BAR CODE MEDICATION ADMINISTRATION (BCMA)

MANAGER'S USER MANUAL

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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
01/2011	i, iii-iv, 12-13, 54, 57, 59-64	PSB*3*42	Removed field Scratch HFS Directory from the Parameters Tab, and replaced corresponding Site Parameters screen capture. Added Appendix A describing the new parameter tab created for the Indian Health Service (IHS) project. Updated Glossary and Index for Indian Health Service. REDACTED
10/2009	i, iii-iv, 48a-48b, 56	PSB*3*47	Added information for the new *Immunizations Documentation by BCMA Nightly Task* [PSB PX BCMA2PCE TASK] option that is added to the *Bar Code Medication Administration Manager* [PSB MGR] menu. PCE added to the glossary. REDACTED
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. REDACTED

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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

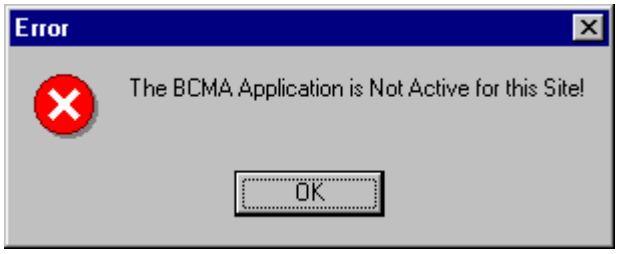
The Facility Tab, on the BCMA Site Parameters Main Screen, provides the following functions:

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.

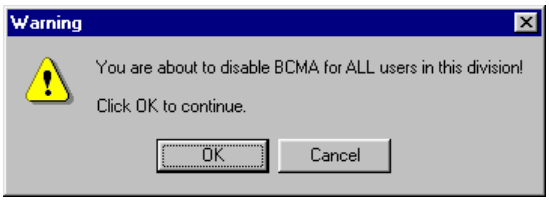
- **If the "BCMA On-Line" check box is checked,** the system is on-line and all GUI BCMA options are available.
- **If the "BCMA On-line" check box is *not* checked,** all users currently logged on to GUI BCMA options will *not* be affected. However, when a user attempts to log on to the GUI options,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



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

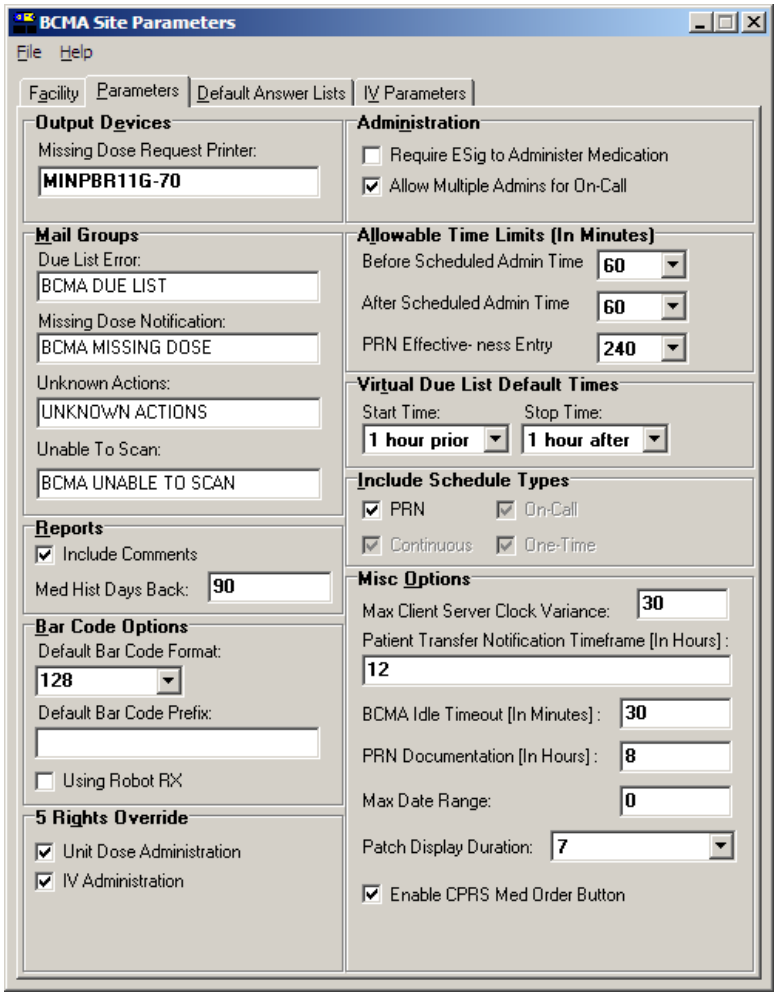
Working with the Parameters Tab

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



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

Working with the Parameters Tab (cont.)

