/13/12 24:00
(6) Schedule Type: CONTINUOUS
*(8) Schedule: NOW
(9) Admin Times:
*(10) Provider: VARGAS,ALBERTO [w]
(11) Special Instructions:
(12) Dispense Drug
                                         U/D
                                                  Inactive Date
 HALOPERIDOL 1MG S.T. Sep 11, 2012@07:23:18 1
     Enter ?? for more actions
DC Discontinue ED Edit
HD Hold RN Renew
FT Flag VF (Verif
                                      AL Activity Logs
                   RN Renew
                   VF (Verify)
FL Flag
Select FIELDS TO EDIT: 2
Available Dosage(s)
  1. 1MG
```

```
2..
          2MG
Select from list of Available Dosages or Enter Free Text Dose: 1MG//\ 2 2MG
You entered 2MG is this correct? Yes// YES
DOB: 12/11/48 (63)
                                  Sex: MALE
   Dx: ADM TO TEST DIETETICS EXTRACT Last transferred: *******
 CrCL: <Not Found>
                                          BSA (m2): _
*(1)Orderable Item: HALOPERIDOL TAB
    Instructions:
*(2)Dosage Ordered: 2MG
                                               *(3)Start: 09/11/12 07:23
        Duration:
      Med Route: ORAL (BY MOUTH)
                                               *(5) Stop: 09/13/12 24:00
(6) Schedule Type: CONTINUOUS
*(8) Schedule: NOW
(9) Admin Times:
*(10) Provider: VARGAS,ALBERTO
(11) Special Instructions:
        This change will cause a new order to be created.
ED Edit
                                AC ACCEPT
Select Item(s): Next Screen// AC ACCEPT
Now doing allergy checks. Please wait...
Now processing Clinical Reminder Order Checks. Please wait ...
Now Processing Enhanced Order Checks! Please wait...
Press Return to continue...
NATURE OF ORDER: SERVICE CORRECTION//
...discontinuing original order...
...creating new order...(you will now work on this new order).
```

## IV Bag/Label Parameters

This section describes IV Parameters in Bar Code Medication Administration (BCMA).

The BCMA IV bag/label parameters determine the status of an order's IV labels after an IV order is edited. The BCMA IV parameters are used to determine if an order's previously printed IV labels are valid (or invalid) after an edit occurs.

BCMA IV parameters are defined primarily by division, and may also be defined by ward location. If no parameters have been defined for a given ward, orders associated with that ward will use the IV parameters for the division associated with the ward.

The following fields are available in the BCMA IV parameters on the IV Order Entry screen:

- Additive
- Strength
- Bottle
- Solution

- Volume
- Infusion Rate
- Med Route
- Schedule
- Admin Time
- Remarks
- Other Print Info
- Provider
- Start Date/Time
- Stop Date/Time
- Provider Comments.

Each field offers a selection of Warning, Non-Verify, and Invalid Bag.

- If a field is set to Warning, and an order is changed, the IV bags from the old order are carried to the new order and are available on the BCMA VDL. When a nurse scans the bar code on an IV bag, a Warning message alerts them about fields that have changed.
- If a field is set to Non-Verify, and an order is changed, the IV bags from the old order are carried to the new order and are available on the BCMA VDL. When a nurse scans the bar code on an IV bag, NO warning message displays.
- If a field is set to Invalid Bag, and an order is changed, the IV bags from the old order do not carry to the new order or display on the BCMA VDL.

## **Editing Orders when an Invalid IV Bag Event Occurs**

The pharmacist is provided a list of invalidated IV bags when an Invalid Bag event has occurred.

An Invalid Bag event occurs when both of the following conditions are met:

- A change is made to any IV order field that matches a BCMA IV Bag site parameter field that is set to "Invalid Bag."
- IV labels were available for the order prior to the change.

Note: Order changes may originate in Inpatient Medications or CPRS.

If an Invalid Bag event occurs, the following is displayed after the edited order's status is changed to ACTIVE:

- The edited field that triggered the IV bags to be invalidated
- The Date and time of each invalidated IV label
- The label ID of each invalidated IV bag
- The status of each invalidated IV bag

- The Count status of each invalidated IV bag.
- The BCMA Action Date/Time of each invalidated IV bag

## **Example: Invalid Labels Cannot be Reprinted or Scanned**

A pause occurs before the display scrolls to the top of the screen.

After the user enters "YES," a prompt to print a list of Invalidated IV labels to a device or RETURN to continue displays.

## **Example: Prompt to Print**

```
Enter 'P' to print list of Invalidated Labels or RETURN to continue: p PRINT

DEVICE: HOME//
```

When P is entered at the "Enter P" prompt, the following is displayed in the report:

- Location (current Ward or Clinic)
- Patient Name
- Medication (IV Additive, IV Solution, or Orderable Item)
- Date/time
- V# of the IV bag
- Status
- Count
- BCMA Action-Date/time

## **Example: List of Invalidated Labels Report**

```
Enter 'P' to print list of Invalidated Labels or RETURN to continue: p
PRINT DEVICE
DEVICE: HOME// SSH VIRTUAL TERMINAL
                                     Right Margin: 80//
                      * Invalidated IV Labels *
    Patient: BANPATNM, JAMES E
                                                Location: BECKY'S CLINIC
 Additive(s): CEFAMANDOLE 20 GM
 Solution(s): DEXTROSE 10% 1000 ML
Label Date/Time Unique ID
                                     Status
                                                 Count BCMA Action-Date/Time
09/14/12 16:06 91V149
                                                 YES
09/14/12 16:06 91V150
                                                 YES
09/14/12 16:06 91V151
```

When the screen is full, a pause for the report output occurs, if the user selects the device option to print to the screen.

When an invalid bag event occurs, all IV labels associated with the edited order that have not already been invalidated are invalidated. IV labels that were previously invalidated as a result of prior edits are not displayed.

Following the "REASON FOR ACTIVITY:" prompt, the "Print new replacement labels? NO// Y" prompt displays to allow the pharmacist to print replacement labels when the following conditions occur:

- A non-starred field is changed.
- The IV parameter is set to Invalid Bag for an edited field.

#### **Example: Print New Replacement IV Labels**

```
REASON FOR ACTIVITY: test

Print new replacement labels? NO// YES

8 Labels needed for doses due at ...
```

IV labels printed prior to an order edit are displayed as available when edits are made to fields set to Warning or Non-Verify in the BCMA IV Parameters.

### **Example: IV Labels Available and Print New Replacement Labels**

```
The following IV labels are available:

Label Date/Time Unique ID Status
08/02/12 09:57 8157V178
08/02/12 09:57 8157V179
08/02/12 09:57 8157V180
08/02/12 09:57 8157V181
08/02/12 09:57 8157V182

Print new replacement labels? N// Y
```

The BCMA availability of IV bags may be viewed using the Label Log action. All IV labels that have been invalidated are displayed in the label log file with "NO" in the "Available in BCMA" column.

The label log file displays the status of the IV label as either available or not available in BCMA.

### **Example: Label Log Display**

```
Unique IDs for this order:

Available
Label Date/Time Unique ID in BCMA Status Count BCMA Action-Date/Time

02/25/13 15:36 197V6411 NO YES
02/25/13 15:36 197V6410 NO YES
02/25/13 15:36 197V6409 NO YES
(A)ctivity (L)abel (H)istory (I)nstructions History:
```

Labels will not be available in BCMA under the following conditions:

- When the status is Reprint, Recycled, Destroyed or Cancelled.
- When the action is Given, Infusing, Stopped or Completed.
- When an Invalid Bag Event has occurred.

After the above information is displayed in the label log, the below prompt displays for associated linked orders, if they exist. The default is "Y//."

## **Example: Associated Linked Orders Prompt**

```
Do you wish to see labels from linked (edited) orders? Y//
```

The clinic location's abbreviation, or the full clinic name if no abbreviation exists, prints on the IV label when the CLINIC field (#126) is populated. The ward location name is printed when the CLINIC field is null. The name "OPT. IV." is printed if neither the clinic location name nor the ward location name is populated.

## 4.6.3 Verify

Orders must be accepted and verified before they can become active and are included on the pick list, BCMA VDL, etc. If AUTO-VERIFY is enabled for the nurse, new orders immediately become active after entry or finish (pending orders entered through CPRS). Orders verified by nursing prior to pharmacy verification are displayed on the profile under the active header marked with an arrow (->) to the right of the order number. When verify is selected and when the order has not been verified by the pharmacist, the nurse must enter any missing data and correct any invalid data before the verification is accepted.

When an action of VF (Verify) is taken on one child order that is part of a Complex Order, a message will display informing the user that the order is part of a Complex Order, and the user is prompted to confirm that the action will be taken on all of the associated child orders.

**Note:** Orders that have been accepted by the pharmacist will appear on the BCMA VDL if verified by a nurse.



**Note:** The ALLOW AUTO-VERIFY FOR USER field in the INPATIENT USER PARAMETERS file controls AUTO-VERIFY.

**Note:** The user will not be allowed to finish an order that contains a schedule that is considered to be non-standard. Schedules must be selected from the ADMINISTRATION SCHEDULE file, with the following exceptions:

- Schedule containing PRN: (Ex. TID PC PRN). If the schedule contains PRN, the base schedule must be in the ADMINISTRATION SCHEDULE file.
- Day of week schedules (Ex. MO-FR or MO-FR@0900)
- Admin time only schedules (Ex. 09-13)

If the Dispense Drug or Orderable Item has a non-formulary status, this status will be displayed on the screen as "\*N/F\*" beside the Dispense Drug or Orderable Item.

## **Example: Verify an Order**

```
NON-VERIFIED UNIT DOSE Sep 07, 2000 13:57:03
                                                           Page:
  PID: 000-00-0001
PSJPATIENT1,ONE
                             Ward: 1 EAST
                                                 Ht(cm): ___
                           Room-Bed: B-12
                                                 Wt(kg): _
   DOB: 08/18/20 (80)
 *(1)Orderable Item: PROPRANOLOL TAB
      Instructions:
 *(2)Dosage Ordered:
                                                   (3)Start: 09/07/00 17:00
          Duration:
 *(4)
      Med Route: ORAL
                                                   (5) Stop: 09/21/00 24:00
 (6) Schedule Type: CONTINUOUS
 *(8)
        Schedule: OD
 *(8) Schedule: QD
(9) Admin Times: 17
       Provider: PSJPROVIDER,ONE [es]
 (10)
 (11) Special Instructions:
 (12) Dispense Drug
                                                   II/D
                                                             Inactive Date
    PROPRANOLOL 10MG U/D
                                                   1
       Enter ?? for more actions
DC Discontinue ED Edit
                                                  AL Activity Logs
HD (Hold)
                        RN (Renew)
                        VF Verify
FL (Flag)
Select Item(s): Next Screen// VF
...a few moments, please.....
Pre-Exchange DOSES:
ORDER VERIFIED.
Enter RETURN to continue or '^' to exit:
```

#### 4.6.4 Hold

Only active orders may be placed on hold. Orders placed on hold will continue to show under the ACTIVE heading on the profiles until removed from hold. Any orders placed on hold through the pharmacy options cannot be released from hold using any of the CPRS options. An entry is placed in the order's Activity Log recording the user who placed/removed the order from hold and when the action was taken.

If the Dispense Drug or Orderable Item has a non-formulary status, this status will be displayed on the screen as "\*N/F\*" beside the Dispense Drug or Orderable Item.

## **Example: Place an Order on Hold**

```
ACTIVE UNIT DOSE
                           Feb 25, 2001@21:25:50
                                                        Page:
                                                                 1 of
PSJPATIENT1,ONE
                            Ward: 1 EAST
  PID: 000-00-0001
                                               Ht(cm): ____
                         Room-Bed: B-12
  DOB: 08/18/20 (80)
                                               Wt(kg): ____
*(1)Orderable Item: ASPIRIN TAB
                                                                     <DIN>
     Instructions:
 *(2)Dosage Ordered: 650MG
         Duration:
                                                 *(3)Start: 02/26/01 14:
 *(4) Med Route: ORAL
                                                 *(5) Stop: 02/28/01 24:00
 (6) Schedule Type: CONTINUOUS
 *(8) Schedule: QDAILY
 (9) Admin Times: 1440
*(10)
      Provider: PSJPROVIDER, ONE [es]
 (11) Special Instructions:
 (12) Dispense Drug
                                                 U/D
                                                           Inactive Date
    ASPIRIN BUFFERED 325MG TAB
                                                 2
        Enter ?? for more actions
DC Discontinue
                      ED Edit
                                                AL Activity Logs
HD Hold
                       RN Renew
FL Flag
                       VF (Verify)
Select Item(s): Next Screen// HD Hold
Do you wish to place this order 'ON HOLD'? Yes// <Enter> (Yes)
NATURE OF ORDER: WRITTEN// <Enter>
COMMENTS:
 1>TESTING
EDIT Option: . <Enter>
Enter RETURN to continue or '^' to exit: <Enter>
```

-----report continues-----

Notice that the order shows a status of "H" for hold in the right side of the Aspirin Tablet order below.

### **Example: Place an Order on Hold (continued)**

```
Feb 25, 2001@21:27:57 Page:
HOLD UNIT DOSE
                                                                 1 of
                             Ward: 1 EAST
PSJPATIENT1, ONE
                                                Ht(cm): _____
  PID: 000-00-0001
                          Room-Bed: B-12
   DOB: 08/18/20 (80)
                                                Wt(kg): _____
 *(1)Orderable Item: ASPIRIN TAB
                                                                      <DIN>
      Instructions:
 *(2)Dosage Ordered: 650MG
         Duration:
                                                 *(3)Start: 02/26/01 14:40
 *(4)
        Med Route: ORAL
                                                  *(5) Stop: 02/28/01 24:00
 (6) Schedule Type: CONTINUOUS
 *(8) Schedule: QDAILY
      Admin Times: 1440
 (9)
        Provider: PSJPROVIDER,ONE [es]
 (10)
 (11) Special Instructions:
 (12) Dispense Drug
                                                            Inactive Date
                                                  U/D
    ASPIRIN BUFFERED 325MG TAB
                                                  2
      Enter ?? for more actions
DC Discontinue
                       ED (Edit)
                                                 AL Activity Logs
```

```
HD Hold RN (Renew)
FL Flag VF (Verify)
Select Item(s): Next Screen// <Enter>
HOLD UNIT DOSE Feb 25, 2001@21:28:20 Page:
PSJPATIENT1,ONE Ward: 1 EAST
PID: 000-00-0001 Room-Bed: B-12 Ht(cm): _____ (_
DOB: 08/18/20 (80)
                                                            Page: 2 of 2
(7)Self Med: NO
Entry By: PSJPROVIDER, ONE
                                              Entry Date: 02/25/01 21:25
(13) Comments:
 TESTING
         Enter ?? for more actions
DC Discontinue ED (Edit)
HD Hold RN (Renew)
FI. Flag VF (Verify)
                                                 AL Activity Logs
                         RN (Renew)
FL Flag
                         VF (Verify)
Select Item(s): Quit// <Enter>
Page: 1 of 1
   Dx: TESTING
                                        Last transferred: ******
  CrCL: <Not Found>
                                                BSA (m2): _
 ----ACTIVE-----
  1 ASPIRIN TAB
                                                С 02/26 02/28 Н
         Give: 650MG ORAL QDAILY
PI Patient Information SO Select Order
PU Patient Record Update NO New Order Entry
Select Action: Quit//
```

## 4.6.5 Renew

Medication orders (referred to in this section as orders) that may be renewed include the following:

- All non-complex active Unit Dose and IV orders.
- Orders that have been discontinued due to ward transfer or treating specialty change.
- Expired orders containing an administration schedule (Unit Dose and scheduled IV orders) that have not had a scheduled administration time since the last BCMA action was taken.
- Expired orders not containing an administration schedule (continuous IV orders) that have had an expired status less than the time limit defined in the EXPIRED IV TIME LIMIT field in the PHARMACY SYSTEM file.



**Note**: Complex Orders may only be renewed if all associated child orders are renewable.

## Renewing Orders with CPRS Overrides/Pharmacist Interventions

When renewing an order, if CPRS Provider Overrides and/or Pharmacy Interventions exist for the order, entering Y (Yes) at the prompt: "Order Check Overrides/Interventions exist for this order. Display? (Y/N)? Y//" displays the heading information first, followed by a summary of the Current CPRS Order Checks overridden by the Provider.

If current Pharmacist Interventions exist, they will display with the following fields (if populated), Heading, Intervention Date/Time, Provider, Pharmacist, Drug, Instituted By, Intervention, Recommendation, and Originating Package.

## Example: Renew an Order with Provider Overrides/Interventions

```
______
      ** Current Provider Overrides for this order **
Overriding Provider: PSJPROVIDER, ONE (PROVIDER)
Override Entered By: PSJPROVIDER, ONE (PROVIDER)
 Date/Time Entered: 07/11/11 09:45
   Override Reason: testing functionality of PO & PI
 CRITICAL drug-drug interaction: TAMOXIFEN CITRATE 10MG TAB and WARFARIN NA
 (GOLDEN STATE) 1MG TAB [ACTIVE] - The concurrent use of tamoxifen or
 toremifene may increase the effects of anticoagulants. - Monograph Available
 SIGNIFICANT drug-drug interaction: TAMOXIFEN CITRATE 10MG TAB and
 THIORIDAZINE HCL 10MG TAB [UNRELEASED] - Concurrent use of inhibitors of CYP
 P-450-2D6 may decrease the effectiveness of tamoxifen in preventing breast
 cancer recurrence. Concurrent use of amiodarone or thioridazine may increase
 the risk of potentially life-threatening cardiac arrhythmias, including
 torsades de pointes. - Monograph Available
Press RETURN to Continue or '^' to Exit:
______
      ** Current Pharmacist Interventions for this order **
______
Intervention Date/Time: 07/11/11 09:50
Pharmacist: PSJPHARMACIST, ONE
                                      Drug: TAMOXIFEN CITRATE 10MG TAB
Instituted By: PHARMACY
Intervention: CRITICAL DRUG INTERACTION
Originating Package: INPATIENT
```

**Note:** When Renewing an Order in Inpatient Medications, if Current CPRS Provider Overrides do not exist and Pharmacist Interventions do exist for the order, the following displays:

\_\_\_\_\_\_

\*\* Current Pharmacist Interventions for this order \*\*

------

Intervention Date: 07/11/11 14:55

Provider: PSJPROVIDER,ONE Pharmacist: PSJPHARMACIST,ONE

Drug: WARFARIN NA (GOLDEN STATE) 1MG TAB

Instituted By: PHARMACY

Intervention: CRITICAL DRUG INTERACTION

Recommendation: OTHER Originating Package: INPATIENT

Other For Recommendation:

TEST INTERVENTION FOR CRITICAL DRUG-DRUG

## **Renewing Active Orders**

The following applies when the RN (Renew) action is taken on any order with a status of "Active":

- A new Default Stop Date/Time is calculated for the order using the same calculation applied to new orders. The starting point of the Default Stop Date/Time calculation is the date and time that the order was signed in CPRS or the date and time that the RN (Renew) action was taken in Inpatient Medications.
- The RN (Renew) action does not create a new order.
- The Start Date/Time is not available for editing when an order is renewed.

**Note**: Orders having a schedule type of One-Time or On Call must have a status of "Active" in order to be renewed.

## **Renewing Discontinued Orders**

IV and Unit Dose orders that have been discontinued, either through the (DC) Discontinue action or discontinued due to edit, cannot be renewed.

IV and Unit Dose medication orders that have been discontinued due to ward transfer or treating specialty change will allow the (RN) Renew action.

## **Renewing Expired Unit Dose Orders**

The following applies to expired Unit Dose orders having a schedule type of Continuous or PRN.

- 1. The RN (Renew) action will not be available on an order with a status of "Expired" if either of the following two conditions exist:
  - a. If the difference between the current system date and time and the last scheduled administration time is greater than the frequency of the schedule. This logic will be used for schedules with standard intervals (for example, Q7H).
  - b. If the current system date and time is greater than the time that the next dose is due. This logic is used for schedules with non-standard intervals (for example, Q6H 0600-1200-1800-2400).

- 2. A new Default Stop Date/Time is calculated for the order using the same calculation applied to new orders. The starting point of the Default Stop Date/Time calculation is the date and time that the order was signed in CPRS or the date and time that the RN (Renew) action was taken in Inpatient Medications.
- 3. The (RN) Renew action does not create a new order.
- 4. The Start Date/Time is not available for editing when an order is renewed.
- 5. The renewed order has a status of "Active."

## **Renewing Expired Scheduled IV Orders**

The following applies to only IV orders that have a scheduled administration time.

- 1. The RN (Renew) action is not available on a scheduled IV order with a status of "Expired" if either of the following two conditions exist:
  - a. If the difference between the current system date and time and the last scheduled administration time is greater than the frequency of the schedule. This logic is used for schedules with standard intervals (for example, Q7H).
  - b. If the current system date and time is greater than the time that the next dose is due. This logic is used for schedules with non-standard intervals (for example, Q6H 0600-1200-1800).
- 2. A new Default Stop Date/Time is calculated for the order using the same calculation applied to new orders. The starting point of the Default Stop Date/Time calculation is the date and time that the order was signed in CPRS or the date and time that the RN (Renew) action was taken in Inpatient Medications.
- 3. The RN (Renew) action does not create a new order.
- 4. The Start Date/Time is not available for editing when an order is renewed.
- 5. The renewed order has a status of "Active."

## **Renewing Expired Continuous IV Orders**

The following applies to IV orders that do not have a scheduled administration time.

- 1. For Continuous IV orders having a status of "Expired," the "Expired IV Time Limit" system parameter controls whether or not the RN (Renew) action is available. If the number of hours between the expiration date/time and the current system date and time is less than this parameter, the RN (Renew) action is allowed. This parameter has a range of 0 to 24 hours, and may be changed using the PARameters Edit Menu option.
- 2. If the RN (Renew) action is taken on a renewable continuous IV order, a new Default Stop Date/Time is calculated using existing Default Stop Date/Time calculations. The starting point of the Default Stop Date/Time calculation is the date and time that the order was signed in CPRS or the date and time that the RN (Renew) action was taken in Inpatient Medications.
- 3. The RN (Renew) action does not create a new order.

- 4. The Start Date/Time is not available for editing when an order is renewed.
- 5. The renewed order has a status of "Active."

## **Renewing Complex Orders**

When an action of RN (Renew) is taken on one child order that is part of a Complex Order, a message will display informing the user that the order is part of a Complex Order, and the user is prompted to confirm that the action will be taken on all of the associated child orders.



Only Complex Orders created with the conjunction AND will be available for renewal.

Orders created by checking the "Give additional dose now" box in CPRS, when ordered in conjunction with a Complex Order, will not be available for renewal.

## **Example: Renew a Complex Order**

```
ACTIVE UNIT DOSE
                            Feb 25, 2004@21:25:50
                                                            Page: 1 of
  JPATIENT1,ONE
PID: 000-00-0001
DOB: 08/18/20 (80)
PSJPATIENT1,ONE
                            Ward: 1 EAST
                            Room-Bed: B-12
                                                  Ht(cm): _
                                                  Wt(kg): ____(_
*(1)Orderable Item: ASPIRIN TAB
                                                                          <DIN>
      Instructions:
 *(2)Dosage Ordered: 650MG
         Duration:
                                                    *(3)Start: 03/26/01 14:40
 *(4) Med Route: ORAL
                                                    *(5) Stop: 03/28/01 24:00
 (6) Schedule Type: CONTINUOUS
 *(8) Schedule: QDAILY
(9) Admin Times: 1440
 (9) Admin Times: 1440
(10) Provider: PSJPROVIDER,ONE [es]
 (11) Special Instructions:
 (12) Dispense Drug
                                                    II/D
                                                               Inactive Date
   ASPIRIN BUFFERED 325MG TAB
       Enter ?? for more actions
DC Discontinue ED (Edit)
HD Hold RN Renew
                                                     AL Activity Logs
HD Hold
FL Flag VF (Verify)
Select Item(s): Next Screen// RN Renew
This order is part of a complex order. If you RENEW this order the
following orders will be RENEWED too.
Press Return to continue... <Enter>
        DIGOXIN TAB
                                                 C 03/26 03/29 A
       Give: 200MG PO BID
                                                 C 03/26 03/28 A
       DIGOXIN TAB
        Give: 100MG PO TID
Press Return to continue... <Enter>
RENEW THIS COMPLEX ORDER SERIES? YES//
```

## **Viewing Renewed Orders**

The following outlines what the user may expect following the renewal process:

- 1. The patient profile will contain the most recent renewal date in the Renewed field.
- 2. The patient detail will contain the most recent renewal date and time in the Renewed field.
- 3. The Activity Log will display the following:
  - ORDER EDITED activity, including the previous Stop Date/Time and the previous Provider (if a new Provider is entered at the time the order is renewed).
  - ORDER RENEWED BY PHARMACIST activity, including the pharmacist that renewed the order and the date and time that the RN (Renew) action was taken.

## **Example: Renewed Order in Profile View**

### **Example: Renewed Order in Detailed Order View**

```
ACTIVE UNIT DOSE Feb 25, 2004@21:25:50
                                                                     1 of
                                                            Page:
  JPATIENT1,ONE Ward: 1 EAST PID: 000-00-0001 Room-Bed: B-12
                             Ward: 1 EAST
PSJPATIENT1,ONE
                                                  Ht(cm): _____
  DOB: 08/18/20 (80)
                                                  Wt(kg): _____(_
*(1)Orderable Item: ASPIRIN TAB
                                                                          <DTN>
     Instructions:
 *(2)Dosage Ordered: 650MG
          Duration:
                                                    *(3)Start: 03/26/04 14:40
 *(4) Med Route: ORAL
                                                      Renewed: 03/27/04 11:00
                                                    *(5) Stop: 03/28/04 24:00
 (6) Schedule Type: CONTINUOUS
 *(8) Schedule: QDAILY
(9) Admin Times: 1440
*(10) Provider: PSJPROVIDER,ONE [es]
 (11) Special Instructions:
 (12) Dispense Drug
                                                    U/D
                                                              Inactive Date
   ASPIRIN BUFFERED 325MG TAB
                                                    2.
        Enter ?? for more actions
DC Discontinue ED (Edit)
HD Hold RN Renew
FI. Flag VF (Verify
                                                    AL Activity Logs
                         VF (Verify)
Select Item(s): Next Screen//
```

```
ACTIVE UNIT DOSE Feb 25, 2004@21:28:20
PSJPATIENT1,ONE Ward: 1 EAST
PID: 000-00-0001 Room-Bed: B-12 Ht(cm):
DOB: 08/18/20 (80) Wt(kg):
                                                                               Page: 2 of
                                                                  Ht(cm): ___
                                                                  Wt(kg): __
(7)Self Med: NO
Entry By: PSJPROVIDER, ONE
                                                                Entry Date: 03/25/04 21:25
Renewed By: PSJPROVIDER, ONE
(13) Comments:
 TESTING
           Enter ?? for more actions
DC Discontinue ED (Edit)
HD Hold RN (Renew
FL (Flag) VF (Verify
                                                                    AL Activity Logs
                                RN (Renew)
VF (Verify)
FL (Flag)
Select Item(s): Quit// <Enter>
```

## **Discontinuing a Pending Renewal**

When a pharmacist attempts to discontinue a pending renewal, the following message displays.

This order is in a pending status. If this pending order is discontinued, the original order will still be active.

If this occurs, a pharmacist may discontinue a pending order, both orders, or exit the discontinue function. When a pending renewal is discontinued, the order will return to its previous status.

### **Orders That Change Status During Process of Renew**

Orders that are active during the renewal process but become expired during the pharmacy finishing process follow the logic described in Renewing Expired Unit Dose Orders, Renewing Expired Scheduled IV Orders, and Renewing Expired Continuous IV Orders.

## 4.6.6 Activity Log

This action allows viewing of a long or short activity log, dispense log, history log, or instructions history of the order. A short activity log only shows actions taken on orders and does not include field changes. The long activity log shows actions taken on orders and does include the requested Start and Stop Date/Time values. If a history log is selected, it will find the first order, linked to the order where the history log was invoked. Then the log will display an order view of each order associated with it, in the order that they were created. If an instructions history log is selected, it will find the first order linked to the order where the history log was invoked from, then show each incremental change to the instructions in the order they were created. When a dispense log is selected, it shows the dispensing information for the order.

### **Example: Activity Log**

```
ACTIVE UNIT DOSE Sep 21, 2000 12:44:25 Page: 1 of 2
PSJPATIENT1,ONE Ward: 1 EAST

PID: 000-00-0001 Room-Bed: B-12 Ht(cm): _____ (_____)

DOB: 08/18/20 (80) Wt(kg): _____ (_____)
```

```
*(1)Orderable Item: AMPICILLIN CAP
      Instructions:
 *(2)Dosage Ordered: 500MG
                                                      *(3)Start: 09/07/00 15:00
         Duration:
 *(4) Med Route: ORAL
                                                     *(5) Stop: 09/21/00 24:00
 (6) Schedule Type: CONTINUOUS
 *(8) Schedule: QID
 (9) Admin Times: 01-09-15-20
(10) Provider: PSJPROVIDER,ONE [es]
 (11) Special Instructions:
 (12) Dispense Drug
                                                     U/D
                                                               Inactive Date
     AMPICILLIN 500MG CAP
                                                     1
       Enter ?? for more actions
DC Discontinue ED Edit
HD Hold RN Renew
FL Flag VF Verify
                                                    AL Activity Logs
Select Item(s): Next Screen// AL Activity Logs
   1 - Short Activity Log
   2 - Long Activity Log
   3 - Dispense Log
   4 - History Log
   5 - Instructions History
Select LOG to display: 2 Long Activity Log
    Date: 09/07/00 14:07 User: PSJPHARMACIST,ONE
Activity: ORDER VERIFIED BY PHARMACIST
    Date: 09/07/00 14:07
                            User: PSJPHARMACIST, ONE
Activity: ORDER VERIFIED
   Field: Requested Start Date
Old Data: 09/07/00 09:00
   Date: 09/07/00 14:07 User: PSJPHARMACIST,ONE
Activity: ORDER VERIFIED
   Field: Requested Stop Date
Old Data: 09/07/00 24:00
Enter RETURN to continue or '^' to exit:
```

### 4.6.7 Finish

Nurses who hold the PSJ RNFINISH key will have the ability to finish and verify Unit Dose orders placed through CPRS.

Nurses who hold the PSJI RNFINISH key will have the ability to finish and verify IV orders placed through CPRS.

When an order is placed or renewed by a provider through CPRS, the nurse or pharmacist needs to finish and/or verify this order. The same procedures are followed to finish the renewed order as to finish a new order with the following exceptions:

The PENDING RENEWAL orders may be speed finished from within the Unit Dose *Order Entry* option. The user may enter an **SF**, for speed finish, at the "Select ACTION:" prompt and then select the pending renewals to be finished. A prompt is issued for the Stop Date/Time. This value is used as the Stop Date/Time for the pending renewals selected. All other fields will retain the values from the renewed order.



Note: Order Checks happen during the finish process.

When an action of FN (Finish) is taken on one child order that is part of a Complex Order, a message will display informing the user that the order is part of a Complex Order, and the user is prompted to confirm that the action will be taken on all of the associated child orders.



**Note:** Complex orders cannot be speed finished because it may not be appropriate to assign the same stop date to all components of a complex order.

## **Example: Complex Unit Dose Orders with Overlapping Administration Times**

When finishing (FN) a complex unit dose drug order with overlapping admin times, after you select the order, a warning message is displayed with the warning and the overlapping admin times.

```
**WARNING**
The highlighted admin times for these portions of this complex order overlap.

Part 1 has a schedule of BID and admin time(s) of 10-22.

AND
Part 2 has a schedule of QDAY and admin time(s) of 10.

Please ensure the schedules and administration times are appropriate.

Press Return to continue...

