



# **INPATIENT MEDICATIONS**

## **PHARMACIST'S USER MANUAL**

Version 5.0  
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Department of Veterans Affairs  
Product Development

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Date	Revised Pages	Patch Number	Description
	225-238 239-246		Updated Glossary Updated Index (G. Tucker, PM; S. Heiress, Tech Writer)
09/2012	i-vii, 12, 12a-12b, 14, 14a-14b, 17, 17a-17b, 25b-25d, 27, 28, 28a-28b, 29, 55, 64, 64a-64b, 66, 66a-66b, 71, 71a-71b, 119, 119a-119b, 231	PSJ*5*267	Added No Allergy Assessment logic  Updated Special Instructions/Other Print Info (R. Singer, PM; B. Thomas, Tech Writer)
01/2012	i, v-vii, 10, 21, 25, 29, 42a, 49, 56, 56a, 75, 89, 99, 106-106b, 124c, 124f-124g, 124k-124l, 124x, 124y-124z, 224, 228, 232, 233, 234, 239-244	PSJ*5*254	Updated Table of Contents Added Order Checks/Interventions (OCI) to “Hidden Actions” section Defined OCI Indicator Updated Schedule Type text Updated text under Interventions Menu Updated Pharmacy Interventions for Edit, Renew, and Finish orders for Unit dose and IV  Added note to Drug-Drug Interactions Added note to Drug-Allergy Interactions Updated Allergy/ADR Example Order Checks Added “Display Pharmacist Intervention” section Defined Historical Overrides/Interventions Updated Glossary  Updated Index (R. Singer PM, C Bernier Tech Writer)
09/2011	58	PSJ*5*235	Updated ‘Note’ section regarding Expected First Dose Scott PM, G. Werner Tech Writer)
07/2011	i, 16, 246	PSJ*5*243	Update Revision History Update Index Revised the existing display in the <i>Non-Verified/Pending Orders</i> [PSJU VBW] option from a pure alphabetic listing of patient names, to a categorized listing by priority. Added “priority” to Index. (N. Goyal, PM; E. Phelps/John Owczarzak, Tech Writers)
04/2011	i, v-vii, 9, 15-15b	PSJ*5*181	Updated Revision History Updated Table of Contents New: Intervention Menu New: Example: Ward Group Sort option ^OTHER for Patient and Example: Ward Group Sort option ^OTHER for Order

Date	Revised Pages	Patch Number	Description
	17		Updated: Example: Patient Information Screen
	19		Update: "Select DRUG"
	20		Note was updated
	21		Updated: Example: Dispense Drug with Possible Dosages and Example: Dispense Drug with Local Possible Dosages
	27-28		Updated: Example: New Order Entry
	30		Updated: Example: New Intervention
	31		Updated: Example: Edit an Intervention
	32		Updated: Example: Delete an Intervention
	33		Updated: Example: View an Intervention
	34		Updated: Example: Print an Intervention
	35-36b		New: Discontinued Codes and Example of Inpatient Order Entry
	37		New: Example: Patient Information
	40		Updated: 4.1.5.1 Discontinue
	41		Updated: Example: Discontinue an Order (continued)
	46		Updated: Example: Verify an Order (continued)
	61-62b		Updated: 4.1.8 Inpatient Profile, Discontinued Codes, & example
	65		Updated: Example: Patient Information
	66		Updated: Example: Patient Record
	67		Updated: Example: Patient Information
	73-74		Updated: Example: New Order Entry
	76		Updated: Example: New Intervention
	77		Updated: Example: Edit an Intervention
	78		Updated: Example: Delete an Intervention
	79		Updated: Example: View an Intervention
	80		Updated: Example: Print an Intervention
	81		Updated: 4.2.3.5 View Profile
	83		Updated: Example: Patient Information
	98		Updated: 4.1.5.4 Hold
	118		Updated text
	120-120b		Updated: 4.2.7. Inpatient Profile, Discontinued Codes, & example
	122		Updated: Example: Inpatient Profile
	123-124v		Updated: 4.3. Order Checks
	125		Added Note
	136		Updated: Example: Extra Units Dispensed Report
	137		Updated: Example: Reporting Medication Returns
	153		Updated: Example: Patient Profile
	190		Updated: Example: Extended Patient Profile Report
	192a-192b		Updated: 8.1.5. Patients on Specific Drug(s)
	194-195		Updated: Example: IV Individual Labels
	196-196d		New: Example: IV Individual Labels (Print New Labels)
	219-220		New: 10. CPRS Order Checks – How They Work
	221-222		New: 11. Error Messages
	223-238		Updated: Glossary page numbering
	239-246		Updated: Index & page numbering

