



**MASTER PATIENT INDEX/PATIENT
DEMOGRAPHICS (MPI/PD) VISTA
EXCEPTION HANDLING**

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Revision History

Documentation Revision History

The following table displays the revision history for this document. Revisions to the documentation are based on continuous dialog with the Infrastructure and Security Services (ISS) Technical Writers and evolving industry standards and styles.

Date	Revision	Description	Author
12/2001	1.0	MPI/PD VistA Exception Handling	Dianne Barker, Silver Spring OIFO
11/2002	1.1	Updates to screen captures and minor changes to text.	Lauren Hardeen, Bay Pines OIFO
6/2003	1.2	Updates to screen captures and minor changes to text	Lauren Hardeen, Bay Pines OIFO
12/2003	1.3	Updates to documentation based on Patch RG*1*29	Susan Strack, Oakland OIFO; Lauren Hardeen, Bay Pines OIFO
5/27/04	3.0	MPI/PD VistA Version 1.0 User Manual released in conjunction with patches MPIF*1.0*33, RG*1.0*35 and DG*5.3*589 to support the MPI Changes Iteration 2 project.	Susan Strack, Oakland OIFO; Christine Chesney, Oakland OIFO; Christine Link, Birmingham OIFO; Paulette Davis, Birmingham OIFO
9/24/04	4.0	Implemented new conventions for displaying TEST data: <ul style="list-style-type: none">• The first three digits (prefix) of any Social Security Numbers (SSN) will be in the "900" or "800" range.• Patient or user names will be formatted as follows: PATIENTn,[first name] or USERn,[first name] respectively, where the digit ("n") in the last name increments with each new entry.	Susan Strack, Oakland OIFO

Patch History

For the current patch history related to this software, please refer to the Patch Module (i.e., Patch User Menu [A1AE USER]) on FORUM.

Revision History

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Orientation

How to Use this Manual

This manual uses several methods to highlight different aspects of the material. The following symbols are used in the manual to alert the reader about special information:

- Various symbols are used throughout the documentation to alert the reader to special information. The following table gives a description of each of these symbols:

Symbol	Description
	Used to inform the reader of general information including references to additional reading material
	Used to caution the reader to take special notice of critical information

Table ix: Documentation Symbol Descriptions

- Descriptive text is presented in a proportional font (as represented by this font).
- All uppercase is reserved for the representation of M code, variable names, or the formal name of options, field and file names, and security keys (e.g., the XUPROGMODE key).
- The Enter or Return Key is illustrated as **<Enter>** and is included in examples only when it might be unclear that such a keystroke must be entered.
- Conventions for displaying TEST data in this document are as follows:
 - The first three digits (prefix) of any Social Security Numbers (SSN) will be in the "900" or "800" range.
 - Patient or user names will be formatted as follows: PATIENTn,[first name] or USERn,[first name] respectively, where the digit ("n") in the last name increments with each new entry

Reference Materials

In addition to the information provided in this documentation, readers who wish to learn more about the Master Patient Index (MPI) software should consult the following Web sites:

- VistA Documentation Library (VDL) at the following address:
<http://www.va.gov/vdl/Infrastructure.asp?appID=16>
- MPI Data Quality Management team's website at:
http://vista.med.va.gov/mpi_dqmt/
- MPI/PD web site at:
http://vista.med.va.gov/mpi_pd/index.html

Readers who wish to learn more about Infrastructure and Security Services (ISS) documentation should consult the following:

- ISS Documentation Home Page at the following web address

<http://www.va.gov/vdl/#infrastructure>

This site provides documentation links and software downloads for all ISS documentation.

- Health System Design and Development (HSD&D) VistA Documentation Library (VDL) Home Page at the following web address:

<http://www.va.gov/vdl/>

This site provides documentation links and software downloads for all VistA documentation.