Enter ?? for more actions

PI Patient Information SO Select Order

PU Patient Record Update NO New Order Entry

Select Action: Next Screen//
```

To finish the order, you must correct the order so that there are no overlapping admin times.



**Note:** When finishing an order, if CPRS Order Checks/Provider Overrides and Pharmacist Interventions exist, they will display during the finish process. Heading information displays first, followed by a summary of the Current CPRS Order Checks overridden by the Provider, as well as the Overriding Provider, plus title, Override Entered By, plus title, Date/Time Entered, and the Override Reason.

## Example: Finish an Order with Provider Overrides/Interventions

```
** Current Provider Overrides for this order **

Overriding Provider: PSJPROVIDER,ONE (PROVIDER)

Override Entered By: PSJPROVIDER,ONE (PROVIDER)

Date/Time Entered: 07/11/11 17:40

Override Reason: Provider gave permission to administer
```

CRITICAL drug-drug interaction: METRONIDAZOLE 250MG TAB and WARFARIN NA (GOLDEN STATE) 1MG TAB [ACTIVE] - Concurrent use of anticoagulants with metronidazole or tinidazole may result in reduced prothrombin activity and/or increased risk of bleeding. - Monograph Available

**Note:** If no Current CPRS Provider Overrides were entered at the time the order was created in CPRS, they will NOT display during finishing, and no heading or messages will display when finishing the Pending order in Inpatient Medications.

#### **Example: Finish an Order Without a Duration**

```
Sep 07, 2000 16:11:42
PENDING IV (ROUTINE)
                                                          Page:
                              Ward: 1 EAST
PSJPATIENT1, ONE
  PID: 000-00-0001
                                                Ht(cm): _
                           Room-Bed: B-12
   DOB: 08/18/20 (80)
                                                Wt(kg): _
 (1) Additives:
                                                     Type:
 (2) Solutions:
          Duration: (4) Start: ******
 (3) Infusion Rate:
                                          REQUESTED START: 09/07/00 09:00
*(5) Med Route: IVPB
                                            (6) Stop: ******
                                              Last Fill: ******
*(7)
          Schedule: QID
(8) Admin Times: 01-09-15-20
                                                Quantity: 0
      Provider: PSJPROVIDER,ONE [es]
                                              Cum. Doses:
*(10)Orderable Item: AMPICILLIN INJ
      Instructions:
 (11) Other Print:
 Provider Comments: THIS IS AN INPATIENT IV EXAMPLE.
        Enter ?? for more actions
DC Discontinue FL (Flag)
ED Edit
                        FN Finish
Select Item(s): Next Screen// FN Finish
COMPLETE THIS ORDER AS IV OR UNIT DOSE? IV// IV
Copy the Provider Comments into Other Print Info? Yes//
IV TYPE: PB
CHOOSE FROM:
             Α
                 ADMIXTURE
             С
                 CHEMOTHERAPY
             Η
                 HYPERAL
             Ρ
                  PIGGYBACK
             S
                 SYRINGE
Enter a code from the list above.
    Select one of the following:
             ADMIXTURE
CHEMOTHERAPY
        А
                 HYPERAL
         Н
         Ρ
                  PIGGYBACK
                  SYRINGEIV TYPE: PIGGYBACK
              **AUTO STOP 7D**
This patient is already receiving an order for the following drug in the same
class as AMPICILLIN INJ 2GM:
       AMPICILLIN CAP
                                              C 09/07 09/21 A
       Give: 500MG PO QID
Do you wish to continue entering this order? NO// Y
Select ADDITIVE: AMPICILLIN// <Enter>
ADDITIVE: AMPICILLIN// <Enter>
Restriction/Guideline(s) exist. Display? : (N/D): No// D
Dispense Drug Text:
    Refer to PBM/MAP PUD treatment guidelines
    RESTRICTED TO NEUROLOGY
(The units of strength for this additive are in GM)
Strength: 1 GM
```

```
Select ADDITIVE: <Enter>
Select SOLUTION: 0.9

1  0.9% NACL  500 ML

2  0.9% NACL  100 ML

3  0.9% NACL  50 ML

4  0.9% NACL  250 ML

BT

CHOOSE 1-4: 2  0.9% NACL  100 ML

INFUSION RATE: <Enter>
```

-----report continues-----

**Note**: When the CPRS patch, OR\*3\*141, is installed on the user's system <u>AND</u> the order is electronically signed through the CPRS package, the electronically signed abbreviation, [es], will appear next to the Provider's Name on the order.

### **Example: Finish an Order Without a Duration (continued)**

```
PENDING IV (ROUTINE) Sep 07, 2000 16:23:46
                                                          Page:
                                                                  1 of
PSJPATIENT1, ONE
                               Ward: 1 EAST
  PID: 000-00-0001
                          Room-Bed: B-12
                                                Ht(cm): _
  DOB: 08/18/20 (80)
                                                Wt(kg): ____(
 (1) Additives:
                                                     Type: PIGGYBACK
                                                                       <DIN>
      AMPICILLIN 1 GM
 (2) Solutions:
      0.9% NACL 100 ML
          Duration:
                                            (4)
                                                  Start: 09/07/00 15:00
 (3) Infusion Rate:
                                          REQUESTED START: 09/07/00 09:00
*(5)
        Med Route: IVPB
                                                 Stop: 09/14/00 16:54
                                               Last Fill: ******
          Schedule: OID
(7)
     Admin Times: 01-09-15-20
                                                 Quantity: 0
(8)
*(9)
         Provider: PSJPROVIDER,ONE [es]
                                              Cum. Doses:
*(10)Orderable Item: AMPICILLIN INJ
     Instructions:
 (11) Other Print: THIS IS AN INPATIENT IV EXAMPLE.
         Enter ?? for more actions
                       ED Edit
   Accept
Select Item(s): Next Screen// AC
Orderable Item: AMPICILLIN INJ
Give: IVPB QID
0001 1 EAST 09/07/00
PSJPATIENT1, ONE B-12
AMPICILLIN 1 GM
0.9% NACL 100 ML
Dose due at: ___
THIS IS AN INPATIENT IV EXAMPLE
01-09-15-20
M2***
Fld by: ____ Chkd by: _
1[1]
Start date: SEP 7,2000 15:00 Stop date: SEP 14,2000 16:54
Is this O.K.? YES// <Enter>
```

The Requested Start date/time value is added to the order view to indicate the date/time requested by the provider to start the order. This date/time is the CPRS expected first dose when no duration is received from CPRS.

## **Example: Finish an Order With a Duration**

```
PENDING IV (ROUTINE)
                          Sep 07, 2000 16:11:42
                                                           Page:
                                                                     1 of
PSJPATIENT1, ONE
                              Ward: 1 EAST
  JPATIENT1,ONE Ward: 1 EAS'
PID: 000-00-0001 Room-Bed: B-12
                                                  Ht(cm): ___
   DOB: 08/18/20 (80)
                                                  Wt(kg): _
 (1) Additives:
                                                       Type:
 (2) Solutions:
          Duration: 10 DAYS (4) Start: *******
 (3) Infusion Rate:
     Med Route: IVPB
                                                     Stop: ******
*(5)
                                              (6)
                                                Last Fill: ******
*(7)
          Schedule: QID
     Admin Times: 01-09-15-20
(8)
                                                  Quantity: 0
       Provider: PSJPROVIDER,ONE [es]
*(9)
                                                Cum. Doses:
*(10)Orderable Item: AMPICILLIN INJ
      Instructions:
       Other Print:
 Provider Comments: THIS IS AN INPATIENT IV EXAMPLE.
        Enter ?? for more actions
    Discontinue
                     FL (Flag)
FN Finish
DC
ED Edit
Select Item(s): Next Screen// FN Finish
COMPLETE THIS ORDER AS IV OR UNIT DOSE? IV// IV
Copy the Provider Comments into Other Print Info? Yes//
IV TYPE: PB
CHOOSE FROM:
                  ADMIXTURE
             Α
             C
                  CHEMOTHERAPY
             Н
                  HYPERAL
             Ρ
                  PIGGYBACK
             S
                  SYRINGE
Enter a code from the list above.
    Select one of the following:
             ADMIXTURE
CHEMOTHERAPY
         Α
         C
         Н
                 HYPERAL
                   PIGGYBACK
                   SYRINGE
         S
IV TYPE: PIGGYBACK
              **AUTO STOP 7D**
This patient is already receiving an order for the following drug in the same
class as AMPICILLIN INJ 2GM:
       AMPICILLIN CAP
                                              C 09/07 09/21 A
       Give: 500MG PO QID
Do you wish to continue entering this order? NO// Y
Select ADDITIVE: AMPICILLIN// <Enter>
ADDITIVE: AMPICILLIN// <Enter>
Restriction/Guideline(s) exist. Display? : (N/D): No// \bf D
Dispense Drug Text:
    Refer to PBM/MAP PUD treatment guidelines
    RESTRICTED TO NEUROLOGY
(The units of strength for this additive are in GM)
Strength: 1 GM
Select ADDITIVE: <Enter>
```

```
Select SOLUTION: 0.9
    1 0.9% NACL
                            500 ML
    2 0.9% NACL
                            100 ML
       0.9% NACL
                            50 ML
    4 0.9% NaCl
                           250 ML
             BT
CHOOSE 1-4: 2 0.9% NACL
                              100 ML
INFUSION RATE: <Enter>
PENDING IV (ROUTINE) Sep 07, 2000 16:23:46 Page: 1 of 2 PSJPATIENT1,ONE Ward: 1 EAST
PSJPATIENT1,ONE
PID: 000-00-0001
                                               Ht(cm): ____(__
                          Room-Bed: B-12
  DOB: 08/18/20 (80)
                                                Wt(kg): _____(_
 (1) Additives:
                                                     Type: PIGGYBACK
                                                                        <DIN>
      AMPICILLIN 1 GM
 (2) Solutions:
      0.9% NACL 100 ML
         Duration: 10 DAYS (4) Start: 09/07/00 09:00
(3) Infusion Rate:
*(5) Med Route: IVPB
                                               Calc Start: 09/07/00 08:13
*(5)
                                                     Stop: 09/17/00 09:00
                                                Calc Stop: 09/22/00 24:00
       Schedule: QID
*(7)
                                                Last Fill: ******
(8) Admin Times: 01-09-15-20
*(9) Provider: PSJPROVIDER,ONE [es]
                                                 Quantity: 0
                                             Cum. Doses:
*(10)Orderable Item: AMPICILLIN INJ
     Instructions:
(11) Other Print: THIS IS AN INPATIENT IV EXAMPLE.
       Enter ?? for more actions
AC Accept
                  ED Edit
Select Item(s): Next Screen// AC
```

**Note**: When the CPRS patch, OR\*3\*141, is installed on the user's system <u>AND</u> the order is electronically signed through the CPRS package, the electronically signed abbreviation, [es], will appear next to the Provider's Name on the order.

## **Example: Finish an Order With a Duration (continued)**

The calculated Start Date/Time (Calc Start) and the Stop Date/Time (Calc Stop) will display according to how the following Inpatient Ward Parameters settings are configured:

- DAYS UNTIL STOP DATE/TIME:
- DAYS UNTIL STOP FOR ONE-TIME:
- SAME STOP DATE ON ALL ORDERS:
- TIME OF DAY THAT ORDERS STOP:
- **DEFAULT START DATE CALCULATION:**

The CPRS Expected First Dose will display as the default Start Date/Time when a duration is received from CPRS.

The default Stop Date/Time is derived from the CPRS Expected First Dose and the duration, when the duration is available from CPRS.

Note: When an order is placed through CPRS prior to the next administration time for today, the Expected First Dose will be today at the next administration time. However, if the order is placed after the last administration time of the schedule for today, the Expected First Dose will be at the next administration time. The Expected First Dose displayed in CPRS displays as Requested Start Date/Time on the order view if no duration is received from CPRS. The Expected First Dose displays as the default Start Date/Time on the order view when a duration is received. Expected First Dose does not display for On-call or One-time orders.

If the Dispense Drug or Orderable Item has a non-formulary status, this status will be displayed on the screen as "\*N/F\*" beside the Dispense Drug or Orderable Item.

The user, when finishing an order that contains an IV Additive and there is more than one dispense drug matched to the selected Orderable Item, they must select the correct item for the order from the displayed list. If there are multiple additives contained on the single order, the Pharmacist must select each of the correct additives for the order. (See example below) The lists of additive will be displayed as follows:

Print Name Additive Strength: Strength

When there are Multiple IV Additive Orderable Items, each IV additive must be selected from the displayed list.

#### **Example: Multiple items for an Orderable Item**

```
DC
        Discontinue
                                         (Flag)
ED
                                         Finish
Select Item(s): Next Screen// FN Finish
IV TYPE: PIGGYBACK//
More than one dispense IV Additives are available for:
   Orderable Item: PIPERACILLIN/TAZOBACTAM INJ
    Ordered Dose: 5 GM
Please select the correct dispense IV Additive below for this order:
      1 PIPERACILLIN/TAZOBACTAM
                                                Additive Strength: 3.375 GM
      2 PIPERACILLIN/TAZOBACTAM
3 PIPERACILLIN/TAZOBACTAM
                                                Additive Strength: 2.25 GM
                                                Additive Strength: 4.5 GM
Select (1 - 3): 3 PIPERACILLIN/TAZOBACTAM
                                                    Additive Strength: 4.5 GM
```

### Example: Multiple IV Additives for same order with multiple items attached to the Orderable Item

```
More than one dispense IV Additives are available for:
         Orderable Item: PIPERACILLIN/TAZOBACTAM
         Ordered Dose: 5 GM
Please select the correct dispense IV Additive below for this order:
         1 PIPERACILLIN/TAZOBACTAM
2 PIPERACILLIN/TAZOBACTAM
                                                 Additive Strength: 3.375
                                                Additive Strength: 2.25
         3 PIPERACILLIN/TAZOBACTAM
                                                Additive Strength: 4.5
         Select (1 - 3): 2
More than one dispense IV Additives are available for:
        Orderable Item: CIPROFLOXACIN
        Ordered Dose: 2 MG
         Please select the correct dispense IV Additive below for this order:
        1 CIPROFLOXACIN 200MG Additive Strength: N/A
         2 CIPROFLOXACIN 400MG
                                                Additive Strength: N/A
        Select (1 - 2): 2
More than one dispense IV Additives are available for:
        Orderable Item: CEFAZOLIN
        Ordered Dose: 2 GM
Please select the correct dispense IV Additive below for this order:
                        Additive Strength: N/A
       1 CEFAZOLIN
       2 CEFAZ2
                                               Additive Strength: N/A
       3 CEFAZ3
                                               Additive Strength: N/A
Select (1 - 3): 1
```

A prompt is added to the finishing process, "COMPLETE THIS ORDER AS IV OR UNIT DOSE?" to determine if the user should complete the order as either an IV or Unit Dose order. The prompt will be displayed only if the user selected the *Inpatient Order Entry* option to finish the order and the order was placed in CPRS using the Inpatient Meds dialog. Also, the prompt will appear only if the correct combination of the entry in the IV FLAG in the MEDICATION ROUTES file and the entry in the APPLICATION PACKAGES' USE field in the DRUG file for the order's Dispense Drug are found.

The following table will help explain the different scenarios for orders placed in CPRS using the Inpatient Meds dialog:

IV FLAG in the MEDICATION ROUTES file	Dispense Drug's Application Use	Which Order View screen will be displayed to the user	Special Processing
IV	IV	IV	None
IV	Unit Dose	Unit Dose	Prompt user to finish order
			as IV or Unit Dose
IV	IV and	IV	Prompt user to finish order
	Unit Dose		as IV or Unit Dose
Non-IV	IV	IV	Prompt user to finish order
			as IV or Unit Dose
Non-IV	Unit Dose	Unit Dose	None
Non-IV	IV and	Unit Dose	Prompt user to finish order
	Unit Dose		as IV or Unit Dose

## 4.6.8 Flag



This option is only available to those users who hold the PSJ RPHARM key.

The flag action is available to alert the users that the order is incomplete or needs clarification. Flagging is applied to any orders that need more information or corrections from the clinician. When the user flags the order, an alert is sent to the specified user defining the information that is needed to process the medication order. The specified user can send a return alert with the needed information. The Activity Log will record the flagging activities including acknowledgement that the alert was viewed. The flag action can be performed in either CPRS or in Inpatient Medications.

When a flagged order appears on the order view, the order number on the right hand side will be highlighted using reverse video. The nurse, or any user without the PSJ RPHARM key, does not have the ability to flag or un-flag orders; however, they can view the flagged or un-flagged comments via the Activity Log.

## **Example: Flagged Order**

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

## 4.6.9 Speed Actions

From the list of orders in the patient's profile, the nurse can select one or more of the orders on which to take action. The nurse can quickly discontinue this patient's orders by selecting Speed Discontinue, or quickly renewing an order by selecting Speed Renew. Other "quick" selections include Speed Finish and Speed Verify.

Note: Any orders placed through the Med Order Button cannot be Speed Discontinued.

**Note:** Complex orders cannot be speed finished because it may not be appropriate to assign the same stop date to all components of a complex order.

# 4.7 Discontinue All of a Patient's Orders [PSJU CA]

The *Discontinue All of a Patient's Orders* option allows a nurse to discontinue all of a patient's orders. Also, it allows a ward clerk to mark all of a patient's orders for discontinuation. If the ALLOW USER TO D/C ORDERS parameter is turned on to take action on active orders, then the ward clerk will also be able to discontinue orders. This ALLOW USER TO D/C ORDERS parameter is set using the *Inpatient User Parameter's Edit* option under the *PARameter's Edit Menu* option, which is under the *Supervisor's Menu* option.

This option is then used to discontinue the selected orders. If a non-verified or pending order is discontinued, it is deleted completely from the system.

# 4.8 Hold All of a Patient's Orders [PSJU HOLD ALL]

The *Hold All of a Patient's Orders* option allows a nurse to place all of a patient's active orders on hold in order to temporarily stop the medication from being dispensed, or take all of the patient's orders off of hold to restart the dispensing of the medication.

The option will take no action on individual orders that it finds already on hold. When this option is used to put all orders on hold, the system will print labels for each medication order newly put on hold, indicating on the label that the medication is on hold. Also, the profile will notify the user that the patient's orders have been placed on hold; the letter **H** will be placed in the Status/Info column on the profile for each formerly active order.

When the option is used to take all orders off of hold, the system will reprint labels for the medication orders that were taken off hold and indicate on the label that the medication is off

hold. Again, this option will take no action on individual orders that it finds were not on hold. The profile will display to the user that the patient's orders have been taken off hold.

## **Example 1: Hold All of a Patient's Orders**

```
Select Unit Dose Medications Option: Hold All of a Patient's Orders

Select PATIENT: PSJPATIENT2,TWO 000-00-0002 02/22/42 A-6

DO YOU WANT TO PLACE THIS PATIENT'S ORDERS ON HOLD? Yes// <Enter> (Yes)

HOLD REASON: SURGERY SCHEDULED FOR 9:00AM
...a few moments, please.................DONE!
```

To take the orders off of hold, choose this same option and the following will be displayed:

## Example 2: Take All of a Patient's Orders Off of Hold

```
Select Unit Dose Medications Option: HOld All of a Patient's Orders

Select PATIENT: PSJPATIENT2,TWO 000-00-0002 02/22/42 A-6

THIS PATIENT'S ORDERS ARE ON HOLD.

DO YOU WANT TO TAKE THIS PATIENT'S ORDERS OFF OF HOLD? Yes// <Enter> (Yes)......DONE!
.....DONE!
```

**Note**: Individual orders can be placed on hold or taken off of hold through the *Order Entry* and *Non–Verified/Pending Orders* options.

## 4.9 Inpatient Profile [PSJ PR]

The *Inpatient Profile* option allows the user to view the Unit Dose and IV orders of a patient simultaneously. The user can conduct the Inpatient Profile search by ward group, ward, or patient. If the selection to sort is by ward, the administration teams may be specified. The default for the administration team is ALL and multiple teams may be entered. If selecting by ward or ward group, the profile may be sorted by patient name or room-bed. To print Outpatients, the user should select the ward group ^OTHER or print by Patient.

When the user accesses this option from the Unit Dose Medications module for the first time within a session, a prompt is displayed to select the IV room. When only one active IV room exists, it will be selected automatically. The user is then given the label and report devices defined for the IV room chosen. If no devices have been defined, the user will be given the opportunity to choose them. If this option is exited and then re-entered within the same session, the current label and report devices are shown.

In the following description, viewing a profile by patient is discussed; however, ward and ward group are handled similarly.

After the user selects the patient for whom a profile view is needed, the length of profile is chosen. The user can choose to view a long or short profile or, if the user decides not to view a

profile for the chosen patient, "NO Profile" can be selected. When **NO Profile** is chosen, the system will return to the "Select PATIENT:" prompt and the user may choose a new patient.

Once the length of profile is chosen, the user can print the patient profile (by accepting the default or typing **P** at the "SHOW PROFILE only, EXPANDED VIEWS only, or BOTH: Profile//" prompt), an expanded view of the patient profile (by typing **E**), or both (by typing **B**). The expanded view lists the details of each order for the patient. The activity logs of the orders can also be printed when the expanded view or both, the expanded view and profile, are chosen.

The advantage of this option is that by viewing the combined Unit Dose/IV profile of a patient, the user can quickly determine if any corrections or modifications need to be made for existing or future orders based on Unit Dose or IV medications already being received by the patient. Sometimes the nurse must revise a prospective order for a patient based on the Unit Dose or IV medications already prescribed for the patient.



**Note**: For Unit Dose orders, the long activity log shows all activities of an order, while the short activity log excludes the field changes, and shows only the major activities. For IV orders, the short and long activity logs give the user the same results.

#### **Example: Inpatient Profile**

```
Select Unit Dose Medications Option: IPF Inpatient Profile
Select by WARD GROUP (G), WARD (W), or PATIENT (P): Patient <Enter>
Select PATIENT: PSJPATIENT11,ONE
                                 000-55-3421 08/18/20 1 EAST
Select another PATIENT: <Enter>
SHORT, LONG, or NO Profile? SHORT// <Enter> SHORT
Show PROFILE only, EXPANDED VIEWS only, or BOTH: PROFILE// BOTH
Show SHORT, LONG, or NO activity log? NO// SHORT
Select PRINT DEVICE: 0;80 NT/Cache virtual TELNET terminal
Dx: Breathing Difficulty Last transferred: 12/11/01
 CrCL: <Not Found>
                                 BSA (m2): _
---- A C T I V E -----
  1 CEFAZOLIN 1 GM
                                  C 06/12 06/22 H
     in 5% DEXTROSE 50 ML Q8H
  2 CIMETIDINE TAB
                                  C 06/12 07/12 A
      Give: 300MG PO BID
  3 FUROSEMIDE TAB
                                 C 06/01 06/15 HP
     Give: 40MG PO QAM
      4 CAPTOPRIL TAB
                                 C 06/14 06/28 N
      Give: 25MG PO BID
  5 HALOPERIDOL TAB
     Give: 5MG PO BID
```

```
6 HEPARIN/DEXTROSE INJ, SOLN
       Give: IV
    LACTULOSE SYRUP
       Give: 10GM/15ML PO BID PRN
 FOLIC ACID TAB C 06/14 06/16 D Give: 1MG PO QAM
  8 FOLIC ACID TAB
      GENTAMICIN 80 MG
                                         C 06/12 06/12 D
      in 5% DEXTROSE 100 ML Q8H
 10 ISONIAZID TAB
                                        C 04/03 04/17 DF
       Give: 300MG PO QD
 11 POTASSIUM CHLORIDE 10MEQ
 in 5% DEXTROSE 1000 ML Q8H

12 POTASSIUM CHLORIDE 40 MEQ
in 5% DEXTROSE 250 TO MEQ
                                       C 06/12 06/12 DA
      POTASSIUM CHLORIDE 40 MEQ
in 5% DEXTROSE 250 ML 120 ml/hr
                                         C 06/12 06/12 DD
 13 PROPRANOLOL TAB
                                         C 06/15 06/20 DP
       Give: 40MG PO Q6H
      THIAMINE TAB
                                         C 04/03 04/17 E
        Give: 100MG PO BID
Enter ?? for more actions
PI Patient Information SO Select Order
PU Patient Record Update NO New Order Entry
                 Entry Date: 09/19/00 09:55
```

## 4.10 Order Checks

Order checks (allergy/adverse drug reactions, drug-drug interactions, duplicate therapy, dangerous medications for patient over 64 years of age, Glucophage lab results, and Aminoglycosides ordered) are performed when a new medication order is placed through Inpatient Medications or when various actions are taken on medication orders through the Inpatient Medications application. This functionality will ensure the user is alerted to possible adverse drug reactions and will reduce the possibility of a medication error due to the omission of an order check when a non-active medication order is acted upon.



**Note**: The check for remote data availability is performed when entering a patient's chart, rather than on each order.

The following actions will initiate an order check:

- Action taken through Inpatient Medications to enter a medication order will initiate order checks (allergy, drug-drug interaction, and duplicate therapy) against existing medication orders.
- Action taken through Inpatient Medications to finish a medication order placed through CPRS will initiate order checks (allergy, drug-drug interaction, and duplicate therapy) against existing medication orders.
- Action taken through IV Menu to finish a medication order placed through CPRS will initiate
  order checks (allergy, drug-drug interaction, and duplicate therapy) against existing
  medication orders.

- Action taken through Inpatient Medications to renew a medication order will initiate order checks (allergy, drug-drug interaction, and duplicate therapy) against existing medication orders.
- Action taken through IV Menu to renew a medication order will initiate order checks (allergy, drug-drug interaction, and duplicate therapy) against existing medication orders.
- Action taken through IV Menu to copy a medication order, thereby creating a new order.

The following are the different items used for the order checks:

- Checks each Dispense Drug within the Unit Dose order for allergy/adverse drug reactions.
- Checks each Dispense Drug within the Unit Dose order against existing orders for drug-drug interaction, and duplicate therapy.
- Checks each additive within an IV order for drug-drug interaction, and duplicate therapy against solutions or other additives within the order.
- Checks each IV order solution for allergy/adverse reactions.
- Checks each IV order solution for drug-drug interaction against other solutions or additives within the order if they are defined as a PreMix.
- Checks each IV order additive for allergy/adverse reaction.
- Checks each IV order additive for drug-drug interaction, and duplicate therapy against existing orders for the patient.
- Checks each IV order solution for drug-drug interaction against existing orders for the patient.

Override capabilities are provided based on the severity of the order check, if appropriate.

Order Checks will be displayed/processed in the following order:

- System Errors
- Allergy/ADR (local & remote)
- CPRS checks generated backdoor (3 new checks)
- Drug Level Errors
- Inpatient Critical Drug Interaction
- Local & Remote Outpatient Critical Drug Interactions
- Inpatient Significant Drug Interactions
- Local & Remote Outpatient Significant Drug Interactions
- Order Level Error Messages Drug Interactions
- Duplicate Therapy –Inpatient, Local & Remote Outpatient
- Order Level Error Messages Duplicate Therapy

These checks will be performed at the Dispense Drug level. Order checks for IV orders will use Dispense Drugs linked to each additive/solution in the IV order. All pending, non-verified, active and renewed Inpatient orders, active Outpatient orders, and active Non-Veterans Affairs (VA) Meds documented in CPRS will be included in the check. In addition, with the release of

OR\*3\*238, order checks will be available using data from the Health Data Repository Historical (HDR-Hx) and the Health Data Repository Interim Messaging Solution (HDR-IMS). This will contain both Outpatient orders from other VAMCs as well as from Department of Defense (DoD) facilities, if available. Any remote Outpatient order that has been expired for 30 days or less will be included in the list of medications to be checked.

There is a slight difference in the display of local Outpatient orders compared with remote Outpatient orders. Below are examples of the two displays:

## **Example: Local Outpatient Order Display**

```
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 Outpatient Order Display**

In the Remote Outpatient Order Display example above, notice the name of the remote location has been added. In addition, the number of refills is not available.

If the order is entered by the Orderable Item only, these checks will be performed at the time the Dispense Drug(s) is specified. The checks performed include:

**Duplicate Therapy** - Each First Databank duplicate therapy class is assigned a duplication allowance value. The duplication allowance value indicates how many duplications are considered appropriate before a warning is generated. If the number of duplicate therapy matches (number of drug pairs) exceeds the duplication allowance value, a warning will be displayed.

In the example below, the patient is already receiving orders containing a Dispense Drug in the same therapy class as one of the Dispense Drugs in the new order. The duplication allowance for the Antihyperlipidemics HMGCo-A Reductase Inhibitors (Statins) therapy class is zero. The new order for Simvastatin 20mg tab and the existing outpatient pharmacy order for Simvastatin 10mg tab are both in the same therapy class resulting in one duplication match. Since one duplication match is greater than zero, a duplicate therapy warning is displayed.

Inpatient duplicate orders of this kind are displayed in a numbered list. The user is first asked whether or not to continue the current order. If the user selects to continue the order then the user is prompted with which, if any, numbered Inpatient duplicate orders to discontinue. The user may enter a range of numbers from the numbered list of duplicate orders or bypass the prompt by selecting **Enter>** and continue with the order. Entry of orders with duplicate drugs of the same class will be allowed.

```
Inpatient Order Entry Mar 16, 2011@12:10:42 Page:
BCMA,EIGHTEEN-PATIENT Ward: 7A GEN
PID: 666-33-0018 Room-Bed: Ht(cm): 175.26
                                                                           1 of
                                                                            Α
                                               Ht(cm): 175.26 (12/15/08)
   DOB: 04/07/35 (75)
                                                          Wt(kg): 100.00 (12/15/08)
                                              Admitted: 01/31/02
  Sex: FEMALE
   Dx: UPSET
                                           Last transferred: 06/04/10
  CrCL: 78.1(est.) (CREAT:1.0mg/dL 4/19/12) BSA (m2): 2.21
 ----- NON-VERIFIED COMPLEX------
   1 LITHIUM TAB, SA
                                                     C 10/13 10/15 N
          Give: 450MG PO QID
        LITTHIUM TAB.SA
                                                     C 10/13 10/15 N
          Give: 10000MG PO Q4H
        RILUZOLE TAB
                                                    C 10/13 10/15 N
         Give: 50MG PO BID
+-----Enter ?? for more actions-----
PI Patient Information SO Select Order PU Patient Record Update NO New Order Ent
                                          NO New Order Entry
Select Action: Next Screen// no New Order Entry
Select DRUG: simv
    Lookup: DRUG GENERIC NAME
1 SIMVASTATIN 10MG TAB CV350
2 SIMVASTATIN 20MG TAB CV350
3 SIMVASTATIN 40MG TAB CV350
4 SIMVASTATIN 80MG TAB CV350
CHOOSE 1-4: 2 SIMVASTATIN 20MG TAB CV350
                                         CV350
                                                        N/F
Restriction/Guideline(s) exist. Display? : (N/O): No// NO
```

```
Enter RETURN to continue or '^' to exit:
Now doing allergy checks. Please wait...
Now processing Clinical Reminder Order Checks. Please wait ...
Now Processing Enhanced Order Checks! Please wait...
______
This patient is already receiving the following INPATIENT and/or OUTPATIENT
order(s) for a drug in the same therapeutic class(es) as SIMVASTATIN 20MG
Local Rx #501820A (ACTIVE) for SIMVASTATIN 10MG TAB
SIG: TAKE ONE TABLET BY MOUTH EVERY EVENING
Processing Status: Not released locally (Window)
Class(es) Involved in Therapeutic Duplication(s): Antihyperlipidemics
 HMGCo-A Reductase Inhibitors (Statins)
______
Press Return to continue...
Available Dosage(s)
    1. 20MG
     2.
          40MG
Select from list of Available Dosages or Enter Free Text Dose: 2 40MG
You entered 40MG is this correct? Yes// YES
```

```
MED ROUTE: ORAL (BY MOUTH)// PO
SCHEDULE: QPM// 2100
SCHEDULE TYPE: CONTINUOUS// CONTINUOUS
ADMIN TIMES: 2100//
SPECIAL INSTRUCTIONS:
START DATE/TIME: MAR 16,2011@12:10// MAR 16,2011@12:10
STOP DATE/TIME: MAR 18,2011@24:00// MAR 18,2011@24:00
Expected First Dose: MAR 16,2011@21:00
PROVIDER: PHARMACIST, SEVENTEEN//
NON-VERIFIED UNIT DOSE Mar 16, 2011@12:10:15 Page: 1 of 2
BCMA,EIGHTEEN-PATIENT Ward: 7A GEN

PID: 666-33-0018 Room-Bed: Ht(cm): 175.26 (12/15/08)
DOB: 04/07/35 (75) Wt(kg): 100.00 (12/15/08)
 (1)Orderable Item: SIMVASTATIN TAB
     Instructions:
 (2)Dosage Ordered: 40MG
         Duration:
                                                       (3)Start: 03/16/11 12:10
        Med Route: ORAL (BY MOUTH)
                                                    (5) Stop: 03/18/11 24:00
 (6) Schedule Type: CONTINUOUS
 (8) Schedule: QPM
 (9) Admin Times: 2100
 (10) Provider: PHARMACIST, SEVENTEEN
 (11) Special Instructions:
 (12) Dispense Drug
                                                      U/D
                                                               Inactive Date
      SIMVASTATIN 20MG TAB
+----Enter ?? for more actions-----
ED Edit
                               AC ACCEPT
Select Item(s): Next Screen// ac ACCEPT
NATURE OF ORDER: WRITTEN//
...transcribing this non-verified order....
                            Mar 16, 2011@12:10:24 Page: 1 of
NON-VERIFIED UNIT DOSE
NON-VERIFIED GM.
BCMA, EIGHTEEN-PATIENT
PID: 666-33-0018
                             Ward: 7A GEN A
Room-Bed: Ht(cm): 175.26 (12/15/08)
   DOB: 04/07/35 (75)
                                                       Wt(kg): 100.00 (12/15/08)
*(1)Orderable Item: SIMVASTATIN TAB
     Instructions:
*(2)Dosage Ordered: 40MG
         Duration:
                                                      (3)Start: 03/16/11 12:10
      Med Route: ORAL (BY MOUTH)
                                                      (5) Stop: 03/18/11 24:00
 (6) Schedule Type: CONTINUOUS
*(8) Schedule: QPM
       Admin Times: 2100
     SIMVASTATIN 20MG TAB
+----Enter ?? for more actions-----
DC Discontinue ED Edit
HD (Hold) RN (Renew)
FL Flag VF Verify
                                                   AL Activity Logs
Select Item(s): Next Screen// vf Verify
...a few moments, please.....
Pre-Exchange DOSES:
ORDER VERIFIED.
Enter RETURN to continue or '^' to exit:
```

• **Drug-Drug Interactions** - Drug-drug interactions warnings will be displayed for critical or significant drug-drug interactions. If the Dispense Drug selected is identified as having

an interaction of this level with one of the drugs the patient is already receiving, details of the order the new drug interacts with will be displayed.