- **Output Devices Area**

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

- **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.

- **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.

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.

- **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.

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 240 minutes.

Glossary

Learning BCMA Lingo

The alphabetical listing, in this section, is designed to familiarize you with the many acronyms and terms used throughout this manual.

Example: Alphabetical Listing of BCMA Acronyms and Terms

Acronym/Term	Definition
Active	When a medication has been finished *and* verified, it becomes "active," and displays on the VDL under the related Medication Tab. A nurse can then administer the medication to the patient. Under the IV Medication Tab, this information is listed in the Status column.
BCMA	**B**ar **C**ode **M**edication **A**dministration. A VistA software application used in VAMCs for validating patient information and medications against active medication orders *before* being administered to a patient.
BCMA Clinical Reminders	A marquee located in the lower, right-hand corner of the VDL that identifies PRN medication orders needing effectiveness documentation. The setting is based on the "PRN Documentation" site parameter, and applies to current admissions or the site parameter timeframe (whichever is greater). A mouse-over list displays when the pointer is placed over the PRN Effectiveness Activity, or a full list is available by double clicking on the Activity.
CHUI	**Ch**aracter-based **U**ser **I**nterface.
Client	An architecture in which one computer can get information from another. The Client is the computer that asks for access to data, software, or services.
Clinician	Nursing personnel who administer active medication orders to patients on a ward. In a VAMC, a number of teams may be assigned to take care of one ward, with specific rooms and beds assigned to each team.
Continuous Order	A medication given continuously to a patient for the life of the order, as defined by the order Start and Stop Date/Time.
CPRS	**C**omputerized **P**atient **R**ecord **S**ystem. A VistA software application that allows users to enter patient orders into different software packages from a single application. All pending orders that appear in the Unit Dose and IV packages are initially entered through the CPRS package. Clinicians, Managers, Quality Assurance Staff, and Researchers use this integrated record system.
ESig	**E**lectronic **Sig**nature Code.
FileMan	The VistA database management system.
Finish	The process in which the Pharmacist adds the information necessary to make the order active. For example: dispense drug, and start/stop date.

Learning BCMA Lingo (cont.)

The alphabetical listing, in this section, is designed to familiarize you with the many acronyms and terms used throughout this manual.

Example: Alphabetical Listing of BCMA Acronyms and Terms

Acronym/Term	Definition
Given	When a medication is administered to a patient, it is considered to be "Given" and marked as such (with a "G") in the Status column of the VDL.
GUI	**G**raphical **U**ser **I**nterface.
HRN	Health Record Number – 6 digit patient identifier in IHS/Tribal facilities
IEN	**I**nternal **E**ntry **N**umber. The internal entry drug number entered by Pharmacy personnel into the DRUG file (#50) to identify Unit Dose and IV medications.
IHS	Indian Health Service
Internal Entry Number	Also called "IEN," the internal entry drug number entered by Pharmacy personnel into the DRUG file (#50) to identify Unit Dose and IV medications.
IV	A medication given intravenously (within a vein) to a patient from an IV Bag. IV types include Admixture, Chemotherapy, Hyperal, Piggyback, and Syringe.
LIMITED ACCESS BCMA	A mode in which BCMA can be accessed that provides medication administering users the ability to access patient records for non-medication administration documentation, review and reporting purposes without being at the patient's bedside.
MAH	**M**edication **A**dministration **H**istory. A patient report that lists a clinician's name and initials, and the exact time that an action was taken on an order (in a conventional MAR format). Each order is listed alphabetically by the orderable item. The Date column lists three asterisks (***) to indicate that a medication is not due. The report also lists information about when an order is placed "On Hold" and taken "Off Hold" by a provider, and the order Start and Stop Date/Time for the medication.
MAR	**M**edication **A**dministration **R**ecord. The traditional, handwritten record used for noting when a patient received a medication. BCMA replaces this record with an MAH.
Medication Administration History Report	**M**edication **A**dministration **H**istory. A patient report that lists a clinician's name and initials, and the exact time that an action was taken on an order (in a conventional MAR format). Each order is listed alphabetically by the orderable item. The Date column lists three asterisks (***) to indicate that a medication is not due. The report also lists information about when an order is placed "On Hold" and taken "Off Hold" by a provider, and the order Start and Stop Date/Time for the medication.

