

# BAR CODE MEDICATION ADMINISTRATION (BCMA)

# **TECHNICAL MANUAL/SECURITY GUIDE**

Version 3.0 February 2004

(Revised September 2007)

# **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
09/2007	6-7	PSB*3*32	<ul> <li>Increased the total for the BCMA V. 3.0. routines to 68. (p.6)</li> <li>Updated the "BCMA V. 3.0 Routines Installed onto VistA Server" example to include the following routine: PSBO XA. (p. 7)</li> <li>(R. Singer, PM; E. Phelps, Tech Writer)</li> </ul>
08/2006	6-7, 9, 13	PSB*3*13	<ul> <li>Increased the total for the BCMA V. 3.0. routines to 68. (p.6)</li> <li>Updated the "BCMA V. 3.0 Routines Installed onto VistA Server" example to include the following routine: PSBO XA. (p. 7)</li> <li>Updated Manager Menu [PSB MGR] options list to include Missing Dose Followup (correction) and Unknown Action Status Report (new with this patch). (p. 9)</li> <li>Added description of the "Unknown Actions" mail group parameter. (p. 13)</li> <li>(R. Singer, PM; M. Newman, Tech Writer)</li> </ul>
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)  (R. Singer, PM; M. Newman, Tech Writer)
12/2005	6-7	PSB*3*16	<ul> <li>Increased the total for the BCMA V. 3.0. routines to 67. (p.6)</li> <li>Updated the "BCMA V. 3.0 Routines Installed onto VistA Server" example to include the following routines: PSBCSUTL, PSBCSUTX, PSBCSUTY. (p. 7)</li> <li>(R. Singer, PM; M. Newman, Tech Writer)</li> </ul>
01/2005	6-7, 14, 20-21	PSB*3*4	<ul> <li>Increased the total for the BCMA V. 3.0. routines to 64. (p.6)</li> <li>Updated the "BCMA V. 3.0 Routines Installed on to VistA Server" example to include the PSBOPF routine. (p. 7).</li> <li>Added description for new PSB READ ONLY security key. (p.14)</li> <li>Added new Glossary entries for PSB READ ONLY and Read-Only BCMA. (p. 20-21)</li> <li>(R. Singer, PM; M. Newman, Tech Writer)</li> </ul>
10/2004	6-7	PSB*3*3	<ul> <li>Increased the total for the BCMA V. 3.0 routines to 63. (p. 6)</li> <li>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)</li> <li>(R. Singer, PM; M. Newman, Tech Writer)</li> </ul>
02/2004			Original Released BCMA V. 3.0 Technical Manual/Security Guide (R. Singer, PM; M. Pospisil, Tech Writer)

## **Implementation and Maintenance**

# Minimum Required Packages

Before installing BCMA V. 3.0, make sure that your system includes the following Department of Veterans Affairs (VA) software packages and versions (those listed or higher).

#### **Example: Minimum Required Packages and Versions**

Package	Minimum Version Needed		
Inpatient Medications	5.0		
Kernel	8.0		
MailMan	8.0		
Nursing	4.0		
Order Entry/Results Reporting	3.0		
Pharmacy Data Management	1.0		
RPC Broker (32-bit)	1.1		
Toolkit	7.3		
VA FileMan	22.0		
Vitals/Measurements	5.0		

# Installation Time Estimates



#### **IMPORTANT:**

You should install and test BCMA in your test accounts **before** installing in your production accounts. On average, it takes approximately two minutes to install BCMA V. 3.0. This estimate was provided by a few of our BCMA V. 3.0 Beta Test sites. Actual times may vary, depending on how your site is using its' system resources.

Suggested time to install: non-peak requirement hours. During the install process, PC Client users should not be accessing the Client Software.

## **Implementation and Maintenance**

#### Resource Requirements



#### TIP:

The approximate size for ^PSB was calculated using a "normal" medication pass for a Unit Dose and an IV medication order. This is only an estimated number; it serves as the "mean."

This section summarizes the (approximate) number of resources required to install BCMA V. 3.0.