**Note**: For a Significant Interaction, the entry of an intervention is optional. For a Critical Interaction, the user must enter an intervention before continuing.



**Note**: If the user, is prompted for an intervention and enters 9, which is OTHER, "OTHER FOR RECOMMENDATION" displays. This allows the user to enter unlimited free text as a response to the order check(s).

## **Example: Drug-Drug Interactions Display**

```
Mar 16, 2011@12:04:33 Page: 1 of 2
Inpatient Order Entry
Inpatient Order Entry

BCMA, EIGHTEEN-PATIENT

PID: 666-33-0018

DOB: 04/07/35 (75)

Sex: FEMALE

Ward: 7A GEN

A

Ht(cm): 175.26 (12/15/08)

Wt(kg): 100.00 (12/15/08)

Admitted: 01/31/02
                            Last transferred: 06/04/10
   Dx: UPSET
 CrCL: 78.1(est.) (CREAT:1.0mg/dL 4/19/12) BSA (m2): 2.21
  ._____
   ------ NON-VERIFIED COMPLEX-------
  1 LITHIUM TAB, SA
                                             C 10/13 10/15 N
         Give: 450MG PO QID
       LITHIUM TAB, SA
                                              C 10/13 10/15 N
        Give: 10000MG PO Q4H
      RILUZOLE TAB
                                             C 10/13 10/15 N
        Give: 50MG PO BID
       RILUZOLE TAB
                                            C 10/15 10/16 N
       Give: 10000MG PO Q4H
  3 HALOPERIDOL TAB
                                            ? **** **** P
       Give: 40MG PO BID
   -----Enter ?? for more actions-----
PI Patient Information SO Select Order
PU Patient Record Update NO New Order Entry
Select Action: Quit// no New Order Entry
Select DRUG: indinavi
   Lookup: DRUG GENERIC NAME
INDINAVIR SULFATE 400MG CAP
                                 008MA
        ...OK? Yes// (Yes)
Now doing allergy checks. Please wait...
Now processing Clinical Reminder Order Checks. Please wait ...
Now Processing Enhanced Order Checks! Please wait...
Press Return to continue...
This patient is receiving the following order(s) that have a CRITICAL Drug
Interaction with INDINAVIR SULFATE 400MG CAP:
Local Rx #501820A (ACTIVE) for SIMVASTATIN 10MG TAB
SIG: TAKE ONE TABLET BY MOUTH EVERY EVENING
Processing Status: Not released locally (Window)
Concurrent administration may result in elevated HMG levels, which may
increase the risk of myopathy, including rhabdomyolysis. (1-16)
```

```
Display Professional Interaction Monograph(s)? NO//
Do you want to Continue with INDINAVIR SULFATE 400MG CAP? NO// y YES
Now creating Pharmacy Intervention
For INDINAVIR SULFATE 400MG CAP
PROVIDER: PSJPROVIDER, ONE
RECOMMENDATION: ?
   Answer with APSP INTERVENTION RECOMMENDATION, or NUMBER
   Choose from:
                CHANGE DRUG
                CHANGE FORM OR ROUTE OF ADMINISTRATION
   3
               ORDER LAB TEST
   4
                ORDER SERUM DRUG LEVEL
                CHANGE DOSE
                START OR DISCONTINUE A DRUG
   7
                CHANGE DOSING INTERVAL
   8
                NO CHANGE
                OTHER
RECOMMENDATION: 9 OTHER
OTHER FOR RECOMMENDATION:
  No existing text
  Edit? NO//
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.
            400MG
            800MG
      2. .
Select from list of Available Dosages or Enter Free Text Dose: 1 400MG
You entered 400MG is this correct? Yes// YES
MED ROUTE: ORAL (BY MOUTH)// PO
SCHEDULE: QDAY//
    1 QDAY 0900
2 QDAY-DIG 1300
3 QDAY-WARF 1300
CHOOSE 1-3: 1 0900
SCHEDULE TYPE: CONTINUOUS// CONTINUOUS
ADMIN TIMES: 0900//
SPECIAL INSTRUCTIONS:
START DATE/TIME: MAR 16,2011@12:08// MAR 16,2011@12:08
STOP DATE/TIME: MAR 17,2011@24:00// MAR 17,2011@24:00
Expected First Dose: MAR 17,2011@09:00
PROVIDER: PHARMACIST, SEVENTEEN//
NON-VERIFIED UNIT DOSE Mar 16, 2011@12:07:46 Page:
BCMA,EIGHTEEN-PATIENT Ward: 7A GEN
PID: 666-33-0018 Poom-Bed: Ht/cml: 175.2
                                                                       1 of
                              Room-Bed:
                                                         Ht(cm): 175.26 (12/15/08)
  PID: 666-33-0018
   DOB: 04/07/35 (75)
                                                        Wt(kg): 100.00 (12/15/08)
 (1)Orderable Item: INDINAVIR CAP,ORAL
      Instructions:
 (2)Dosage Ordered: 400MG
         Duration:
                                                        (3)Start: 03/16/11 12:08
 (4) Med Route: ORAL (BY MOUTH)
                                                        (5) Stop: 03/17/11 24:00
 (6) Schedule Type: CONTINUOUS
        Schedule: QDAY
      Admin Times: 0900
 (9)
 (10)
       Provider: PHARMACIST, SEVENTEEN
(11) Special Instructions:
```

```
(12) Dispense Drug
                                                                    Inactive Date
                                                        U/D
      INDINAVIR SULFATE 400MG CAP
+-----Enter ?? for more actions-----
                                        AC ACCEPT
Select Item(s): Next Screen// ac ACCEPT
Press Return to continue...
NATURE OF ORDER: WRITTEN//
...transcribing this non-verified order....
NON-VERIFIED UNIT DOSE Mar 16, 2011@12:08:04

BCMA,EIGHTEEN-PATIENT Ward: 7A GEN

PID: 666-33-0018 Room-Bed: Ht(c)

DOB: 04/07/35 (75)
                                                                          1 of
                                                                Page:
                               Ward: 7A GEN A
Room-Bed: Ht(cm): 175.26 (12/15/08)
Wt(kg): 100.00 (12/15/08)
   DOB: 04/07/35 (75)
*(1)Orderable Item: INDINAVIR CAP,ORAL
     Instructions:
*(2)Dosage Ordered: 400MG
                                                         (3)Start: 03/16/11 12:08
         Duration:
*(4) Med Route: ORAL (BY MOUTH)
                                                         (5) Stop: 03/17/11 24:00
 (6) Schedule Type: CONTINUOUS
*(8) Schedule: QDAY
 (9) Admin Times: 0900
       Provider: PHARMACIST, SEVENTEEN [w]
*(10)
 (11) Special Instructions:
 (12) Dispense Drug
                                                        U/D
                                                                  Inactive Date
      INDINAVIR SULFATE 400MG CAP
                                                        1
     -----Enter ?? for more actions-----
DC Discontinue ED Edit AL Activity Logs
HD (Hold) RN (Renew)
FL Flag VF Verify
Select Item(s): Next Screen// NEXT SCREEN
```

• Allergy Order Checks – This section describes the Allergy Order Checks functionality. Allergy Order Checks appear prior to Clinical Reminder Order Checks.

**Note:** Severity for an allergy can ONLY be entered for (O)bserved and NOT (H)istorical Allergy/Adverse Reactions and the user MUST HOLD the GMRA-ALLERGY VERIFY key to enter MECHANISM and SEVERITY for Observed types of Allergy/Adverse Reactions.

```
Mar 16, 2011@12:04:33 Page:
Inpatient Order Entry
                                                                        1 of
BCMA, EIGHTEEN-PATIENT Ward: 7A GEN
PID: 666-33-0018 Room-Bed:
DOB: 04/07/35 (75)
                                                    Ht(cm): 175.26 (12/15/08)
DOB: 04/07/35 (75)
                                                    Wt(kg): 100.00 (12/15/08)
                                              Admitted: 01/31/02
Sex: FEMALE
Dx: UPSET
                                     Last transferred: 06/04/10
CrCL: 78.1(est.) (CREAT:1.0mg/dL 4/19/12)
                                               BSA (m2): 2.21
Allergies - Verified: ACETAMINOPHEN, CODEINE, PROPOFOL
Non-Verified: AMLODIPINE/BENAZEPRIL, LEVOTHYROXINE, SULFA DRUGS
Remote: ACETAMINOPHEN, CODEINE, DIPRIVAN, GUAIFENESIN, PROPOFOL
Adverse Reactions:
Inpatient Narrative:
Outpatient Narrative:
```

```
Enter ?? for more actions
DA Detailed Allergy/ADR List
                                       IN Intervention Menu
VP View Profile
Select Action: View Profile// View Profile
SHORT, LONG, or NO Profile? SHORT// SHORT
Inpatient Order Entry Mar 16, 2011@12:04:33 Page: BCMA,EIGHTEEN-PATIENT Ward: 7A GEN
BCMA, EIGHTEEN-PATIENT War 16, BCMA, EIGHTEEN-PATIENT War PID: 666-33-0018 Room-Bed: DOB: 04/07/35 (75)
                                                                         Α
                                           Ht(cm): 175.26 (12/15/08)
Wt(kg): 100.00 (12/15/08)
                                      Admitted: 01/31/02
Sex: FEMALE
                            Last transferred: 06/04/10
Dx: UPSET
CrCL: 78.1(est.) (CREAT:1.0mg/dL 4/19/12) BSA (m2): 2.21
----ACTIVE-
                                               C 05/22 06/19 A
1 ACETAMINOPHEN TAB
Give: 325MG PO Q6H
2 AMLODIPINE/BENAZEPRIL CAP,ORAL
                                              C 05/06 06/03 A
Give: 5mg PO AM
3 LEVOTHYROXINE SODIUM TAB
                                              C 05/08 06/05 A
Give: 0.025MG PO QAM
? **** **** P
     SULFADIAZINE TAB
Give: 500MG PO AM & AFTERNOON
Enter ?? for more actions
                             NO New Order Entry
PU Patient Record Update
Select Action: Quit// SO Select Order
Select ORDERS (1-4): 1
Inpatient Order Entry Mar 16, 2011@12:04:33 Page: 2 of 2
BCMA,EIGHTEEN-PATIENT Ward: 7A GEN A
PID: 666-33-0018 Room-Bed: Ht(cm): 175.26 (12/15/08)
DOB: 04/07/35 (75) Wt(kg): 100.00 (12/15/08)
Sex: FEMALE Admitted: 01/31/02
Dx: UPSET Last transferred: 06/04/10
                                    Last transferred: 06/04/10
Dx: UPSET
CrCL: 78.1(est.) (CREAT:1.0mg/dL 4/19/12) BSA (m2): 2.21
*(1)Orderable Item: ACETAMINOPHEN TAB
Instructions:
*(2)Dosage Ordered: 325MG
Duration:
                                           *(3)Start: 05/22/14 12:03
*(4) Med Route: ORAL
*(5) Stop: 06/19/14 24:00
(6) Schedule Type: CONTINUOUS
*(8) Schedule: Q6H
(9) Admin Times: 0600-1200-1800-2359
 *(10) Provider: CLERKPEARSON, HOLLY [w]
(11) Special Instructions:
(12) Dispense Drug
                                                    U/D
                                                               Inactive Date
ACETAMINOPHEN 325MG TAB UNIT DOSE
                                               1
       Enter ?? for more actions
DC Discontinue ED Edit
HD Hold RN Renew
FL Flag VF (Verify)
                                                   AL Activity Logs
Select Item(s): Next Screen// CO CO
NON-VERIFIED UNIT DOSE May 27, 2014@18:10:16 Page: 1 of 2 BCMA,EIGHTEEN-PATIENT Ward: 7A GEN A
PID: 666-33-0018
                                                    Ht(cm): 175.26 (12/15/08)
                          Room-Bed:
                                                    Wt(kg): 100.00 (12/15/08)
DOB: 04/07/35 (75)
(1)Orderable Item: ACETAMINOPHEN TAB
Instructions:
(2)Dosage Ordered: 325MG
Duration:
                                    (3)Start: 05/27/14 18:10
```

```
Med Route: ORAL
(5) Stop: 06/24/14 24:00
(6) Schedule Type: CONTINUOUS
        Schedule: Q6H
(8)
(9)
     Admin Times: 0600-1200-1800-2359
        Provider: CLERKPEARSON, HOLLY [w]
(10)
(11) Special Instructions:
                                                    U/D
(12) Dispense Drug
                                                               Inactive Date
ACETAMINOPHEN 325MG TAB UNIT DOSE
          Enter ?? for more actions
ED Edit
                                        AC ACCEPT
Select Item(s): Next Screen// AC ACCEPT
A Drug-Allergy Reaction exists for this medication and/or class!
Prospective Drug: ACETAMINOPHEN 325MG TAB UNIT DOSE
Causative Agent: ACETAMINOPHEN (CLE13 TEST LAB - 05/07/14)
Historical/Observed: OBSERVED
Severity: SEVERE
Ingredients: ACETAMINOPHEN
Signs/Symptoms: NAUSEA AND VOMITING
Provider Override Reason: N/A - Order Entered Through VistA
Press Return to continue:
A Drug-Allergy Reaction exists for this medication and/or class!
Prospective Drug: ACETAMINOPHEN 325MG TAB UNIT DOSE
Causative Agent: ACETAMINOPHEN (MARTINSBURG VAMC - 05/13/14)
Historical/Observed: HISTORICAL
Severity: Not Entered
Ingredients: ACETAMINOPHEN
Signs/Symptoms: DIARRHEA
Provider Override Reason: N/A - Order Entered Through VistA
Do you want to Intervene? YES// Y
Enter your Current Signature Code:
                                    SIGNATURE VERIFIED
Now creating Pharmacy Intervention
for ACETAMINOPHEN 325MG TAB UNIT DOSE
PROVIDER: DOCTOR, TEST
                           DT
                                     192
                                              4567891 BAY PINES TEST LAB
RECOMMENDATION: 9 OTHER
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 Clinical Reminder Order Checks. Please wait ...
Now Processing Enhanced Order Checks! Please wait...
Press Return to continue...
NATURE OF ORDER: WRITTEN//
...transcribing this non-verified order....
NON-VERIFIED UNIT DOSE May 27, 2014@18:14:45
BCMA,EIGHTEEN-PATIENT Ward: 7A GEN
                                                                      1 of
                                                             Page:
PID: 666-33-0018
                           Room-Bed:
                                                   Ht(cm): 175.26 (12/15/08)
DOB: 04/07/35 (75)
                                                   Wt(kg): 100.00 (12/15/08)
*(1)Orderable Item: ACETAMINOPHEN TAB
Instructions:
*(2)Dosage Ordered: 325MG
Duration:
                                             (3)Start: 05/27/14 18:14
```

```
Med Route: ORAL
(5) Stop: 06/24/14 24:00
(6) Schedule Type: CONTINUOUS
 *(8) Schedule: Q6H
(9) Admin Times: 0600-1200-1800-2359
*(10) Provider: CLERKPEARSON, HOLLY [w]
(11) Special Instructions:
                                                 U/D
(12) Dispense Drug
ACETAMINOPHEN 325MG TAB UNIT DOSE
+ Enter ?? for more actions
(12) Dispense Drug
                                                                    Inactive Date
DC Discontinue ED Edit
HD (Hold) RN (Renew)
FL Flag VF Verify
                                                        AL Activity Logs
Select Item(s): Next Screen// VF Verify
...a few moments, please.....
Pre-Exchange DOSES: 2
...updating dispense drug(s)...
...ACETAMINOPHEN 325MG TAB UNIT DOSE U/D: 1...
ORDER VERTETED.
Enter RETURN to continue or '^' to exit:
You are finished with the new order.
The following ACTION prompt is for the original order. Enter RETURN to continue or '^' to exit:
ACTIVE UNIT DOSE May 27, 2014@18:16:09 Page: 2 of 2 BCMA,EIGHTEEN-PATIENT Ward: 7A GEN A PID: 666-33-0018 Room-Bed: Ht(cm): 175.26 (12/15/00)
(7)Self Med: NO
Entry By: PEARSON, HOLLY
                                                       Entry Date: 05/22/14 12:04
(13) Comments:
Enter ?? for more actions
DC Discontinue ED Edit
                                                        AL Activity Logs
HD Hold
                           RN Renew
FL Flag
Inpatient Order Entry May 27, 2014@18:16:10 Page: 1 of 2
BCMA,EIGHTEEN-PATIENT Ward: 7A GEN A
PID: 666-33-0018 Room-Bed: Ht(cm): 175.26 (12/15/08)
DOB: 04/07/35 (75) Wt(kg): 100.00 (12/15/08)
Sex: FEMALE Admitted: 01/31/02
Dx: UPSET Last transferred: 06/04/10
                                        Last transferred: 06/04/10
CrCL: 78.1(est.) (CREAT:1.0mg/dL 4/19/12) BSA (m2): 2.21
----ACTIVE----
1 ACETAMINOPHEN TAB
                                                   C 05/22 06/19 A
Give: 325MG PO 06H
2 ACETAMINOPHEN TAB
                                                  C 05/27 06/24 A
Give: 325MG PO Q6H
3 AMLODIPINE/BENAZEPRIL CAP,ORAL
                                                 C 05/06 06/03 A
Give: 5mg PO AM
4 LEVOTHYROXINE SODIUM TAB
                                                  C 05/08 06/05 A
Give: 0.025MG PO QAM
```

The following changes have been made to the existing allergy order checks:

1. In Backdoor Pharmacy, the system will require the pharmacist to complete an Intervention if the severity value equals 'Severe' before allowing the pharmacist to continue with the order.

**Note:** The intervention functionality will be similar to the Critical Drug-Drug Interactions in backdoor pharmacy today.

- 2. For Allergies/Adverse Reactions with Severity of Mild, Moderate, or Not Entered, the system will continue the same as it does today with the option that allows the pharmacist to enter an intervention at their discretion.
- 3. All allergies are captured and stored with the order, regardless of whether or not an intervention was entered.
- 4. Remote/HDR allergy Signs/Symptoms are now displayed when doing Allergy/ADR Order Checks.
- 5. Modified Allergy/ADR Order Check to display actual Station Name in lieu of Local or Remote terminology.
- 6. For a Severe Allergy the user is required to enter their electronic signature and intervention.

**Note:** In order to enter the Severity for an allergy in the Allergy Package it must be entered as (O)bserved and not (H)istorical Allery/Adverse Reaction.

#### Mild:

```
Now doing allergy checks. Please wait...

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

Prospective Drug: ASPIRIN 81MG EC TAB
    Causative Agent: ASPIRIN (ALBANY - 07/09/15)

Historical/Observed: OBSERVED
    Severity: MILD
    Ingredients: ASPIRIN
    Signs/Symptoms: ANXIETY, HIVES
    Drug Class: CN103 NON-OPIOID ANALGESICS
```

```
Provider Override Reason: N/A - Order Check Not Evaluated by Provider Do you want to Intervene? YES// NO
```

#### Moderate:

Now doing allergy checks. Please wait...

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

Prospective Drug: MINOXIDIL 2.5MG S.T.

Causative Agent: MINOXIDIL (ALBANY - 07/29/15)

Historical/Observed: OBSERVED
Severity: MODERATE
Ingredients: MINOXIDIL

Signs/Symptoms: ANXIETY, ITCHING, WATERING EYES
Drug Class: CV490 ANTIHYPERTENSIVES, OTHER

Provider Override Reason: N/A - Order Check Not Evaluated by Provider

Do you want to Intervene? YES// NO

#### Not Entered:

Now doing allergy checks. Please wait...

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

Prospective Drug: AMIODARONE

Causative Agent: AMIODARONE (ALBANY - 07/29/15)

Historical/Observed: OBSERVED
Severity: Not Entered

Ingredients: AMIODARONE, IODINE

Signs/Symptoms: ANXIETY

Drug Class: CV300 ANTIARRHYTHMICS

Provider Override Reason: N/A - Order Check Not Evaluated by Provider

Do you want to Intervene? YES// NO

## Severe without Intervention:

Now doing allergy checks. Please wait...

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

Prospective Drug: PENICILLIN

Causative Agent: PENICILLIN (ALBANY - 07/29/15)

Historical/Observed: OBSERVED
Severity: SEVERE
Ingredients: PENICILLIN

Signs/Symptoms: DIARRHEA, HIVES

Drug Class: AM110 PENICILLIN-G RELATED PENICILLINS

Provider Override Reason: N/A - Order Check Not Evaluated by Provider

Do you want to Intervene? YES// NO

With a SEVERE reaction, an intervention is required!

#### Severe with Intervention:

Now doing allergy checks. Please wait...

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

Prospective Drug: PENICILLIN

Causative Agent: PENICILLIN (ALBANY - 07/29/15)

Historical/Observed: OBSERVED
Severity: SEVERE
Ingredients: PENICILLIN
Signs/Symptoms: DIARRHEA, HIVES

Drug Class: AM110 PENICILLIN-G RELATED PENICILLINS

Provider Override Reason: N/A - Order Check Not Evaluated by Provider

Do you want to Intervene? YES//

Enter your Current Signature Code: SIGNATURE VERIFIED

Now creating Pharmacy Intervention

For PENICILLIN VK 250MG TAB

PROVIDER: INPATIENT-MEDS, PROVIDER PROV

RECOMMENDATION: 1 CHANGE DRUG

See 'Pharmacy Intervention Menu' if you want to delete this

intervention or for more options.



Note: "With a severe reaction, an intervention is required"

#### Historical:

Now doing allergy checks. Please wait...

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

Prospective Drug: AMPICILLIN 250MG

Causative Agent: AMPICILLIN (ALBANY - 01/14/16)

Historical/Observed: HISTORICAL
Severity: Not Entered

Ingredients: AMPICILLIN
Signs/Symptoms: DRY MOUTH, HIVES

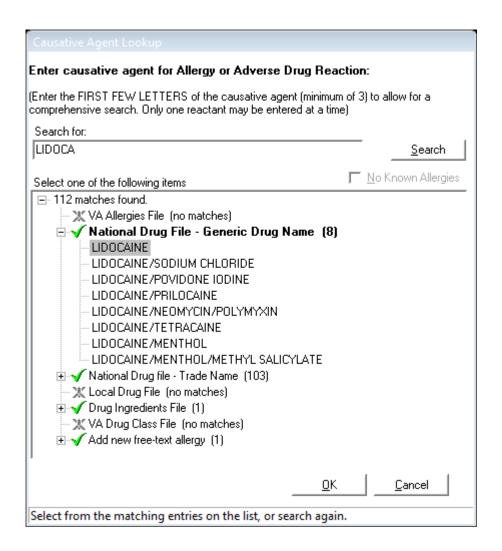
Drug Class: AM111 PENICILLINS, AMINO DERIVATIVES

Provider Override Reason: N/A - Order Check Not Evaluated by Provider

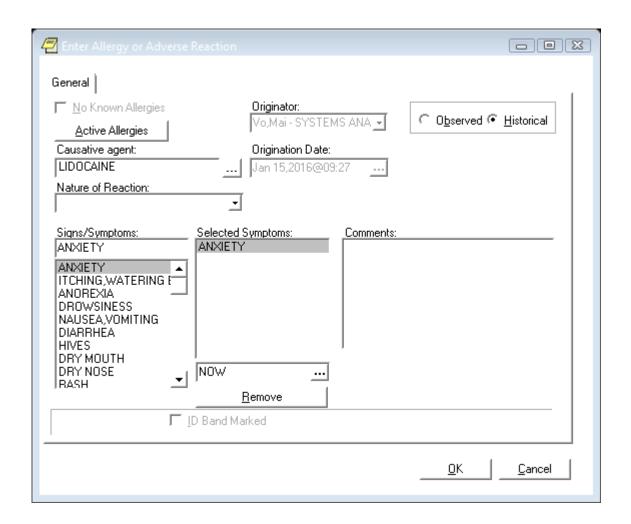
Do you want to Intervene? YES// NO

# Example: CPRS Allergy Order Entry Process

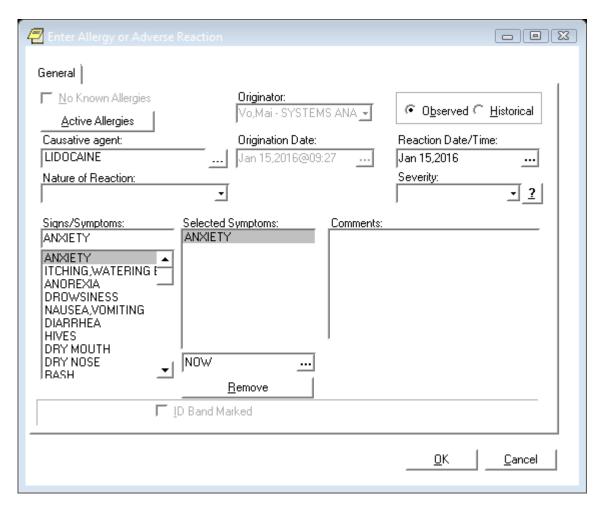
From the Order tab, enter a new allergy using the Allergies Dialog:



# **Example of Historical Allergy:**



# **Example of Observed Allergy:**



**Example: Inpatient Allergy Order Entry Process** 

# Example of Observed Allergy:

```
Patient Information
                                   Jan 15, 2016@09:50:42
DEF.PATIENT
                                       Ward: GEN MED
   PID: 666-66-6661
                                   Room-Bed:
                                                              Ht(cm):
   DOB: 01/01/62 (54)
                                                              Wt(kg):
   Sex: MALE
                                                         Admitted: 04/15/15
                                               Last transferred: ******
    Dx: TESTING
  CrCL: <Not Found>
                                                         BSA (m2):
Allergies - Verified: AMIODARONE, AMIODARONE 200MG (PAR), HEPARIN, INDINAVIR, MINOXIDIL, MORPHINE, PENICILLIN, VANCOMYCIN, ASPIRIN
         Non-Verified:
                Remote:
   Adverse Reactions:
 Inpatient Narrative:
Outpatient Narrative:
```

```
Enter ?? for more actions
```

PU Patient Record Update DA Detailed Allergy/ADR List

NO New Order Entry IN Intervention Menu

VP View Profile

Select Action: View Profile// DA

```
Detailed ADR List
                              Jan 15, 2016@09:51:07
                                                              Page:
                                                                       1 of
DEF, PATIENT
                                  Ward: GEN MED
   PID: 666-66-6661
                              Room-Bed:
                                                       Ht(cm):
   DOB: 01/01/62 (54)
                                                      Wt(kg):
   Sex: MALE
                                                 Admitted: 04/\overline{15/15}
                                         Last transferred: ******
   Dx: TESTING
  CrCL: <Not Found>
                                                 BSA (m2): _
   Verified
    Drug:
       1 AMIODARONE
      2 AMIODARONE 200MG (PAR)
      3 HEPARIN
      4 INDINAVIR
      5 MINOXIDIL
      6 MORPHINE
      7 PENICILLIN
      8 VANCOMYCIN
     Drug/Food:
      9 ASPIRIN
          Enter ?? for more actions
   Enter/Edit Allergy/ADR Data
                                        SA
                                             Select Allergy
Select Action: Next Screen// EA
Enter Causative Agent: LIDOC
Checking existing PATIENT ALLERGIES (#120.8) file for matches...
Now checking GMR ALLERGIES (#120.82) file for matches...
Now checking the National Drug File - Generic Names (#50.6)
        LIDOCAINE
        LIDOCAINE/MENTHOL
    2
        LIDOCAINE/MENTHOL/METHYL SALICYLATE
        LIDOCAINE/NEOMYCIN/POLYMYXIN
        LIDOCAINE/POVIDONE IODINE
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1
CHOOSE 1-5: 1 LIDOCAINE
   LIDOCAINE OK? Yes//
                           (Yes)
(0)bserved or (H)istorical Allergy/Adverse Reaction: 0 OBSERVED
Select date reaction was OBSERVED (Time Optional): T (JAN 15, 2016)
2016 (JAN 15, 2016)
 Are you adding 'JAN 15, 2016' as
   a new ADVERSE REACTION REPORTING? No// Y (Yes)
No signs/symptoms have been specified. Please add some now.
The following are the top ten most common signs/symptoms:

    ANXIETY

                                    7. HIVES
2. ITCHING, WATERING EYES
                                    8. DRY MOUTH
3. ANOREXIA
                                    9. DRY NOSE
```

```
4. DROWSINESS
                                 10. RASH
NAUSEA, VOMITING
                                 11. OTHER SIGN/SYMPTOM
6. DIARRHEA
Enter from the list above: 7,10
Date(Time Optional) of appearance of Sign/Symptom(s): Jan 15, 2016// (JAN 15, 2
The following is the list of reported signs/symptoms for this reaction:
     Signs/Symptoms
                                                   Date Observed
                 -----
 1 HIVES
                                                   Jan 15, 2016
 2 RASH
                                                   Jan 15, 2016
Select Action (A)DD, (D)ELETE OR <RET>:
     Choose one of the following:
                   A - ALLERGY
                   P - PHARMACOLOGICAL
                   U - UNKNOWN
MECHANISM: UNKNOWN// A ALLERGY
COMMENTS:
 No existing text
 Edit? NO//
Complete the observed reaction report? Yes// (Yes)
DATE/TIME OF EVENT: JAN 15,2016//
OBSERVER: VO, MAI// BIRMINHGAM
                                                             SYSTEMS ANALYST
                                       ALABAMA
                                                   MV
SEVERITY: SE SEVERE
DATE MD NOTIFIED: Jan 15,2016// (JAN 15, 2016)
Complete the FDA data? Yes// N (No)
Currently you have verifier access.
Would you like to verify this Causative Agent now? Yes// (Yes)
CAUSATIVE AGENT: LIDOCAINE
          TYPE: DRUG
   INGREDIENTS: LIDOCAINE
VA DRUG CLASSES: CN204 - LOCAL ANESTHETICS, INJECTION CV300 - ANTIARRHYTHMICS
                DE700 - LOCAL ANESTHETICS, TOPICAL
                GU900 - GENITO-URINARY AGENTS, OTHER
                NT300 - ANESTHETICS, MUCOSAL
                OP700 - ANESTHETICS, TOPICAL OPHTHALMIC
                PH000 - PHARMACEUTICAL AIDS/REAGENTS
      OBS/HIST: OBSERVED
SIGNS/SYMPTOMS: HIVES (Jan 15, 2016)
                RASH (Jan 15, 2016)
     MECHANISM: ALLERGY
Would you like to edit any of this data? N (No)
      PATIENT: DEF,PATIENT
                                       CAUSATIVE AGENT: LIDOCAINE
```

Enter RETURN to continue or '^' to exit:

INGREDIENTS: LIDOCAINE

VA DRUG CLASSES: ANTIARRHYTHMICS

LOCAL ANESTHETICS, INJ LOCAL ANESTHETICS, TOP ANESTHETICS, MUCOSAL

ANESTHETICS, TOPICAL O PHARMACEUTICAL AIDS/R GENITO-URINARY AGENTS

ORIGINATOR: VO, MAI ORIGINATED: Jan 15, 2016@09:52

SIGN OFF: NO OBS/HIST: OBSERVED SEVERITY: SEVERE OBS D/T: Jan 15, 2016

ID BAND MARKED: CHART MARKED:

SIGNS/SYMPTOMS: HIVES (Jan 15, 2016) RASH (Jan 15, 2016)

Change status of this allergy/adverse reaction to verified? Y

Opening Adverse React/Allergy record for review...

**Browse Document** Jan 15, 2016@09:54:33 Page: 1 of 1

Adverse React/Allergy

DEF,P 666-66-6661 GEN MED Adm: 04/15/2015 Dis:

DATE OF NOTE: JAN 15, 2016@09:54:33 ENTRY DATE: JAN 15, 2016@09:54:33

AUTHOR: VO, MAI EXP COSIGNER:

URGENCY: STATUS: UNSIGNED

This patient has had an allergy to LIDOCAINE verified on Jan 15, 2016@09:54:33.

+ Next Screen - Prev Screen ?? More actions

Find Sign/Cosign Link ...

Print Copy Encounter Edit
Edit Identify Signers Interdiscipl'ry Note

Make Addendum Delete Quit

Select Action: Quit//

# Example of Historical Allergy:

Detailed ADR List	Jan 15, 2016@09:5	51:07 Page:	1 of	2
DEF,PATIENT	Ward: GEN MED	)	Α	
PID: 666-66-6661	Room-Bed:	Ht(cm):	_ (	)
DOB: 01/01/62 (54)		Wt(kg):	_ (	)
Sex: MALE		Admitted: 04/15/15		
Dx: TESTING	Last t	ransferred: ******		
CrCL: <not found=""></not>		BSA (m2):		
Verified				
Drug:				
1 AMIODARONE				
2 AMIODARONE 200MG (F	PAR)			
3 HEPARIN				
4 INDINAVIR				
5 MINOXIDIL				
6 MORPHINE				
7 PENICILLIN				
8 VANCOMYCIN				
Drug/Food:				

```
9 ASPIRIN
```

+ Enter ?? for more actions

EA Enter/Edit Allergy/ADR Data SA Select Allergy

Select Action: Next Screen// EA

Enter Causative Agent: LIDO

Checking existing PATIENT ALLERGIES (#120.8) file for matches...