Date	Revised Pages	Patch Number	Description
			(C. Flegel, developer; S. Heiress, Tech Writer)
9/2010	i-ii, 174	PSJ*5*232	Deleted paragraph referring to Start/Stop date prompts of Action Profile #1 option as this is not how the option works. (A. Scott, PM; G. Werner, Tech Writer)
06/2010	i-v, 33-34, 25a-25d, 124a-124b, 124e-124f, 239-241	PSJ*5*113	Added new Order Validation Requirements.  Removed Duplicate Order Check Enhancement functionality, (removed in a prior patch). (R. Singer, DM, B. Thomas, Tech Writer)
02/2010	i-ii, iv-v, 192a-b, 214a-b, 239-241	PSJ*5*214	Updated Table of Contents to include new sections. Added new sections 8.1.5 and 8.2.4 to reference <i>Patients on Specific Drug(s)</i> option that is now commonly used by pharmacists who may have been assigned this option directly and not as part of the Supervisor's Menu. Added <i>Patients on Specific Drug(s)</i> option to the Index. (C. Willette, DM; R. Silverman/D. Dertien, Tech Writer)
12/2009	56, 56a, 56b iii	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	43	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	226	PSJ*5*196	Update to IV Duration (A. Scott, PM; G. Werner, Tech Writer)
0829 /2008	iii, 20-27, 54, 68-76, 94-95, 104-106, 236, 240-241	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	iii, 124 a-d 5, 17-18, 27- 28, 30-34, 37-38, 65-68, 76-80, 83-84, 119- 120, 123- 124, 149- 150, 195- 196, 209-210	PSJ*5*175  PSJ*5*160	Modified outpatient header text for display of duplicate orders. Added new functionality to Duplicate Drug and Duplicate Class Order Check definitions.  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)

<b>Date</b>	<b>Revised Pages</b>	<b>Patch Number</b>	<b>Description</b>
07/2007	155a-155b, 162a-162b, 168a-168b	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	25	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, 124-124b	PSJ*5*146	Remote Data Interoperability (RDI) Project: Removed document revision dates in Section 1. Introduction. Updated Section 4.3. Order Checks to include new functionality for checking allergies, drug reactions, and interactions. (E. Williamson, PM; M. Newman, Tech. Writer)
03/2005	iv-vii, 114-116, 223, 236-241	PSJ*5*112	Updated TOC to correct Index page number. (p. iv) In Unit Dose Menu Tree, changed Clinic Stop Dates to Clinic Definition. (p. v) In Section 1., Introduction, updated revision dates and added reference to Release Notes. (p. 1) In Sections 4.2.5.1., 4.2.5.3., and 4.2.5.3., added a sentence that refers to the IMO parameter NUMBER OF DAYS UNTIL STOP from the CLINIC DEFINITION file. (p.114-116) Updated Glossary; added definition for CLINIC DEFINITION File. (p. 223) Updated Index; added CLINIC DEFINITION file and Inpatient Medication Orders for Outpatients page number references; reflowed all following Index pages. (p. 236-241) (S. Templeton, PM, R. Singer, PM, M. Newman, Tech. Writer)
01/2005	All	PSJ*5*111	Reissued entire document to include updates for Inpatient Medication Orders for Outpatients and Non-Standard Schedules. (S. Templeton, PM, R. Singer, PM, M. Newman, Tech. Writer)

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



**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.

- **“Select SOLUTION:”**

There can be any number of solutions in any 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 an opportunity to add one. The pharmacist 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:”**

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 pharmacist 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/hour (IV system will calculate bags needed per day), 125@2 = 125 ml/hour with 2 labels per day, Titrant@1 = Titrant 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/hour 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:”**

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)



**Note:** Order entry will permit the entry of a Day-of-Week schedule in the following format: days@schedule name (e.g. MO-WE-FR@BID, TU@Q6H).



