



BAR CODE MEDICATION ADMINISTRATION (BCMA)

MANAGER'S USER MANUAL

Version 3.0
February 2004

(Revised December 2013)

Department of Veterans Affairs

Product Development

Revision History

Each time this manual is updated, the Title Page lists the new revised date and this page describes the changes. If the Revised Pages column lists “All,” replace the existing manual with the reissued manual. If the Revised Pages column lists individual entries (e.g., 25, 32), either update the existing manual with the Change Pages Document or print the entire new manual.

Date	Revised Pages	Patch Number	Description
12/2013	i-ii, 2, 12, 13, 13a-13b, 14a	PSB*3*70	<p>Updated BCRO address link.</p> <p>Added site parameter to allow sites to be able to assign a specific clinic order missing dose request printer to a specific clinic, so that all missing dose requests for that clinic will print at that defined clinic location. Sites will also be able to assign a division clinic order missing dose request printer, so that all clinic order missing dose requests in the division will print on that printer.</p> <p>Renamed “Missing Dose Request Printer” parameter in BCMA Parameters to “Inpatient Missing Dose Request Printer.”</p> <p>Parameters for Allowable Time Limits ignored for Clinic Orders.</p> <p>(R. Santos, PM; R. Thomas, Tech Writer)</p>
09/2012	i, 12, 16	PSB*3*68	<p>Added site parameter to allow sites to select the maximum number of hours that new BCMA site parameter, Injection Site History, will display on the VDL during the administration of injectable medications.</p> <p>(R. Singer, PM, R. Thomas, Tech Writer)</p>
01/2012	i, 8, 12, 14, 14a-14b	PSB*3*58	<p>Added site parameter to allow sites to administer non-nurse verified medication orders with no warnings displayed, to display a warning before administering non-nurse verified medication orders, or to prohibit administration of non-nurse verified medication orders.</p> <p>PRN Effectiveness Entry Parameter maximum increased from 240 to 960 minutes.</p> <p>(R. Singer, PM, R. Thomas, Tech Writer)</p>
01/2011	i, iii-iv, 12-13, 54, 57, 59-64	PSB*3*42	<p>Removed field Scratch HFS Directory from the Parameters Tab, and replaced corresponding Site Parameters screen capture.</p> <p>Added Appendix A describing the new parameter tab created for the Indian Health Service (IHS) project.</p> <p>Updated Glossary and Index for Indian Health Service.</p> <p>(R. Singer, DM, R. Thomas, Tech Writer)</p>

Date	Revised Pages	Patch Number	Description
10/2009	i, iii-iv, 48a-48b, 56	PSB*3*47	Added information for the new <i>Immunizations Documentation by BCMA Nightly Task</i> [PSB PX BCMA2PCE TASK] option that is added to the <i>Bar Code Medication Administration Manager</i> [PSB MGR] menu. PCE added to the glossary. (R. Singer, DM, D. Dertien/R. Silverman, Tech Writer)
01/2009	All	PSB*3*28	Reissue of manual to add new functionality in patch PSB*3*28 including the addition of a new unable to scan option, email notification feature, mode of patient record access and five rights override administration. (R. Singer, PM, R. Thomas, Tech Writer)

Introduction

Benefits of BCMA V. 3.0



TIP:

BCMA is designed to augment, not replace, the clinical judgment of the medication administrator, or clinician.

The Bar Code Medication Administration (BCMA) V. 3.0 software includes routines, files, enhancements, maintenance fixes, and Phase Release changes for BCMA V. 2.0. The enhancements are a direct result of feedback from the BCMA Workgroup and our many end users.

BCMA V. 3.0 software is designed to improve the accuracy of the medication administration process. By automating this process, Department of Veterans Affairs Medical Centers (VAMCS) can expect enhanced patient safety and patient care.

The electronic information that BCMA V. 3.0 provides clinicians improves their ability to administer medications safely and effectively to patients on wards during their medication passes. It also helps to improve the daily communication that occurs between Nursing and Pharmacy staffs.

Benefits of This Manual



TIP:

Only individuals holding the PSB MANAGER security key can access the Bar Code Medication Administration Manager menu.

This manual provides detailed instructions for setting the Graphical User Interface (GUI) BCMA site parameters; using the BCMA Character-based User Interface (CHUI) Manager Option; checking the Drug Internal Entry Number (IEN) Code on Unit Dose medications; entering a reason for a Missing Dose Request; resetting user parameters; and using the Trouble Shoot Med Log.

Our Target Audience

We have developed this manual for individuals within the following groups, who are responsible for managing the site parameter settings for your VAMC.