The Technical Writers Style Guide documentation is made available online, on paper and in Adobe Acrobat Portable Document Format (PDF). The PDF documents *must* be read using the Adobe Acrobat Reader (i.e., ACROREAD.EXE), which is freely distributed by Adobe Systems Incorporated at the following web address:

<http://www.adobe.com/>



For more information on the use of Adobe Acrobat Reader, please refer to the “Adobe Acrobat Quick Guide” at the following web address:
<http://vista.med.va.gov/iis/acrobat/index.asp>



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Chapter 1: Introduction

This documentation provides Master Patient Index/Patient Demographics (MPI/PD) sites information and assistance on resolving MPI/PD HL7 exception messages:

- Chapter 2: This chapter documents the bulletins sent to the RG CIRN DEMOGRAPHIC ISSUES mail group designed to alert Patient Administration of problems (a.k.a., MPI/PD HL7 exception messages) related to information processing.
- Chapter 3: This chapter provides information on how to use the MPI/PD Exception Handling option, introduced in MPI/PD Patch RG*1.0*3, to process and resolve MPI/PD HL7 exception messages. The Patient MPI/PD Data Inquiry option is also documented as it pertains to exception handling. This option shows you patient information at your site that is useful when dealing with exception messages.
- Chapter 4: This chapter provides strategies for resolving the various exception message types, both included and not included in the MPI/PD Exception Handling option.



The MPI/PD Exception Handling option uses a VistA List Manager interface to display exception messages and process the actions involved in resolving them. If you have not installed Patch RG*1.0*3, you will receive separate messages for each of the exceptions. There will be no List Manager display. You will need to use the Patient Audit, MPI Display Only Query, and Single Patient Initialization to MPI options on the MPI Patient Admin Coordinator menu and do Patient Inquiries, HINQs and edit patient data from outside the CIRN menus. The Purge and Update Status to Processed features will not be available.

What are MPI/PD HL7 Exception Messages?

MPI/PD HL7 exception messages result from problems encountered when a patient's demographic data does not match data provided to the MPI by another facility. During the processing of HL7 messages for the MPI/PD options, it's possible for these exception messages to be generated. These messages serve to notify IRM and/or Patient Administration personnel of dilemmas or situations that have been encountered. These problems can include one of the situations listed as follows:

- Patient's dates of death not being synchronized between your local PATIENT file (#2) and the MPI.
- Potential matches were found during the initialization of the patient to the MPI or during the Local/Missing ICN resolution job that need to be resolved manually in order to obtain an ICN.

Listed in the section that follows, titled "MPI/PD HL7 Exception Message Mail Groups" are the mail groups to which these exception messages are sent, depending on the nature of the problem. They are listed by mail group name, type of problem, and recommended mail group members.

MPI/PD HL7 Exception Message Mail Groups

Members of the RG CIRN DEMOGRAPHIC ISSUES mail group are automatically notified of problems relating to data. It is recommended that Patient Administration personnel (i.e., Automated Data Processing Application Coordinator (ADPAC) and/or Coordinators, etc.) be made members of this mail group.

There are a number of MPI/PD exception messages that are technical in nature, involving problems with HL7 messages, multiple sites, or ones that require a NOIS to be logged. These are sent to the MPIF EXCEPTIONS Handler on the Austin MPI. They will be resolved by MPI/PD team members or by Enterprise VistA Support (EVS—formerly National VistA Support)

Chapter 2: Bulletins Sent to the RG CIRN DEMOGRAPHIC ISSUES Mail Group

Several bulletins are sent to the RG CIRN DEMOGRAPHIC ISSUES mail group. These are designed to alert Patient Administration of problems related to information processing. They are:

Patient-Related bulletins:

- Remote Sensitivity Indicated
- Remote Date of Death Indicated

Master File Update bulletins:

- Patient Not Found (Treating Facility type)
- Inconsistent Data (Treating Facility type)

Patient-Related Bulletins

These messages concern any changes in demographic information (such as Marital Status, address, etc.) for a particular patient. All incoming patient-related messages go through the same validation steps.

1. Do a match on SSN, and Coordinating Master of Record Site (CMOR)

The second step is the check on the incoming HL7 message to insure that certain data in the incoming message matches the information for the patient at the receiving system. This insures that this, in fact, is the same patient. Data fields that are checked are the ICN and the CMOR. If these fields do not match, an Inconsistent Data bulletin is generated. Also, the system compares the SSN; if they do not match, the system will still process the HL7 message and update the patient. It will also add the patient to the exception list and fire off this bulletin.