,PATIENT DEF,PATIENT 1-1-62 666666661 YES ACTIVE DUTY INP

ATIENT-MEDS, PROVIDER LIDOCAINE

LIDOCAINE OK? Yes// N (No)

Now checking GMR ALLERGIES (#120.82) file for matches...

Now checking the National Drug File - Generic Names (#50.6)

- 1 LIDOCAINE
- 2 LIDOCAINE/MENTHOL
- 3 LIDOCAINE/MENTHOL/METHYL SALICYLATE
- 4 LIDOCAINE/NEOMYCIN/POLYMYXIN

REACTANT	VER.	MECH.	OBS/ HIST	TYPE
AMIODARONE	AUT0	ALLERGY	OBS	DRUG
(IODINE)				
Reactions: ANXIETY				
AMIODARONE 200MG (PAR)	YES	ALLERGY	HIST	DRUG
(AMIODARONE, IODINE)				
Reactions: ANXIETY				
HEPARIN	AUT0	ALLERGY	OBS	DRUG
Reactions: DRY MOUTH, DRY NOSE				
INDINAVIR	AUT0	ALLERGY	OBS	DRUG
(INDINAVIR SULFATE)				
Reactions: ITCHING,WATERING EYES, ANOREXIA,				
NAUSEA, VOMITING, ANXIETY, DROWSINESS				
LIDOCAINE	YES	ALLERGY	OBS	DRUG
Reactions: HIVES, RASH				
5 LIDOCAINE/POVIDONE IODINE				
Press <return> to see more, '^' to exit this list, O</return>	R			

OK? Yes//

(Yes)

(0)bserved or (H)istorical Allergy/Adverse Reaction: H HISTORICAL

No signs/symptoms have been specified. Please add some now.

The following are the top ten most common signs/symptoms:

1. ANXIETY 7. HIVES
2. ITCHING,WATERING EYES 8. DRY MOUTH
3. ANOREXIA 9. DRY NOSE
4. DROWSINESS 10. RASH

CHOOSE 1-5: 3 LIDOCAINE/MENTHOL/METHYL SALICYLATE

LIDOCAINE/MENTHOL/METHYL SALICYLATE

5. NAUSEA, VOMITING 11. OTHER SIGN/SYMPTOM

6. DIARRHEA

Enter from the list above : 7

Date(Time Optional) of appearance of Sign/Symptom(s):

The following is the list of reported signs/symptoms for this reaction:

Signs/Symptoms Date Observed

1 HIVES

Select Action (A)DD, (D)ELETE OR <RET>:

Choose one of the following:

A - ALLERGY

P - PHARMACOLOGICAL

U - UNKNOWN

MECHANISM: UNKNOWN// A ALLERGY

COMMENTS:

No existing text Edit? NO//

Currently you have verifier access.
Would you like to verify this Causative Agent now? Yes// Y (Yes)

CAUSATIVE AGENT: LIDOCAINE/MENTHOL/METHYL SALICYLATE

TYPE: DRUG
INGREDIENTS: LIDOCAINE

MENTHOL

METHYL SALICYLATE

VA DRUG CLASSES: DE900 - DERMATOLOGICALS, TOPICAL OTHER

OBS/HIST: HISTORICAL

SIGNS/SYMPTOMS: HIVES
MECHANISM: ALLERGY

Would you like to edit any of this data? N (No)

PATIENT: DEF,PATIENT CAUSATÍVE AGENT: LIDOCAINE/MENTHOL/MET INGREDIENTS: LIDOCAINE VA DRUG CLASSES: DERMATOLOGICALS,TOPIC

MENTHOL

METHYL SALICYLATE

ORIGINATOR: VO, MAI ORIGINATED: Jan 15, 2016@09:55

SIGN OFF: NO OBS/HIST: HISTORICAL

ID BAND MARKED: CHART MARKED:

Enter RETURN to continue or '^' to exit:

Jan 15, 2016@09:56:46

SIGNS/SYMPTOMS: HIVES

Change status of this allergy/adverse reaction to verified? Y (Yes)

Opening Adverse React/Allergy record for review...

**Browse Document** Jan 15, 2016@09:56:46 Page: 1 of 1

Adverse React/Allergy

DEF,P 666-66-6661 GEN MED Adm: 04/15/2015 Dis:

DATE OF NOTE: JAN 15, 2016@09:56:45 ENTRY DATE: JAN 15, 2016@09:56:45

AUTHOR: VO, MAI EXP COSIGNER:

URGENCY: STATUS: UNSIGNED

This patient has had an allergy to LIDOCAINE/MENTHOL/METHYL SALICYLATE verified on Jan 15, 2016@09:56:45.

```
+ Next Screen - Prev Screen ?? More actions
Find Sign/Cosign Link ...
Print Copy Encounter Edit
Edit Identify Signers Interdiscipl'ry Note
Make Addendum Delete Quit
Select Action: Quit//
```

• Clinical Reminder Order Checks - This section describes the Clinical Reminder Order Checks functionality (PSJ\*5\*281).

Order Checks now includes the ability to view Clinical Reminders (prior to the display of Enhanced Drug-Drug interactions). Reminders are used to aid physicians in performing tasks to fulfill Clinical Practice Guidelines and periodic procedures or education as needed for veteran patients

#### **Example: Drug-Drug Interactions Display**

```
Inpatient Order Entry Mar 16, 2011@12:04:33 Page:
                                                            1 of
BCMA, EIGHTEEN-PATIENT Ward: 7A GEN
PID: 666-33-0018 Room-Bed:
                                                            Α
                                             Ht(cm): 175.26 (12/15/08)
  DOB: 04/07/35 (75)
                                              Wt(kg): 100.00 (12/15/08)
                                    Admitted: 01/31/02
  Sex: FEMALE
   Dx: UPSET
                                  Last transferred: 06/04/10
  CrCL: 78.1(est.) (CREAT:1.0mg/dL 4/19/12) BSA (m2): 2.21
 ______
 ----- NON-VERIFIED COMPLEX------
  1 LITHIUM TAB, SA
                                          C 10/13 10/15 N
        Give: 450MG PO QID
      LITHIUM TAB, SA
                                          C 10/13 10/15 N
       Give: 10000MG PO Q4H
      RILUZOLE TAB
                                          C 10/13 10/15 N
        Give: 50MG PO BID
      RILUZOLE TAB
                                         C 10/15 10/16 N
       Give: 10000MG PO Q4H
       3 HALOPERIDOL TAB
       Give: 40MG PO BID
   -----Enter ?? for more actions-----
PI Patient Information SO Select Order
PU Patient Record Update NO New Order Entry
Select Action: Quit// no New Order Entry
Select DRUG: indinavi
   Lookup: DRUG GENERIC NAME
INDINAVIR SULFATE 400MG CAP
                                AM800
       ...OK? Yes// (Yes)
Now doing allergy checks. Please wait...
Now processing Clinical Reminder Order Checks. Please wait ...
*** Clinical Reminder Order Check | Severity: HIGH ***
CR3286 CROC - GENTAMICIN OI SEVERITY HIGH (RULE DISPLAY NAME)
CR3286 CROC - GENTAMICIN OI SEVERITY HIGH (RULE ORDER CHECK TEXT)
```

```
*** Clinical Reminder Order Check | Severity: MEDIUM ***
Potentially Teratogenic Medication (FDA Category D or C)
Concern has been raised about use of this medication during pregnancy.
1) Pregnancy status should be determined. Discuss use of this medication on the
context of risks to the mother and child of untreated disease. Potential
benefits may warrant use of the drug in pregnant women despite risks.
2) The patient must be provided contraceptive counseling on potential risk vs.
benefit of taking this medication if she were to become pregnant.
The 'Teratogenic Medications' Order Check will display for female patients
between the ages of 12 and 50, except those with a known exclusion criterion
(e.g., hysterectomy), or those with a documented IUD placement that is more
recent than a documented IUD removal.
*** Clinical Reminder Order Check | Severity: LOW ***
CR3286 CROC - GENTAMICIN DRUG SEVERITY LOW (RULE DISPLAY NAME)
CR3286 CROC - GENTAMICIN DRUG SEVERITY LOW (RULE ORDER CHECK TEXT 01) CR3286
CROC - GENTAMICIN DRUG SEVERITY LOW (RULE ORDER CHECK TEXT 02) CR3286 CROC -
GENTAMICIN DRUG SEVERITY LOW (RULE ORDER CHECK TEXT 03) CR3286 CROC -
GENTAMICIN DRUG SEVERITY LOW (RULE ORDER CHECK TEXT 04)
Do you want to Continue? Y// ES
                                    SIGNATURE VERIFIED
Enter your Current Signature Code:
Now creating Pharmacy Intervention
For GENTAMICIN 4MG/2ML INTRATHECAL
PROVIDER:
           DOCTOR, TEST
                                  דת
RECOMMENDATION: 9 OTHER
OTHER FOR RECOMMENDATION:
 No existing text
 Edit? NO//
See 'Pharmacy Intervention Menu' if you want to delete this
intervention or for more options.
Press Return to continue...
Would you like to edit this intervention? N//\ O
Now Processing Enhanced Order Checks! Please wait...
Press Return to continue...
______
This patient is receiving the following order(s) that have a CRITICAL Drug
Interaction with INDINAVIR SULFATE 400MG CAP:
Local Rx #501820A (ACTIVE) for SIMVASTATIN 10MG TAB
SIG: TAKE ONE TABLET BY MOUTH EVERY EVENING
Processing Status: Not released locally (Window)
```

```
Concurrent administration may result in elevated HMG levels, which may
increase the risk of myopathy, including rhabdomyolysis. (1-16)
______
Display Professional Interaction Monograph(s)? NO//
Do you want to Continue with INDINAVIR SULFATE 400MG CAP? NO// y YES
Now creating Pharmacy Intervention
For INDINAVIR SULFATE 400MG CAP
PROVIDER: PSJPROVIDER, ONE
RECOMMENDATION: ?
   Answer with APSP INTERVENTION RECOMMENDATION, or NUMBER
   Choose from:
               CHANGE DRUG
               CHANGE FORM OR ROUTE OF ADMINISTRATION
   3
              ORDER LAB TEST
   4
               ORDER SERUM DRUG LEVEL
   5
               CHANGE DOSE
               START OR DISCONTINUE A DRUG
               CHANGE DOSING INTERVAL
   7
   8
               NO CHANGE
               OTHER
RECOMMENDATION: 8 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. 400MG
      2.
           800MG
Select from list of Available Dosages or Enter Free Text Dose: 1 400MG
You entered 400MG is this correct? Yes// YES
MED ROUTE: ORAL (BY MOUTH)// PO
SCHEDULE: QDAY//
    1 QDAY 0900
2 QDAY-DIG 1300
3 QDAY-WARF 1300
CHOOSE 1-3: 1
                0900
SCHEDULE TYPE: CONTINUOUS// CONTINUOUS
ADMIN TIMES: 0900//
SPECIAL INSTRUCTIONS:
START DATE/TIME: MAR 16,2011@12:08// MAR 16,2011@12:08
STOP DATE/TIME: MAR 17,2011@24:00// MAR 17,2011@24:00
Expected First Dose: MAR 17,2011@09:00
PROVIDER: PHARMACIST, SEVENTEEN//
                                       145
                           Mar 16, 2011@12:07:46
NON-VERIFIED UNIT DOSE
                                                          Page: 1 of
BCMA, EIGHTEEN-PATIENT
                             Ward: 7A GEN
                                                                     Α
   PID: 666-33-0018
                                                    Ht(cm): 175.26 (12/15/08)
                            Room-Bed:
  DOB: 04/07/35 (75)
                                                    Wt(kg): 100.00 (12/15/08)
 (1)Orderable Item: INDINAVIR CAP,ORAL
      Instructions:
 (2)Dosage Ordered: 400MG
         Duration:
                                                    (3)Start: 03/16/11 12:08
 (4)
        Med Route: ORAL (BY MOUTH)
                                                     (5) Stop: 03/17/11 24:00
 (6) Schedule Type: CONTINUOUS
 (8) Schedule: QDAY
 (9)
      Admin Times: 0900
(10) Provider: PHARMACIST, SEVENTEEN
```

```
(11) Special Instructions:
 (12) Dispense Drug
                                                      U/D Inactive Date
     INDINAVIR SULFATE 400MG CAP
+----Enter ?? for more actions---
                                 AC ACCEPT
ED Edit
Select Item(s): Next Screen// ac ACCEPT
Press Return to continue...
NATURE OF ORDER: WRITTEN//
...transcribing this non-verified order....
NON-VERIFIED UNIT DOSE Mar 16, 2011@12:08:04 Page: 1 of 2
BCMA,EIGHTEEN-PATIENT Ward: 7A GEN

PID: 666-33-0018 Room-Bed: Ht(cm): 175.26 (12/15/08)

DOB: 04/07/35 (75) Wt(kg): 100.00 (12/15/08)
*(1)Orderable Item: INDINAVIR CAP,ORAL
      Instructions:
*(2)Dosage Ordered: 400MG
        Duration:
                                                      (3)Start: 03/16/11 12:08
*(4) Med Route: ORAL (BY MOUTH)
                                                    (5) Stop: 03/17/11 24:00
 (6) Schedule Type: CONTINUOUS
*(8) Schedule: QDAY
(9) Admin Times: 0900
*(10) Provider: PHARMACIST, SEVENTEEN [w]
 (11) Special Instructions:
                                                  U/D
1
 (12) Dispense Drug
                                                                 Inactive Date
    INDINAVIR SULFATE 400MG CAP
+-----Enter ?? for more actions-----
DC Discontinue ED Edit
HD (Hold) RN (Renew)
FL Flag VF Verify
                                      AL Activity Logs
Select Item(s): Next Screen// NEXT SCREEN
```

## 4.10.1 Clinic Orders

Clinic orders are created via CPRS generally using the Meds Inpatient tab or the IV Fluids tab. Drug orders that have a clinic and an appointment date and time are considered clinic orders. The clinic must be defined with 'ADMINISTER INPATIENT MEDS?' prompt answered YES under the SETUP A CLINIC [SDBUILD] option in the Scheduling package. Defining the clinic in this manner ensures that an appointment date and time are defined. Orders placed via backdoor inpatient medications are not considered clinic orders.

MOCHA v1.0 Enhancements 1 adds drug interaction and therapeutic duplication order checks for clinic orders to Outpatient Pharmacy. Previously Inpatient Medications package performed order checks on active, pending and non-verified clinic orders. With the MOCHA v1.0 Enhancements 1, Inpatient medications will perform enhanced order checks for recently discontinued and expired inpatient medications clinic orders.

For both packages, the system will display clinic orders in a standard format to differentiate them from Inpatient Medications and Outpatient Pharmacy order checks.

Based on the number of days defined in the IMO DC/EXPIRED DAY LIMIT field (#6) in CLINIC DEFINITION file (#53.46), the enhanced order checks process will only include discontinued and expired drug interactions and/or duplicate therapy orders with a stop date that falls within the range defined. The following are the scenarios that drive which dates will be displayed for the clinic order:

- If there are start/stop dates defined, they are displayed.
- If there are no stop/start dates defined, the 'requested start/stop dates' will be displayed with the word "Requested" prior to the start/stop date header.
- If there are no requested start/stop dates defined, the order date will be displayed and the start/stop date headers will be displayed with "\*\*\*\*\*\*\* for the date.
- If there is either a requested start date or a requested stop date, the available date will be displayed and "\*\*\*\*\*\*\*" will be displayed for the undefined date.

#### **Unit Dose Clinic Order Check example:**

```
Now Processing Enhanced Order Checks! Please wait...

This patient is receiving the following order(s) that have a CRITICAL Drug
Interaction with CIMETIDINE 300 MG:

Clinic Order: PHENYTOIN 100MG CAP (DISCONTINUED)
Schedule: Q8H
Dosage: 100MG
Start Date: FEB 27, 2012@13:00
Stop Date: FEB 28, 2012@15:22:27

Concurrent use of cimetidine or ranitidine may result in elevated levels of and toxicity from the hydantoin.Neutropenia and thrombocytopenia have been reported with concurrent cimetidine and phenytoin.
```

## IV Clinic Order Check example:

Therapeutic Duplication - IV and Unit Dose clinic order therapeutic duplications display in the same format as drug interactions.

#### **Unit Dose Clinic Order Check example:**

```
This patient is already receiving the following INPATIENT and/or OUTPATIENT order(s) for a drug in the same therapeutic class(es):

Drug(s) Ordered:
   POTASSIUM CHLORIDE 30 MEQ

Clinic Order: POTASSIUM CHLORIDE 10MEQ TAB (PENDING)
   Schedule: BID
   Dosage: 20MEQ
```

```
Requested Start Date: NOV 20, 2012@17:00
Stop Date: *******

Class(es) Involved in Therapeutic Duplication(s): Potassium
```

#### **IV Order Check example:**

```
This patient is already receiving the following INPATIENT and/or OUTPATIENT order(s) for a drug in the same therapeutic class(es):

Drug(s) Ordered:
    CEFAZOLIN 1 GM

    Clinic Order: CEFAZOLIN 2 GM (PENDING)
        Solution(s): 5% DEXTROSE 50 ML
        Order Date: NOV 20, 2012@11:01
        Start Date: *******
        Stop Date: *******

    Clinic Order: CEFAZOLIN SOD 1GM INJ (EXPIRED)
        Solution(s): 5% DEXTROSE 50 ML
        Start Date: OCT 24, 2012@16:44
        Stop Date: OCT 25, 2012@24:00

Class(es) Involved in Therapeutic Duplication(s): Beta-Lactams,
        Cephalosporins, Cephalosporins - 1st Generation
```

- **Drug-Allergy Interactions** Drug allergy interactions will be either critical or significant. If the Dispense Drug selected is identified as having an interaction with one of the patient's allergies, the allergy the drug interacts with will be displayed.
  - CPRS Order Check: Aminoglycoside Ordered

```
Trigger: Ordering session completion.
Mechanism: For each medication order placed during this ordering session, the CPRS Expert
System requests the pharmacy package to determine if the medication belongs to the VA
Drug Class 'Aminoglycosides'. If so, the patient's most recent BUN results are used to
calculate the creatinine clearance then OERR is notified and the warning message is
displayed.
[Note: The creatinine clearance value displayed in some order check messages is an
estimate based on adjusted body weight if patient height is > 60 inches. Approved by the
CPRS Clinical Workgroup 8/11/04, it is based on a modified Cockcroft-Gault formula and
was installed with patch OR*3*221.
For more information:
http://www.ascp.com/public/pubs/tcp/1999/jan/cockcroft.shtml
CrCl (male) = (140 - age) x (adj body weight* in kg)
(serum creatinine) x 72
        * If patient height is not greater than 60 inches, actual body weight is used.
CrCl (female) = 0.85 \times CrCl (male)
To calculate adjusted body weight, the following equations are used:
Ideal body weight (IBW) = 50 \text{ kg x (for men)} or 45 \text{ kg x (for women)} + 2.3 \text{ x (height in)}
inches - 60)
Adjusted body weight (Adj. BW) if the ratio of actual BW/IBW > 1.3 = (0.3 \times (Actual BW - Adjusted))
Adjusted body weight if the ratio of actual BW/IBW is not > 1.3 = IBW or Actual BW
(whichever is less)]
Message: Aminoglycoside - est. CrCl: <value calculated from most recent serum
creatinine>. (CREAT: <result> BUN: <result>).
Danger Lvl: This order check is exported with a High clinical danger level.
```

# CPRS Order Check: Dangerous Meds for Patients >64

DANGEROUS MEDS FOR PT > 64 - Yes
This is based on the BEERS list. This order check only checks for three drugs:
Amitriptyline, Chlorpropamide and Dipyridamole. The workgroup felt that the list of drugs should be expanded. A request can be sent to CPRS for this.

Trigger: Acceptance of pharmacy orderable items amitriptyline, chlorpropamide or dipyridamole.

Mechanism: The CPRS Expert System determines if the patient is greater than 64 years old. It then checks the orderable item of the medication ordered to determine if it is mapped as a local term to the national term DANGEROUS MEDS FOR PTS > 64.

Message: If the orderable item text contains AMITRIPTYLINE this message is displayed: Patient is <age>. Amitriptyline can cause cognitive impairment and loss of balance in older patients. Consider other antidepressant medications on formulary. If the orderable item text contains CHLORPROPAMIDE this message is displayed: Patient is <age>. 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.

If the orderable item text contains DIPYRIDAMOLE this message is displayed:

If the orderable item text contains DIPYRIDAMOLE this message is displayed:
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.

Danger Lvl: This order check is exported with a High clinical danger level.

## • CPRS Order Check: Glucophage Lab Results

Glucophage-Lab Results Interactions
Trigger: Selection of a Pharmacy orderable item.
Mechanism: The CPRS Expert System checks the pharmacy orderable item's local text (from the Dispense Drug file [#50]) to determine if it contains "glucophage" or "metformin".
The expert system next searches for a serum creatinine result within the past x number of days as determined by parameter ORK GLUCOPHAGE CREATININE. If the patient's creatinine result was greater than 1.5 or does not exist, OE/RR is notified and the warning message

Message: Metformin- no serum creatinine within past <x> days. else:
Metformin - Creatinine results: <creatinine greater than 1.5 w/in past <x> days>
Danger Lvl: This order check is exported with a High clinical danger level.

#### 4.10.2 Order Validation Checks

is displayed.

The following order validation checks will apply to Unit Dose orders and to intermittent IV orders.

**Note:** IV orders do not have Schedule Type.

## • Order Validation Check One

For intermittent IV orders, references to an order's Schedule Type will refer to either the TYPE OF SCHEDULE from the Administration Schedule file (#51.1), or PRN for schedule names in PRN format, or CONTINUOUS for schedule names in Day of Week format.

## • Order Validation Check Two

The system shall use the schedule type of the schedule from the Administration Schedule file independent of the schedule name when processing an order to determine if administration times are required for a particular order.

## • Order Validation Check Three

If an order has the Schedule Type of Continuous, the Schedule entered is NOT in Day of Week (Ex. MO-FR) or PRN (Ex. TID PC PRN) format, and the frequency associated with the schedule is one day (1440 minutes) or less, the system will not allow the number of administration times associated with the order to be greater than the number of administration times calculated for that frequency. The system will allow for the number of administration times to be LESS than the calculated administration times for that frequency but not less than one administration time. (For example, an order with a schedule of BID is associated with a frequency of 720 minutes. The frequency is divided into 1440 minutes (24 hours) and the resulting calculated administration time is two. For this order, the number of administration times allowed may be no greater than two, but no less than one. Similarly, a schedule frequency of 360 minutes must have at least one administration time but cannot exceed four administration times.)

If an order has the Schedule Type of Continuous, the Schedule entered is NOT in Day of Week (Ex. MO-FR) or PRN (Ex. TID PC PRN) format, and the frequency associated with the schedule is **greater than one day** (1440 minutes) and evenly divisible by 1440, only one administration time is permitted. (For example, an order with a schedule frequency of 2880 minutes must have ONLY one administration time. If the frequency is greater than 1440 minutes and not evenly divisible by 1440, no administration times will be permitted.)

The system shall present warning/error messages to the user if the number of administration times is less than or greater than the maximum admin times calculated for the schedule or if no administration times are entered. If the number of administration times entered is less than the maximum admin times calculated for the schedule, the warning message: "The number of admin times entered is fewer than indicated by the schedule." shall appear. In this case, the user will be allowed to continue after the warning. If the number of administration times entered is greater than the maximum admin times calculated for the schedule, the error message: "The number of admin times entered is greater than indicated by the schedule." shall appear. In this case, the user will not be allowed to continue after the warning. If no admin times are entered, the error message: "This order requires at least one administration time." shall appear. The user will not be allowed to accept the order until at least one admin time is entered.

## Order Validation Check Four

If an order has a Schedule Type of Continuous and is an Odd Schedule {a schedule whose frequency is not evenly divisible by or into 1440 minutes (1 day)}, the system shall prevent the entry of administration times. For example, Q5H, Q17H – these are not evenly divisible by 1440. In these cases, the system shall prevent access to the administration times field. No warning message is presented.

## • Order Validation Check Five

If an order has a Schedule Type of Continuous with a non-odd frequency of greater than one day, (1440 minutes) the system shall prevent more than one administration time, for example, schedules of Q72H, Q3Day, and Q5Day.

If the number of administration times entered exceeds one, the error message: "This order requires one admin time" shall appear. If no administration times are entered, the error message: "This order requires at least one administration time." shall appear. The user will not be allowed to accept the order until at least one admin time is entered.

## • Order Validation Check Six

If an order has a Schedule Type of One Time, or if an order is entered with a schedule that is defined in the schedule file as One Time, the system shall prevent the user from entering more than one administration time.

If more than one administration time is entered, the error message: "This is a One Time Order - only one administration time is permitted." shall appear. No administration times are required.

## Order Validation Check Seven

For an order with a Schedule Type of Continuous where no doses/administration times are scheduled between the order's Start Date/Time and the Stop Date/Time, the system shall present a warning message to the user and not allow the order to be accepted or verified until the Start/Stop Date Times, schedule, and/or administration times are adjusted so that at least one dose is scheduled to be given.

If the stop time will result in no administration time between the start time and stop time, the error message: "There must be an admin time that falls between the Start Date/Time and Stop Date/Time." shall appear.

# 4.10.3 Display of Provider Overrides and Pharmacist Interventions

In Inpatient Medications, the first time a field preceded by an asterisk (\*) is selected for editing and when renewing an order, if Current Pharmacist Interventions exist for the order, entering Y (Yes) at the prompt, "Order Check Overrides/Interventions exist for this order. Display? (Y/N)? Y//," will display the following information when the fields are populated with data:

- Heading: \*\*Current Pharmacist Interventions for this order\*\*
- Intervention Date/Time
- Provider
- Pharmacist
- Drug,
- Instituted By
- Intervention
- Other For Recommendation
- Originating Package
- Was Provider Contacted
- Provider Contacted

- Recommendation Accepted
- Agree With Provider
- Rx #
- Division
- Financial Cost
- Other For Intervention
- Reason For Intervention
- Action Taken
- Clinical Impact
- Financial Impact

\*\* Current Provider Overrides for this order \*\*

```
Overriding Provider: PSJPROVIDER,ONE (PROVIDER)
Override Entered By: PSJPROVIDER,ONE (PROVIDER)
 Date/Time Entered: 7/12/11 09:13
   Override Reason: Testing 9 OTHER
 CRITICAL drug-drug interaction: METRONIDAZOLE 250MG TAB and WARFARIN NA
 (GOLDEN STATE) 2MG TAB [ACTIVE] - Concurrent use of anticoagulants with
 metronidazole or tinidazole may result in reduced prothrombin activity and/or
 increased risk of bleeding. - Monograph Available
 CRITICAL drug-drug interaction: METRONIDAZOLE 250MG TAB and WARFARIN(GOLDEN
 ST) 0.5MG(1/2X1MG) TAB [UNRELEASED] - Concurrent use of anticoagulants with
 metronidazole or tinidazole may result in reduced prothrombin activity and/or
 increased risk of bleeding. - Monograph Available
Press RETURN to Continue or '^' to Exit :
      ** Current Pharmacist Interventions for this order **
______
Intervention Date: 7/12/11 09:14
Provider: PSJPROVIDER, ONE
                                         Pharmacist: PSJPHARMACIST, ONE
Drug: METRONIDAZOLE 250MG TAB
                                         Instituted By: PHARMACY
Intervention: CRITICAL DRUG INTERACTION
Recommendation: OTHER
                                         Originating Package: INPATIENT
Other For Recommendation:
 INTERVENTION FOR CRITICAL DRUG-DRUG
Press RETURN to Continue or '^' to Exit :
```

Intervention TIME displays to the right of the date (e.g., 01/18/11 09:04)

If Historical Overrides/Interventions exist for an order, entering Y (Yes) at the prompt: "View Historical Overrides/Interventions for this order (Y/N)? Y//," displays the Historical Pharmacist Intervention information:

```
______
     ** Historical Pharmacist Interventions for this order **
______
Intervention Date: 07/12/11 09:14
Provider: PSJPROVIDER, ONE
                                Pharmacist: PSJPHARMACIST, ONE
Drug: METRONIDAZOLE 250MG TAB
                                Instituted By: PHARMACY
Intervention: CRITICAL DRUG INTERACTION
                                 Originating Package: INPATIENT
Recommendation: OTHER
Other For Recommendation:
 Testing 9 OTHER
Press RETURN to Continue or '^' to Exit:
______
     ** Historical Provider Overrides for this order **
______
Overriding Provider: PSJPROVIDER, ONE (PROVIDER)
Override Entered By: PSJPROVIDER, ONE (PROVIDER)
 Date/Time Entered: 07/12/11 09:13
  Override Reason: Testing 9 OTHER
 CRITICAL drug-drug interaction: METRONIDAZOLE 250MG TAB and WARFARIN NA
 (GOLDEN STATE) 2MG TAB [ACTIVE] - Concurrent use of anticoagulants with
 metronidazole or tinidazole may result in reduced prothrombin activity and/or
 increased risk of bleeding. - Monograph Available
```

CRITICAL drug-drug interaction: METRONIDAZOLE 250MG TAB and WARFARIN(GOLDEN ST) 0.5MG(1/2X1MG) TAB [UNRELEASED] - Concurrent use of anticoagulants with metronidazole or tinidazole may result in reduced prothrombin activity and/or increased risk of bleeding. - Monograph Available

Intervention TIME displays to the right of the date (e.g., 01/18/11 09:04. Current Pharmacist Intervention fields and labels also display, when the fields are populated.



**Note:** In Inpatient Medications, if no Current Pharmacist Interventions exist when editing a field preceded by an asterisk (\*),the following displays:

```
** Current Pharmacist Interventions for this order **

No Pharmacist Interventions to display
```

# 4.10.4 Dosing Order Checks

MOCHA v2.0 implements the first increment of dosage checks and introduces the Maximum Single Dose Check for simple and complex orders for both Outpatient Pharmacy and Inpatient Medications applications. MOCHA v2.0 uses the same interface to First Databank (FDB) as MOCHA v1.0.



Please refer to the **Dosing Order Checks User Manual** for a detailed description of dosing order checks.

# **4.11 Check Drug Interactions**[PSJ CHECK DRUG INTERACTION]

The Check Drug Interaction option allows a user to check for a drug interaction and Therapeutic Duplications between two or more drugs. This option shall be placed on the Unit Dose Medications [PSJU MGR] Menu, and the IV [PSJI MGR] Menu.

# **Example: Checking for drug interactions**

\*\*\* DRUG INTERACTION(S) \*\*\*

\*\*\*Critical\*\*\* with WARFARIN 5MG TAB and CIMETIDINE 300MG TAB

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

-----

Press Return to Continue...:

Display Professional Interaction monograph? N// YES

DEVICE: HOME// SSH VIRTUAL TERMINAL Right Margin: 80//

-----

#### Professional Monograph

Drug Interaction with WARFARIN 5MG TAB and CIMETIDINE 300MG TAB

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/Cimetidine

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

MECHANISM OF ACTION: Inhibition of warfarin hepatic metabolism. The effect appears to be greater on the less active R-warfarin than on the S-warfarin.

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

Press Return to Continue or "^" to Exit:

#### Professional Monograph

Drug Interaction with WARFARIN 5MG TAB and CIMETIDINE 300MG TAB

PREDISPOSING FACTORS: None determined.

PATIENT MANAGEMENT: Coadministration of cimetidine and warfarin should be avoided. If they are administered concurrently, monitor anticoagulant activity and adjust the dose of warfarin indicated. The H-2 antagonists famotidine and nizatidine are unlikely to interact with warfarin. The time of highest risk for a coumarin-type drug interaction is when the precipitant drug is initiated or discontinued. Contact the prescriber before initiating, altering the dose or discontinuing either drug.

DISCUSSION: The majority of drug interaction reports involving H-2 antagonists and warfarin have occurred with cimetidine. Reports of a possibly significant interaction between ranitidine and warfarin have been equivocal. Famotidine and nizatidine do not appear to affect prothrombin time.

Press Return to Continue or "^" to Exit:

#### Professional Monograph

Drug Interaction with WARFARIN 5MG TAB and CIMETIDINE 300MG TAB

#### REFERENCES:

1.Silver BA, Bell WR. Cimetidine potentiation of the hypoprothrombinemic effect of warfarin. Ann Intern Med 1979 Mar;90(3):348-9.