**Note:** Inpatient Medications will translate a Day of Week schedule into appropriate administration times. For example: “MO-WE-FR@BID” is translated to “MO-WE-

### Example: Edit an Order and Create a New Order (continued)

```
-----
Patient: PSJPATIENT1,ONE                               Status: ACTIVE
* (1) Additives:                Order number: 42        Type: PIGGYBACK
      MVI 1 ML
(2) Solutions:
      DEXTROSE 10% 1000 ML
      Duration: TST ISC ROOM                            * (4) Start: 04/02/01 20:56
(3) Infusion Rate: INFUSE OVER 8 HOURS.
* (5) Med Route: IVPB                                    * (6) Stop: 04/03/01 24:00
* (7) Schedule: QDAILY                                  Last Fill: *****
(8) Admin Times: 1440                                   Quantity: 0
* (9) Provider: PSJPROVIDER,ONE [es]                   Cum. Doses:
* (10) Orderable Item: MVI INJ
      Instructions:
(11) Other Print:

(12) Remarks :
      Entry By: PSJPROVIDER,ONE                          Entry Date: 04/02/01 20:56
Enter RETURN to continue or '^' to exit: <Enter>
(A)ctivity (L)abel (H)istory: ^
```

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

### Change the Volume of a Solution

There are times when the pharmacist will need to change the volume of the solution for one specific order. The syringe type of order does have a separate volume prompt so the user will not have to add any steps. For other types, the user can simply enter an order and then edit it to change the volume, or use the following method:

An order calls for 25 ML of D5W, but when D5W is selected, there is no solution in the file with that volume.

- Choose the solution that is most like the one needed (e.g., D5W 50 ML). In this example, D5W 50 ML is now the selected solution.
- At the next prompt, enter the characters <^SOL> and choose the solution just entered.
- The next prompt is “SOLUTION: (DEFAULT) //”. Enter the characters <^VOL>.
- The prompt “VOLUME: (DEFAULT) //” will be displayed.
- Change the volume for this specific order to the desired volume (the example below shows 25). The terminal dialog follows:

### Example: Change the Volume of a Solution

```
Select SOLUTION:  D5W      50ML
INFUSION RATE:   ^SOL
Select SOLUTION: D5W//    <Enter>
SOLUTION:  D5W //      <Enter>
VOLUME:   50 ML //    25      ML
```

## 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

```
Is this O.K.: Y// y YES
NATURE OF ORDER: SERVICE CORRECTION// SERVICE CORRECTION S

** Edit to PROVIDER has caused the following IV labels to be invalidated **
(Invalid IV labels cannot be reprinted or marked as Infusing in BCMA)

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 YES
```

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      YES

```

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

```
(A)ctivity (L)abel (H)istory (I)nstructions History: Label Log
LABEL LOG:
# DATE/TIME ACTION USER #LABELS TRACK COUNT
=====
1 FEB 26,2013@16:69:53
DISPENSED HARRIS,JAMES 3 ORDER ACTION YES
Enter RETURN to continue or '^' to exit:
Unique IDs for this order:
Label Date/Time Unique ID Available
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.

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#### 4.2.4.3. Verify

Orders must be accepted and verified before they can become active and are included on the BCMA VDL. If AUTO-VERIFY is enabled for the pharmacist, 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, and are included on the BCMA VDL.

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.

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.



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



**Note:** AUTO-VERIFY is controlled by the ALLOW AUTO-VERIFY FOR USER field in the INPATIENT USER PARAMETERS file. For more information on the Auto-Verify function, see the Edit User Parameters section of the Pharmacy Supervisor Manual.



**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:

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

## 4.5. 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

### 4.5.1. 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:)

#### 4.5.2. 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

Entry Result	System Prompt	User Entry
C	“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.