Bulletins Sent to the RG CIRN DEMOGRAPHIC ISSUES Mail Group

Subj: MPI/PD - INCONSISTENT DATA [#93364] 23 Apr 98 14:23 51 Lines
From: MPI/PD PACKAGE in 'IN' basket. Page 1

The MPI/PD Package has received a message from:
ALBANY, NY --> Site Number: 500
This message contains data that is inconsistent
with your site's data.

Local Name: BURNETT,COREL
Local SSN: 999438885
Local ICN: 1000304603
Local CMOR: BATAVIA, NY

Remote Data

FIELD: .01 = BURNETT,CARAL
FIELD: .02 = FEMALE
FIELD: .03 = 2340512
FIELD: .05 = DIVORCED
FIELD: .08 = ISLAM
FIELD: .09 = 999438885
FIELD: .097 = 2980423
FIELD: .111 = NANCY STREET SENS
FIELD: .1112 = "@"
FIELD: .112 = "@"
FIELD: .113 = "@"
FIELD: .114 = "@"
FIELD: .115 = "@"
FIELD: .117 =
FIELD: .131 = "@"
FIELD: .132 = "@"
FIELD: .211 = "@"
FIELD: .219 = "@"
FIELD: .2403 = "@"
FIELD: .301 = NO
FIELD: .302 = "@"
FIELD: .31115 = "@"
FIELD: .323 = "@"
FIELD: .351 = "@"
FIELD: .361 = EMPLOYEE
FIELD: .3612 = "@"
FIELD: .3615 = "@"
FIELD: 391 = EMPLOYEE
FIELD: 991.01 = 1000304603
FIELD: 991.02 = 842887
FIELD: 991.03 = ALBANY, NY
FIELD: 1901 = NO
FIELD: DFN = 7169753
FIELD: FLD = .111;
FIELD: SENDING SITE = 500
FIELD: SENSITIVITY = "@"
FIELD: SENSITIVITY DATE = "@"
FIELD: SENSITIVITY USER = "@"
FIELD: SITENUM = 500

Figure 2-1: Inconsistent Data bulletin

2. Remote Sensitivity Indicated

Now that we know for sure that we are in fact dealing with the correct patient, the system checks the incoming HL7 message to see if the patient is marked as a "Sensitive" patient at the sending site, but not at the receiving site. If this is true, a Remote Sensitivity Indicated bulletin is generated. This is a clue that you may wish to mark the patient's record as "Sensitive" at the receiving site.

```
Subj: Remote Sensitivity Indicated [#93001] 11 Mar 98 13:18 8 Lines
From: MPI/PD PACKAGE in 'IN' basket. Page 1 **NEW**
-----
The MPI/PD Package has received a message from:
ALBANY, NY --> Site Number: 500

This message indicates that Pt. BURNETT,CARAL is flagged as Sensitive at
the other facility but is not flagged as Sensitive at your facility.
Remote Patient SSN:xxxxxxxxxxxxxxxx
Remote User Who Flagged the Pt as Sensitive: ADPAC,ANNE
Date/time remote user Flagged Pt Sensitive: Feb 04, 1998@13:38
```

Figure 2-2: Remote Sensitivity Indicated bulletin

3. Remote Date of Death Indicated

Next, the system checks the incoming HL7 message to see if the patient is marked as deceased at the sending site. If this is true, a Remote Date of Death Indicated bulletin is generated. The bulletin is generated when the remote site has a date of death and the subscribing site does not and also when the remote site has a date of death that is different from the subscribing site's date of death. The receiving site can then review whether to mark the patient as deceased at their site.

The following message is displayed when the remote site has a date of death and the subscribing site does not.

```
Subj: Remote Date of Death Indicated [#108237] 23 May 02 14:22 11 lines
From: MPI/PD PACKAGE In 'IN' basket. Page 1 *New*
-----
The MPI/PD Package has received a message from:
DETROIT --> Site Number: 553

This message indicates that patient KILIMILLIE,MIKE
has a date of death at the other facility but not at your facility.

Remote Patient SSN: 999102102
Date of Death from other facility: Jun 02, 1997

CMOR site: ALBANY
```