2.Wallin BA, Jacknowitz A, Raich PC. Cimetidine and effect of warfarin. Ann Intern Med 1979 Jun; 90(6):993.

```
3.Serlin MJ, Sibeon RG, Breckenridge AM. Lack of effect of ranitidine
     on warfarin action. Br J Clin Pharmacol 1981 Dec;12(6):791-4.
     4. Kerley B, Ali M. Cimetidine potentiation of warfarin action. Can Med
     Assoc J 1982 Jan 15;126(2):116.
     5.Desmond PV, Mashford ML, Harman PJ, Morphett BJ, Breen KJ, Wang YM.
     Decreased oral warfarin clearance after ranitidine and cimetidine.
     Clin Pharmacol Ther 1984 Mar; 35(3): 338-41.
     6. Toon S, Hopkins KJ, Garstang FM, Rowland M. Comparative effects of
     ranitidine and cimetidine on the pharmacokinetics and pharmacodynamics
     of warfarin in man. Eur J Clin Pharmacol 1987;32(2):165-72.
Press Return to Continue or "^" to Exit:
Professional Monograph
   Drug Interaction with WARFARIN 5MG TAB and CIMETIDINE 300MG TAB
     7. Cournot A, Berlin I, Sallord JC, Singlas E. Lack of interaction
     between nizatidine and warfarin during chronic administration. J Clin
     Pharmacol 1988 Dec; 28(12):1120-2.
     8. Hussey EK, Dukes GE. Do all histamine2-antagonists cause a warfarin
     drug interaction?. DICP 1989 Sep;23(9):675-9.
     9. Hunt BA, Sax MJ, Chretien SD, Gray DR, Frank WO, Lalonde RL.
     Stereoselective alterations in the pharmacokinetics of warfarin
     enantiomers with two cimetidine dose regimens. Pharmacotherapy 1989;
     10. Baciewicz AM, Morgan PJ. Ranitidine-warfarin interaction. Ann
     Intern Med 1990 Jan 1;112(1):76-7.
     Copyright 2012 First DataBank, Inc.
Enter RETURN to continue or '^' to exit:
Display Professional Interaction monograph? N// O
```

# 4.12 Pharmacy - Edit Clinic Med Orders Start Date/Time [PSJ ECO]

The *Edit Clinic Med Orders Start Date/Time* [PSJ ECO] option allows the user to change the selected date/range of all active or non-verified clinic orders (Unit Dose, IV, IVP/IVPB) to a new single START DATE/TIME for a patient(s) within a selected clinic. This option provides:

- An action that allows the pharmacist to edit the Start Date/Time of a patient order.
- Patient selection by medication order start date and by Clinic Group, Clinic, or Patient.
- A patient profile display of active or non-verified Clinic medication orders for date/time range selected.
- Automatic retrieval, one patient at a time, based on the type of patient selection, when editing
  a medication Start Date/Time for one or multiple patient Clinic medication orders. Date/Time
  edits are confirmed for each patient.
- Actions to view the patient's full order entry profile, details of specific clinic and non-clinic orders.
- Various warnings and message prompts to the user when certain profile or order conditions occur, allowing the user to view, exit, or proceed with the edit process.

• The *Edit Clinic Med Orders Start Date/Time* [PSJ ECO] option has changes to reflect the new fields related to medications requiring removal. The user will be directed to go to the <u>Inpatient Order Entry [PSJ OE]</u> option to modify the orders that contain medications requiring removal.

# 4.12.1 Search Med Orders Date Entry

A search med orders date entry prompt is the first prompt from the *Edit Clinic Med Orders Start Date/Time* [PSJ ECO] menu option:

- The Begin Search Date defaults to "TODAY//" (current date).
- The End Search Date defaults to the entered Begin Search Date. The End Search Date shall not precede the Begin Search Date.

## Example: Prompt that End Search Date Shall Not Precede Begin Search Date

```
Begin Search Date: TODAY//06/01 (JUN 01, 2012)

End Search Date: Jun 01, 2012// 05/15 (MAY 15, 2012)

Response must not precede 6/1/2012.

End Search Date: Jun 01, 2012//
```

- Time entry with the date is optional.
- The search results include all active or non-verified clinic orders within the selected date range, not just those with a start date within the range. Current business rules apply for date/time validation entry.

## **Example: Prompt to Search Begin and End Dates**

```
Search for Active and Non-Verified CLINIC Medication Orders
that fall within the date range selected below:

Begin Search Date: TODAY// (default to current date)

End Search Date: (default to the entered Begin Search Date:)
```

# 4.12.2 Search by Clinic, Clinic Group or Patient

The entry prompt "Search by CLINIC (C), CLINIC GROUP (G), or PATIENT (P):" allows the user to search by clinic, clinic group or patient, with no default, from the *Edit Clinic Med Orders Start Date/Time* [PSJ ECO] menu option.

## **Example: Prompt to Select Clinic, Clinic Group or Patient**

```
Search by CLINIC (C), CLINIC GROUP (G) or PATIENT (P):
```

The appropriate entry prompt "C," "G," or "P" is provided and allows the user to enter a Clinic, Clinic Group or Patient name. Current business rules apply to the entry of clinic name, clinic group or patient name.

# Table: Prompt Entry for Clinic, Clinic Group or Patient

<b>Entry Result</b>	System Prompt	User Entry

С	"SELECT CLINIC:"	Clinic name – case inclusive (display clinics
		that are marked allow clinic orders)
G	"SELECT CLINIC GROUP"	Clinic group name
P	"SELECT PATIENT:"	Patient name

The entry prompt, "SELECT CLINIC:" or "SELECT PATIENT:" is repeated allowing the user to select multiple clinics or multiple patients by entering individual names for the search. A blank return stops the search, and the process continues.

## 4.12.3 Select Patient from Clinic

If the user selects "Clinic," the numbered list of active patients' full names displays in alphabetical order by last name for all active or non-verified clinic orders (Unit Dose, IV, IVP, IVPB) from the med orders date/time range entered.

## **Example: Display Patient List**

```
CLINIC ORDERS - PATIENT CLINIC

No. PATIENT

1 CPRSPATIENT, ONE (0091)
2 CPRSPATIENT, TWO (5555)
3 CPRSPATIENT, THREE (0038)

Select 1 - 3:
```

If the user selects "Clinic," an entry prompt of "Select N-N:" displays. N-N represents the begin/end number of displayed patients. The user may select one or multiple patients. Current business rules apply to numbered entry list selection.

## **Example: Prompt to Select Patient**

```
Select 1 - 1:
```

# 4.12.4 View Patient Clinic Order Entry Profile

A Clinic Order Entry Patient profile view of active followed by non-verified orders, is provided based on the filter selection choices previously made.

#### **Example: Display Clinic Order Entry Patient Profile**

```
Clinic Order Entry May 06, 2011@09:46:50
 PIQY U6, 2011@09:
                                        Page: 1 of 2
CPRSPATIENT, ONE
                               Sex: MALE
                            Last Admitted: 03/28/11
                              Discharged: 03/28/11
           CLINIC ORDERS: May 10, 2013 to May 12, 2013@24:00
  C 05/12 05/17 A
 1 FLUOROURACTI INJ.SOLN
      Give: IV ONCE
    ABACAVIR/LAMIVUDINE TAB
                               C 05/10 05/17 N
      Give: 1 TABLET PO BID
```

```
+ Enter ?? for more actions
ES Edit Start Date VP View Profile
VD View Order Detail CD Change Date Range
Select Action:Quit//
```



**Note:** If the user selects "by Patient" orders for all clinics for that patient are displayed rather than orders from a single clinic. This is the alternate path re-entry point when selecting by patient.

The following user actions are provided in the Clinic Order Entry Patient profile:

- ES Edit Start Date
- VD View Order Detail
- VP View Profile
- CD Change Date Range
- Quit

## 4.12.4.1 ES Edit Start Date

The "ES" (Edit Start Date) action allows the user to select medication orders to edit. The system provides an entry prompt "Select Orders: (N-N):" when ES is entered. (N - N) represents the begin/end number from the displayed number list in the Clinic Order Entry profile. The system proceeds to entry prompt "NEW START DATE/TIME:"

# 4.12.4.2 VD View Order Detail

The "VD" (View Order Detail) action allows the user to select the medication orders to view. The following attributes are provided:

- View Only
- No Patient Demographics
- Order Details Only
- Allowed Action of QUIT

#### **Example: Display VD View Order Detail**

```
Patient: CPRSPATIENT, THREE
                                                  Status: ACTIVE
*(1) Additives:
                          Order number: 1
                                               Type: ADMIXTURE
     5-FLUOURACIL 11 MG
*(2) Solutions:
     DEXTROSE 20% DEXTROSE TEST 500 ML
                                          *(4) Start: 04/12/12 09:39
         Duration:
*(3) Infusion Rate: 11 ml/hr
                                          *(6)
                                                 Stop: 04/13/12 24:00
*(5) Med Route: IM
*(7)
                                            Last Fill: 04/12/12 09:44
         Schedule:
(8) Admin Times:
                                               Quantity: 1
*(9)
        Provider: MACOY, BONES [es]
                                            Cum. Doses: 1
(10) Other Print: (11) Remarks:
       IV Room: TST ISC ROOM
                                             Entry Date: 04/12/12 09:44
      Entry By: PROVIDER, ONE
Enter RETURN to continue or '^' to exit: Select Action: Quit// Quit
```

### 4.12.4.3 VP View Profile

The "VP" (View Profile) action allows the user to view the order profile for all medication orders. The following attributes are provided:

- Entire Patient Profile Non-Clinic and Clinic medication orders are displayed.
- This is a display only action.
- The Quit action is allowed.

Medication orders display in the following sequence:

- a. Non-clinic inpatient medication orders display in the usual manner.
- b. Clinic medication orders display by clinic name in alphabetical order as follows:.
  - Pending
  - Non-verified
  - Active
  - Discontinued/expired
- c. Non-active, non-clinic medication orders display at the bottom of the profile list.

#### **Example: Display VP View Profile**

```
INPATIENT MEDICATIONS
                                                     03/06/13
10:17
                   VAMC: ALBANY (500)
Last transferred: 05/07/03
  Dx: SICK
                                BSA (m2): __
 CrCL: <Not Found>
Allergies: CEFAZOLIN, PENICILLIN, VALIUM, WARFARIN, ASPIRIN,
       BISMUTH SUBSALICYLATE, EGGS, LACTOSE, MILK, BACON ( FREE TEXT ),
       ICE CREAM, STRAWBERRIES
NV Aller.: CIMETIDINE
   ADR: AMPICILLIN
       -----ACTIVE----
 1 BACLOFEN TAB
                                R 03/04 03/15 A
      Give: 10MG PO Q4H
      -----NON-VERIFIED-------
 2 CEFAMANDOLE INJ
      Give: 10 GM IVP Q3D@0900
                                C 02/13 03/17 N
   5-FLUOURACIL 100 MG
                                C 02/15 03/17 N
     in DEXTROSE 10% 1000 ML 200 ml/hr
 ----PENDING------
    BACLOFEN TAB
                                C ***** ***** P
      Give: 20MG PO BID
                                 C **** **** P
  5 CAPTOPRIL TAB
      Give: 25MG PO BID
   FLUOROURACIL INJ, SOLN
                                 C ***** P
      Give: 100MG/2ML IV BID
 BACLOFEN TAB
                                C 02/25 03/27 A
       Give: 10MG ORALSL Q4H
       Instructions too long. See Order View or BCMA for full
View ORDERS (1-7):
```

### 4.12.4.4 CD Change Date Range

The "CD" (Change Date Range) action in the Clinic Order Entry view allows the user to change the search date range for the current patient's clinic orders. The user may begin a new search by entering a new Begin Search Date and End Search Date for the current patient and continue with the ECO process. The original date range entry remains unchanged for other patients after completing the CD action for the current patient. To assist the user in selecting clinics and patients, clinics are displayed alphabetically along with the associated patients, within the selected date range and clinic group. The Clinic Order Entry profile displays after the completion of the patient selection for all the selected clinics.

### **Example: Clinic and Patient Display**

```
Search by CLINIC (C), CLINIC GROUP (G), or PATIENT (P): gROUP

Select CLINIC GROUP: gROUP ONE

CLINIC ORDERS - BECKY'S CLINIC

No. PATIENT

1 CPRSPATIENT, ONE (0091)
2 CPRSPATIENT, TWO (5555)
3 CPRSPATIENT, THREE (0038)
4 CPRSPATIENT, FOUR (0237)

Select 1 - 4: 3

CLINIC ORDERS - CLINIC (45)

No. PATIENT

1 CPRSPATIENT, TWO (5555)
2 CPRSPATIENT, THREE (0038)
Select 1 - 2: 1
```

If the user selects by "Patient," and no active/non-verified orders exist within the entered date range, the below message displays.

#### Example: No Active/Non-Verified Clinic Orders by Patient Message

```
No ACTIVE AND/OR NON-VERIFIED Clinic Orders found for this patient
```

If the user selects by "Clinic," and no active/non-verified orders exist within the entered date range, the below message displays.

### Example: No Active/Non-Verified Clinic Orders by Clinic Message

```
NO ACTIVE AND/OR NON-VERIFIED ORDERS FOR SELECTED CLINIC
```

### 4.12.4.5 **Ouit**

The entry prompt "Select Action: Quit//" displays on the Clinic Order Entry Patient profile after the Inpatient Medications profile display for the selected patient(s). The number entered forces the use of the VD action with a "Enter RETURN to continue or '^' to exit" prompt.

### Example: Entering a Number Response to "Select Action: Quit//" Prompt

```
Select Action: Quit// 1
Patient: BCMAPATIENT, EIGHT
Orderable Item: ATENOLOL TAB
 Instructions:
Dosage Ordered: 100MG
     Duration:
                                           Start: 06/18/12 11:00
    Med Route: ORAL (PO)
                                           Stop: 06/22/12 11:00
Schedule Type: CONTINUOUS
    Schedule: BID
   Admin Times: 09-17
     Provider: PROVIDER, ONE [s]
                                            Units Units Inactive
                                     U/D Disp'd Ret'd Date
Dispense Drugs
ATENOLOL 100MG TAB
                                     1 0 0
Self Med: NO
Entry By: MCCOY, BONES
                                               Entry Date: 05/31/12 12:28>
Enter RETURN to continue or '^' to exit:
```

### 4.12.5 Entering a New Start Date/Time

The entry prompt "NEW START DATE/TIME:" displays allowing the user to enter a new Start Date/Time. After the user enters a new Start Date/Time, a prompt displays giving the user the ability to change the calculated Stop Date/Time.

#### **Example: Prompt Entry for New Start Date/Time**

NEW START DATE/TIME: 05/16/2011@1100

### 4.12.6 Order Entry View with New Start Date

The Clinic Order Entry view, based on Begin search date and the NEW end date, if greater than the original entered end date of the search, re-displays after the user enters "YES" to the "CHANGE ALL START DATES/TIME TO" prompt.

#### **Example: Display Clinic Order Entry with New Start Date**

```
CLINIC ORDERS: Apr 20, 2013 to Apr 21, 2013@24:00
----- BECKY'S CLINIC --------
   DIPHENHYDRAMINE INJ, SOLN C 04/21 04/26 N
    Give: 10MG IM WEEKLY
                   R 04/20 04/25 N
 2 ACETAMINOPHEN TAB
    Give: 10 MG PO Q4H
Give: 300 MG PO BID-AM
 3 RANITIDINE TAB
                        C 04/20 04/23 N
    4 HEPARIN 11 ML (1)
                    ? 04/20 04/21 N
  in 5% DEXTROSE 50 ML 100 ml/hr
```

```
-----Enter ?? for more actions------ES Edit Start Date VD View Order Detail VP View Profile Select Action:Quit//
```

### 4.12.7 New Start Date Update Confirmation

After the user answers "YES" to the "Are you sure?" confirmation of the new Start Date/Time change, the prompt "NATURE OF ORDER: SERVICE CORRECTION//" displays for an ACTIVE Clinic Order, with a default of SERVICE CORRECTION.

### **Example: Nature of Order Prompt**

```
NATURE OF ORDER: SERVICE CORRECTION//
```

The selected record(s), along with the applicable message for each order, is updated, using current business functionality.

### **Example: Update Message**

```
Now working on order:
    BACLOFEN
                                                 07/01/12 11:11
        Give: 10 MG PO QID
NATURE OF ORDER: SERVICE CORRECTION//
...discontinuing original order...
 ...creating new order.....
Pre-Exchange DOSES:
Now working on order:
    CEFAMANDOLE
                                                05/22/12 08:00
        Give: 44 GM IV
...updating order.....
...updating OE/RR...
Now working on order:
    DAPSONE
                                                04/23/12 12:00
        Give: 50 MG PO QAM
...updating order.....
...updating OE/RR...
Now working on order:
    FLUOROURACIL
                                                05/20/12 12:00
        Give: 11 MG IM
...updating order.....
...updating OE/RR...
```

After the user enters "QUIT" or when editing by clinic with multiple patients, the system mimics the *Non-Verified/Pending Orders* [PSJU VBW] option when cycling through the remaining selected patient(s).

**Note**: The Nature of Order prompt does not display for edits made to orders that are not active, e.g., orders with a status of non-verified.

### 4.12.8 Conditional Messages Displaying after New Start Date

Individual message prompts may or may not be presented after the new start date/time is entered for the patient. These depend on various validations that are being checked which the user may need to review or act upon. None, one, or more messages may display depending upon the entry.

### 4.12.8.1 New Start Date No Earlier than Now

A change to a new start date, earlier than "NOW" is not allowed. If the new start date entered is earlier than "NOW" the following prompt displays: "Start Date/Time earlier than NOW is not allowed. Re-enter start date. Enter new Start Date/Time:".

### 4.12.8.2 New Start Date beyond 365 Days

A change to a new Start DATE beyond 365 days is not allowed.

#### **Example: Message Start Date Beyond 365 Days**

```
Start Date cannot be more than 365 days from today. Re-enter Start Date. Enter new Start Date/Time:
```



**Note**: The system cycles back to the enter new start/date prompt entry until the new start/date time is less than 365 days.

#### 4.12.8.3 Other Orders Exist

The message below displays when orders exist for the date entered at the "new Start Date/Time:" prompt. The existing active orders also display.

### **Example: Message Other Orders Exist**

```
* This patient has active order(s) on Jun 04, 2012. *

PROCHLORPERAZINE 06/01/12 11:11

Give: 5 MG/1 ML IV WEEKLY

Do you want to view the profile?
```

• If the user answers "YES," a Profile View for the selected orders for the Start Date/Time edit for the new date displays followed by the prompt to continue.

### **Example: Display View Profile for Selected Order**

• If the user answers "NO," the "new Start Date/Time:" prompt to re-enter a new Start Date/Time displays.

### **4.12.8.4** New Start Date After One or More Stop Dates

The message below and prompt display, with no default, when the new start date is after one or more stop date(s).

#### **Example: Display Start Date After Stop Date**

```
* The new start date is after one or more stop date(s). *
The stop date(s) will be automatically changed to reflect the new start date.

Do you want to view the profile?
```

- If the user answers "YES," the process continues.
- If the user answers "NO," the "new Start Date/Time:" prompt to re-enter a new Start Date/Time displays.

The selected changed med orders display followed by the message: "The Start Date/Time for the selected orders will now be changed to mm/dd/yy hh:mm (user entered Start Date/Time.) Are you sure?"

### **Example: Prompt to Confirm Changed Start Date**

The process returns to the "Enter a new Start Date/Time:" prompt. The existing business rule for a new order is used to calculate the med order stop date from the med start date.

### 4.12.9 Conditional Messages Displaying after Selection of Orders

The following individual message prompts may or may not be presented after the ES selection when selecting the clinic med order(s). These depend on various validations that are being checked which the user may need to review or act upon. None, one, or more messages may display depending upon the entry.

### **4.12.9.1 ON CALL Orders**

ON CALL (OC) status can only be set for IV orders. If the user selects a Clinic IV order with an ON CALL status, the message: "Orders with ON CALL Status cannot be edited....." displays. ES action changes to orders with ON CALL status are not allowed.

#### **Example: Selecting ON CALL Orders**

#### 4.12.9.2 ON HOLD Orders

If the user selects ON HOLD orders, the message: "ON HOLD orders cannot be edited...." displays. ES action changes to orders ON HOLD are not allowed.

### **Example: Selecting ON HOLD Orders**

### 4.12.9.3 Complex Orders

If the user selects complex orders, the message: "Complex Orders cannot be edited – no changes will be applied to any of the following Complex order components:......" displays. ES action changes to complex orders are not allowed.

### **Example: Selecting Complex Orders**

### 4.12.9.4 Orders for More than One Clinic

If the user selects orders for more than one clinic, the message: "You have selected orders from different clinics do you want to continue?" displays:

• If the user answers "NO," the Clinic Order Entry profile view of order(s) for the selected patient(s) re-displays.

• If the user answers "YES," the process continues.

### 4.12.9.5 Orders with different Start Date/Times

If the user selects orders for more than one Start Date/Time, the message: "You have selected orders with different Start Date/Time, do you want to proceed?" displays:

- If the user answers "NO," the Clinic Order Entry profile view of order(s) for the selected patient(s) re-displays.
- If the user answers "YES," the process continues.

### 4.12.9.6 Orders for More than one Clinic with Different Start Date/Times

If the user selects orders for more than one clinic with different Start Date/Times, the message below displays:

### **Example: Orders for More than One Clinic with Different Start Date/Times**

```
You have selected orders from different clinics
and with different Start Date/Times.

Do you want to continue?

You have selected orders from different clinics
and with different Start Date/Times.
```

- If the user answers "NO," the Clinic Order Entry profile view of order(s) for the selected patient(s) re-displays.
- If the user answers "YES," the process continues.

### 4.12.9.7 System Auto Adjusts the Start Time to the Current Time

The system will auto adjust the start date/time to "NOW" for <u>pending CPRS</u> clinic orders with a start/date time in the past.

For example, when the order was created in CPRS, the current 'NOW' Start Time was 13:02, but when the pending order is selected in Inpatient Medications, the current 'NOW' Start Time is 13:12.

### **5** Maintenance Options

All of these maintenance options are located on the *Unit Dose Medications* menu.

## **5.1 Edit Inpatient User Parameters** [PSJ UEUP]

The *Edit Inpatient User Parameters* option allows users to edit various Inpatient User parameters. The prompts that will be encountered are as follows:

# • "PRINT PROFILE IN ORDER ENTRY:" Enter **YES** for the opportunity to print a profile after entering Unit Dose orders for a patient.

### "INPATIENT PROFILE ORDER SORT:"

This is the sort order in which the Inpatient Profile will show inpatient orders. The options will be sorted either by medication or by start date of order. Entering the words "Medication Name" (or the number 0) will show the orders within schedule type (continuous, one-time, and then PRN) and then alphabetically by drug name. Entering the words "Start Date of Order" (or the number 1) will show the order chronologically by start date, with the most recent dates showing first and then by schedule type (continuous, one-time, and then PRN).

**Note**: The Profile first shows orders by status (active, non-verified, and then non-active).

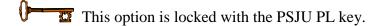
### • "LABEL PRINTER:"

Enter the device on which labels are to be printed.

### "USE WARD LABEL SETTINGS:" From WES to have the labels print on the print

Enter **YES** to have the labels print on the printer designated for the <u>ward</u> instead of the printer designated for the <u>pharmacy</u>.

## 5.2 Edit Patient's Default Stop Date [PSJU CPDD]



The "UD DEFAULT STOP DATE/TIME:" prompt accepts the date and time entry to be used as the default value for the STOP DATE/TIME of the Unit Dose orders during order entry and renewal processes. This value is used only if the corresponding ward parameter is enabled. The order entry and renewal processes will sometimes change this date and time.



When the SAME STOP DATE ON ALL ORDERS parameter is set to yes, the module will assign a default stop date for each patient. This date is initially set when the first order is entered for the patient, and can change when an order for the patient is renewed. This date is shown as the default value for the stop date of each order entered for the patient. However, if a day or dose limit exists for the selected Orderable Item, and the limit is less than the default stop date, the earlier stop date and time will be displayed.

### **6 Output Options**

Most of the Output Options are located under the *Reports Menu* option on the *Unit Dose Medications* menu. The other reports are located directly on the *Unit Dose Medications* menu.

## 6.1 PAtient Profile (Unit Dose) [PSJU PR]

The *PAtient Profile (Unit Dose)* [PSJU PR] option allows a user to print a profile (list) of a patient's orders for the patient's current or last (if patient has been discharged) admission, by group (**G**), ward (**W**), clinic (**C**), or patient (**P**). When group is selected, a prompt to select by ward group (**W**) or clinic group (**C**) displays. If the user's terminal is selected as the printing device, this option will allow the user to select any of the printed orders to be shown in complete detail, including the activity logs, if any.

The *PAtient Profile (Unit Dose)* [PSJU PR] option also allows for viewing a list of clinic orders. New clinic orders cannot be created. Clinic orders are displayed separately from non-clinic orders.

### **Example: Patient Profile**

```
Select Unit Dose Medications Option: PAtient Profile (Unit Dose)
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): P Patient <Enter>
Select PATIENT: PSJPATIENT1,ONE 000-00-0001 08/18/20 1 EAST
Select another PATIENT: <Enter>
SHORT, LONG, or NO Profile? SHORT// <Enter> SHORT
Show PROFILE only, EXPANDED VIEWS only, or BOTH: PROFILE// <Enter>
Select PRINT DEVICE: <Enter> NT/Cache virtual TELNET terminal
                 UNIT DOSE PROFILE 09/13/00 16:20
                  SAMPLE HEALTHCARE SYSTEM
PSJPATIENT1,ONE Ward: 1 EAST
PID: 000-00-0001 Room-Bed: B-12
DOB: 08/18/20 (80)
                                                Ht(cm): ____ (____
Wt(kg): ____ (____
                                               Admitted: 05/03/00
   Sex: MALE
   Dx: TESTING
  CrCL: <Not Found>
                                               BSA (m2): _
 Allergies: No Allergy Assessment
     ADR:
                -----ACTIVE--
                                              C 09/07 09/21 A NF
  1 -> AMPICILLIN CAP
         Give: 500MG PO QID
  2 -> HYDROCORTISONE CREAM, TOP
                                              C 09/07 09/21 A NF
         Give: 1% TOP QDAILY
                                              C 09/07 09/21 A NF
  3 -> PROPRANOLOL 10MG U/D
         Give: PO QDAILY
View ORDERS (1-3): 1
```

### **Example: Patient Profile (continued)**

```
_____
Patient: PSJPATIENT1,ONE
                                     Status: ACTIVE
Orderable Item: AMPICILLIN CAP
 Instructions:
Dosage Ordered: 500MG
                                     Start: 09/07/00 15:00
    Duration:
    Med Route: ORAL (PO)
                                        Stop: 09/21/00 24:00
 Schedule Type: CONTINUOUS
    Schedule: QID
  Admin Times: 01-09-15-20
    Provider: PSJPROVIDER,ONE [w]
                                     Units Units Inactive
                                 U/D Disp'd Ret'd Date
 Dispense Drugs
 AMPICILLIN 500MG CAP
                                   1 0
ORDER NOT VERIFIED
Self Med: NO
Entry By: PSJPROVIDER, ONE
                                           Entry Date: 09/07/00 13:37
```

## **6.2 Reports Menu** [PSJU REPORTS]

The Reports Menu option contains various reports generated by the Unit Dose package.

**Note**: All of these reports are <u>QUEUABLE</u>, and it is <u>strongly suggested</u> that these reports be queued when run.

### **Example: Reports Menu**

```
Select Reports Menu Option: ?

7     7     Day MAR
14     14    Day MAR
24     24    Hour MAR
AP1     Action Profile #1
AP2     Action Profile #2
AUthorized Absence/Discharge Summary
Extra Units Dispensed Report
Free Text Dosage Report
INpatient Stop Order Notices
Medications Due Worksheet
Patient Profile (Extended)
```

### 6.2.1 24 Hour MAR [PSJU 24H MAR]

The 24 Hour MAR option creates a report that can be used to track the administration of a patient's medications over a 24-hour period. The 24 Hour MAR report includes:

- Date/time range covered by the MAR using a four-digit year format
- Institution Name
- Ward/Clinic\*

144

• Patient demographic data

- Time line
- Information about each order

\*For Outpatients receiving Inpatient Medication orders in an appropriate clinic.

The order information consists of:

- Order date
- Start date
- Stop date
- Schedule type (a letter code next to the administration times)
- Administration times (will be blank if an IV order does not have a schedule)
- Drug name
- Strength (if different from that indicated in drug name)
- Medication route abbreviation
- Schedule
- Verifying pharmacist's and nurse's initials

The MAR is printed by group (G), ward (W), clinic (C), or patient (P). When group is selected, a prompt to select by ward group (W) or clinic group (C) displays. If the user chooses to print by patient, the opportunity to select more than one patient will be given. The system will keep prompting, "Select another PATIENT:". If a caret (^) is entered, the user will return to the report menu. When all patients are entered, press <Enter> at this prompt to continue.



**Note:** If the user chooses to select by ward, administration teams may be specified and the MAR may be sorted by administration team, and then by room-bed or patient name. The default for the administration team is ALL and multiple administration teams may be entered. If selecting by ward group, the MAR may be sorted by room-bed or patient name. When the report is printed by clinic or clinic group, and the order is for an outpatient, the report leaves Room/Bed blank.

When selecting by Ward, Ward Group, Clinic, or Clinic Group, the following prompts are included. All orders for a patient are grouped together by the patient's name, regardless of location.

### Select by Ward:

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): WARD

Include Clinic Orders?
```

Entering **YES** for Clinic Orders prints both ward and clinic orders for patients on a ward. Entering **NO** for Clinic Orders prints only the ward orders.

\_\_\_\_\_\_

### **Select by Ward Group:**

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): GROUP
Select by WARD GROUP (W) or CLINIC GROUP (C): WARD
Include Clinic Orders?
```

Entering **YES** for Clinic Orders prints both ward and clinic orders for patients in a Ward Group. Entering **NO** for Clinic Orders prints only the ward orders for patients in a Ward Group.

\_\_\_\_\_\_

### **Select by Clinic:**

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): CLINIC

Include Ward Orders?
```

Entering **YES** for Ward Orders prints both clinic and ward orders for patients in a clinic. Entering **NO** for Ward Orders prints only the clinic orders.

\_\_\_\_\_\_

### **Select by Clinic Group:**

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): GROUP
Select by WARD GROUP (W) or CLINIC GROUP (C): CLINIC
Include Ward Orders?
```

Entering **YES** for Ward Orders prints both clinic and ward orders for patients in a Clinic Group. Entering **NO** for Ward Orders prints only the clinic orders for patients in a Clinic Group.

\_\_\_\_\_

There are six medication choices. The user may select multiple choices of medications to be printed on the 24 Hour MAR. Since the first choice is ALL Medications, the user will not be allowed to combine this with any other choices. The default choice is "Non-IV Medications only" if:

- 1. The MAR ORDER SELECTION DEFAULT parameter was not defined.
- 2. Selection by Ward group.
- 3. Selected by patients and patients are from different wards.

The MAR is separated into two sheets. The first sheet is for continuous medications and the second sheet is for one-time and PRN medications. When the 24 Hour MAR with orders is run, both sheets will print for each patient, even though the patient might only have one type of order. The user can also print blank MARs and designate which sheets to print. The user can print continuous medication sheets only, PRN sheets only, or both. The blank MARs contain patient demographics, but no order data. Order information can be added manually or with labels.

Each sheet of the 24 Hour MAR consists of three parts:

1. The top part of each sheet contains the patient demographics.

- 2. The main body of the MAR contains the order information and an area to record the medication administration.
  - a. The order information prints on the left side of the main body, and is printed in the same format as on labels. Labels can be used to add new orders to this area of the MAR (Labels should <u>never</u> be placed over order information already on the MAR). Renewal dates can be recorded on the top line of each order.
  - b. The right side of the main body is where the actual administration is to be recorded. It is marked in one-hour increments for simplicity.
- 3. The bottom of the form allows space for signatures/titles, initials for injections, allergies, injection sites, omitted doses, reason for omitted doses, and initials for omitted doses.

At the "Enter START DATE/TIME for 24 Hour MAR:" prompt, indicate the date and the time of day, in military time, the 24 Hour MAR is to start, including leading and trailing zeros. The time that is entered into this field will print on the 24 Hour MAR as the earliest time on the time line. If the time is not entered at this prompt, the time will default to the time specified in the ward parameter, "START TIME OF DAY FOR 24 HOUR MAR:". If the ward parameter is blank, then the time will default to 0:01 a.m. system time.

Please keep in mind that the MAR is designed to print on stock 8 ½" by 11" paper at 16 pitch (6 lines per inch).



