



# **PHARMACY BENEFITS MANAGEMENT (PBM) EXTRACT ENHANCEMENTS**

## **RELEASE NOTES**

PSU\*4\*3

Version 4.0  
February 2006



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# 1. Introduction

Pharmacy Benefits Management (PBM) Version 4.0 is a new enhanced version of the software and replaces PBM Version 3.0. It contains enhancements to support the Veterans Affairs National Formulary (VANF), disease management issues, and patient safety initiatives.

## 1.1. User Interfaces

The software product shall conform to the existing VistA conventions and utilize a roll and scroll based interface. Software modifications shall be tested by Department of Veterans Affairs (VA) facilities to ensure that the software modifications meet the needs of the Veterans Health Administration (VHA) user.

Phase III requires the creation and configuration of an HL LOGICAL LINK called PSU SEND.

## 1.2. Hardware Interfaces

This product shall run on the standard hardware platform used by the Department of Veterans Affairs Healthcare facilities, Cache VMS.

Phase III utilizes HLO (Health Level 7 Optimized) technology, which requires port 5026 in test areas and port 5001 in live areas.

### 1.3. Software Interfaces

The following software must be running to support the enhancements requested.

Package	Minimum Version Needed
Adverse Reaction Tracking (ART)	4.0
Auto Replenishment/Ward Stock (AR/WS)	2.3
Controlled Substances (CS)	3.0
Drug Accountability	3.0
HLO (Health Level 7 Optimized)	1.6
Inpatient Medications	5.0
Integrated Funds Control, Accounting and Procurement (IFCAP)	5.1
Kernel	8.0
Laboratory	5.2
MailMan	8.0
National Drug File (NDF)	4.0
Outpatient Pharmacy	7.0
Patient Care Encounter (PCE)	1.0
Patient Information Management System (PIMS)	5.3
Pharmacy Data Management (PDM)	1.0
VA FileMan	22.0
Visit Tracking	2.0

### 1.4. Communications Interfaces

The extracted data is electronically exported via MailMan to the PBM national database at Hines from each VA Medical Center (VAMC) or Outpatient clinic. MailMan messages are downloaded to text files onto the PBM network and run through a translation program. The data is then appended to an existing PBM Pharmacy dispensing master file.

In addition, PSU\*4\*3 introduces the new functionality of sending Chemistry Lab results to the PBM database via Health Level 7 (HL7). HLO is used to send and receive messages.

When a Chemistry Lab test is resulted, the creation and transmission of an HL7 message containing data about that patient and test result is sent real-time to the CMOP-NAT server. A PBM process on CMOP-NAT parses the received messages into a temporary holding area. A nightly job on the CMOP-NAT server loads these messages into a flat file for the PBM team and then cleans up old data from yesterday's load.

## 1.5. Enhancements Summary

The following summarizes changes that were made to the PBM application during this enhancement. More detailed descriptions may be found in the remainder of this document.

### Phase III Enhancements

The following enhancements are being introduced with the release of PBM V. 4.0 (PSU\*4\*3).

Rather than using the messaging method (MailMan), PSU\*4\*3 incorporates HL7 to send chemistry lab data in real-time to the PBM national database. Each VAMC or Outpatient clinic will send a PBM HL7 message each time a Chemistry Lab test is verified. It is then sent to the CMOP-NAT server. A PBM process will receive and store the messages and a nightly PBM job will load the messages into text files. PBM personnel will retrieve these files.

HLO and TCP/IP are the communication protocols that will be used to transmit messages between the VistA databases and PBM. Two links will be required for message transactions. VistA will send HL7 messages and receive a commit acknowledgement over the same link, and the link will then be disconnected.

## 1.6. Pre-Installation Setup

### Global Parameters

None.

### HL7 Links and Protocols

PSU logical link and HL7 protocols must be loaded at all facilities and on the national PBM server in order for the messaging to function properly.

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## **2. New Features**

This section documents features that were added during the PBM Extract Enhancement III project.

This project introduces the real-time collection and transmission of verified chemistry lab results to the PBM server.

### **2.1. New Options**

No new options were added during this project.

### **2.2. New Fields**

No new fields were added during this project.

### **2.3. New Reports**

No new reports were added during this project.

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## 3. Modified Features

### Current Functionality

The extracted lab data is electronically exported via MailMan to the PBM national database at Hines from each VAMC or Outpatient clinic. MailMan messages are downloaded to text files onto the PBM network and run through a translation program. The data is then appended to an existing PBM pharmacy dispensing master file.

### New Functionality

This new functionality works in conjunction with all existing functionality. No existing functionality was modified.

Real-time transmission of PBM lab HL7 messages will be created and sent to the CMOP-NAT server each time a Chemistry Lab test is resulted at a VAMC. Two links will be required for message transactions. VistA will send HL7 messages and receive a commit acknowledgement over the same link, then the link will be disconnected. The laboratory data will be sent from each VAMC or Outpatient clinic via the HL7 link to the PBM national database and appended to a daily PBM master file.



**Note:** The laboratory extract that exists within the *Manual Pharmacy Statistics* [PSU PBM MANUAL] and *Automatic Pharmacy Statistics* [PSU PBM AUTO] options will not be replaced by the HL7 transmission of laboratory data to the national database. This functionality is in addition to the laboratory extract that generates MailMan messages transmitted to the PBM national database at Hines that sites run on a monthly basis.

### 3.1. Modified Options

The following describes modifications made to options during the PBM Extract Enhancement III project.

There were no modifications made to the options during this project.

### 3.2. Modified Fields

No fields were modified during the PBM Extract Enhancement III project.

### 3.3. Modified Reports

No reports were modified during the PBM Extract Enhancement III project.

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## 4. New Functionality

The PBM Extract Enhancement III project provides automatic real-time transmission of PBM HL7 Chemistry Lab Results to the PBM national database. This process will be transparent to the users. The data will be stored in flat files on the CMOP-NAT server for the PBM team.

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## **5. Impact on Other VistA Software Packages**

The enhancements described in this document do not have any impact on other VistA software packages.

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