BAR CODE MEDICATION ADMINISTRATION (BCMA)

TECHNICAL MANUAL/SECURITY GUIDE

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, 9, 10, 10a-10b, 14, 18a	PSB*3*70	Added "Documenting Backlog PRNs" to Manager's Menu. Added note that Missed Medications, Ward Administration Times, and Due List BCMA CHUI reports are Inpatient, only. Added PSB NO WITNESS Security Key. Missing Dose Request option removed from CHUI menus. Added "VHIC 4.0 Card Bar Code Scanning Support" to External Relations section. ==REDACTED==
01/2011	i-ii, 6, 7, 10, 15, B-2, B-4	PSB*3*42	Added note and list of BCMA Reports that were added to GUI only. Added definition of data field change for Indian Health Service. Added Indian Health Service terms to Glossary. ==REDACTED==
10/2009	i-ii, 7, 9, 17	PSB*3*47	Added PSBPXFL and PSBPXLP to the list of installed routines. Add Immunizations Documentation by BCMA Nightly Task [PSB PX BCMA2PCE TASK] option to the *Manager* [PSB MGR] menu. Added Patient Care Encounter to the External Relationships section. ==REDACTED==
01/2009	i-ii, iv, 6-7, 13-14, 18-19, 21	PSB*3*28	- Update Table of Contents to include Remote Procedure Calls. (p. iv) - Increased the total for the BCMA V .3.0 routines to 85 and files to 6. (p.6-7) - Updated the files and "BCMA V.3.0 Routines Installed onto VistA Server" Example. (p.7) - Updated the Mail Group Types in BCMA V.3.0 to include scanning failures. (p. 13) - Updated Security Keys to include PSB UNABLE TO SCAN. (p. 14) - Added list of Remote Procedure Calls (RPCs). (p. 18) -Added new Glossary entry for LIMITED ACCESS BCMA. (p. 19) - Added new Glossary entry for PSB UNABLE TO SCAN. (p. 21) ==REDACTED==
03/2008	6-7, 9-10, C-1, C-2, C-4, C-5, C-7, C-9	PSB*3*2	Description of [PSBO BZ] functionality added, code strings updated (p. C-1.) - Updated Intermec Printer Team Type Codes Information, Intermec Barcode Label Field Position Map, Intermec printer Sample Terminal Type File code descriptions updated (pp. C-4, C-5, C-7.) - Barcode samples updated – references to "Dosage" changed to "Dose" and space between colon and dose measurement deleted (p. C-9.) ==REDACTED==
09/2007	6-7	PSB*3*32	– Increased the total for the BCMA V. 3.0. routines to 68. (p.6) – Updated the "BCMA V. 3.0 Routines Installed onto VistA Server" example to include the following routine: PSBO XA. (p. 7) ==REDACTED==

Revision History

Date	Revised Pages	Patch Number	Description
08/2006	6-7, 9, 13	PSB*3*13	– Increased the total for the BCMA V. 3.0. routines to 68. (p.6) – Updated the "BCMA V. 3.0 Routines Installed onto VistA Server" example to include the following routine: PSBO XA. (p. 7) – Updated Manager Menu [PSB MGR] options list to include Missing Dose Followup (correction) and Unknown Action Status Report (new with this patch). (p. 9) – Added description of the "Unknown Actions" mail group parameter. (p. 13) REDACTED
08/2006	iv, 6, C1-C10	PSB*3*2	**Note**: The functionality listed below will be activated with the release of PSB*3*2. – Updated Table of Contents to include new Appendix C. (p. iv) – Added reference to new Unit Dose label printing functionality and Appendix C. (p. 6) – Added Appendix C: Interfacing with the Bar Code Label Printer. (p. C1-C10) REDACTED
12/2005	6-7	PSB*3*16	– Increased the total for the BCMA V. 3.0. routines to 67. (p.6) – Updated the "BCMA V. 3.0 Routines Installed onto VistA Server" example to include the following routines: PSBCSUTL, PSBCSUTX, PSBCSUTY. (p. 7) REDACTED
01/2005	6-7, 14, 20-21	PSB*3*4	– Increased the total for the BCMA V. 3.0. routines to 64. (p.6) – Updated the "BCMA V. 3.0 Routines Installed on to VistA Server" example to include the PSBOPF routine. (p. 7). – Added description for new PSB READ ONLY security key. (p.14) – Added new Glossary entries for PSB READ ONLY and Read-Only BCMA. (p. 20-21) REDACTED
10/2004	6-7	PSB*3*3	– Increased the total for the BCMA V. 3.0 routines to 63. (p. 6) – Updated the "BCMA V. 3.0 Routines Installed on to VistA Server" example to reflect the inclusion of routines PSBML2, PSBML3, and PSBMLLKU to the VistA Server. (p. 7) REDACTED
02/2004			Original Released BCMA V. 3.0 Technical Manual/Security Guide REDACTED

Exported Options

BCMA CHUI Menus

BCMA V. 3.0 exports three main menus. They include those listed below, in the CHUI version of BCMA V. 3.0. The options for each menu are listed in this section.

