



ERROR PROCESSING PHASE 1

HEALTH ELIGIBILITY CENTER (HEC)

TECHNICAL MANUAL

Patch IVMB*2*463

May 2001

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Introduction

Overview

The Health Eligibility Center (HEC) system sends eligibility data, enrollment data, income data, and means test data to the local VA Medical Centers (VAMCs) using HL7 messaging. Eligibility, enrollment, and income data are sent via a Z11 HL7 transmission; means test data via a Z10 HL7 transmission. In the event that a local VAMC is unable to process the information received, it will notify the HEC of a problem. This notification is transmitted via an Application Error (AE) message.

The HEC performs its own error checking to prevent bad data from being sent to the VAMC where it will be rejected and sent back to the HEC as an application error message. This error checking process notifies the HEC of the problem via a Consistency Check (CC) message. Previously, both the AE and CC messages were transmitted via a bulletin to various users at the HEC. Some of these error messages can be corrected through a manual correction at the HEC; the patient record must then be re-queued to be transmitted to the VAMC.

The Error Processing Tool was created to easily correct the inaccurate data, send the updated data to the VAMC, and keep track of the progress of the error correction process. It allows users to review the errors, exchange messages with VAMC personnel regarding the resolution of the data discrepancy, queue a transmission to be sent to the VAMC, and make corrections at the HEC, if necessary.

Purpose

The purpose of Patch IVMB*2*463 is to provide an error processing tool that allows users at the HEC to

- Easily correct inaccurate data at the HEC
- Send updated data to the VAMC
- Track the progress of the error correction process
- Review errors
- Exchange messages with VAMC personnel regarding the resolution of the data discrepancy
- Queue a transmission to be sent to the VAMC

Related Manuals

The following manuals will also be released with the Error Processing Phase 1 software.

- Error Processing Phase 1 Installation Guide
- Error Processing Phase 1 User Manual

You can download the Error Processing Phase 1 documentation as follows:

From the Anonymous Directory

1. Go to the anonymous.software directory.
2. Ftp the files listed in the following table. Remember to use binary format.

File Name	Documentation Component
IVMB_p463_hec_um.pdf	User Manual
IVMB_p463_hec_tm.pdf	Technical Manual
IVMB_p463_hec_ig.pdf	Installation Guide

From the Project Notebook Web Page

<http://tspr.vista.med.va.gov/warboard/anotebk.asp?proj=342>

Implementation and Maintenance

Implementation

All users must be defined in the new option, Error Processing User Group, in order to have access to the Error Processing Tool software.

Please see the Error Processing Phase 1 Installation Guide for information about installing and implementing the Error Processing Phase 1 software.

Maintenance

User Groups

The Error Processing User Group option allows error messages to be assigned to a class of users instead of being assigned to an individual user. This option allows supervisors to assign individual users to a user-defined group and to define the sort criteria for displaying the list of error messages displayed in the error processing tool.

It is very important to accurately maintain user group membership. A user must be defined in at least one user group to be able to access the Error Processing Tool software.

Purge Parameter

Use the Error Message Purge Parameter option to define the number of days that errors with a status of CLOSED or DELETE remain in the Error Message Log File before being purged.

Files

File List

The following files are exported with Patch IVMB*2*463.

File #	File Name	Description	Global
742080	HEC ERROR PROCESSING LOG	Tracks the progress of an error message in the HEC. The information captured by this log will be used for managerial reports. This file will be accessed on a daily basis, recording when errors are received at the HEC and their status updates until they are finally resolved.	^IVMGA(742080,
742081	HEC ERROR PROCESSING GROUP	Stores the user group name and user name. After the initial definition, this file should require very little maintenance. It will be used to identify potential user groups that may be assigned responsibility for error processing.	^IVMGA(742081,
742082	HEC ERROR PROCESSING USER	Stores user name and staff position (supervisor or contact representative), and sort order.	^IVMGA(742082,

File Flow (Relationships Between Files)

1. VA FileMan
2. Data Dictionary Utilities Menu
3. List File Attributes option
4. Enter file number
5. Select Standard listing format
6. Select print device

Templates

List Templates

- AYCBEF ERROR PROCESSING; Menu ; This screen is used as the main entry point for the tool.
- AYCBEF2; Display ; This screen is used only to display a list of errors that exist in a single patient's file.
- AYCBEV VIEW ERROR DETAIL; Protocol ; Used to view the details of a single error, this screen also is used as the entry point for the Entry/Edit protocol.

Routines

Routines to Map

The routines in the Error Processing Phase 1 software do not require mapping.

Callable Routines

There are no callable routines in the Error Processing Phase 1 software.