**Note:** It is strongly recommended that this report be queued to print at a later time.

### **Example: 24 Hour MAR**

```
Select Reports Menu Option: 24 24 Hour MAR
Select the MAR forms: 3// ?
     Select one of the following:
               Print Blank MARs only
                  Print Non-Blank MARs only
         2
                   Print both Blank and Non-Blank MARs
Select the MAR forms: 3// <Enter> Print both Blank and Non-Blank MARs
Enter START DATE/TIME for 24 hour MAR: 090700@1200 (SEP 07, 2000@12:00)
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): PATIENT <Enter>
Select PATIENT:
                PSJPATIENT1,ONE
                                     000-00-0001 08/18/20 1 EAST
Select another PATIENT: <Enter>
Enter medication type(s): 2,3,6// ?
1. All medications
   Non-IV medications only
3. IVPB (Includes IV syringe orders with a med route of IV or IVPB.
        All other IV syringe orders are included with non-IV medications).
4. LVPs
5. TPNs
6. Chemotherapy medications (IV)
```

```
A combination of choices can be entered here except for option 1.
e.g. Enter 1 or 2-4,5 or 2.

Enter medication type(s): 2,3,6// 1
Select PRINT DEVICE: 0;132 NT/Cache virtual TELNET terminal
```

-----report continues-----

### **Example: 24 Hour MAR (continued)**

CONTINUOUS SAMPLE HEAL	SHEET FHCARE SYSTEM	I			24	HOUR	MAR		09/0	7/2000			h 09/08/2000	
Name: PID: Sex: Allergies:	PSJPATIENT: 000-00-0001 MALE No Allergy A	l,ONE DOB: Dx:	08/18/1 TESTING	ADR:				(cm):		_ (	)	Ro Admitte	09/20/2000 Ward: 1 EAS om-Bed: B-12 d: 05/03/2000	13:29
Order Star	t Stop	A. T	dmın imes	12	13 14	15	16 17 18	3 19 20	21 2	2 23 24	01 02	03 04 0	5 06 07 08 09	10 11
	l													
	l													
	l													
1														
	l													
	ı													
SIGNATURI		         	       			         	Indicate or LEFT 1. DELTC 2. ABDON 3. ILIAC 4. GLUTH 5. THIGH RN: E=Eff	RIGHT (L) DID MEN C CREST EAL H	             				REASON	INIT
PSJPATI	 ENT1,ONE		000-0				ed: B-12						VA FORM 10	

### **Example: 24 Hour MAR (continued)**

SAMPI	LE HEA	RN SHEE LTHCARE	SYSTE															Pri	nted	lon	(	09/2	0/2	000	11:59 16:15
	sex.	PSJPA 000-00 MALE No Al		DX.	IFSII	LING		)		W∈	eight eight	(kg (cm)	): _			(		)	Adm	itt	Roor ed:	War n-Be	d: d: 1	1 EAS B-12 2000	ST 13:29
		rt						3 14	15	16	17 1	8 19	20	21	22	23 2	24 (	01 0	2 03	04	05	06	07	08 09	10 11
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5	SIGNAT	URE/TIT	LE	-	INIT	ALL	ERGIES		·			N SIT		j		MED/I	00SI	OM	ITTE	D 	 	REA	SON	-	INIT
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					 							Effe												-	
P:	SJPAT	IENT1,			000		0001	Roon	n-Be	d: I	3-12											VA	FOR	 м 10-	 -5568d

### **Example: 24 Hour MAR (continued)**

CONTINUOUS SHEET  SAMPLE HEALTHCARE SYSTEM  Name: PSJPATIENTI,ONE  PID: 000-00-0001 DOB: 08/18/1920 (80)  Sex: MALE Dx: TESTING  Allergies: No Allergy Assessment ADR:  Admin  Order Start Stop Times	24 HOUR MAR  Weight (kg):  Height (cm):  12 13 14 15 16 17 18 19 20 21	Prii ()	through 09/08/2000 11:59 nted on 09/20/2000 16:15 Ward: 1 EAST ROOM-Bed: B-12 Admitted: 05/03/2000 13:29
09/07   09/07 15:00   09/21/00 24:00(A9111)   09 AMPICILLIN CAP   C   15 Give: 500MG PO QID   20 RPH: PI RN:	15 20		09
09/07   09/07 15:00   09/14/00 16:54(A9111)   09  AMPICILLIN 1 GM	       15 20	01	09
THIS IS AN INPATIENT IV EXAMPLE			
RPH: PI RN:    09/07   09/07 17:00   09/07/00 12:00(A9111)    HYDROCORTISONE CREAM, TOP C   17  Give: 1% TOP QDAILY    RPH: PI RN:	i 		
09/07   09/07 17:00   09/07/00 12:50 (A9111)   METHYLPREDNISOLNE INJ C   09 Give: 500MG IV Q12H 21 THIS IS AN INPATIENT IV EXAMPLE   RPH: MLV RN:		* *** *** *** ***	**** *** ****
O9/07   09/07 17:00   09/07/00 12:50 (A9111)   METHYLPREDNISOLME INJ C   17 Give: 1000MG IV QDAILY   THIS IS AN INPATIENT IV EXAMPLE   RPH: MLV RN:	**** *** *** *** ***		**** **** ****
SIGNATURE/TITLE   INIT   ALLERGIES	INJECTION SITES	ED/DOSE OMITTED	REASON INIT
PSJPATIENT1,ONE 000-00-00	01 Room-Bed: B-12	PAGE: 1	1 VA FORM 10-2970

### **Example: 24 Hour MAR (continued)**

ONE-TIME/PRN SHEET SAMPLE HEALTHCARE SYSTEM Name: PSJPATIENT1,ONI PID: 000-00-0001 DOB Sex: MALE Dx Allergies: No Allergy Assess Order Start Stop	E: 08/18/1920 (80) : TESTING sment ADR: Admin	Weight (kg):( Height (cm):	Printed o	gh 09/08/2000 11:59 n 09/20/2000 16:15 Nard: 1 EAST -Bed: B-12 ed: 05/03/2000 13:29
l l				
SIGNATURE/TITLE	       	INJECTION SITES Indicate RIGHT (R) or LEFT (L) 1. DELTOID 2. ABDOMEN 3. ILIAC CREST 4. GLUTEAL 5. THIGH PRN: E=Effective N=Not Effective	•	REASON INIT

### 6.2.2 7 Day MAR [PSJU 7D MAR]

The 7 Day MAR option creates a report form that can be used to track the administration of patients' medications.

The 7 Day MAR report includes:

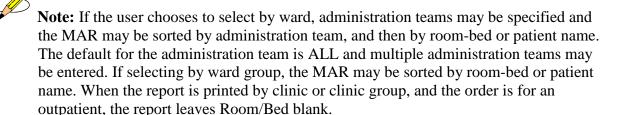
- Date/time range covered by the MAR using a four-digit year format
- Institution Name
- Ward/Clinic\*
- Patient demographic data
- Time line
- Information about each order

\*For Outpatients receiving Inpatient Medication orders in an appropriate clinic.

The order information consists of:

- Order date
- Start date
- Stop date
- Schedule type (a letter code next to the administration times)
- Administration times (will be blank if an IV order does not have a schedule)
- Drug name
- Strength (if different from that indicated in drug name)
- Medication route abbreviation
- Schedule
- Verifying pharmacist's and nurse's initials

The MAR is printed by group (G), ward (W), clinic (C), or patient (P). When group is selected, a prompt to select by ward group (W) or clinic group (C) displays. If the user chooses to print by patient, the opportunity to select more than one patient will be given. The system will keep prompting, "Select another PATIENT:". If a caret (^) is entered, the user will return to the report menu. When all patients are entered, press <Enter> at this prompt to continue.



When selecting by Ward, Ward Group, Clinic, or Clinic Group, the following prompts are included. All orders for a patient are grouped together by the patient's name, regardless of location.

### Select by Ward:

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): WARD

Include Clinic Orders?
```

Entering **YES** for Clinic Orders prints both ward and clinic orders for patients on a ward. Entering **NO** for Clinic Orders prints only the ward orders.

\_\_\_\_\_\_

### **Select by Ward Group:**

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): GROUP
Select by WARD GROUP (W) or CLINIC GROUP (C): WARD
Include Clinic Orders?
```

Entering **YES** for Clinic Orders prints both ward and clinic orders for patients in a Ward Group. Entering **NO** for Clinic Orders prints only the ward orders for patients in a Ward Group.

\_\_\_\_\_

#### **Select by Clinic:**

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): CLINIC

Include Ward Orders?
```

Entering **YES** for Ward Orders prints both clinic and ward orders for patients in a clinic. Entering **NO** for Ward Orders prints only the clinic orders.

\_\_\_\_\_

### **Select by Clinic Group:**

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): GROUP
Select by WARD GROUP (W) or CLINIC GROUP (C): CLINIC
Include Ward Orders?
```

Entering **YES** for Ward Orders prints both clinic and ward orders for patients in a Clinic Group. Entering **NO** for Ward Orders prints only the clinic orders for patients in a Clinic Group.

\_\_\_\_\_

There are six medication choices. The user may select multiple choices of medications to be printed on the 7 Day MAR. Since the first choice is ALL Medications, the user will not be allowed to combine this with any other choices. The default choice is "Non-IV Medications only" if:

- 1. The MAR ORDER SELECTION DEFAULT parameter was not defined.
- 2. Selection by Ward group.
- 3. Selected by patients and patients are from different wards.

The 7 Day MAR option also allows the nurse to choose whether to print one of the two sheets, continuous, PRN, or both. The MAR is separated into two sheets. The first sheet is for continuous medications and the second sheet is for one-time and PRN medications. When the 7

Day MAR with orders is run, both sheets will print for each patient, even though the patient might only have one type of order. The user can also print blank MARs and designate which sheets to print. The user can print continuous medication sheets only, PRN sheets only, or both. The blank MARs contain patient demographics, but no order data. Order information can be added manually or with labels.

Each sheet of the 7 Day MAR consists of three parts:

- 1. The top part of each sheet contains the patient demographics.
- 2. The main body of the MAR contains the order information and an area to record the medication administration.
  - a. The order information prints on the left side of the main body, printed in the same format as on labels. Labels can be used to add new orders to this area of the MAR (Labels should <u>never</u> be placed over order information already on the MAR). Renewal dates can be recorded on the top line of each order.
  - b. The right side of the main body is where the actual administration is to be recorded. On the continuous medication sheet, the right side will be divided into seven columns, one for each day of the range of the MAR. Asterisks will print at the bottom of the columns corresponding to the days on which the medication is not to be given (e.g., Orders with a schedule of Q3D would only be given every three days, so asterisks would appear on days the medication should not be given).
- 3. The bottom of the form is designed to duplicate the bottom of the current CMR (VA FORM 10-2970), the back of the current PRN and ONE TIME MED RECORD CMR (VA FORM 10-5568d). The MAR is provided to record other information about the patient and his or her medication(s). It is similar to the bottom of the 24 Hour MAR, but lists more injection sites and does not allow space to list allergies.

For IV orders that have no schedule, \*\*\*\*\*\* will print on the bottom of the column corresponding to the day the order is to expire. On the continuous medication sheet only, there might be additional information about each order under the column marked notes. On the first line, SM will print if the order has been marked as a self-med order. The letters HSM will print if the order is marked as a hospital supplied self-med. On the second line, WS will print if the order is found to be a ward stock item, CS will print if the item is a Controlled Substance and/or NF will print if the order is a non-formulary. If the order is printed in more than one block, the RPH and RN initial line will print on the last block.

The answer to the prompt, "Enter START DATE/TIME for 7 Day MAR:" determines the date range covered by the 7 Day MAR. The stop date is automatically calculated. Entry of <u>time</u> is not required, but if a time is entered with the date, only those orders that expire after the date and time selected will print. If no time is entered, all orders that expire on or after the date selected will print.

Please keep in mind that the MAR is designed to print on stock 8 ½" by 11" paper at 16 pitch (6 lines per inch).



**Note:** It is strongly recommended that this report be queued to print at a later time.

### Example: 7 Day MAR

Select Reports Menu Option: 7 7 Day MAR
Select the MAR forms: 3// <Enter> Print both Blank and Non-Blank MARS

Select TYPE OF SHEETS TO PRINT: BOTH// <Enter>
Enter START DATE/TIME for 7 day MAR: 090700@1200 (SEP 07, 2000@12:00:00)

Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): PATIENT <Enter>

Select PATIENT: PSJPATIENT1,ONE 000-00-0001 08/18/20 1 EAST
Select another PATIENT: <Enter>
Enter medication type(s): 2,3,6// 1

Select PRINT DEVICE: 0;132 NT/Cache virtual TELNET terminal

	UOUS SHEE			7 1	DAY MAR					through 09	
		ARE SYSTEM								on 09/20/200	00 16:14
		PATIENT1,ON				t (kg): _				Loc: 1 EAST	
				8/1920 (80	) Heigh	t (cm): _		()		-Bed: B-12	
	Sex: MAL								Admitt	ed: 05/03/200	00 13:29
Allerg	ies: No.	Allergy Ass									
Ondon	Ctowt	Cton	Admin	00/07	00/09	00/00	00/10	00/11	00/12	09/13	notos
order	Start	scop	TIMES	09/07	09/08		09/10		09/12	09/13	notes
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				5.VASTUS LA							
				PRN: E=Effe							
DOT	PATIENT1,	ONE	0.00	0-00-0001 F	Coom-Bed:	B-12				VA FORM 10	-2970

### **Example: 7 Day MAR (continued)**

SAMPI Name PID: Sex:	E-TIME/PRN SHEET 7 DAY MAR 09/07/2000 through 09/13 SAMPLE HEALTHCARE SYSTEM Printed on 09/20/2000 Name: PSJPATIENTI,ONE Weight (kg):() Loc: 1 EAST PID: 000-00-0001 DOB: 08/18/1920 (80) Height (cm):() Room-Bed: B-12 Sex: MALE Dx: TESTING Admitted: 05/03/2000 lergies: No Allergy Assessment ADR:								16:14		
Order St	tart	Stop					Order	Start	Stop		
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<u> </u>									 I		
DATE	TIME	MEDICAT:	ION/DOSI	E/ROUTE	INIT	REA	ASON	1	RESULTS	TIME	INIT
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				3. GLUTEUS 4. MID(ANTE							
				5. VASTUS L							
				PRN: E=Eff			ffective				i
	ENT1,ONE			0-00-0001 R					V	A FORM 10-	-5568d

### **Example: 7 Day MAR (continued)**

CONTINUOUS SHEET SAMPLE HEALTHCARE SYSTEM		7 DAY MA	R										hrough		/13/2000
16:14  Name: PSJPATIENT1,ONE PID: 000-00-0001 DOB: 08/18/1920 Sex: MALE Dx: TESTING 13:29	(80)	Weig Hei	ght (kg ght (ci	m): _		(	)	)				oom-B	e: 1 E ed: B- : 05/0	-12	00
Allergies: No Allergy Assessment ADR:	Admin														
Order Start Stop	Times	09/07	09/	08 	09/0	09 	09/	10 	09/2	l1 	09/	12	09/1	L3 	notes
- 09/07   09/07 15:00   09/21/00 24:00(A9111) AMPICILLIN CAP Give: 500MG PO QID		*******   *******		   						-				   	
RPH: PI RN:	i 	<u> </u>	İ 	i		i		i		i		i		j	
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- THIS IS AN INPATIENT IV EXAMPLE	1	I	I	ı		ı		ı		1				1	
INTO TO AN INTATIBNI IV BANKED														_	
RPH: PI RN:	_   	İ	 	i		i		i		i		i		İ	
-   09/07  09/07 17:00  09/07/00 12:34(A9111) HYDROCORTISONE CREAM,TOP Give: 1% 0 QDAILY			****	****	****	****	****	****	****	****	****	****	****	   ***	
RPH: MLV RN:	_									-					
-	)     C 09  21 						-	1	1	1	1				1
- 09/07   09/07 17:00   09/07/00 12:50 (A9111 METHYLPREDNISOLNE INJ Give: 1000MG IV QDAILY THIS IS AN INPATIENT IV EXAMPLE RPH: MLV RN:		     **** ***	-	    ****	****	    ****	-	    ****	   **** 	     ****	     ****	    ****	    ****	****	
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	3. GLUTEU	S MEDIUS	8.	THIG	H						-			-	
	4. MID(AN	TERIOR) TH	IGH 9.	BUTT	OCK						-			-	
	5. VASTUS	LATERALIS	10.	UPPE	R BACI	K					-			-	
	PRN: E=E	ffective	N=Not	Effe	ctive						-			-	
-															
PSJPATIENT1,ONE 000-00-	0001 Roc	m-Bed: B-1	2				LAST	PAGE	: 1			VA	FORM	10-2	970

### 6.2.3 14 Day MAR [PSJU 14D MAR]

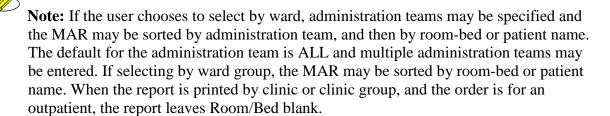
The 14 Day MAR option creates a report form that can be used to track the administration of patients' medications.

- Date/time range covered by the MAR using a four-digit year format
- Institution Name
- Ward/Clinic\*
- Patient demographic data
- Time line
- Information about each order

The order information consists of:

- Order date
- Start date
- Stop date
- Schedule type (a letter code next to the administration times)
- Administration times (will be blank if an IV order does not have a schedule)
- Drug name
- Strength (if different from that indicated in drug name)
- Medication route abbreviation
- Schedule
- Verifying pharmacist's and nurse's initials

The MAR is printed by group (G), ward (W), clinic (C), or patient (P). When group is selected, a prompt to select by ward group (W) or clinic group (C) displays. If the user chooses to print by patient, the opportunity to select more than one patient will be given. The system will keep prompting, "Select another PATIENT:". If a caret  $(^{\land})$  is entered, the user will return to the report menu. When all patients are entered, press <Enter> at this prompt to continue.



When selecting by Ward, Ward Group, Clinic, or Clinic Group, the following prompts are included. All orders for a patient are grouped together by the patient's name, regardless of location.

<sup>\*</sup>For Outpatients receiving Inpatient Medication orders in an appropriate clinic.

### Select by Ward:

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): WARD

Include Clinic Orders?
```

Entering **YES** for Clinic Orders prints both ward and clinic orders for patients on a ward. Entering **NO** for Clinic Orders prints only the ward orders.

\_\_\_\_\_\_

### **Select by Ward Group:**

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): GROUP
Select by WARD GROUP (W) or CLINIC GROUP (C): WARD
Include Clinic Orders?
```

Entering **YES** for Clinic Orders prints both ward and clinic orders for patients in a Ward Group. Entering **NO** for Clinic Orders prints only the ward orders for patients in a Ward Group.

\_\_\_\_\_\_

### **Select by Clinic:**

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): CLINIC

Include Ward Orders?
```

Entering **YES** for Ward Orders prints both clinic and ward orders for patients in a clinic. Entering **NO** for Ward Orders prints only the clinic orders.

\_\_\_\_\_\_

### **Select by Clinic Group:**

```
Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): GROUP
Select by WARD GROUP (W) or CLINIC GROUP (C): CLINIC
Include Ward Orders?
```

Entering **YES** for Ward Orders prints both clinic and ward orders for patients in a Clinic Group. Entering **NO** for Ward Orders prints only the clinic orders for patients in a Clinic Group.

-----

There are six medication choices. The user may select multiple choices of medications to be printed on the 14 Day MAR. Since the first choice is ALL Medications, the user will not be allowed to combine this with any other choices. The default choice is "Non-IV Medications only" if:

- 1. The MAR ORDER SELECTION DEFAULT parameter was not defined.
- 2. Selection by Ward group.
- 3. Selected by patients and patients are from different wards.

The *14 Day MAR* option allows the nurse to choose whether to print continuous, PRN, or both. The MAR is separated into two sheets. The first sheet is for continuous medications and the second sheet is for one-time and PRN medications. When the 14 Day MAR with orders is run, both sheets will print for each patient, even though the patient might only have one type of order.

The user can also print blank MARs and designate which sheets to print. The user can print continuous medication sheets only, PRN sheets only, or both. The blank MARs contain patient demographics, but no order data. Order information can be added manually or with labels.

Each sheet of the MAR consists of three parts:

- 1. The top part of each sheet contains the patient demographics.
- 2. The main body of the MAR contains the order information and an area to record the medication administration.
  - a. The order information prints on the left side of the main body, printed in the same format as on labels. Labels can be used to add new orders to this area of the MAR (Labels should <u>never</u> be placed over order information already on the MAR). Renewal dates can be recorded on the top line of each order.
  - b. The right side of the main body is where the actual administration is to be recorded. On the continuous medication sheet, the right side will be divided into 14 columns, one for each day of the range of the MAR. Asterisks will print at the bottom of the columns corresponding to the days on which the medication is not to be given (e.g., Orders with a schedule of Q3D would only be given every three days, so asterisks would appear on two days out of three).
- 3. The bottom of the MAR is provided to record other information about the patient and his or her medication(s). It is similar to the bottom of the 24-hour MAR, but lists more injection sites.

For IV orders that have no schedule, \*\*\*\* will print on the bottom of the column corresponding to the day the order is to expire. On the continuous medication sheet only, there might be additional information about each order under the column marked notes. On the first line, SM will print if the order has been marked as a self-med order. The letters HSM will print if the order is marked as a hospital supplied self-med. On the second line, WS will print if the order is found to be a ward stock item, CS will print if the item is a Controlled Substance and/or NF will print if the order is a non-formulary. If the order is printed in more than one block, the RPH and RN initial line will print on the last block.

The answer to the prompt, "Enter START DATE/TIME for 14 Day MAR:" determines the date range covered by the 14 Day MAR. The stop date is automatically calculated. Entry of time is not required, but if a time is entered with the date, only those orders that expire after the date and time selected will print. If no time is entered, all orders that will expire on or after the date selected will print.

Please keep in mind that the MAR is designed to print on stock 8 ½" by 11" paper at 16 pitch (6 lines per inch).

**Note:** It is strongly recommended that this report be queued to print at a later time.

### Example: 14 Day MAR

### **Example: 14 Day MAR Report (continued)**

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CONTINUOUS	SHEET				14 D	AY MA	R										20/2000
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Name.	000-00-0001 D	E ∩B: 08/1	8/1920	(8)	١)							1	Por	LOC -	4. B	10	
	MALE			(0)	<i>J</i> )	пету.	110 (0	,		'	,	'	Admit	ted:	05/01	3/2000	13:29
	No Allergy Ass			:									11011112	Jua	03, 0.	3, 2000	15 25
. 5		Admin															
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### **Example: 14 Day MAR (continued)**

Name PID: Sex:	LE HEALTHO PSJPAT: 000-00: MALE No Alle	-0001 DOB: Dx: ergy Assessm	08/18/1 TESTING	920 (80 ; ADR:	W	DAY MA eight ( eight (	kg): cm):			)	Room	on Ward -Bed	09/20/2000 : 1 EAST	) 16:11
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DATE	TIME	MEDICA	ATION/DO	SE/ROUTE	1	INIT	ļ	REAS	ON	-	RESULTS		TIME	INIT
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				<ol> <li>DELTC</li> <li>VENTR</li> </ol>		TTEAT.		. UPPER . ABDOM						
				3. GLUTE				. ABDOM . THIGH						
				4. MID(A										
				5. VASTU PRN: E=				. UPPER						
PSJPATI	ENT1,ONE			-0001 R							7	VA FO	DRM 10-556	8d

### Example: 14 Day MAR (continued)

CONTINUOUS SHEET SAMPLE HEALTHCARE SYSTEM			:	14 DA	Y MAR												20/2000
Name: PSJPATIENT1,ONE PID: 000-00-0001 DOB: 08/18/	/1920 (8	0)					g):			;	)			Ward		EAST	
Sex: MALE Dx: TESTIN Allergies: No Allergy Assessment	1G								-								13:29
Order Start Stop		Admin Times			09	10	11	12	13	14	15	16	17	18	19	20	notes
-		01	* * * *			 I				 I		 I					
09/07   09/07 15:00   09/21/00 24:00 ( AMPICILLIN CAP			****	 	 	 		 		 	 	   <sub></sub>		 	 	 	
Give: 500MG PO QID		20		 	 	 	 	 	 	 	 	 		 	 	 	- I 
RPH: PI R	sn:	.  															
-		01	****	I	I	I	I	I	I	I	****	****	****	****	****	****	
09/07   09/07 15:00   09/14/00 16:54 (			****	ļ—	<u> </u>	 	<u> </u>	ļ—	<u> </u>	 	* * * *   * * * *	****	****	* * * *   * * * *	* * * *   * * * *		
in 0.9% NACL 100 ML IVPB QID		20 	İ	İ	İ	İ	<u> </u>	İ	<u> </u>	****	****	****	****	****	****	****	
See next label for continuation		 	 	 	 	 	 	 	 	 	 	 	 	 	 		
- THIS IS AN INPATIENT IV EXAMPLE		ļ	ļ	ļ	ļ	ļ	ļ	ļ	ļ	ļ	ļ	ļ	ļ	ļ	ļ	ļ	
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RPH: PI RN	·																
09/07   09/07 17:00   09/07/00 12:34 (	(A9111)			ļ		ļ				ļ		ļ					
HYDROCORTISONE CREAM, TOP Give: 1% 0 QDAILY			****	****	****	****	****	****	****	****	****	****	****	****	****	****	
RPH: MLV R	SN:	į .i		ļ—	<u> </u>	 		<u> </u>		 	<u> </u>	i		<u> </u>	<u> </u>		
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   09/07   09/07   17:00   09/07/00   12:50 (						 				 		 			<u> </u>	 	
METHYLPREDNISOLNE INJ Give: 500MG IV Q12H		09  21	* * * *   * * * *	* * * *   * * * *	* * * *   * * * *	* * * *   * * * *	* * * *   * * * *	1	* * * *   * * * *	I	* * * *   * * * *	* * * *   * * * *	****	* * * *   * * * *	* * * *   * * * *	****	
THIS IS AN INPATIENT IV EXAMPLE RPH: MLV R	sn:	 .										 					
-																	
09/07   09/07 17:00   09/07/00 12:50 ( METHYLPREDNISOLNE INJ					    ****	 				 		 				 	
Give: 1000MG IV QDAILY THIS IS AN INPATIENT IV EXAMPLE	C					~ ~ ~ ~				~ ~ ~ ~		~ ~ ~ ~				^ ^ ^ ^	
RPH: MLV R	sn:	.  															
-   SIGNATURE/TITLE	INIT		INJE	CTION	SITE	S			MED	/DOSE	OMIT	red		RE.	ASON	1	INIT
-																-	
		Indica	te RI	GHT (	R) or	LEFT	(L)									-	
																-	
-		(MI)				(SU	BQ)									-	
-																	
-																	
- 																	
- 																	
-																	
-	P	RN: E=E	ffect:	ive	N=No	t Eff	ective	e								-	
- PSJPATIENT1,ONE (	000 00 00	01 D	m De-3	. p 1	2					ACT D	AGE:	1		777	FODM	10 20	70
FOUPMITENII, ONE	000-00-00	OT KOC	sea	• B-I	_				Ь	nol P	HGE.	_		VA	T. OKM	10-29	70

### 6.2.4 Action Profile #1 [PSJU AP-1]

The Action Profile #1 [PSJU AP-1]option creates a report form that contains all of the active inpatient medication orders for one or more patients. These patients may be selected by ward group (G), ward (W), or patient (P). If selection by ward is chosen, the administration teams may be specified. The default for the administration team is ALL and multiple administration teams may be entered. If selecting by ward or ward group, the profile may be sorted by patient name or room-bed. Entering a Ward Group of ^OTHER will automatically sort by patient and print a report for Outpatients that are receiving Inpatient Medications and that meet the report parameters. If the user chooses to run this option by patient, the opportunity is given to select as many patients as needed, but only those that have active orders will print.

The Action Profile #1 [PSJU AP-1] option also allows for viewing a list of clinic orders. New clinic orders cannot be created. Clinic orders are displayed separately from non-clinic orders.

Start and stop dates will be prompted next. If the user chooses to enter a start and stop date, only patients with active orders occurring between those dates will print. The start and stop dates must be in the future (**NOW** is acceptable). Time is required only if the current date of **TODAY** or **T** is entered.

There are six medication choices. The user may select multiple choices of medications to be printed on the Action Profile #1 report. Since the first choice is ALL Medications, the user will not be allowed to combine this with any other choices. The default choice is "Non-IV Medications only" if:

- 1. The MAR ORDER SELECTION DEFAULT parameter was not defined.
- 2. Selection by Ward group.
- 3. Selected by patients and patients are from different wards.

The form is printed so the attending provider will have a method of periodically reviewing these active medication orders. If the user chooses to run this option by patient, the opportunity is given to select as many patients as needed, but only those that have active orders will print.

Also on this profile, the provider can renew, discontinue, or not take any action regarding the active orders for each patient. A new order will be required for any new medication prescribed or for any changes in the dosage or directions of an existing order. If no action is taken, a new order is not required.

If the user chooses to enter a start and stop date, only patients with active orders occurring between those dates will print (for the ward or wards chosen). The start and stop dates must be in the future (**NOW** is acceptable). Time is required only if the current date of **TODAY** or **T** is entered.

It is recommended that the action profiles be printed on two-part paper, if possible. Using two-part paper allows a copy to stay on the ward and the other copy to be sent to the pharmacy.



Note: This report uses a four-digit year format.

### **Example: Action Profile #1**

```
Select Reports Menu Option: AP1 Action Profile #1
Select by WARD GROUP (G), WARD (W), or PATIENT (P): Patient <Enter>
                                  000-00-0001 08/18/20 1 EAST
Select PATIENT: PSJPATIENT1, ONE
Select another PATIENT: <Enter>
Enter medication type(s): 2,3,6// 1
...this may take a few minutes...(you should QUEUE this report)...
Select PRINT DEVICE: <Enter> NT/Cache virtual TELNET terminal
Enter RETIRN to continue or '^' to exit: <Enter
```

Elicel Reform to colleting of	to exit: \milei>		
SAMPLE HEALT	CION PROFILE #1 CHCARE SYSTEM CONTROL OF THE PROFILE OF THE PROFIL	Page: 1	
This form is to be used to REVIEW/RE orders for inpatients. Review the act circle one of the following:  R - to RE			
N - to ta activ	SCONTINUE the order	e indicated)	
A new order must be written for any in dosage or directions on an existing	order.		
PSJPATIENT1,ONE Ward: 1 E PID: 000-00-0001 Room-Bed: B-1 DOB: 08/18/1920 (80) Sex: MALE Dx: TESTING	AST 2 Ht(cm):	() () 05/03/2000	
CrCL: <not found=""></not>	BSA (m2):		
Allergies: No Allergy Assessment ADR:			
No. Action Drug	ST Start	Stop Status/Info	
1 R D N AMPICILLIN 1 GM in 0.9% NACL 100 ML QID Special Instructions: THIS I	C 09/	07 09/14 A	
2 R D N AMPICILLIN CAP Give: 500MG PO QID	C 09/07	09/21 A	
3 R D N HYDROCORTISONE CREAM, TOP	C 09/07	09/21 A	
Give: 1% TOP QDAILY 4 R D N MULTIVITAMINS 5 ML in 0.9% NACL 1000 ML 20 ml/h	C 09/07	09/12 A	
5 R D N PROPRANOLOL 10MG U/D Give: PO QDAILY	C 09/07	09/21 A	
Date AND Time	PHYSICIAN'S SIGNATUR	E	
MULTIDISCIPLINARY REVIEW (WHEN APPROPRIATE)			
	PHARMACIST'S SIGNATU	TRE	
	NURSE'S SIGNATUR	E	

ADDITIONAL MEDIC	CATION ORDERS:					
 Dat	e AND Time	- <u>-</u>	HYSICIAN'S	SIGNATURE		
PSJPATIENT1.ONE		000-00-	0001		08/18/1920	

### 6.2.5 Action Profile #2 [PSJU AP-2]

The *Action Profile #2* [PSJU AP-2] option is similar to the *Action Profile #1* option (see previous report) with the added feature that the nurse can show only expiring orders, giving in effect, stop order notices (see *INpatient Stop Order Notices*).

The *Action Profile #2* [PSJU AP-2] option also allows for viewing a list of clinic orders. New clinic orders cannot be created. Clinic orders are displayed separately from non-clinic orders.

The user can run the *Action Profile #2* [PSJU AP-2] option by group (**G**), ward (**W**), clinic (**C**), or patient (**P**). When group is selected, a prompt to select by ward group (**W**) or clinic group (**C**) displays. If this option is run by patient, the opportunity to select as many patients as desired is given, but the user will not get a report if the patient has no <u>active</u> orders.

If the option for a ward or a ward group is chosen, a prompt to choose the ward or ward group for which the user wants to run the option is displayed. The user will then be asked to sort (print) Action Profiles by team (**T**) or treating provider (**P**). If Ward Group of ^OTHER is entered, the user will not be given a sort (print) option; it will automatically sort by treating provider and print a report of Outpatients that are receiving Inpatient Medications and that meet the report parameters.

At the "Print (A)ll active orders, or (E)xpiring orders only? A//" prompt, the user can choose to print all active orders for the patient(s) selected, or print only orders that will expire within the date range selected for the patient(s) selected.

There are six medication choices. The user may select multiple choices of medications to be printed on the Action Profile #2 report. Since the first choice is ALL Medications, the user will not be allowed to combine this with any other choices.

It is recommended that the action profiles be printed on two-part paper, if possible. Using two-part paper allows a copy to stay on the ward and the other copy to be sent to the pharmacy.

**Note:** This report uses a four-digit year format.

### **Example: Action Profile #2**

```
Select Reports Menu Option: AP2 Action Profile #2

Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): PATIENT <Enter>

Select patient: PSJPATIENT1,ONE 000-00-0001 08/18/20 1 EAST

Select another PATIENT: <Enter>
Enter START date/time: NOW// <Enter> (SEP 11, 2000@11:02)
Enter STOP date/time: SEP 11,2000@11:02// T+7 (SEP 18, 2000)

Print (A)ll active orders, or (E)xpiring orders only? A// <Enter> (ALL)