- **Manager Menu:** [PSB MGR] is assigned to managers
- **Pharmacist Menu:** [PSB PHARMACY] is assigned to all inpatient Pharmacists
- **Nurse Menu:** [PSB NURSE] is assigned to all clinicians and other personnel who administer active medication orders

Manager Menu [PSB MGR]

This menu includes the following options:

- Documenting Backlog PRNs
- Drug File Inquiry
- Immunizations Documentation by BCMA Nightly Task
- Medication Administration Menu Nursing
    - Medication Administration Log Report
    - Missed Medications Report (INPATIENT ONLY)
    - Ward Administration Times Report (INPATIENT ONLY)
    - Due List Report (INPATIENT ONLY)
    - PRN Effectiveness List Report
    - Enter PRN Effectiveness
    - Manual Medication Entry
    - Medication Administration History (MAH) Report
    - Medication Variance Log
    - Drug File Inquiry
- Medication Administration Menu Pharmacy
    - Medication Administration Log Report
    - Missed Medications Report (INPATIENT ONLY)
    - Due List Report (INPATIENT ONLY)
    - Medication Administration History (MAH) Report
    - Missing Dose Followup
    - Missing Dose Report
    - Label Print
    - Drug File Inquiry
    - Barcode Label Print
- Missing Dose Followup
- Reset User Parameters
- Trouble Shoot Med Log
- Unknown Action Status Report

Exported Options

BCMA CHUI Menus (cont.)

Pharmacy Medication Administration Menu
[PSB PHARMACY]

This menu includes the following options:

- Medication Administration Log Report
- Missed Medications Report (INPATIENT ONLY)
- Due List Report (INPATIENT ONLY)
- Medication Administration History (MAH) Report
- Missing Dose Followup
- Missing Dose Report
- Label Print
- Drug File Inquiry
- Barcode Label Print

Nursing Medication Administration Menu
[PSB NURSE]

This menu includes the following options:

- Medication Administration Log Report
- Missed Medications Report (INPATIENT ONLY)
- Ward Administration Times Report (INPATIENT ONLY)
- Due List Report (INPATIENT ONLY)
- PRN Effectiveness List Report
- Enter PRN Effectiveness
- Manual Medication Entry
- Medication Administration History (MAH) Report
- Medication Variance Log
- Drug File Inquiry

Note: The Missed Medications, Ward Administration Times, and Due List BCMA CHUI reports will only include Inpatient orders in the report. The menus containing these options will be updated to include "(INPATIENT ONLY)" in the report label/description. To run these reports for Clinic orders and updated report selection options, the reports must be generated in the BCMA GUI.

Note: The following reports have been added to BCMA and are available via GUI only, but have not been added to the CHUI menus.

- Cover Sheet Reports:
- Medication Overview
- PRN Overview
- IV Overview

Exported Options

BCMA CHUI Menus (cont.)	• Expired/DC'd/Expiring Orders • IV Bag Status Report • Medication Therapy Report • Unable to Scan Detailed Report • Unable to Scan Summary Report

Security Features

Defining Mail Groups in BCMA

In BCMA V. 3.0, you can define two "Mail Groups" for notifying Pharmacy, IRM, and other internal staff about errors and Missing Dose Requests. This section describes how you can create mail groups, and the purpose of each group.

Creating Mail Groups for BCMA V. 3.0

Creating mail groups for BCMA V. 3.0 involves using the VistA Mail Group *Enter/Edit* [XMUSER] option to set the TYPE field to PUBLIC. Once this task is accomplished, you can then use the Parameters Tab of the GUI BCMA Site Parameters application to define the mail groups that you created.

Mail Group Types in BCMA V. 3.0

This section describes the mail groups that you can define using the Parameters Tab of the GUI BCMA Site Parameters application.

- **Due List Error:** Generates an E-mail message for any medication order that BCMA V. 3.0 cannot resolve for the BCMA 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:** Generates an E-mail message for any Missing Dose Request entered using the BCMA V. 3.0 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 a scanning failure entry, and to assist in researching the reasons for a scanning failure.

Security Features

Assigning Menus to Users

Use this section to assign menus to BCMA V. 3.0 CHUI and GUI users, if they have not already been assigned.

CHUI Version

Refer to this section for BCMA V. 3.0 CHUI menu assignments.

- **PSB MGR:** assign to a manager
- **PSB PHARMACY:** assign to all Inpatient Pharmacists
- **PSB NURSE:** assign to all clinicians and other personnel who administer active medication orders

GUI Version

Refer to this section for BCMA V. 3.0 GUI menu assignments.

- **PSB GUI CONTEXT – USER:** assign to all clinicians and other personnel who administer active medication orders

Allocating Security Keys to Users

Refer to this section to allocate the following security keys to appropriate site personnel.

- **PSB MANAGER:** designates the holder as a manager
- **PSB INSTRUCTOR:** designates the holder as a nursing instructor supervising student nurses
- **PSB STUDENT:** designates the holder as a student nurse, requiring that an instructor also sign on to BCMA V. 3.0 at the same time
- **PSB CPRS MED BUTTON:** designates the holder as a nurse who can document administered verbal- and phone-type STAT and NOW (One-Time) orders using the CPRS Med Order Button on the BCMA VDL
- **PSB READ ONLY:** designates the holder as a user that only has Read-Only access to BCMA. Note that users with Read-Only access will also be required to have the PSB GUI CONTEXT – USER secondary menu option.
- **PSB UNABLE TO SCAN:** designates the holder as a user that can run the Unable to Scan (Detailed and Summary) reports.
- **PSB NO WITNESS:** designates the holder as a BCMA user not authorized to witness high risk/high alert administrations, such as Unlicensed Assistive Personnel and Respiratory Therapists.

Establishing Electronic Signature Codes

You may establish Electronic Signatures Codes using the Kernel *Electronic Signature code Edit* [XUSESIG] option.
Note: For easier access by all users, this option is tied to the Common Options, under the *User's Toolbox* [XUSERTOOLS] submenu.

Internal and External Relations

External Relations (cont.)

VHIC 4.0 Card Bar Code Scanning Support

To incorporate lookup of patients by scanning the bar code on the new VIC 4.0 card or a DoD CAC card, a new supported API (RPCVIC^DPTLK) from dependent patch DG*5.3*857 has been incorporated into PSB SCANPT, which returns a patient DFN for lookup in BCMA.