Routine List

The following is a list of IVM routines with checksums included in the Error Processing Phase 1 software. The second line of each of these routine(s) will look like:

```
<tab>;;2.0;INCOME VERIFICATION;**[patch list]**;JULY 18,2000
```

Routine Name	Before Patch	After Patch	Patch List	Bytes
AYCBCMN	13446952	13460226	277, 463	8835
AYCBEF	N/A	335933	463	532
AYCBEP	N/A	22790628	463	4700
AYCBEPD	N/A	839471	463	1233
AYCBEPG	N/A	10157801	463	8613
AYCBEPL1	N/A	17344797	463	9730
AYCBEPL2	N/A	18481998	463	9484
AYCBEPL3	N/A	21031008	463	8500
AYCBEPL5	N/A	11198538	463	3562
AYCBEPPE	N/A	1440007	463	1343
AYCBEPRE	N/A	7524951	463	4943
AYCBEPRE1	N/A	13535403	463	9972
AYCBEPRE2	N/A	15465369	463	7882
AYCBEPRE3	N/A	6347237	463	5305
AYCBEPRE4	N/A	6929883	463	5262
AYCBEPRE5	N/A	3137442	463	2733
AYCBEPS1	N/A	7840139	463	6104
AYCBEP2	N/A	4957248	463	4054
AYCBEV	N/A	5494529	463	3490
IVMB463P	N/A	2671015	463	2114

The following is a list of the VIVA routines with checksums included in the Error Processing Phase 1 software. The second line of each of these routines will look like:

```
<tab>;;1.0;VIVA; **[patch list]**;MAY 25, 1994
```

Routine Name	Before Patch	After Patch	Patch List	Bytes
IVMBACK1	18384034	19882209	173, 196, 208, 233, 412, 463	9859
IVMEV11	11759731	13164980	166, 30, 256, 292, 463	7419
AYCBTBTO	7258902	7616983	277, 392, 397, 414, 463	9820
AYCBTBT1	7391115	7586253	277, 392, 397, 414, 412, 463	9992

Exported Options

Menu Diagram

```

Error Processing Tool (AYCB ERROR PROCESSING TOOL)
|
|
----1 Error Processing Menu
      [AYCB ERROR PROCESSING MENU]

----2 Error Processing Reports
      [AYCB ERROR PROCESSING REPORTS]

----3 Error Message Purge Parameters
      [AYCB ERROR MESSAGE PURGE PARAMETERS]

----4 Error Processing User Group
      [AYCB ERROR PROCESSING USER GROUP]
  
```

Server Options

AYCBEP ERROR LOG SERVER.....Error Processing Server

Exported Protocols

The following protocols are exported with the Error Processing Phase 1 software:

Protocol Name	Associated Function	Description
AYCBEP MENU	Menu	Set to Menu. Contains the following protocols: <ul style="list-style-type: none"> • AYCBE DATE RANGE • AYCBE SORT • AYCBE RETRANSMIT • AYCBE FIND PATIENT • AYCBE ASSIGN STAFF • AYCBE MAIL • AYCBE UPDATE STATUS • AYCBE VIEW ERROR • AYCBE ENTER/EDIT
AYCBEP DATE RANGE	Change Date Range	Used to create a new list of errors within a user-supplied date range.
AYCBEP SORT	Sort List	Displays the existing list of errors in a different order according to a User selected sort order. The sort options are Assigned To, Date/Time, Patient Name, Error Text, Station Logging Error, and Error Status.
AYCBEP RETRANSMIT	Retransmit Patient File	Flags the appropriate files which causes the chosen patient's file to be retransmitted to the site(s) that the patient has visited.
AYCBEP FIND PATIENT	Check Errors	Used to view a new list composed of all of the errors associated with a selected patient.

Protocol Name	Associated Function	Description
AYCBEP ASSIGN STAFF	Assign Staff	Used to assign errors to individual users or a group of users for repair of faulty data.
AYCBEP MAIL	Mail Message	Invokes the VA MailMan messaging system.
AYCBEP UPDATE STATUS	Update Error Status	Used to change the status of an error.
AYCBEP VIEW ERROR	View Error Detail	Displays a new list composed of the details associated with a single error. It will also have a Menu setting, and contain the following protocols: <ul style="list-style-type: none"> • AYCBEP RETRANSMIT • AYCBEP FIND PATIENT • AYCBEP ASSIGN STAFF • AYCBEP MAIL • AYCBEP UPDATE STATUS • AYCBEP VIEW ERROR • AYCBEP ENTER/EDIT
AYCBEP ENTER/EDIT	Enter/Edit VIVA Data	Entered only through the view error screen. Allows the user to modify VIVA data, then transmit the file to the appropriate site(s).

Archiving and Purging

Archiving

There are no archiving capabilities exported with the Error Processing Phase 1 software.

Purging

Option [AYCB EDIT PURGE DATE] allows users to define the number of days that errors with a status of CLOSED or DELETE remain in the Error Message Log File before being purged.

Callable Routines/Entry Points/Application Programmer Interfaces (APIs)

There are no callable routines, entry points or APIs that can be called by other products. Any of the APIs called are existing routines.