Enter medication type(s): 2,3,6// 1

Select PRINT DEVICE: <Enter> NT/Cache virtual TELNET terminal

...this may take a few minutes...(you really should QUEUE this report)...
Enter RETURN to continue or '^' to exit: <Enter>
```

	UNIT DOSE ACTION SAMPLE HEALTHCAR (Continuation of VA	E SYSTEM FORM 10-1158)	I	
	written for any new	medication or to m		nges
PSJPATIENT1,ONE PID: 000-00-0001 DOB: 08/18/1920 (8 Sex: MALE DX: TESTING Allergies: No Allergy ADR:	30)	T  Ht(cm): Wt(kg): Admitted:	(((	)
No. Action Drug		ST Start Stop		
		C 09/07 09/14		
TAKE NO ACTION	DISCONTINUE	RENEW COST/DO	OSE: 1.32	
2 AMPICILLIN CAP Give: 500MG PO QII		C 09/07 09/21	А	
TAKE NO ACTION	DISCONTINUE	RENEW COST/DO	OSE: 0.731	
3 HYDROCORTISONE CREAT Give: 1% TOP QDAIL		C 09/07 09/21	А	
TAKE NO ACTION	DISCONTINUE	RENEW COST/DO	OSE: 0.86	
4 MULTIVITAMINS 5 ML in 0.9% NACL 1000		C 09/07 09/12	А	
TAKE NO ACTION	DISCONTINUE	RENEW COST/DO	OSE: 468.795	
Date Al	ND Time PHY	SICIAN'S SIGNATURI	€	

MULTIDISCIPLINARY REVIE (WHEN APPROPRIATE			
(WHEN AFFROFRIATE	PHARMACIST'	S SIGNATURE	
	NURSE'S SIG	NATURE	
ADDITIONAL MEDICATION ORDERS:			
			<del></del>
Date AND Time	PHYSICIAN'S	SIGNATURE	
PSJPATIENT1,ONE	000-00-0001	08/18/1920	

### 6.2.6 AUthorized Absence/Discharge Summary [PSJU DS]

The *AUthorized Absence/Discharge Summary* option creates a report to allow the user to determine what action to take on a patient's Unit Dose orders if the patient is discharged from the hospital or will leave the hospital for a designated period of time (authorized absence). The form is printed so that the provider can place the active orders of a patient on hold, not take any action on the order, or continue the order upon discharge or absence. If the provider wishes to continue the order upon discharge, then he or she can identify the number of refills, the quantity, and the number of days for the order to remain active. If no action is taken on the order, it will expire or be discontinued.

The user can run the Authorized Absence Discharge Summary by ward group, ward, or by patient. If the user chooses to run this report by patient, the opportunity is given to select as many patients as desired, but only patients with <u>active</u> orders will print.

If the option by ward or ward groups is chosen, the user will be prompted for start and stop date. Entry of these dates is not required, but if a start and stop date is entered, a discharge summary will print only for those patients that have at least one order that will be active between those dates. If the user does not enter a start date, all patients with active orders will print (for the ward or ward group chosen). If a clinic visit has been scheduled, the date will print. If more than one has been scheduled, only the first one will print. It is recommended that this report be queued to print when user demand for the system is low.

For co-payment purposes, information related to the patient's service connection is shown on the first page of the form (for each patient). If the patient is a service-connected less than 50% veteran, the provider is given the opportunity to mark each non-supply item order as either SERVICE CONNECTED (SC) or NON-SERVICE CONNECTED (NSC).

**Note:** This report uses a four-digit year format.

### **Example: Authorized Absence/Discharge Summary**

```
Select Reports Menu Option: AUthorized Absence/Discharge Summary
Print BLANK Authorized Absence/Discharge Summary forms? NO// <Enter>
Select by WARD GROUP (G), WARD (W), or PATIENT (P): Patient <Enter>
Select PATIENT: PSJPATIENT2, TWO
                                   000-00-0002 02/22/42 1 West
Select another PATIENT: <Enter>
\dots this may take a few minutes...(you should QUEUE this report)...
Select PRINT DEVICE: <Enter> TELNET
```

	AUTHORIZED ABSENCE/DIS		09/19/2000	12:43
VA FORM: 10-7978M Effective Date:				Page: 1
Instructions to the ph				
A. A prescription 1. all class 2. any medica 3. any new me	blank (VA FORM 10-2577	newable' to those entered	on this form	η.
C. To continue a m	edication, you MUST:			
	ctions, quantity, and			
_	rder, enter your DEA n			
PSJPATIENT2,TWO PID: 000-00-0002 DOB: 02/22/1942 ( Sex: MALE Dx: KDJF CrCL: <not found=""> Allergies: CARAMEL, C</not>	58) Team: * NF *	Ht(cm): Wt(kg): Last Admitted: Discharged: BSA (m2):	((	)
	N, AMPICILLIN, TAPE, F.	TOU ETTIDUEMAGINE	ב הבטאוטאיים	
ADR:	N, AMPICILLIN, IAPE, F	ISH, FLOPHENAZINI	DECANOALE	
ADK.				
=======================================	=======================================	==========	========	======
***	THIS PATIENT HAS NON-V	ERIFIED ORDERS. '	***	
	ENCE <96 HOURS A			
REGULAR DISCHA	RGE OPT NSC	_ SC		
Service Connected Disabilities: NON				
Next scheduled	clinic visit:			
	=======================================	===========	.=======	======
				Cost per
No. Medication		Type	Do	
1 ACETAMINOPHEN 650 Inpt Dose: 650MG R		CONT	INUOUS (	0.088
TAKE NO ACTION	(PATIENT WILL NOT REC	EIVE MEDICATION)		
Outpatient Directi	ons:			
Qty: Refills:	0 1 2 3 4 5 6	7 8 9 10 11		
Physician's Signat	ure DEA	# Date A	AND Time	

Enter RETURN to cont	tinue or '^' to ex	it:					
VID TODAY 10 TOTOY	AUTHORIZED ABSENC VAMC: REG			RDERS		Page:	2
VA FORM: 10-7978M PSJPATIENT2,TWO		000-00-	0002		02/22/1942		
				Sche	edule	Cost	oer
2 BENZOYL PEROXIDE	10% GEL (20Z) SMALL AMOUNT TOP Q			CON	rinuous	3.78	
TAKE NO ACTIO	ON (PATIENT WILL NO	T RECEIV	E MED	ICATION	)		
Outpatient Direct	cions:						_
Qty: Refills:	0 1 2 3 4 5	6 7	8 9	10 11			
	ature						_
3 RANITIDINE 150MG Inpt Dose: 150MG					rinuous	0.5	
TAKE NO ACTIO	ON (PATIENT WILL NO	T RECEIV	E MED	ICATION	)		
Outpatient Direct	ions:						_
Qty: Refills:	0 1 2 3 4 5	6 7	8 9	10 11			
	ature			Date	AND Time		_
4 THEO-24 200MG Inpt Dose: 400MG Special Instructi	PO QID Lons: TESTING DO			CON	rinuous	0.086	
	ON (PATIENT WILL NO	T RECEIV	E MED	ICATION	)		
Outpatient Direct			0 0	10 11			_
Qty: Refills:	: 0 1 2 3 4 5	6 /	8 9	10 11			
Physician's Signa						:====:	
5 Medication:							
Outpatient Direct	ions:						_
Qty: Refills:	0 1 2 3 4 5	6 7	8 9	10 11			
Physician's Signa	ature			Date	AND Time		_
6 Medication:							_
Outpatient Direct	cions:						
Qty: Refills:	0 1 2 3 4 5	6 7	8 9	10 11			
Physician's Signa	ature	DEA #		 Date	AND Time		_
Enter RETURN to conti	inue or '^' to exit	: <enter< td=""><td>&gt;</td><td></td><td></td><td></td><td></td></enter<>	>				

AUTHORIZED ABSENCE/DISCHARGE INSTRUCTIONS 09/19/2000 12:43  VAMC: REGION 5 (660)
VA FORM: 10-7978M Effective Date:
PSJPATIENT2,TWO Ward: 1 West  PID: 000-00-0002 Room-Bed: A-6 Ht(cm): ()  DOB: 02/22/1942 (58) Team: * NF * Wt(kg): ()  Sex: MALE Last Admitted: 06/24/1998  Dx: KDJF Discharged: 12/11/12  CrCL: <not found=""> BSA (m2):  Allergies: CARAMEL, CN900, LOMEFLOXACIN, PENTAMIDINE, PENTAZOCINE, CHOCOLATE, NUTS, STRAWBERRIES, DUST  NV Aller: AMOXICILLIN, AMPICILLIN, TAPE, FISH, FLUPHENAZINE DECANOATE  ADR:</not>
Next scheduled clinic visit:
DIETARY INSTRUCTIONS: (Check One)NO RESTRICTIONS RESTRICTIONS (Specify)
PHYSICAL ACTIVITY LIMITATIONS: (Check One) NO RESTRICTIONS RESTRICTIONS (Specify)
SPECIAL INSTRUCTIONS: (list print information, handouts, or other instructions pertinent to patient's condition)
DIAGNOSES:
Enter RETURN to continue or '^' to exit: <enter></enter>
AUTHORIZED ABSENCE/DISCHARGE INSTRUCTIONS 09/19/2000 12:43  VAMC: REGION 5 (660)  VA FORM: 10-7978M  Effective Date:
PSJPATIENT2,TWO Ward: 1 West  PID: 000-00-0002 Room-Bed: A-6

==========			=
Next sche	duled clinic visit:		
	Nurse's Signature	Date AND Time	
	Physician's Signature	Date AND Time	
	>>>> I HAVE RECEIVED AND UNDERS' >>>> MY DISCHARGE INSTRUCTIONS	TAND <<<< <<<<	
	Patient's Signature	Date And Time	
PSJPATIENT2,TWO	000-00-0002	02/22/1942	

# 6.2.7 Extra Units Dispensed Report [PSJU EUDD]

The *Extra Units Dispensed Report* option allows the user to print a report showing the amounts, date dispensed, and the initials of the person who entered the dispensed drug. This can be printed by ward group, ward, or by patient. If the user chooses to select by ward, the administration teams may be specified. The default for the administration team is ALL and multiple administration teams may be entered. If selecting by ward or ward group, the profile may be sorted by patient name or room-bed.

#### **Example: Extra Units Dispensed Report**

```
Enter Start Date and Time: T@1000 (SEP 19, 2000@10:00)
Enter Ending Date and Time: T@2400 (SEP 19, 2000@24:00)

Select by WARD GROUP (G), WARD (W), or PATIENT (P): Patient <Enter>
Select PATIENT: PSJPATIENT2,TWO 2-22-42 000000002 YES ACTIVE DUTY

Select another PATIENT: <Enter>
Select output device: 0;80 TELNET

this may take a while...(you should QUEUE the Extra Units Dispensed report)
```

```
EXTRA UNITS DISPENSED REPORT PAGE: 1
REPORT FROM: 09/19/00 10:00 TO: 09/19/00 24:00

PSJPATIENT2,TWO Room_Bed: A-6
000-00-0002 Ward: 1 West
```

DRUG NAME	UNIT	DATE DISPENSED		DISP. BY
ACETAMINOPHEN 650 MG SUPP	5	09/19/00 09/19/00		
	8			
BENZOYL PEROXIDE 10% GEL (20Z)		09/19/00	12:58	PM
	2			
RANITIDINE 150MG		09/19/00		
	3	09/19/00	12:58	РМ
	6			
TOTAL FOR PSJPATIENT2,TWO	16			
Press Return to continue				

# 6.2.8 Free Text Dosage Report [PSJU DOSAGE REPORT]

The *Free Text Dosage Report* option creates a report to track commonly ordered free text dosages over a date range. This report evaluates Unit Dose orders that were active during the specified dates against the DISPENSE DRUG file. If the applicable Possible Dosages or Local Possible Dosages do not match the Dosage Ordered, then this is considered a Free Text Dosage Entry and is contained in this report. This report includes the:

- Dispense Drug
- Free Text Dosage Entry
- Total number of occurrences of each Free Text Dosage Entry
- Number of occurrences by the Provider Name

Each entry in the Free Text Dosage Report consists of at least two lines of display. The first line shows the Dispense Drug name, followed by the drug internal entry number in parentheses. The first line continues with the Free Text Dosage Entry and the total number of occurrences of this entry. The second line shows the name of the Providers that used this Free Text Dosage Entry during the requested date range, and the number of times Providers used this free text dosage. Since all Providers are listed, multiple lines will be displayed.

Unit Dose orders that were active during the specified date range and have free text dosages are included in this report. The user is prompted to enter the "Beginning Date:" and an "Ending Date:" for the report to print. If no value is entered in either of the two prompts, the report will not print. The date range will be listed in the "Period:" section of the report header with the beginning date appearing as the first date and the ending date appearing as the second date.



**Note:** It is strongly recommended that this report be queued to print at a later time.

### **Example: Free Text Dosage Report**

```
Select Reports Menu Option: FREE Text Dosage Report

Beginning Date: T-100 (SEP 29, 2001)
```

```
Ending Date: T (JAN 07, 2002)
DEVICE: HOME// 0:80 NT/Cache virtual TELNET terminal
Working - please wait.....
                                                                      Page 1
              Inpatient Free Text Dosage Entry Report
                Period: Sep 29, 2001 to Jan 07, 2002
                                      Free Text Entry
                                                                        Count
   Provider:Count
A-METHYL-PARA-TYROSINE CAPS, 25 (5098) 100MG
                                                                         1
   PSJPROVIDER, ONE: 1
ACETAMINOPHEN 325MG C.T. (263)
                                     1000MG
                                                                         1
   PSJPROVIDER, TWO:1
                                       100MG
   PSJPROVIDER, THREE: 1 PSJPROVIDER, FOUR: 1
                                      100mg
    PSJTPROVIDER FOUR:1
                                       300MG
                                                                         1
    PSJPROVIDER, TWO:1
                                      325MG
                                                                         7
    PSJPROVIDER, ONE:1 PSJPROVIDER, TWO:4
    PSJPROVIDER, FIVE: 2
 Press Return to Continue or ^ to Exit:
```

# 6.2.9 INpatient Stop Order Notices [PSJ EXP]

The *INpatient Stop Order Notices* option produces a list of patients' medication orders that are about to expire. Action must be taken (using VA FORM 10-1158) if these medications are to be re-ordered. This option will list both Unit Dose orders and IV orders. The user may choose to print All, which is the default, or either the Unit Dose or IV orders.

The next prompt allows the user to select by group (**G**), ward (**W**), clinic (**C**), or patient (**P**). When group is selected, a prompt to select by ward group (**W**) or clinic group (**C**) displays.

Start and stop dates will be prompted next.

Special Instructions for Unit Dose orders and Other Print Information for IV orders are listed on the report. IV orders are sorted by the Orderable Item of the first additive or solution in the order. The Orderable Item with each additive and solution is displayed along with the strength/volume specified. The schedule type for all IV orders is assumed to be continuous.

If the user chooses to print by ward, the selection to sort by administration teams is displayed. ALL teams, which is the default, multiple teams, or one administration team may be chosen.

#### **Example: Inpatient Stop Order Notices**

```
Select Reports Menu Option: INpatient Stop Order Notices

Select by GROUP (G), WARD (W), CLINIC (C), or PATIENT (P): PATIENT <Enter>

Select PATIENT: PSJPATIENT2,TWO 000-00-0002 02/22/42 1 West
```

```
Enter start date: T (SEP 19, 2000)
Enter stop date: T+7 (SEP 26, 2000)
List IV orders, Unit Dose orders, or All orders: ALL// <Enter>
Select PRINT DEVICE: 0;80 TELNET
...this may take a few minutes...
                        ...you really should QUEUE this report, if possible...
Enter RETURN to continue or '^' to exit: <Enter>
AS OF: 09/19/00 13:14
                                                                  Page: 1
                   THE FOLLOWING MEDICATIONS WILL EXPIRE
                FROM 09/19/00 00:01 THROUGH 09/26/00 24:00
         TO CONTINUE MEDICATIONS, PLEASE REORDER ON VA FORM 10-1158.
 PSJPATIENT2, TWO
                           Ward: 1 West
   PID: 000-00-0002 Room-Bed: A-6
                                                 Ht(cm): _____(_
                                           Ht(Cui).
Wt(kg):
   DOB: 02/22/1942 (58) Team: * NF *
                                           Last Admitted: 06/24/1998
   Sex: MALE
                                           Discharged: 12/11/12
    Dx: KDJF
                                               BSA (m2):
  CrCL: <Not Found>
 Allergies: CARAMEL, CN900, LOMEFLOXACIN, PENTAMIDINE, PENTAZOCINE, CHOCOLATE,
           NUTS, STRAWBERRIES, DUST
 NV Aller.: AMOXICILLIN, AMPICILLIN, TAPE, FISH, FLUPHENAZINE DECANOATE
 Medication
                                        ST Start Stop
                                                               Status/Info
  Dosage
                                                               Provider
 AMPICILLIN 1 GM
                                     C 09/19 09/22/00 18:00 A
  in 0.45% NACL 100 ML QID
                                                     PSJPROVIDER, ONE
                               C 09/19 09/22/00 18:00 A
 PENTAMIDINE ISETHIONATE 1 MG
  in 0.45% NACL 1000 ML 8 MG/HR
                                                      PSJPROVIDER, ONE
 IV 8 MG/HR@1
 ACETAMINOPHEN 300/CODEINE 30 TAB C 09/16 09/22/00 22:00 A
 Give: 2TABS PO QDAILY
                                                     PSJPROVIDER, ONE
 BENZOYL PEROXIDE GEL, TOP
                                        C 09/19 09/22/00 22:00 A
 Give: APPLY SMALL AMOUNT TOP QDAILY
                                                      PSJPROVIDER, ONE
    Special Instructions: TEST
 RANITIDINE TAB
                                      C 09/18 09/22/00 22:00 A
 Give: 150MG PO BID
                                                     PSJPROVIDER, ONE
 THEOPHYLLINE CAP, SA
                                       C 09/18 09/22/00 22:00 A
 Give: 400MG PO OID
                                                      PSJPROVIDER, ONE
    Special Instructions: TESTING
PSJPATIENT2, TWO
                               000-00-0002 1 West
```

# 6.2.10 Medications Due Worksheet [PSJ MDWS]

The *Medications Due Worksheet* option creates a report that lists active medications (Unit Dose and IV) that are due within a selected 24-hour period. The user will be able to select by ward group, ward, or individual patients. If the user chooses to select by ward, the administration

teams may be specified. The default for the administration team is ALL and multiple administration teams may be entered. If selecting by ward or ward group, the Medications Due Worksheet may be sorted by administration time, patient name, or room-bed. However, if the user chooses to select by patient, multiple patients can be entered.



**Note:** If you specify ^OTHER as the ward group, it will select orders for outpatients in clinics that allow inpatient medication orders.

For IV orders that have no schedule, the projected administration times will be calculated based on the order's volume, flow rate, and start time. An asterisk (\*) will be printed for the administration times instead of the projected administration times.

If the MAR ORDER SELECTION DEFAULT prompt for the ward parameter is defined, the default will be displayed at the "Enter medication type(s):" prompt.

The default choice is 2 or Non-IV Medications only if:

- 1. The MAR ORDER SELECTION DEFAULT parameter was not defined.
- 2. Selection by Ward group.
- 3. Selected by patients and patients are from different wards.

The PRN medication orders will be printed if the user enters **YES** at the "Would you like to include PRN Medications (Y/N)? NO//" prompt. PRN orders will be listed after all continuous and one-time orders are printed.

#### **Example: Medications Due Worksheet**

```
Select Reports Menu Option: MEDications Due Worksheet
Would you like to include PRN Medications (Y/N)? NO// YES
Enter Start Date and Time: T@1000 (SEP 19, 2000@10:00)
Enter Ending Date and Time: T@2400 (SEP 19, 2000@24:00)
Select by WARD GROUP (G), WARD (W), or PATIENT (P): Patient <Enter>
                 PSJPATIENT2, TWO 2-22-42 000000002 YES ACTIVE DUTY
Select PATIENT:
Select another PATIENT: <Enter>
Enter medication type(s): 2// 1
Select output device: 0;80 TELNET
                                                       Page: 1
MEDICATIONS DUE WORKSHEET For: PSJPATIENT2, TWO
Report from: 09/19/00 10:00 to: 09/19/00 24:00
                                                     Report Date: 09/19/00
Continuous/One time Orders for: ALL MEDS
For date: 09/19/00
PSJPATIENT2,TWO A-6 12:00 09/18 | 09/18 12:00 | 09/22/00 22:00
000-00-0002
                                    RANITIDINE TAR
1 West
                                    Give: 150MG PO BID
                                    RN/LPN Init:
                                     09/18 | 09/18 12:00 | 09/22/00 22:00
                                     THEOPHYLLINE CAP, SA
                                     Give: 400MG PO QID
```

	TESTING
	RN/LPN Init:
* 09,	/19   09/19 12:00   09/22/00 18:00 AMPICILLIN 1 GM in 0.45% NACL 1000 ML QID IV QID RN/LPN Init:
15:00	09/18   09/18   12:00   09/22/00   22:00 RANITIDINE TAB Give: 150MG PO BID RN/LPN Init:
	09/18   09/18   12:00   09/22/00   22:00 THEOPHYLLINE CAP,SA Give: 400MG PO QID TESTING RN/LPN Init:
20:00	09/18   09/18   12:00   09/22/00   22:00 RANITIDINE TAB Give: 150MG PO BID RN/LPN Init:
	09/18   09/18   12:00   09/22/00   22:00 THEOPHYLLINE CAP,SA Give: 400MG PO QID TESTING RN/LPN Init:
* Projected admin. times based on order	r's volume, flow rate, and start time.
Enter RETURN to continue or '^' to exit	-
CO CALC	•

# 6.2.11 Patient Profile (Extended) [PSJ EXTP]

The *Patient Profile (Extended)* option creates a report to allow the viewing of all the orders on file for a patient. The user can view all of the orders that have not been purged or enter a date to start searching from.

```
Last transferred: *******
  Dx: TESTING
 CrCL: <Not Found>
                                        BSA (m2): _____
Allergies: No Allergy Assessment
    ADR:
 ----ACTIVE------
  1
      MULTIVITAMINS 5 ML
                                         C 02/28/02 03/30/02 A
      in 0.9% SODIUM CHLORIDE 1000 ML Q8H
                                         C 02/20/02 03/06/02 A
     BACLOFEN TAB
       Give: 10MG PO QDAILY
        PATIENT SPITS OUT MEDICINE
    PREDNISONE TAB
                                         C 02/25/02 03/11/02 A
       Give: 5MG PO TU-TH-SA@09
     RESERPINE TAB
                                         C 02/20/02 03/06/02 A
       Give: 1MG PO QDAILY
    PANCREATIN CAP,ORAL
                                         O 02/21/02 03/23/02 A
       Give: 1 CAPSULE PO ONCE
  ----NON-ACTIVE-
                                         . ****** ****** N
      CEFTAZIDIME INJ
       Give: 1 GM IV QDAILY
                                         ? ****** ****** N
      TRACE ELEMENTS INJ
       Give: 1 ML IV QDAILY
        - - - - - - - - - N O N - A C T I V E - -
    in DEXTROSE 5% 1000 ML 1 ml/hr ? *******
CEFAZOLIN INJ ? ******
                                                    ***** P
 8
                                         ? ****** ****** P
  9
       Give: 1GM/1VIAL IVPB ONE TIME
                                         ? ****** ****** D
 10 PENICILLIN INJ, SUSP
       Give: 600000UNT/1ML IM BID
                                         ? ****** ****** P
     PENICILLIN INJ, SUSP
       Give: 600000UNT/1ML IM QDAILY
 C 11/02/01 12/07/01 E
      in 5% DEXTROSE 1000 ML QID
     zC2TESTDRUG 1 LITER
                                        C 12/14/01 12/21/01 E
       in 5% DEXTROSE 1000 ML QDAILY
Enter RETURN to continue or '^' to exit: <Enter>
                                           Status: ACTIVE
   Patient: PSJPATIENT1,ONE
                      Order number: 29
*(1) Additives:
                                             Type: PIGGYBACK
     MULTIVITAMINS 5 ML
(2) Solutions:
    0.9% SODIUM CHLORIDE 1000 ML
       Duration: *(4) Start: 02/28/02 13:56
(3) Infusion Rate: INFUSE OVER 8 HOURS.
                                     *(6) Stop: 03/30/02 24:00
Last Fill: *******
*(5) Med Route: IV
                                      Last 1_
Quantity: 0
*(7)
        Schedule: QDAILY
(8) Admin Times: 09-13-17-21
*(9) Provider: PSJPROVIDER,ONE [w]
                                       Cum. Doses:
*(10)Orderable Item: MULTIVITAMINS INJ
     Instructions:
(11) Other Print:
(12) Remarks:
     Entry By: PSJPROVIDER, ONE
                                         Entry Date: 02/28/02 13:56
ACTIVITY LOG:
# DATE TIME REASON
                                        USER
______
1 FEB 28,2002 13:58:30 VERIFY
                                        PSJPHARMACIST, ONE
 Comment: ORDER VERIFIED BY PHARMACIST
Patient: PSJPATIENT1,ONE
                                     Status: ACTIVE
Orderable Item: BACLOFEN TAB
 Instructions:
Dosage Ordered: 10MG
    Duration:
                                      Start: 02/20/02 15:20
   Med Route: ORAL (PO)
                                       Stop: 03/06/02 24:00
Schedule Type: CONTINUOUS
   Schedule: QDAILY
  Admin Times: 1440
    Provider: PSJPROVIDER,ONE [w]
Special Instructions: PATIENT SPITS OUT MEDICINE
```

```
Units Units Inactive
                      U/D Disp'd Ret'd Date
Dispense Drugs
BACLOFEN 10MG TABS
                                1 0
Entry By: PSJPROVIDER, ONE
                                      Entry Date: 02/20/02 15:20
ACTIVITY LOG:
ACTIVITY LOG:
# DATE TIME REASON USER
______
  (THE ORDERABLE ITEM IS CURRENTLY LISTED AS INACTIVE.)
  Date: 02/20/02 15:20 User: PSJPHARMACIST,ONE
Activity: ORDER ENTERED AS ACTIVE BY PHARMACIST
Patient: PSJPATIENT1,ONE
                                  Status: ACTIVE
Orderable Item: PREDNISONE TAB
 Instructions:
Dosage Ordered: 5MG
                     Start: 02/25/02 10:58
Stop: 03/11/02 24:00
    Duration:
   Med Route: ORAL (PO)
Schedule Type: CONTINUOUS
   Schedule: TU-TH-SA@09
  Admin Times: 09
    Provider: PSJPROVIDER,ONE [w]
                                   Units Units Inactive
                          U/D Disp'd Ret'd Date
Dispense Drugs
                               1 0 0
PREDNISONE 5MG TAB
Self Med: NO
Entry By: PSJPROVIDER, ONE
                                      Entry Date: 02/25/02 10:58
ACTIVITY LOG:
ACTIVITY LOG:
# DATE TIME REASON
                                     USER
______
  Date: 02/25/02 10:58 User: PSJPHARMACIST, ONE
Activity: ORDER VERIFIED BY PHARMACIST
```

# 6.3 Align Labels (Unit Dose) [PSJU AL]

The *Align Labels (Unit Dose)* option allows the user to align the label stock on a printer so that Unit Dose order information will print within the physical boundaries of the label.

#### **Example: Align Labels (Unit Dose)**

```
Select Unit Dose Medications Option: ALIGn Labels (Unit Dose)
Select LABEL PRINTER: <Enter> TELNET
\----- FIRST LINE OF LABEL -----/
<----> LABEL BOUNDARIES
/-----LAST LINE OF LABEL-----\
XX/XX | XX/XX | XX/XX/XX XX:XX (PXXXX) | A T PATIENT NAME
     ROOM-BED
DRUG NAME
                       SCHEDULE TYPE | D I XXX-XX-XXXX DOB (AGE)
       TEAM
DOSAGE ORDERED MED ROUTE SCHEDULE MM M SEX
                                                     DIAGNOSIS
             TIONS | I E ACTIVITY DATE/TIME ACTIVITY

RPH:____ RN:____ | N S WARD GROUP
SPECIAL INSTRUCTIONS
WS HSM NF
         WARD
Are the labels aligned correctly? Yes// Y (Yes)
```

# 6.4 Label Print/Reprint [PSJU LABEL]

The *Label Print/Reprint* option allows the user to print new unprinted labels and/or reprint the latest label for any order containing a label record. When entering this option, the nurse will be informed if there are any unprinted new labels from auto-cancelled orders (i.e., due to ward or service transfers). The nurse will be shown a list of wards to choose from if these labels are to be printed at this time. The nurse can delete these auto-cancel labels; however, deletion will be for all of the labels.

Next, the nurse will be instructed if there are any unprinted new labels. The nurse can then decide whether to print them now or later.

The nurse can choose to print the labels for a group (**G**), ward (**W**), clinic (**C**), or patient (**P**). When group is selected, a prompt to select by ward group (**W**) or clinic group (**C**) displays. If ward, ward group, clinic, or clinic group is chosen, the label start date will be entered and the labels will print on the specified printer device. When the option to print by individual patient is chosen, an Inpatient Profile will be displayed and the nurse can then choose the labels from the displayed Unit Dose and IV orders to be printed on a specified printer.

# 7 Inquiries Options

All of the Inquiries Options are located under the *INQuiries Menu* option on the *Unit Dose Medications* menu.

# INQuiries Menu [PSJU INQMGR]

The *INQuiries Menu* option allows the user to view information concerning standard schedules and drugs. No information in this option can be edited, so there is no danger of disrupting the Unit Dose Medications module's operation. The *INQuiries Menu* contains the following suboptions:

#### **Example: Inquiries Menu**

```
Select Unit Dose Medications Option: INQuiries Menu

Select INQuiries Menu Option: ?