- Information Resources Management (IRM)
- Clinical Applications Coordinator (CAC) — called Applications Package Coordinator (ADPAC) at some VAMCs
- BCMA Coordinators

Introduction

Other Sources of Information



TIP:

Bookmark these sites for future reference.

Refer to the Web sites listed below when you want to receive more background and technical information about BCMA V. 3.0, and to download this manual and related documentation.

Background/Technical Information

To access the BCMA Bar Code Resource Office (BCRO) home page, access the following link from your Intranet: <http://vaww.va.gov/barcode/>

Training Information

To access BCMA training modules on the National Training and Education Office web site, access the following link from your Intranet: <http://vaww.vistau.med.va.gov/vistau/barcode/default.htm>

This Manual and Related Documentation

To access this manual, and those listed below, from the VHA Software Document Library, access the following link from your Intranet: <http://www.va.gov/vdl/application.asp?appid=84>

- Release Notes
- Installation Guide
- Technical Manual/Security Guide
- BCMA GUI User Manual
- Nursing CHUI User Manual
- Pharmacy CHUI User Manual

Conventions Used in This Manual



TIP:

In a CHUI environment, when you press **ENTER**, instead of typing a response, the system accepts the default value shown to the left of the double slash (//) at a prompt or a field.

Throughout this manual, you will find a variety of elements designed to help you work more efficiently with BCMA 3.0. They include the many conventions listed below.

Keyboard Responses: Keys provided in **boldface**, within the copy, help you quickly identify what to press on your keyboard to perform an action. For example, when you see **ENTER** or **<Enter>** in the copy, press this key on your keyboard.

- **Within the GUI Steps:** Use the **ARROW** keys to Select your division name, and then press **ENTER**.
- **Within the CHUI Steps:** At the “Select User to Reset:” prompt, enter the user’s name and then press **<Enter>**.

Mouse Responses: Buttons provided in **boldface**, within the steps, indicate what you should select on your computer screen using the mouse. For example, when you see **NEXT**, **YES/NO**, or **OK** in the steps, click or select the appropriate button on your computer screen.

Setting Site Parameters for GUI BCMA

Defining and Updating Site Parameters for Your Division (cont.)



TIP:

Modifying the “BCMA On-line” parameter affects *all* users signing on to your division. Multi-division sites must disable access to each site.

Working with the Facility Tab

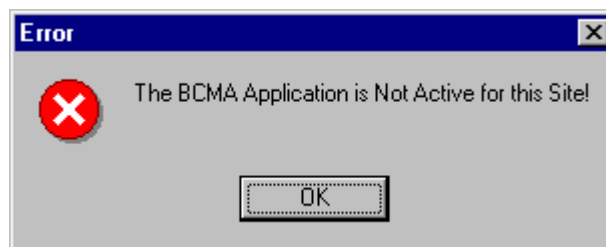
The Facility Tab, on the BCMA Site Parameters Main Screen, provides the following functions:

Facility Information (Read-Only): This area provides read-only information populated by the INSTITUTION file (#4).

BCMA On-Line: This option (check box) under the “BCMA Status for Division” section lets IRM personnel enable or disable all GUI BCMA options. It does not affect CHUI BCMA options.

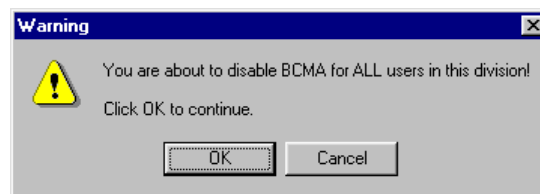
- If the “BCMA On-Line” check box is checked, the system is on-line and all GUI BCMA options are available.
- If the “BCMA On-line” check box is *not* checked, all users currently logged on to GUI BCMA options will *not* be affected. However, when a user attempts to log on to the GUI options, the following Error message displays:

Example: Error Message When BCMA Not Active for Your Site



- If the “BCMA On-Line” check box is checked and you try to take it off-line by deselecting the check box, the following Warning message displays:

Example: Warning Message When All BCMA Users Are Being Disabled for Your Division



Setting Site Parameters for GUI BCMA

Defining and Updating Site Parameters for Your Division (cont.)

Working with the Parameters Tab

You can activate the Parameters Tab by placing the cursor over the Tab, and then clicking once on it. Doing so activates the site parameters for this Tab.

Keyboard Shortcut: Press **ALT+P** to display the Parameters Tab.

This section describes the fields and check boxes available on the Parameters Tab.