External Interfaces

The HL7 messaging has been altered slightly. Previously, when an AE was created, the system would put an entry of the error, along with several pieces of information, into the global ^XMB(3.9. The system would then send a mail message through MailMan to a pre-defined group at the HEC informing them that an error was received from **VISTA** associated with the ENROLLMENT File (#300.132). The same process occurs for the CCs, but through a series of Consistency Checkers. This functionality has been altered slightly. These are the following changes:

- When the error is received, whether an AE or CC, the entry into the ^XMB(3.9 global has been stopped. No entries will be filed.
- No new mail message will be sent to a group or a user when the Error is received.
- When an error message has been fixed (by the user the error was assigned to or by someone else), an HL7 message is sent to notify the user who fixed it that the error was closed or deleted.

External/ Internal Relations

External Relations

The following **VISTA** package versions or higher must be installed prior to installing the Error Processing Phase 1 software:

Package Name	Minimum Version Required
IVM	2.0
Kernel	8.0
VA FileMan	22.0
VISTA HL7	1.6

Database Integration Agreements (DBIAs)

There are no DBIAs associated with the Error Processing Phase 1 software.

Internal Relations

All of the Error Processing Tool options have been designed to stand alone.

Package-wide Variables

There are no package-wide variables associated with the Error Processing Phase 1 software.

SACC Exemptions/Non-standard Code

There are no SACC exemptions associated with the Error Processing Phase 1 software.

Security

Security Management

There are no unique legal requirements associated with the Error Processing Phase 1 software. In accordance with VHA Directive 10-93-142, the files and fields exported with the Error Processing Phase 1 software should not be modified locally.

Security Features

Mail Groups and Alerts

A new mail group, Error Processing Active/Exempt, has been created to receive any errors encountered during the installation of this software and the totals of records created, deleted, or purged.

Remote Systems

The Health Eligibility Center (HEC) system sends eligibility data, enrollment data, income data, and means test data to the local VA Medical Centers (VAMCs) using HL7 messaging. Eligibility, enrollment, and income data are sent via a Z11 HL7 transmission; means test data via a Z10 HL7 transmission. In the event that a local VAMC is unable to process the information received, it will notify the HEC of a problem. This notification is transmitted via an Application Error (AE) message.

The HEC performs its own error checking to prevent bad data from being sent to the VAMC where it will be rejected and sent back to the HEC as an application error message. This error checking process notifies the HEC of the problem via a Consistency Check (CC) message. Previously, both the AE and CC messages were transmitted via a bulletin to various users at the HEC. Some of these error messages can be corrected through a manual correction at the HEC; the patient record must then be re-queued to be transmitted to the VAMC.

The Error Processing Tool was created to easily correct the inaccurate data, send the updated data to the VAMC, and keep track of the progress of the error correction process. It allows users to review the errors, exchange messages with VAMC personnel regarding the resolution of the data discrepancy, queue a transmission to be sent to the VAMC, and make corrections at the HEC, if necessary.

Archiving and Purging

See Archiving and Purging section of this manual.

Contingency Planning

Using services should have a local contingency plan to be used in the event of application problems in a live environment. The plan should identify the procedure(s) for maintaining the functionality provided by Error Processing Phase 1 software in the event of system outage. Field Station Information Security Officers (ISOs) can get assistance from the regional ISO (RISO).

Interfacing

There are no specialized products embedded within or required by the Error Processing Phase 1 software.

Electronic Signatures

The Error Processing Phase 1 software does not use electronic signatures.

Menus

There are no new or existing menu options that would warrant warnings about sensitive patient data being displayed when using any of the Error Processing Menu options.

Security Keys

Contact Representatives are limited to the menu options that are available. These limitations will be accomplished by Security Keys. The security keys needed will be set up on the following menu options:

- 2 Error Processing Reports
- 3 Error Processing Purge Parameters
- 4 Error Processing User Group

File Security

The following is a list of recommended VA FileMan access codes for the files in the Error Processing Phase 1 software:

File Number	File Name	DD	RD	WR	DEL	LAYGO	AUDIT
742080	HEC ERROR PROCESSING LOG FILE	@	@	@	@	@	@
742081	HEC ERROR PROCESSING GROUP FILE	@	@	@	@	@	@
742082	HEC ERROR PROCESSING USER FILE	@	@	@	@	@	@

References

None

Official Policies

In accordance with VHA Directive 10-93-142, the files and fields exported with the Error Processing Phase 1 software should not be modified locally.

Glossary

Acronym	Description
AE	Application Error
CC	Consistency Check
HEC	Health Eligibility Center
HL7	Health Level Seven
IEN	Internal Entry Number
SDD	Software Design Description
SRS	Software Requirements Specification
SSN	Social Security Number
VA	Veterans Affairs
VAMC	Veterans Affairs Medical Center
VHA	Veterans Health Administration
VISTA	Veterans Health Information Systems and Technology Architecture
VIVA	Veterans Identification & Verification Access
Z10	HL7 transmission from the HEC to VAMC site which contains income test data.
Z11	HL7 transmission from the HEC to VAMC site which contains a veteran's eligibility and enrollment information.

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