Dispense Drug Look-Up
Standard Schedules
```

# 7.1 Dispense Drug Look-Up [PSJU INQ DRUG]

The *Dispense Drug Look-Up* option allows the user to see what drugs are in the DRUG file and any Unit Dose information pertaining to them.

At the "Select DRUG:" prompt, the nurse can answer with drug number, quick code, or VA drug class code (for IV, solution print name, or additive print name). Information about the selected drug will be displayed.

#### **Example: Dispense Drug Look-Up**

```
Select Unit Dose Medications Option: INQuiries Menu
Select INQuiries Menu Option: DIspense Drug Look-Up
Select DRUG: ASP
1 ASPIRIN 10 GRAIN SUPPOSITORIES CN103 02-18
2 ASPIRIN 325MG CN103 N/F *90-DAY FILL*
3 ASPIRIN 325MG E.C. CN103 *90-DAY FILL*
4 ASPIRIN 325MG E.C. U/D CN103 N/F TAB
5 ASPIRIN 325MG U/D CN103
Press <RETURN> to see more, '^' to exit this list, OR
                                                                                  02-18-98
                                                                                                      TNPATTENT
CHOOSE 1-5: 5 ASPIRIN 325MG U/D
FORMULARY ITEM
 A UNIT DOSE DRUG
  DAY (nD) or DOSE (nL) LIMIT:
            UNIT DOSE MED ROUTE:
        UNIT DOSE SCHEDULE TYPE:
              UNIT DOSE SCHEDULE:
CORRESPONDING OUTPATIENT DRUG:
                      ATC MNEMONIC:
                       ATC CANISTER: WEST WING
                                                                             12
                                          SOUTH WING
                                                                             12
                                          JUNK ONE
                                                                             12
                                          TESSS
```

```
12
                               11;PS(57.5,
                               13;PS(57.5,
                                                         12
                               14;PS(57.5,
                                                         12
                               15;PS(57.5,
                                                         12
                               16;PS(57.5,
                                                         12
                               17;PS(57.5,
                                                         12
                               18;PS(57.5,
                                                         12
                               21;PS(57.5,
                                                         12
                               22;PS(57.5,
                                                         12
Select DRUG:
```

# 7.2 Standard Schedules [PSJU INQ STD SCHD]

It is extremely important for all users to know the method of schedule input. When the user enters a standard schedule, the system will echo back the corresponding Administration times.

At the "Select STANDARD SCHEDULE:" prompt, enter an administration schedule abbreviation to view information pertaining to that schedule. An explanation of the selected schedule will be displayed. To view a list of the available administration schedule abbreviations, enter a question mark (?) at the prompt "Select STANDARD SCHEDULE:".

### **Example: Standard Schedules**

```
Select INQuiries Menu Option: STandard Schedules

Select STANDARD SCHEDULE: q4H 01-05-09-13-17-21

Schedule: Q4H Type: CONTINUOUS
Standard Admin Times: 01-05-09-13-17-21

Select STANDARD SCHEDULE:
```

# 8 CPRS Order Checks: How They Work

# 8.1 CPRS Order Checks 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 Over 65 is defined as a rule in the CPRS Expert System.

# 8.2 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.

(This page included for two-sided copying.)

# 9 Error Messages

# 9.1 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.

# There are three levels of error messages:

**System** 

When such an error occurs, Drug Interaction, Duplicate Therapy, or Dosing order checks will be performed. Other order checks that do not use the COTS database (FDB) will still be performed such as allergy/ADRs, duplicate drug (for outpatient only) and new CPRS order checks, etc.

Drug

The second error level is for the drug and no Drug Interaction, Duplicate Therapy, or Dosing 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 (GCNSENO mismatch) is rare.

**Order** 

The third error level is for the order. Order level errors will only occur with dosing order checks. Please see the *Dosing Order Check User Manual* for more information.

Error Level	Error Message	Reason	Why message is being displayed
System	No Enhanced Order	Vendor Database	The connectivity to the vendor
	Checks can be	cannot be	database has gone down. A MailMan
	performed.	reached.	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	The connection to	A user has executed the
	Checks can be	the vendor	Enable/Disable Vendor Database
	performed.	database has been	Link [PSS ENABLE/DISABLE DB
		disabled.	LINK] option and disabled the
			interface.

System	No Enhanced Order	Vendor database	The vendor database (custom and
	Checks can be	updates are being	standard data) is being updated using
	performed	processed	the DATUP (Data Update) process.
System	No Enhanced Order	An unexpected	There is a system network problem
	Checks can be	error has occurred	and the vendor database cannot be
	performed		reached or a software interface issue.
Drug	Enhanced Order	Drug not matched	The local drug being ordered/ or on
	Checks cannot be	to NDF	profile has not been matched to
	performed for Local or		NDF. Matching the drug to a VA
	Local Outpatient Drug:		Product will eliminate this message.
	<drug name=""></drug>		
Drug	Order Checks could		If this error message is displayed, it
	not be done for Remote		means that the VA product that the
	Drug: <drug< td=""><td></td><td>local or remote drug being ordered/or</td></drug<>		local or remote drug being ordered/or
	NAME>, please		on the local or remote profile does not
	complete a manual		have a GCNSEQNO or in rare cases,
	check for Drug		the GCNSEQNO assigned to the VA
	Interactions and		Product does not match up with a
	Duplicate Therapy.		GCNSEQNO in the vendor database.
	Remote order indicator		
Drug	Enhanced Order	No active	Highly unlikely that this error would
_	Checks cannot be	Dispense Drug	be seen. At the time the order check
	performed for	found	was being performed the orderable
	Orderable Item: <oi< td=""><td></td><td>item did not have an active dispense</td></oi<>		item did not have an active dispense
	NAME>		drug associated.

#### 10 **Glossary**

# **Action Prompts**

There are three types of Inpatient Medications "Action" prompts that occur during order entry: ListMan, Patient/Order, and Hidden action prompts.

## **ListMan Action Prompts**

- Next Screen
- Previous Screen
- UP Up a Line
- DN Down a Line
- > Shift View to Right
- Shift View to Left <
- FS First screen
- LS Last Screen
- Go to Page GO
- RD Re Display Screen
- PS Print Screen
- PT **Print List**
- SL Search List
- Quit Q
- ADPL Auto Display (on/off)

# **Patient/Order Action Prompts**

- PU Patient Record Updates
- Detailed Allergy/ADR List DA
- VP View Profile
- New Orders Entry NO
- IN Intervention Menu
- Patient Information PΙ
- Select Order SO
- DC Discontinue
- ED Edit
- FL Flag
- VF Verify
- HD Hold
- RN Renew
- AL **Activity Logs**
- OC On Call
- Print New IV Labels NL
- RL Reprint IV Labels
- Recycled IV RC
- Destroyed IV DT
- CA Cancelled IV

# **<u>Hidden Action</u>** Prompts

LBL Label Patient/Report
JP Jump to a Patient

OTH Other Pharmacy Options

MAR MAR Menu

DC Speed Discontinue
RN Speed Renew
SF Speed Finish
SV Speed Verify

CO Copy

N Mark Not to be Given
 I Mark Incomplete
 DIN Drug Restr/Guide
 DA Display Drug Allergies
 OCI Overrides/Interventions
 CK Check Interactions

#### **Active Order**

Any order which has not expired or been discontinued. Active orders also include any orders that are on hold or on call.

#### **Activity Reason Log**

The complete list of all activity related to a patient order. The log contains the action taken, the date of the action, and the user who took the action.

### **Activity Ruler**

The activity ruler provides a visual representation of the relationship between manufacturing times, doses due, and order start times. The intent is to provide the on-the-floor user with a means of tracking activity in the IV room and determining when to call for doses before the normal delivery. The activity ruler can be enabled or disabled under the *SIte Parameters (IV)* option.

#### Additive

A drug that is added to an IV solution for the purpose of parenteral administration. An additive can be an electrolyte, a vitamin or other nutrient, or an antibiotic. Only an electrolyte or multivitamin type additives can be entered as IV fluid additives in CPRS.

# ADMINISTRATION SCHEDULE File

File #51.1. This file contains administration schedule names and standard dosage administration times. The name is a common abbreviation for an administration schedule type (e.g., QID, Q4H, PRN). The administration time entered is in military time, with each time separated from the next by a dash, and times listed in ascending order.

### **Administering Teams**

Nursing teams used in the administration of medication to the patients. There can be a number of teams assigned to take care of one ward, with specific rooms and beds assigned to each team.

**Admixture** 

An admixture is a type of intravenously administered medication comprised of any number of additives (including zero) in one solution. It is given at a specified flow rate; when one bottle or bag is empty, another is hung.

Allergy/ADR Order Check

The screening of a patient's documented allergies or adverse reactions against a medication ordered by a provider.

**APSP INTERVENTION File** 

File #9009032.4. This file is used to enter pharmacy interventions. Interventions in this file are records of occurrences where the pharmacist had to take some sort of action involving a particular prescription or order. A record would record the provider involved, why an intervention was necessary, what action was taken by the pharmacists, etc.

**Average Unit Drug Cost** 

The total drug cost divided by the total number of units of measurement.

**BSA** 

Body Surface Area. The Dubois formula is used to calculate the Body Surface Area using the following formula:

BSA ( $m^2$ ) = 0.20247 x Height (m)<sup>0.725</sup> x Weight (kg)<sup>0.425</sup>

The equation is performed using the most recent patient height and weight values that are entered into the vitals package.

The calculation is not intended to be a replacement for independent clinical judgment.

**BCMA** 

A VistA computer software package named Bar Code Medication Administration. This package validates medications against active orders prior to being administered to the patient.

Calc Start Date

Calculated Start Date. This is the date that would have been the default Start Date/Time for an order if no duration was received from CPRS. Due to the existence of a duration, the default Start Date/Time of the order becomes the <u>expected</u> first dose.

**Calc Stop Date** 

Calculated Stop Date. This is the date that would have been the default Stop Date/Time for an order if no duration was received from CPRS. Due to the existence of a duration, the default Stop Date/Time of the order becomes the expected first dose plus the duration.

Chemotherapy

Chemotherapy is the treatment or prevention of cancer with

chemical agents. The chemotherapy IV type administration can be a syringe, admixture, or a piggyback. Once the subtype (syringe, piggyback, etc.) is selected, the order entry follows the same procedure as the type that corresponds to the selected subtype (e.g., piggyback type of chemotherapy follows the same entry procedure as regular piggyback IV).

Chemotherapy "Admixture"

The Chemotherapy "Admixture" IV type follows the same order entry procedure as the regular admixture IV type. This type is in use when the level of toxicity of the chemotherapy drug is high and is to be administered continuously over an extended period of time (e.g., hours or days).

Chemotherapy "Piggyback"

The Chemotherapy "Piggyback" IV type follows the same order entry procedure as the regular piggyback IV type. This type of chemotherapy is in use when the chemotherapy drug does not have time constraints on how fast it must be infused into the patient. These types are normally administered over a 30 - 60 minute interval.

Chemotherapy "Syringe"

The Chemotherapy "Syringe" IV type follows the same order entry procedure as the regular syringe IV type. Its administration may be continuous or intermittent. The pharmacist selects this type when the level of toxicity of the chemotherapy drug is low and needs to be infused directly into the patient within a short time interval (usually 1-2 minutes).

**Child Orders** 

One or more Inpatient Medication Orders that are associated within a Complex order and are linked together using the conjunctions AND and OR to create combinations of dosages, medication routes, administration schedules, and order durations.

**CLINIC DEFINITION file** 

File #53.46. This file is used in conjunction with Inpatient Medications for Outpatients (IMO) to give the user the ability to define, by clinic, default stop dates, whether to auto-dc IMO orders, and whether to send IMO orders to BCMA. User's may also define a Missing Dose Request printer and a Pre-Exchange Report printer.

Clinic Group

A clinic group is a combination of outpatient clinics that have been defined as a group within Inpatient Medications to facilitate processing of orders.

Clinical Reminder Order Checks (CROC)

CPRS Order Checks that use Clinical Reminder functionality, both reminder terms and reminder definitions, to perform checks for groups of orderable items.

**Complex Order** 

An order that is created from CPRS using the Complex order dialog and consists of one or more associated Inpatient Medication orders, known as "child" orders.

**Continuous IV Order** 

Inpatient Medications IV order not having an administration schedule. This includes the following IV types: Hyperals, Admixtures, Non-Intermittent Syringe, and Non-Intermittent Syringe or Admixture Chemotherapy.

**Continuous Syringe** 

A syringe type of IV that is administered continuously to the patient, similar to a hyperal IV type. This type of syringe is commonly used on outpatients and administered automatically by an infusion pump.

**Coverage Times** 

The start and end of coverage period designates administration times covered by a manufacturing run. There must be a coverage period for all IV types: admixtures and primaries, piggybacks, hyperals, syringes, and chemotherapy. For one type, admixtures for example, the user might define two coverage periods; one from 1200 to 0259 and another from 0300 to 1159 (this would mean that the user has two manufacturing times for admixtures).

**CPRS** 

A VistA computer software package called Computerized Patient Record Systems. CPRS is an application in VistA that allows the user to enter all necessary orders for a patient in different packages from a single application. All pending orders that appear in the Unit Dose and IV modules are initially entered through the CPRS package.

CrCL

Creatinine Clearance. The CrCL value which displays in the pharmacy header is identical to the CrCL value calculated in CPRS. The formula approved by the CPRS Clinical Workgroup is the following:

Modified Cockcroft-Gault equation using Adjusted Body Weight in kg (if ht > 60in)

This calculation is not intended to be a replacement for independent clinical judgment.

**Critical Drug-Drug Interaction** 

One of two types of drug-drug interactions identified by order checks. The other type is a "significant" drug-drug interaction

**Cumulative Doses** 

The number of IV doses actually administered, which equals the total number of bags dispensed less any recycled, destroyed, or cancelled bags.

**DATUP** 

Data Update (DATUP). Functionality that allows the

Pharmacy Enterprise Customization System (PECS) to send out VA custom and standard commercial-off-the-shelf (COTS) vendor database changes to update the production and pre-production centralized MOCHA databases at Austin and Philadelphia.

**Default Answer** 

The most common answer, predefined by the system to save time and keystrokes for the user. The default answer appears before the two slash marks (//) and can be selected by the user by pressing **Enter**>.

**Dispense Drug** 

The Dispense Drug is pulled from the DRUG file (#50) and usually has the strength attached to it (e.g., Acetaminophen 325 mg). Usually, the name alone without a strength attached is the Orderable Item name.

**Delivery Times** 

The time(s) when IV orders are delivered to the wards.

**Dosage Ordered** 

After the user has selected the drug during order entry, the dosage ordered prompt is displayed.

**DRUG ELECTROLYTES file** 

File #50.4. This file contains the names of anions/cations,

and their concentration units.

**DRUG** file

File #50. This file holds the information related to each drug that can be used to fill a prescription.

**Duration** 

The length of time between the Start Date/Time and Stop Date/Time for an Inpatient Medications order. The default duration for the order can be specified by an ordering clinician in CPRS by using the Complex Dose tab in the Inpatient Medications ordering dialog.

**Electrolyte** 

An additive that disassociates into ions (charged particles) when placed in solution.

**Enhanced Order Checks** 

Drug-Drug Interaction, Duplicate Therapy, and Dosing order checks that are executed utilizing FDB's MedKnowledge Framework APIs and database.

**Entry By** 

The name of the user who entered the Unit Dose or IV order into the computer.

**Hospital Supplied Self Med** 

Self medication, which is to be supplied by the Medical Center's pharmacy. Hospital supplied self med is only prompted for if the user answers Yes to the SELF MED: prompt during order entry.

**Hyperalimentation (Hyperal)** 

Long term feeding of a protein-carbohydrate solution. Electrolytes, fats, trace elements, and vitamins can be added. Since this solution generally provides all necessary nutrients, it is commonly referred to as Total Parenteral Nutrition (TPN). A hyperal is composed of many additives in two or more solutions. When the labels print, they show the individual electrolytes in the hyperal order.

**Infusion Rate** 

The designated rate of flow of IV fluids into the patient.

INPATIENT USER PARAMETERS file

File #53.45. This file is used to tailor various aspects of the Inpatient Medications package with regards to specific users. This file also contains fields that are used as temporary storage of data during order entry/edit.

INPATIENT WARD PARAMETERS file

File #59.6. This file is used to tailor various aspects of the Inpatient Medications package with regards to specific wards.

**Intermittent Syringe** 

A syringe type of IV that is administered periodically to the patient according to an administration schedule.

**Internal Order Number** 

The number on the top left corner of the label of an IV bag in brackets ([]). This number can be used to speed up the entry of returns and destroyed IV bags.

IV ADDITIVES file

File #52.6. This file contains drugs that are used as additives in the IV room. Data entered includes drug generic name, print name, drug information, synonym(s), dispensing units, cost per unit, days for IV order, usual IV schedule, administration times, electrolytes, and quick code information.

IV CATEGORY file

File #50.2. This file allows the user to create categories of drugs in order to run "tailor-made" IV cost reports for specific user-defined categories of drugs. The user can group drugs into categories.

**IV Duration** 

The duration of an order may be entered in CPRS at the IV DURATION OR TOTAL VOLUME field in the IV Fluids order dialog. The duration may be specified in terms of volume (liters or milliliters), or time (hours or days). Inpatient Medications uses this value to calculate a default stop date/time for the order at the time the order is finished.

**IV Label Action** 

A prompt, requesting action on an IV label, in the form of "Action ()", where the valid codes are shown in the parentheses. The following codes are valid:

- P Print a specified number of labels now.
- B Bypass any more actions.
- S Suspend a specified number of labels for the IV room

to print on demand.

**IV Room Name** The name identifying an IV distribution area.

IV SOLUTIONS file File #52.7. This file contains drugs that are used as primary

> solutions in the IV room. The solution must already exist in the DRUG file (#50) to be selected. Data in this file includes: drug generic name, print name, status, drug information,

synonym(s), volume, and electrolytes.

**IV STATS file** File #50.8. This file contains information concerning the IV

> workload of the pharmacy. This file is updated each time the COmpile IV Statistics option is run and the data stored is

used as the basis for the AMIS (IV) report.

**Label Device** The device, identified by the user, on which computer-

generated labels will be printed.

**Local Possible Dosages** Free text dosages that are associated with drugs that do not

meet all of the criteria for Possible Dosages.

**LVP** Large Volume Parenteral — Admixture. A solution intended

for continuous parenteral infusion, administered as a vehicle for additive(s) or for the pharmacological effect of the solution itself. It is comprised of any number of additives, including zero, in one solution. An LVP runs continuously, with another bag hung when one bottle or bag is empty.

**Manufacturing Times** The time(s) that designate(s) the general time when the

> manufacturing list will be run and IV orders prepared. This field in the SIte Parameters (IV) option (IV ROOM file (#59.5)) is for documentation only and does not affect IV

processing.

**MEDICATION** 

194

File #57.7. This file contains wards, the teams used in the **ADMINISTERING TEAM file** 

administration of medication to that ward, and the

rooms/beds assigned to that team.

**MEDICATION** File #51. This file is used by Outpatient Pharmacy and Unit **INSTRUCTION file** 

Dose Special Instructions. (Not used by IV Other Print Info.) It contains the medication instruction name, expansion, and

intended use.

**MEDICATION ROUTES file** File #51.2. This file contains medication route names. The

> user can enter an abbreviation for each route to be used at their site. The abbreviation will most likely be the Latin

abbreviation for the term.

Medication Routes/Abbreviations Route by which medication is administered (e.g., oral). The MEDICATION ROUTES file (#51.2) contains the routes and abbreviations, which are selected by each VAMC. The abbreviation cannot be longer than five characters to fit on labels and the MAR. The user can add new routes and abbreviations as appropriate.

**Non-Formulary Drugs** 

The medications that are defined as commercially available drug products not included in the VA National Formulary.

**Non-VA Meds** 

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.

**Non-Verified Orders** 

Any order that has been entered in the Unit Dose or IV module that has not been verified (made active) by a nurse and/or pharmacist. Ward staff may not verify a non-verified order.

**Orderable Item** 

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).

**Order Check** 

Order checks (drug-allergy/ADR interactions, drug-drug interactions, duplicate drug, and duplicate drug class) are performed when a new medication order is placed through either the CPRS or Inpatient Medications applications. They are also performed when medication orders are renewed, when Orderable Items are edited, or during the finishing process in Inpatient Medications. This functionality will ensure the user is alerted to possible adverse drug reactions and will reduce the possibility of a medication error.

**Order Sets** 

An Order Set is a set of N pre-written orders. (N indicates the number of orders in an Order Set is variable.) Order Sets are used to expedite order entry for drugs that are dispensed to all patients in certain medical practices and procedures.

**Order View** 

Computer option that allows the user to view detailed information related to one specific order of a patient. The order view provides basic patient information and identification of the order variables.

**Parenteral** 

Introduced by means other than the digestive track.

#### **Patient Profile**

A listing of a patient's active and non-active Unit Dose and IV orders. The patient profile also includes basic patient information, including the patient's name, social security number, date of birth, diagnosis, ward location, date of admission, reactions, and any pertinent remarks.

#### **PECS**

Pharmacy Enterprise Customization System. A Graphical User Interface (GUI) web-based application used to research, update, maintain, and report VA customizations of the commercial-off-the-shelf (COTS) vendor database used to perform Pharmacy order checks such as drug-drug interactions, duplicate therapy, and dosing.

### **Pending Order**

A pending order is one that has been entered by a provider through CPRS without Pharmacy or Nursing finishing the order. Once Pharmacy or Nursing has finished and verified the order, it will become active.

#### **PEPS**

Pharmacy Enterprise Product System. A re-engineering of pharmacy data and its management practices developed to use a commercial off-the-shelf (COTS) drug database, currently First DataBank (FDB) MedKnowledge, to provide the latest identification and safety information on medications.

# **Pharmacist Intervention**

A recommendation provided by a pharmacist through the Inpatient Medications system's Intervention process acknowledging the existence of a critical drug-drug interaction and/or allergy/ADR interaction, and providing justification for its existence. There are two ways an intervention can be created, either via the Intervention Menu, or in response to Order Checks.

## PHARMACY SYSTEM file

File #59.7. This file contains data that pertains to the entire Pharmacy system of a medical center, and not to any one site or division.

#### **Piggyback**

Small volume parenteral solution for intermittent infusion. A piggyback is comprised of any number of additives, including zero, and one solution; the mixture is made in a small bag. The piggyback is given on a schedule (e.g., Q6H). Once the medication flows in, the piggyback is removed; another is not hung until the administration schedule calls for it.

#### **Possible Dosages**

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 VA PRODUCT file (#50.68). The VA PRODUCT file (#50.68) 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.

**Pre-Exchange Units** 

The number of actual units required for this order until the next cart exchange.

**Primary Solution** 

A solution, usually an LVP, administered as a vehicle for additive(s) or for the pharmacological effect of the solution itself. Infusion is generally continuous. An LVP or piggyback has only one solution (primary solution). A hyperal can have one or more solutions.

**Print Name** 

Drug generic name as it is to appear on pertinent IV output, such as labels and reports. Volume or Strength is not part of the print name.

**Print Name{2}** 

Field used to record the additives contained in a commercially purchased premixed solution.

**Profile** 

The patient profile shows a patient's orders. The Long profile includes all the patient's orders, sorted by status: active, non-verified, pending, and non-active. The Short profile will exclude the patient's discontinued and expired orders.

**Prompt** 

A point at which the system questions the user and waits for a response.

**Provider** 

Another term for the physician/clinician involved in the prescription of an IV or Unit Dose order for a patient.

**Provider Override Reason** 

A reason supplied by a provider through the CPRS system, acknowledging a critical drug-drug interaction and/or allergy/ADR interaction and providing justification for its existence.

**PSJI MGR** 

The name of the *key* that allows access to the supervisor functions necessary to run the IV medications software. Usually given to the Inpatient Medications package coordinator.

PSJI PHARM TECH

The name of the *key* that must be assigned to pharmacy technicians using the IV module. This key allows the technician to finish IV orders, but not verify them.

**PSJI PURGE** The *key* that must be assigned to individuals allowed to

purge expired IV orders. This person will most likely be the

IV application coordinator.

**PSJI RNFINISH** The name of the *key* that is given to a user to allow the

finishing of IV orders. This user must also be a holder of the

PSJ RNURSE key.

**PSJI USR1** The *primary menu option* that may be assigned to nurses.

**PSJI USR2** The *primary menu option* that may be assigned to

technicians.

**PSJU MGR** The name of the *primary menu* and of the *key* that must be

assigned to the pharmacy package coordinators and supervisors using the Unit Dose Medications module.

**PSJU PL** The name of the *key* that must be assigned to anyone using

the Pick List options.

**PSJ PHARM TECH** The name of the *key* that must be assigned to pharmacy

technicians using the Unit Dose Medications module.

**PSJ RNFINISH** The name of the *key* that is given to a user to allow the

finishing of a Unit Dose order. This user must also be a

holder of the PSJ RNURSE key.

**PSJ RNURSE** The name of the *key* that must be assigned to nurses using

the Unit Dose Medications module.

**PSJ RPHARM** The name of the *key* that must be assigned to a pharmacist to

use the Unit Dose Medications module. If the package coordinator is also a pharmacist he/she must also be given

this key.

Quick Code An abbreviated form of the drug generic name (from one to

ten characters) for IV orders. One of the three drug fields on

which lookup is done to locate a drug. Print name and

synonym are the other two. Use of quick codes will speed up

order entry, etc.

**Report Device** The device, identified by the user, on which computer-

generated reports selected by the user will be printed.

**Schedule** The frequency of administration of a medication (e.g., QID,

QDAILY, QAM, STAT, Q4H).

Schedule Type Codes include: O - one time (i.e., STAT - only once), P -

PRN (as needed; no set administration times). **C**- continuous (given continuously for the life of the order; usually with set administration times). **R** - fill on request (used for items that

are not automatically put in the cart - but are filled on the nurse's request. These can be multidose items (e.g., eye wash, kept for use by one patient and is filled on request when the supply is exhausted)). And **OC** - on call (one time with no specific time to be given, i.e., 1/2 hour before surgery).

Scheduled IV Order

Inpatient Medications IV order having an administration schedule. This includes the following IV Types: IV Piggyback, Intermittent Syringe, IV Piggyback Chemotherapy, and Intermittent Syringe Chemotherapy.

**Self Med** 

Medication that is to be administered by the patient to himself.

**Standard Schedule** 

Standard medication administration schedules stored in the ADMINISTRATION SCHEDULE file (#51.1).

**Start Date/Time** 

The date and time an order is to begin.

Status

A - active, E - expired, R - renewed (or reinstated), D - discontinued, H - on hold, I - incomplete, or N - nonverified, U - unreleased, P - pending, O - on call, , DP-discontinued by provider through CPRS, DE- discontinued due to edit via backdoor pharmacy (unit Dose orders only), DF- discontinued due to edit by provider through CPRS, DD- auto discontinued due to death, DA- auto discontinued due to patient movements, HP- placed on hold due to provider CPRS, DE - discontinued edit, RE - reinstated, DR - discontinued renewal.

**Stop Date/Time** 

The date and time an order is to expire.

**Stop Order Notices** 

A list of patient medications that are about to expire and may require action.

**Syringe** 

Type of IV that uses a syringe rather than a bottle or bag. The method of infusion for a syringe-type IV may be continuous or intermittent.

**Syringe Size** 

The syringe size is the capacity or volume of a particular syringe. The size of a syringe is usually measured in number of cubic centimeters (ccs).

**TPN** 

Total Parenteral Nutrition. The intravenous administration of the total nutrient requirements of the patient. The term TPN is also used to mean the solution compounded to provide those requirements.

**Units per Dose** 

The number of Units (tablets, capsules, etc.) to be dispensed

as a Dose for an order. Fractional numbers will be accepted.

VA Drug Class Code A drug classification system used by VA that separates drugs

into different categories based upon their characteristics. IV

cost reports can be run for VA Drug Class Codes.

**VDL** Virtual Due List. This is a Graphical User Interface (GUI)

application used by the nurses when administering

medications.

Ward Group A ward group indicates inpatient nursing units (wards) that

have been defined as a group within Inpatient Medications to

facilitate processing of orders.

**WARD GROUP file** File #57.5. This file contains the name of the ward group,

and the wards included in that group. The grouping is necessary for the pick list to be run for specific carts and

ward groups.

Ward Group Name A field in the WARD GROUP file (#57.5) used to assign an

arbitrary name to a group of wards for the pick list and

medication cart.

**WARD LOCATION file** File #42. This file contains all of the facility ward locations

and their related data, i.e., Operating beds, Bed section, etc.

The wards are created/edited using the Ward Definition

option of the ADT module.

# 11 Index

### 1

14 Day MAR Report, 142, 14314 Day MAR Report Example, 145

## 2

24 Hour MAR Report, 128, 130, 131, 138 24 Hour MAR Report Example, 131

## 7

7 Day MAR Report, 136, 137, 138 7 Day MAR Report Example, 139

# Α

Abbreviated Order Entry, 26, 27 Action Area, 6, 13, 21, 24, 61 Action Profile #1 Report, 148 Action Profile #1 Report Example, 149 Action Profile #2 Report Example, 151 Activity Log, 61, 66, 73, 81, 88, 91 Activity Log Example, 81 Additive, 40, 41, 88, 93, 165, 172, 176, 178, 181 Administration Schedule, 44, 72, 172 Administration Team, 129, 136, 142, 148 Administration Time, 86 Administration Times, 44, 65, 87, 129, 136, 142 Admixture, 40, 41, 173, 174, 175, 178 Adverse Reaction Tracking (ART) Package, 50 Align Labels (Unit Dose), 163 Align Labels (Unit Dose) Example, 163 Allergy Order Checks, 99 Asterisk, 60, 64, 66 Auto-Verify, 71

### В

BCMA, 1, 44, 61 BCMA Virtual Due List (VDL), 71

### C

CPRS Order Checks Introduction, 167 CPRS Order Checks: How They Work, 167 CPRS Provider Overrides, 28 Critical Drug-Drug Interaction, 175 critical drug-drug interactions, 50 CWAD Indicator, 5, 6

#### D

Default Start Date Calculation Default Start Date Calculation = NOW, 148 Default Stop Date, 25, 46, 114, 125, 126 Default Stop Date/Time, 46 Detailed Allergy/ADR List, 50, 171 Discontinue All of a Patient's Orders, 89 Discontinue an Order, 61 Discontinue an Order Example, 62 Discontinuing a Pending Renewal, 80 Dispense Drug, 26, 27, 28, 40, 41, 64, 66, 72, 73, 87, 88, 93, 176, 179 Dispense Drug Look-Up, 165 Dispense Drug Look-Up Example, 165 Dispense Log, 81 DONE Order, 45 Dosage Ordered, 26, 28, 29, 66, 176 Dosing Order Checks, 112 Drug File, 26, 88, 165 Drug Prompt, 26 Drug Text Indicator, 27, 40, 41

### Ε

Edit an Order, 64
Edit an Order Example, 64, 65
Edit Inpatient User Parameters, 58, 125
Edit Patient's Default Stop Date, 125
Enter/Edit Allergy/ADR Data, 50
Error Information, 169
Error Messages, 169
Expected First Dose, 87

### F

Finish an Order, 82 Finish an Order With a Duration Example, 85 Finish an Order Without a Duration Example, 83 Flag an Order, 88 Flag an Order Example, 89 Free Text Dosage, 157

#### G

Glossary, 171

#### Н

Header Area, 6

Hidden Actions, 4, 7 History Log, 64, 81	N
Hold, 3, 12, 22, 50, 73, 90, 172	Nature of Order, 27, 37, 46
Hold All of a Patient's Orders, 90	New Order Entry, 25
Hold All of a Patient's Orders Example, 90	New IV Order Entry Example, 47
Hold an Order Francis 73	New Unit Dose Order Entry Example, 37
Hold an Order Example, 73	Non-Formulary Status, 27, 40, 41, 64, 72, 73, 87
Take All of a Patient's Orders Off of Hold Example, 90	Non-Verified Order, 6
Hyperal, 40, 41, 175, 176, 181	Non-Verified/Pending Orders, 11, 13, 25, 55
1	Non-Verified/Pending Orders Example, 14
Infinite Data 41 42	0
Infusion Rate, 41, 43	OCT 0
Inpatient Medication Orders for Outpatients, 46, 136, 142, 148	OCI, 9
Inpatient Narrative, 24	OCXCACHE, 167
Inpatient Narrative, 24 Inpatient Order Entry, 3, 6, 7, 11, 12, 22, 25, 40, 55, 88	Order Actions, 61
Inpatient Order Entry, 5, 6, 7, 11, 12, 22, 23, 40, 33, 88  Inpatient Order Entry Example, 22	Order check
Inpatient Order Entry Example, 22 Inpatient Profile, 90, 164	data caching, 167 OCXCACHE, 167
Inpatient Profile Example, 91	•
Inpatient Stop Order Notices Example, 158	XTMP, 167 Order Cheek, 26, 02, 03, 170
Inpatient User Parameters File, 58, 72	Order Check, 26, 92, 93, 179 Drug-Allergy Interactions, 26, 92, 93, 94
Inpatient Ward Parameters, 36, 37, 45	Drug-Drug Interactions, 26, 92, 93
Inquiries Menu, 165	Duplicate Class, 26, 92, 93
Inquiries Menu Example, 165	Duplicate Orug, 93
Intermittent Syringe, 44	Order Check Data Caching, 167
Intervention, 50, 173	Order Check/Interventions, 9
Intervention Menu, 50, 171	Order Checks/Interventions (OCI) indicator, 27
Delete an Intervention Example, 52	Order Entry, 9, 11, 12, 25, 26, 90
Edit an Intervention Example, 51	Order Locks, 11
New Intervention Example, 50	Order Options, 11
Print an Intervention Example, 53	Order Set, 26, 27
View an Intervention Example, 53, 89	Orderable Item, 26, 27, 40, 41, 43, 64, 66, 72, 73, 87, 88,
Introduction, 1	126, 176, 179
IRMS, 40	Orientation, 3
IV Additives, 46, 177	Other Print Info, 44, 45
IV Duration, 177	
IV Flag, 88	Р
IV Room, 22, 45, 91, 172, 177, 178	•
IV Solution, 41, 172	Parenteral, 40, 172, 178, 180
IV Type, 40, 41, 46	Patient Action, 13, 21, 24
	Patient Actions, 24
L	Patient Information, 6, 13, 23, 42, 59, 171
	Patient Information Example, 59
Label Print/Reprint, 164	Patient Information Screen Example, 13, 24
Large Volume Parenteral (LVP), 40, 178	Patient Lock, 11, 25
List Area, 6	Patient Record Update, 24
List Manager, 5, 6, 7, 24, 61	Patient Record Update Example, 24
Local Possible Dosages, 28, 178	Pharmacist Intervention, 180
Local Possible Dosages Example, 29	Pick List, 1, 71, 182, 184
	Pick List Menu Example, 114
M	Piggyback, 40, 41, 44, 173, 174, 175, 180, 181
	Possible Dosages, 28, 178, 180
Maintenance Options, 125	Possible Dosages Example, 28
Medication Administration Records (MARs), 1	Priority, 6, 15, 16, 19, 55
Medication Routes, 43, 88, 178	Provider, 27, 37
Menu Option, 3	Provider Comments, 45
Menu Tree, viii	PSJ RNFINISH Key, 15, 22, 82, 88
Message Window, 6, 64	PSJ RNURSE Key, 3, 21, 182
	PSJ RPHARM Key, 50
	PSJI RNFINISH Key, 15, 22, 82

PSJU PL Key, 125 Standard Schedules, 166 Standard Schedules Example, 166 Start Date/Time, 45, 62, 66, 183 Q Stop Date/Time, 36, 46, 47, 61, 64, 66, 81, 82, 183 Syringe, 40, 173, 174, 175, 177, 183 Quick Code, 40, 165, 177 Т R Table of Contents, vi Regular Order Entry, 26 Topic Oriented Section, viii Renew an Order, 74, 75 Active Orders, 76 Complex Orders, 78 U Discontinued Orders, 76 Expired Continuous IV Orders, 78 Unit Dose Medications, 3, 11, 12, 125, 165 Expired Scheduled IV Orders, 77 Unit Dose Order Entry Profile, 9 Expired Unit Dose Orders, 77 Units Per Dose, 29 Viewing Renewed Orders, 79 Renewing Orders V with CPRS Overrides/Pharmacist Interventions, 75 Requested Start Date/Time, 85, 87 VA Drug Class Code, 165 Requested Stop Date/Time, 85 VA FORM 10-1158, 149, 151 Revision History, i VA FORM 10-2970, 138 VA FORM 10-5568d, 138 S VDL, 44, 71, 184 Verify an Order, 71 Schedule, 44, 138, 144, 166, 177, 180 Verify an Order Example, 72 Screen Prompts, 3 View Profile, 13, 24, 55, 171 Screen Title, 5, 6 View Profile Example, 55 Select Action, 6, 7, 13, 21, 24 VistA, 25, 175 Select Allergy, 50 Volume, 40 Select Order, 57, 60, 171 Select Order Example, 60 W Self Med, 37 Short Profile Example, 16 Ward, 15, 90, 129, 148, 164 Solution, 40, 41, 88, 93, 165, 173, 176, 178, 180, 181, 183 Speed Actions, 89 Ward Group Sort Speed Discontinue, 172

Ward Group, 14, 15, 90, 91, 129, 136, 142, 148, 164, 184 ^OTHER, 15, 148 Ward Stock, 138, 144



XTMP, 167

Speed Finish, 172

Speed Renew, 172 Speed Verify, 172

Speed Discontinue, 89 Speed Finish, 82, 89

Speed Renew, 89 Speed Verify, 89