Figure 2-3: Remote Date of Death Indicated bulletin

The following message is displayed when the remote site has a date of death that is different from the subscribing site's date of death.

```
Subj: Remote Date of Death Indicated [#108237] 23 May 02 14:22 11 lines
From: MPI/PD PACKAGE In 'IN' basket. Page 1 *New*
-----
The MPI/PD Package has received a message from:
DETROIT --> Site Number: 553

This message indicates that patient KILIMILLIE,MIKE
has a different date of death at the other facility than at your facility.

Remote Patient SSN: 999102102
Date of Death from other facility: Jun 02, 1997
Date of Death at your facility: Jun 01, 1997

CMOR site: ALBANY
```

Figure 2-4: A Remote Date of Death different from subscribing site's date of death

Chapter 3: Exception Message Processing

This chapter provides information and assistance to Master Patient Index/Patient Demographics (MPI/PD) sites on how to use the MPI/PD Exception Handling option, introduced in Patch RG*1.0*3, to process and resolve MPI/PD HL7 exception messages. The Patient MPI/PD Data Inquiry option is also documented as it pertains to exception handling. This option shows you patient information at your site that is useful when dealing with exception messages.



This manual makes no attempt to document all the MPI/PD Message Exception Menu options. The MPI/PD Exception Handling and Patient MPI/PD Data Inquiry options are the primary focus of MPI/PD HL7 exception messaging and are documented in detail in this chapter.

The MPI/PD Exception Handling options listed below are *not* documented in this manual:

- View Potential Match Patient
- Remote Patient Data Query Menu ...

All options located on the Message Exception Menu are documented in detail in the "Master Patient Index/Patient Demographics (MPI/PD) Vista User Manual" found at the following Web site:

<http://www.va.gov/vdl/Infrastructure.asp?appID=16> .

Use MPI/PD Exception Handling Option to Process/Resolve MPI/PD HL7 Exception Messages

The MPI/PD Exception Handling option provides utilities for processing MPI/PD exceptions in the CIRN HL7 EXCEPTION LOG file (#991.1). This List Manager based option displays exceptions and allows the user to choose an exception case for review and resolution.

To access the MPI/PD Exception Handling option, start at the MPI/PD Patient Admin Coordinator Menu [RG ADMIN COORD MENU] and choose the Message Exception Menu [RG EXCEPTION MENU], Figure 3-1.

```
Select MPI/PD Master Menu Option: CORD <Enter> MPI/PD Patient Admin Coordinator
Menu

    SP      Site Parameters Edit for CMOR
    ADU     MPI/PD Patient Admin User Menu ...
    LOG     Patient Audit Log Reports ...
    MPI     Master Patient Index Menu ...
    MSG     Message Exception Menu ...
    RPT     Management Reports ...
    POC     Add/Edit Point of Contact

Select MPI/PD Patient Admin Coordinator Menu Option: MSG <Enter> Message Exception
Menu

    View Potential Match Patient
    MPI/PD Exception Handling
    Patient MPI/PD Data Inquiry
    Remote Patient Data Query Menu ...

Select Message Exception Menu Option: MPI/PD <Enter> Exception Handling

The MPI/PD Exception Purge process last ran Oct 31, 2001@12:09:10.
Do you want to run the MPI/PD Exception Purge process now? NO// <Enter>
```

Figure 3-1: MPI/PD Patient Admin Coordinator Menu

Upon entering the option, you will be notified when the last purge took place and prompted to run the purge, Figure 3-1. If you choose to run the purge, you will have to wait a few minutes before using the MPI/PD Exception Handling option.

The purge removes duplicate entries and resolved entries over 30 days old from the CIRN HL7 EXCEPTION LOG file (#991.1):

Regular purging provides you with the most up-to-date information on the List Manager screen. If you feel that waiting for the purge to complete is too time consuming, you can ask your IRM service to schedule the background job MPI/PD Exception Purge [RG EXCEPTION PURGE] via TaskMan to run once a week at an off-hours time that does not conflict with backups.