• Routines 81

• Globals 1 (^PSB)

• Files 5 (53.66-53.79)

• ^PSB Size Unit Dose = 300 x # of Medications

(in bytes) Administered

IV = 2100 x # of IV Bags

Administered

FTEE Support .2FTEE Maintenance .2

#### **Response Time Monitor**

BCMA V. 3.0 does not include Response Time Monitor hooks.

#### **Laptops and Bar Code Scanners**

The approximate requirements for laptops and bar code scanners depend on the number of Inpatient areas, at your site, that use BCMA V. 3.0 for administering active medication orders. The BCMA Development Team recommends that your site have a minimum of three laptops and three scanners for each ward.

#### **Printers**

Your site should provide printers for creating patient wristbands and medication bar code labels, and for handling Missing Dose Requests sent from BCMA V. 3.0 to the Pharmacy.

#### **Unit Dose Label Printer Devices**

BCMA V. 3.0 includes the *Label Print* [PSBO BL] option for printing individual or batch Unit Dose bar code labels. This option allows sites the flexibility to use any printer that has bar code printing capabilities to produce BCMA bar code labels. Routine PSBOBL uses site-specific printers or terminals to produce labels. See Appendix C: "Interfacing with the Bar Code Label Printer" for detailed setup information.

#### **IV Label Printer Devices**

Inpatient Medications V. 5.0 provides a menu option for printing individual or batch IV bar code labels. See the section "Interfacing with the Bar Code Label Printer" in the *Inpatient Medications V. 5.0 Technical Manual/Security Guide* for detailed setup information.

## **Implementation and Maintenance**

#### Files Required to Run BCMA V. 3.0



#### TIP:

The namespace for the BCMA package is PSB and the primary global is ^PSB. BCMA V. 3.0 uses the following files installed on the VistA Server. "Journaling" is recommended.

• ^PSB (53.66,	BCMA IV Parameters
• ^PSB (53.68,	BCMA Missing Dose Request
• ^PSB (53.69,	BCMA Report Request
• ^PSB (53.78,	BCMA Medication Variance Log

• ^PSB (53.79, BCMA Medication Log

**Note:** You can learn more about these files by generating a list with file attributes using VA FileMan.

#### **Routines Installed**

Review the listing below to learn the routines installed on to your site's VistA Server during the installation of BCMA V. 3.0. The first line of each routine briefly describes its general function.

**Note:** You can use the *Kernel First Line Routine Print* [XU FIRST LINE PRINT] option to print a list containing the first line of each PSB routine.

#### **Routine Mapping**

At this time, we do *not* offer any recommendations for routine mapping. However, if you choose to map the BCMA V. 3.0 package routines, you will need to bring your system down, and then restart it to load the new routines into memory.

#### Example: BCMA V. 3.0 Routines Installed onto VistA Server

PSBALL	PSBAPIPM	PSBCHIVH	PSBCHKIV	PSBCSUTL	PSBCSUTX
PSBCSUTY	PSBMD	PSBML	PSBML1	PSBML2	PSBML3
PSBMLEN	PSBMLEN1	PSBMLHS	PSBMLLKU	PSBMLTS	PSBMLU
PSBMLVAL	PSBO	PSB01	PSBOAL	PSBOBL	PSBOCE
PSBOCE1	PSBOCI	PSBOCI1	PSBOCM	PSBOCM1	PSBOCP
PSBOCP1	PSBODL	PSBODL1	PSBODO	PSBOHDR	PSBOIV
PSBOIV1	PSBOMD	PSBOMH	PSBOMH1	PSBOMH2	PSBOML
PSBOMM	PSBOMM2	PSBOMT	PSBOMT1	PSBOMV	PSBOPE
PSBOPF	PSBOPI	PSBOPM	PSBOVT	PSBOWA	PSBOXA
PSBPAR	PSBPARIV	PSBPOIV	PSBPRN	PSBRPC	PSBRPC1
PSBRPC2	PSBRPC3	PSBRPCMO	PSBRPCXM	PSBSAGG	PSBSVHL7
PSBUTL	PSBVAR	PSBVDLIV	PSBVDLPA	PSBVDLPB	PSBVDLTB
81 routines					