Example: Site Parameters Available Parameters Tab

The screenshot shows the 'BCMA Site Parameters' dialog box with the 'Parameters' tab selected. The dialog is organized into several sections:

- Output Devices:** Inpatient Missing Dose Request Printer: HFS-BCMA IM MISSING DOSE; Clinic Missing Dose Request Printer: HFS-BCMA CD MISSING DOSE.
- Mail Groups:** Due List Error: BCMA ORDER PROBLEM; Missing Dose Notification: BCMA MISSING DOSE NOTIFICATI; Unknown Actions: BCMA UNKNOWN ACTIONS; Unable To Scan: BCMA UNABLE TO SCAN.
- Reports:** Include Comments; Med Hist Days Back: 180.
- Bar Code Options:** Default Bar Code Format: 125; Default Bar Code Prefix: [empty]; Using Robot RX.
- 5 Rights Override:** Unit Dose Administration; IV Administration.
- Administration:** Require ESig to Administer Medication; Allow Multiple Admins for On-Call.
- Non-Nurse Verified Orders:** Allow Administration (No Warning); Allow Administration with Warning; Prohibit Administration.
- Allowable Time Limits (In Minutes):** Before Scheduled Admin Time: 30; After Scheduled Admin Time: 30; PRN Effectiveness Entry: 960.
- Virtual Due List Default Times:** Start Time: 1 hour prior; Stop Time: 1 hour after.
- Include Schedule Types:** PRN; On-Call; Continuous; One-Time.
- Misc Options:** Max Client Server Clock Variance: 30; Patient Transfer Notification Timeframe (In Hours): 72; BCMA Idle Timeout (In Minutes): 30; PRN Documentation (In Hours): 72; Max Date Range: 10; Patch Display Duration: Always Display; Injection Site History Max Hours: 72; Enable CPRS Med Order Button.

Setting Site Parameters for GUI BCMA

Defining and Updating Site Parameters for Your Division (cont.)

Working with the Parameters Tab (cont.)

➤ Output Devices Area

Inpatient Missing Dose Request Printer: This field identifies the default division printer for Inpatient Missing Dose requests.

Clinic Missing Dose Request Printer: This field identifies a specific clinic printer for Clinic Missing Dose requests.

You may set the MISSING DOSE PRINTER field in the CLINIC DEFINITION (#53.46) file according to the following 3-tiered approach to defining a clinic missing dose request printer.

- This field allows you to specify a printer device that is located at a particular clinic in order to send all missing dose requests for this clinic to the specified printer.

Example: Specifying a Printer Device for the Clinic

```
Clinic Definition
Select CLINIC: 45 CLINIC PATTERN
...OK? Yes// (Yes)

NUMBER OF DAYS UNTIL STOP: 10//
AUTO-DC IMO ORDERS: NO//
SEND TO BCMA?: YES//
MISSING DOSE PRINTER: HFS-BCMA CLIN DEF MISSING DOSE
```

- If no specific Clinic Missing Dose Request Printer device is defined above for this particular clinic, missing dose requests will print on a general Clinic Missing Dose Request Printer that is defined for the division in the BCMA Parameters Tab Output Devices.

Example: BCMA Parameters Tab Output Devices

Output Devices

Inpatient Missing Dose Request Printer:
HFS-BCMA IM MISSING DOSE

Clinic Missing Dose Request Printer:
HFS-BCMA CO MISSING DOSE

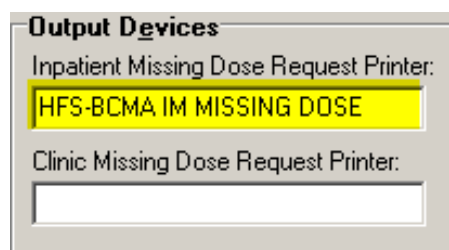
Setting Site Parameters for GUI BCMA

Defining and Updating Site Parameters for Your Division (cont.)

Working with the Parameters Tab (cont.)

- If no specific Clinic Missing Dose Request Printer device is defined above for this particular clinic, AND no general Clinic Missing Dose Request Printer is defined for a division in the BCMA Parameters Tab Output Devices, then all missing dose requests for both clinic and inpatient orders will print on the Inpatient Missing Dose Request Printer defined for the division in the BCMA Parameters Tab Output Devices.