The MPI/PD Exception Handling option, , allows you to process the following exceptions:

- Required field(s) missing for patient sent to MPI
- SSN Match Failed
- Name Doesn't Match
- Death Entry on MPI not in VistA
- Death Entry on VistA not in MPI
- Death Entries on MPI and VistA DO NOT Match
- Potential Matches Returned

The option displays a list of exceptions that have not yet been processed, Figure 3-2. You can sort the list by date (default), patient name, or exception type. You can also choose to view only those of a selected exception type. These first three actions merely change the order that the patients are listed on the screen.

```

Select Message Exception Menu Option: MPI/PD <Enter> Exception Handling

The MPI/PD Exception Purge process last ran Jul 23, 2002@09:59:56.
Do you want to run the MPI/PD Exception Purge process now? NO// <Enter>
...EXCUSE ME, JUST A MOMENT PLEASE...

ST Sort by Exception Type

MPI/PD EXCEPTION HANDLING      Jul 24, 2002@09:37:53      Page: 1 of 1
MPI/PD Exception Handling

      Patient          SSN          Dt Rec'd  Exception Type
1  PATIENT46,MICHAEL  999471102  10/22/01  Death Entry on MPI not in VISTA
2  PATIENT47,DAVID   999455455  12/11/01  Death Entry on Vista not in MPI
3  PATIENT44,TESTING  999457457P 4/29/02   Potential Matches Returned
4  PATIENT48,ZEETTIE  999936785  5/15/02   SSN Match Failed
5  PATIENT72,JAMES D  999223333  6/11/02   Potential Matches Returned
6  PATIENT45,ACKS    999456456  7/3/02    Potential Matches Returned
-----
Enter ?? for more actions
SD Sort Exceptions by Date          VT View Selected Exception Type
SN Sort by Patient Name             SE Select Exception
ST Sort by Exception Type
Select Action:Quit// ??
The following actions are also available:
+ Next Screen          FS First Screen          SL Search List
- Previous Screen      LS Last Screen          ADPL Auto Display(On/Off)
UP Up a Line           GO Go to Page           QU Quit
DN Down a Line         RD Re Display Screen
> Shift View to Right  PS Print Screen
< Shift View to Left  PL Print List

```

Figure 3-2: MPI/PD Exception Handling option

Once the option is done running, you can go back to the Message Exception Menu and choose the MPI/PD Exception Handling option again to view the results of the purge process. This option offers several actions to sort by. You can choose to see only those exception types that you select, or you can select more detailed information on a particular exception as well as perform the actions necessary to

process and resolve that exception. These actions are listed below and documented with screen captures on the following pages:

- SD—Sort Exceptions by Date
- SN—Sort by Patient Name
- ST—Sort by Exception Type
- VT—View Selected Exception Type
- SE—Selection Exception

SD—Sort Exceptions by Date

This action allows you to sort exceptions by date, Figure 3-3.

```

Select Action:Quit// SD <Enter> Sort Exceptions by Date

ST Sort by Exception Type
MPI/PD EXCEPTION HANDLING      Jul 24, 2002@09:42:15      Page: 1 of 1
MPI/PD Exception Handling

      Patient          SSN          Dt Rec'd  Exception Type
1  PATIENT46,MICHAEL  999102102  10/22/01  Death Entry on MPI not in VISTA
2  PATIENT47,DAVID    999455455  12/11/01  Death Entry on Vista not in MPI
3  PATIENT44,TESTING  999457457P 4/29/02   Potential Matches Returned
4  PATIENT48,ZEETTIE  999936785  5/15/02   SSN Match Failed
5  PATIENT72,JAMES D  999223333  6/11/02   Potential Matches Returned
6  PATIENT45,ACKS     999456456  7/3/02    Potential Matches Returned
Enter ?? for more actions
SD Sort Exceptions by Date      VT View Selected Exception Type
SN Sort by Patient Name        SE Select Exception
ST Sort by Exception Type
Select Action:Quit// <Enter>
    
```

Figure 3-3: MPI/PD Exception Handling option sorted by date

SN—Sort by Patient Name

This action allows you to sort exceptions by patient name, Figure 3-4.

```

Select Action:Quit// SN <Enter> Sort by Patient Name

SN Sort by Patient Name
MPI/PD EXCEPTION HANDLING      Jul 24, 2002@10:25:10      Page: 1 of 1
MPI/PD Exception Handling

      Patient          SSN          Dt Rec'd  Exception Type
1  PATIENT48,ZEETTIE    999936785  5/15/02   SSN Match Failed
2  PATIENT72,JAMES D    999223333  6/11/02   Potential Matches Returned
3  PATIENT47,DAVID      999455455  12/11/01  Death Entry on Vista not in MPI
4  PATIENT46,MICHAEL    999102102  10/22/01  Death Entry on MPI not in VISTA
5  PATIENT44,TESTING    999457457P 4/29/02   Potential Matches Returned
6  PATIENT45,ACKS       999456456  7/3/02    Potential Matches Returned

      Enter ?? for more actions
SD Sort Exceptions by Date          VT View Selected Exception Type
SN Sort by Patient Name             SE Select Exception
ST Sort by Exception Type
Select Action:Quit// <Enter>