#### 4.5.3. 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 - BECKY'S 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:

#### 4.5.9.1. 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

```
Select Action:Next Screen// es Edit Start Date
Select Orders: (1-5): 2

Orders with ON CALL Status cannot be edited - no changes will be applied
to any of the following orders with ON CALL status:
ON CALL Status orders: Current Start / Stop Dates
-----
< GENTAMICIN 07/18/12 07/23/12
in INFUSE OVER 5 MINUTES>

Press Return to continue...
```

#### 4.5.9.2. 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

```
Select Action:Next Screen// es Edit Start Date
Select Orders: (1-3): 1-2

ON HOLD orders cannot be edited - no changes will be applied
to any of the following ON HOLD orders:
ON HOLD orders: Current Start / Stop Dates
-----
<ACETAMINOPHEN 07/21/12 07/26/12
Give: 10 MG PO Q4H>

Press Return to continue...
```

#### 4.5.9.3. 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

```
Select Action:Next Screen// es Edit Start Date
Select Orders: (1-5): 2

Complex Orders cannot be edited - no changes will be applied
to any of the following Complex order components:
Complex Component (Child) Orders: Current Start Date/Time
-----
<LANOLIN 06/01/12 17:00
Give: 25 MG TOP 5XD>

Press Return to continue...
```

#### 4.5.9.4. 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.

#### 4.5.9.5. 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.

#### 4.5.9.6. 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.

#### 4.5.9.7. System Auto Adjusts the Start Time to the Current Time

The system will auto adjust the start date/time to “NOW” for pending CPRS 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.

#### 4.5.9.8. Pharmacist Selecting Active Orders with Auto Verify Off

The message below, with entry prompt, displays if a pharmacist selects orders from the clinic order entry view, with auto verify off.

##### Example: Selecting Active Orders with Auto Verify Off

```
* ATTENTION: One or more selected orders have an ACTIVE status. *
You may choose to have ACTIVE orders remain ACTIVE after editing, or
you may choose to have the status of ACTIVE orders changed to NON-VERIFIED.

Should ACTIVE orders remain ACTIVE after editing?
```

- If the user answers “YES,” the med order is auto verified and maintained in active status, after the Start Date/Time update.

- If the user answers “NO,” the selected active order(s) is assigned to non-verified status, after the Start Date/Time update.

**Example: Active Orders Assigned Non-Verify after Editing**

All selected orders will have a status of NON-VERIFIED after editing

Enter new Start Date/Time:

**4.5.9.9. Technician Selecting Active Orders with Auto Verify On or Off**

The message below, with entry prompt, displays if a technician selects orders from the clinic order entry view, with auto verify on or off. If the technician changes the order(s) start date, the status of Active orders changes to non-verified.

**Example: Selecting Active Orders with Auto Verify On or Off**

Attention: One or more selected orders have an ACTIVE status. If you continue, the status of ACTIVE orders will be changed to NON-VERIFIED.

Continue editing orders? ?

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### **.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. Users may 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.

### **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. Inpatient Medications receives the parent order number from CPRS and links the child orders together. If an action of FN (Finish), VF (Verify), DC (Discontinue), or RN (Renew) is taken on one child order, the action must be taken on all of the associated child orders. For example:

- If one child order within a Complex Order is made active, all child orders in the Complex Order must be made active.
- If one child order within a Complex Order is discontinued, all child orders in the Complex Order must be discontinued.
- If one child order within a Complex Order is renewed, all child orders in the Complex Order must be renewed.

<b>Continuous IV Order</b>	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.
<b>Continuous Syringe</b>	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.
<b>Coverage Times</b>	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).
<b>CPRS</b>	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.
<b>CrCL</b>	<p>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:</p> <p>Modified Cockcroft-Gault equation using Adjusted Body Weight in kg (if ht &gt; 60in)</p> <p>This calculation is not intended to be a replacement for independent clinical judgment.</p>
<b>Critical Drug-Drug Interaction</b>	One of two types of drug-drug interactions identified by order checks. The other type is a “significant” drug-drug interaction
<b>Cumulative Doses</b>	The number of IV doses actually administered, which equals the total number of bags dispensed less any Recycled, Destroyed, or Cancelled bags.

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