Learning BCMA Lingo (cont.)

The alphabetical listing, in this section, is designed to familiarize you with the many acronyms and terms used throughout this manual.

Example: Alphabetical Listing of BCMA Acronyms and Terms

Acronym/Term	Definition
Refused	The status for an IV bag or Unit Dose to indicate that the patient refused to take the dose.
RPMS	Resource and Patient Management System – health information system for IHS, analogous to VistA
Schedule Type	Identifies the type of schedule (i.e., Continuous, PRN, On-Call, and One-Time) for the medication being administered to a patient.
Security Keys	Used to access specific options within BCMA V. 3.0 that are otherwise "locked" without the security key. Only users designated as "Holders" may access these options.
Solution	A homogeneous mixture of two or more substances. For IVs, these would be liquids.
Start Date/Time	The date and time that a medication is scheduled for administration to a patient.
STAT Order	A medication order given immediately to a patient, entered as a One-Time order by providers and pharmacists. This order type displays for a fixed length of time on the VDL, as defined by the order Start and Stop Date/Time.
Stop Date/Time	The date and time that a medication order will expire, and should no longer be administered to a patient.
Strength	The degree of concentration, distillation, or saturation of a medication.
Unit Dose	A medication given to a patient, such as tablets or capsules.
VDL	**V**irtual **D**ue **L**ist. An on-line "list" used by clinicians when administering active medication orders (i.e., Unit Dose, IV Push, IV Piggyback, and large-volume IVs) to a patient. This is the Main Screen in BCMA V. 3.0.
Verify	When a nurse or a Pharmacist confirms that a medication order is accurate and complete, according to the information supplied by the Provider.
Virtual Due List	Also called "VDL," an on-line list used by clinicians when administering active medication orders to a patient. This is the Main Screen in BCMA V. 3.0.
VistA	**V**eterans Health **I**nformation **S**ystems and **T**echnology **A**rchitecture.

Appendix A: Setting Site Parameters for Indian Health Service (IHS)

Defining and Setting Site Parameters for IHS

The Indian Health Service (IHS) project requires the addition of a new parameter to the BCMA Parameters application. The IHS user-specified parameter entries are stored at the Division level and override corresponding System level values.

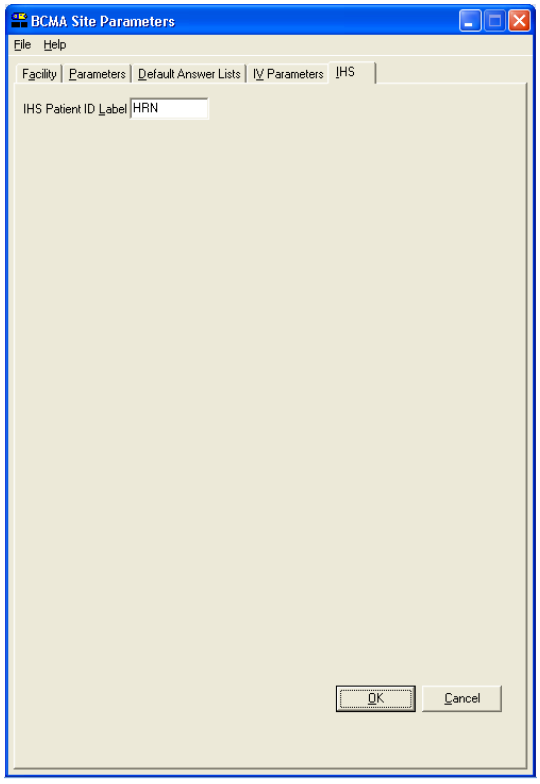
Working with the Parameters Tab

If the operating environment is Resource and Patient Management System (RPMS), the tab entitled "IHS" is added to the parameters application.

You can activate the IHS Tab by placing the cursor over the Tab and clicking once on it or by selecting Alt-H to access it directly. Doing so activates the site parameters for this Tab.

This section describes the field available on the IHS Tab.

Example: Site Parameters Available IHS Tab



IHS Patient ID Label: This text entry field allows you to enter a patient ID textual label of up to 5 characters if the operating environment is RPMS. The contents of this field are displayed throughout the BCMA GUI forms and reports.

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