```

Figure 3-4: MPI/PD Exception Handling option sorted by patient name

ST—Sort by Exception Type

This action allows you to sort exceptions by exception type, Figure 3-5.

```

Select Action:Quit// ST <Enter> Sort by Exception Type

MPI/PD EXCEPTION HANDLING      Jul 24, 2002@10:48:47      Page: 1 of 1
MPI/PD Exception Handling

      Patient          SSN          Dt Rec'd  Exception Type
1  PATIENT48,ZEETTIE    999936785  5/15/02   SSN Match Failed
2  PATIENT46,MICHAEL    999102102  10/22/01  Death Entry on MPI not in VISTA
3  PATIENT47,DAVID      999455455  12/11/01  Death Entry on Vista not in MPI
4  PATIENT44,TESTING    999457457P 4/29/02   Potential Matches Returned
5  PATIENT72,JAMES D    999223333  6/11/02   Potential Matches Returned
6  PATIENT45,ACKS       999456456  7/3/02    Potential Matches Returned

      Enter ?? for more actions
SD Sort Exceptions by Date          VT View Selected Exception Type
SN Sort by Patient Name             SE Select Exception
ST Sort by Exception Type
Select Action:Quit// <Enter>

```

Figure 3-5: MPI/PD Exception Handling option sorted by exception type

VT—View Selected Exception Type by SSN Match Failed

This action allows you to see only those exception types that you choose in the MPI/PD Exception Handling option, Figure 3-6.

```

Select Action:Quit// VT <Enter> View Selected Exception Type
Enter an exception type to view: ??

    Select one of the following:
        209      Required field(s) DOB or Name Missing
        213      SSN Match Failed
        214      Name Doesn't Match
        215      Death Entry on MPI not VISTA
        216      Death Entry on Vista not MPI
        217      Death Entries on MPI and Vista DON'T MATCH
        218      Potential Matches Returned

Enter an exception type to view: 2

MPI/PD EXCEPTION HANDLING      Jul 24, 2002@09:52:40      Page: 1 of 2
MPI/PD Exception Handling

    Patient      SSN      Dt Rec'd      Exception Type
1  PATIENT48,ZEETTIE      999936785      5/15/02      SSN Match Failed
2  PATIENT49,JOHN      999125589      SSN Match Failed
3  PATIENT50,LIZ      999321444      SSN Match Failed
4  PATIENT52,SIDNEY      999315315      SSN Match Failed
5  PATIENT51,NEW      999747848      SSN Match Failed
6  PATIENT53,RICARDO      999435435      SSN Match Failed
7  PATIENT54,ROHDA      999323323      SSN Match Failed
8  PATIENT55,ACOUSTIC      999678888      SSN Match Failed
9  PATIENT56,TANDY      999136666      SSN Match Failed
10 PATIENT57,COUPLER      999465555      SSN Match Failed
11 PATIENT58,ISSIDORE      999497777      SSN Match Failed
12 PATIENT59,DAVE      999919191      SSN Match Failed
13 PATIENT60,JIMMY D      999387533      SSN Match Failed
14 PATIENT61,SIDNEY      999090090      SSN Match Failed
+      Enter ?? for more actions
SD Sort Exceptions by Date      VT View Selected Exception Type
SN Sort by Patient Name      SE Select Exception
ST Sort by Exception Type
Select Action:Next Screen// <Enter> NEXT SCREEN
MPI/PD EXCEPTION HANDLING      Jul 24, 2002@09:53:10      Page: 2 of 2
MPI/PD Exception Handling

+      Patient      SSN      Dt Rec'd      Exception Type
15 PATIENT62,CHARLES P      999122333      SSN Match Failed
16 PATIENT63,RAVEN      999223333      SSN Match Failed
17 PATIENT64,NEAL      999433454      SSN Match Failed
18 PATIENT65,GREG      999444141      SSN Match Failed
19 PATIENT66,LANA      999897123      SSN Match Failed
20 PATIENT67,LOLA      999786231      SSN Match Failed

    Enter ?? for more actions
SD Sort Exceptions by Date      VT View Selected Exception Type
SN Sort by Patient Name      SE Select Exception
ST Sort by Exception Type
Select Action:Quit// <Enter>
    
```