Example: BCMA Parameters Tab Output Devices



Output Devices
Inpatient Missing Dose Request Printer:
HFS-BCMA IM MISSING DOSE
Clinic Missing Dose Request Printer:

➤ Mail Groups Area

Mail Groups: This area lists the mail groups that must be created using the *Vista Mail Group Edit* [XM EDIT MG] option, and by setting the TYPE field to PUBLIC. BCMA

V. 3.0 includes the following mail groups listed below:

- **Due List Error:** This field generates an E-mail message for any medication order that BCMA cannot resolve for VDL placement, and sends it to the mail group members. An example might include no administration times entered for a Continuous order.
- **Missing Dose Notification:** This field generates an E-mail message for any Missing Dose Request entered using the BCMA CHUI or GUI menu options. The E-mail is sent to all members of the mail group, specifically Pharmacy, as a “fail safe” even if the designated Missing Dose printer is not functioning.
- **Unknown Actions:** This field generates an E-mail message for any administration with an “Unknown” status while processing administrations to display on the VDL.
- **Unable to Scan:** Generates an E-mail message to alert the mail group when a user creates an “Unable to Scan” entry and to assist in researching the reasons for a scanning failure.

Setting Site Parameters for GUI BCMA

Defining and Updating Site Parameters for Your Division (cont.)

Working with the Parameters Tab (cont.)

➤ Reports Area

Include Comments: This check box, when selected, will automatically check the “Include Comments” check box in the Report dialog box as the default setting for the Medication History Report and the Medication Log Report. If this is unchecked, the “Include Comments” check box will be unchecked, by default, in the related Report dialog box. Users can change the check box setting in the Printer dialog box as needed, depending on whether they wish to have the comments for the administration included on the report.

Med Hist Days Back: This field lets you define the number of days in the past, from the current system date, that the Medication History Report should retrieve data. The allowable entry is 1 to 9999 days. The default is 30 days.

- A user can change the date range for the report, in the Report dialog box.

Setting Site Parameters for GUI BCMA

Defining and Updating Site Parameters for Your Division (cont.)

Working with the Parameters Tab (cont.)

➤ Bar Code Options Area

Default Bar Code Format: This field lets you select the desired bar code format that you want to produce on the bar code label printer. The following options are available from a drop-down list box: C39, 128, and I25.

Default Bar Code Prefix: This field lets you specify up to five alphanumeric characters of text that will print as a prefix on a bar code label printed on the bar code label printer.

Using Robot RX: This check box should be checked only if your site is using the Robot RX product.

➤ Five Rights Override Area

Unit Dose Administration: This field lets you control the Unable to Scan verification process by allowing the user to verify the Five Rights of medication administration and proceed with a unit dose administration without entering a Drug IEN or National Drug Code (NDC).

IV Administration: This field lets you control the Unable to Scan verification process by allowing the user to verify the Five Rights of medication administration and proceed with an IV administration without entering a Drug IEN or National Drug Code (NDC).

➤ Administration Area

Require ESig To Administer Medication: This check box requires that users enter the Access/Verify and Electronic Signature Code (ESig) before launching GUI BCMA. Otherwise, the clinician administering medications will be asked for Access/Verify codes only.

Allow Multiple Admins for On-Call: When checked, your division allows multiple administrations for an On-Call order.

➤ Non-Nurse Verified Orders Area

This parameter allows sites to administer non-nurse verified medication orders with no warnings displayed, to display a warning before administering non-nurse verified medication orders, or to prohibit administration of non-nurse verified medication orders. Facilities will be able to set this option by division.

Allow Administration (No Warning): When checked, your site allows administration of non-nurse verified medication orders with no warnings displayed.

Allow Administration with Warning: When checked, your site will display a warning before administering non-nurse verified medication orders. Marking as Held or Refused and Missing Dose requests will be allowed with warning.

Setting Site Parameters for GUI BCMA

Defining and Updating Site Parameters for Your Division (cont.)

Working with the Parameters Tab (cont.)

Prohibit Administration: When checked, your site will prohibit administration of non-nurse verified medication orders and missing dose requests. Marking as Held or Refused will be allowed with warning.

➤ Allowable Time Limits In Minutes Area

Before and After Scheduled Admin Time: This parameter defines the allowable medication administration timeframe. In the example provided, the allowable timeframe is set to one hour before through one hour after the scheduled administration time. Each window may be defined up to 240 minutes.

Note: The parameters for Allowable Time Limits (Before Scheduled Admin Time and After Scheduled Admin Time) are ignored when displaying clinic orders on the Cover Sheet and displaying and administering clinic orders on the VDL.

PRN Effectiveness Entry: This parameter defines the allowable time for the PRN Effectiveness to be assessed, after a PRN medication is given, and before a variance is logged. If a medication administration is outside the allowable time, a variance will be logged when the effectiveness is entered. You can define this window up to 960 minutes (equivalent to 16 hours.) Numeric options in 10 minute increments are provided in the spinner field.