Figure 3-6: MPI/PD Exception Handling option viewed by SSN Match Failed exception type

SE—Selection Exception action using patient ZEETTIE PATIENT48

This action allows you to select a specific exception providing more detailed information on that exception, EXCEPTION ACTIONS screen. They allow you to easily check patient data and resolve exceptions without leaving the MPI/PD Exception Handling option.

- **Patient Audit**—Use this action to audit the changes made in the MPI/PD Exception Handling option. The report prints the patient name and DFN, date/time the field was edited, the user who made the change, the field edited, the old value, and the new value. The right margin for this report is 80.
- **Patient Inquiry**—Use this action to do a Patient Inquiry directly from the MPI/PD Exception Handling option. Patient Inquiry is the standard Patient Inquiry option.
- **HINQ Inquiry**—Use this action to do a HINQ Inquiry for a selected patient directly from the MPI/PD Exception Handling option. HINQ Inquiry sends a HINQ Request to the HINQ SUSPENSE file. Sites using HINQ Inquiry within the Patient Data Review [VAFC EXCEPTION HANDLER] or MPI/PD Exception Handling [RG EXCEPTION HANDLING] options, should be sure that the USE HINQ INQUIRY? (#17) field in the MAS PARAMETERS file (#43) is set to YES.
- **MPI Display Only Query**—Use this action to display the information that is on the MPI for a patient directly from the MPI/PD Exception Handling option.
- **Single Patient Initialization to the MPI**—Use this action to perform a Single Patient Initialization to the MPI directly from the MPI/PD Exception Handling option. This action allows you to initialize the patient to the MPI to get a national ICN.
- **Edit Patient Data**—Use this action to edit patient data directly from the MPI/PD Exception Handling option. This action allows you to edit selected fields on the patient.
- **Update Status to Processed**—Use this action to update the exception status to Processed directly from the MPI/PD Exception Handling option. This action allows you to change the status of the exception to Processed thereby removing it from the exception list. It is only used for resolving the three Death entry exceptions.
- **MPI/PD Data Inquiry**—Use this action to display Master Patient Index/Patient Demographics (MPI/PD) information for the selected patient directly from the MPI/PD Exception Handling option. This action allows you to query any facility at which a selected patient has been seen, check the query, and display the remote patient data that is returned from that site. It is documented in detail elsewhere in this manual, in the section titled "MPI/PD Data Inquiry Action."
- **Edit Note**—Use this action to add/edit notes to the exception directly from the MPI/PD Exception Handling option.



Some of these actions, listed previously, can also be found as stand-alone MPI/PD VistA options, Table 1-1. The MPI/PD Exception Handling option offers these same options in the form of actions. This is done to make this functionality available and convenient for users to continue working within the MPI/PD Exception Handling option to resolve exceptions.

Action	Counterpart VistA MPI/PD Option
Patient Audit	Single Patient Audit File Print [RGMT AUDIT SINGLE] on the Patient Audit Log Reports [RG TRAN/AUD AUD REP] menu.
Display Only Qry	Display Only Query [MPIF DISPLAY ONLY QUERY TO MPI] on the Master Patient Index Menu [MPIF VISTA MENU]
Single Patient Init	Single Patient Initialization to MPI [MPIF IND MPI LOAD] on the Master Patient Index Menu [MPIF VISTA MENU]
MPI/PD Data Inquiry	<p>This action allows users to get MPI data and remote data. It comprises the following stand-alone MPI/PD option and menu option:</p> <ul style="list-style-type: none"> • MPI data is also available on the PATIENT MPI/PD Data Inquiry [RG EXCEPTION TF INQUIRY] option. • Remote data can be derived from the three options (Send Remote Patient Data Query, Check Remote Patient Data Query, and Display Remote Patient Data Query) located on the Remote Patient Data Query Menu [RG REMOTE PDAT MENU].

Table 1-1: MPI/PD Exception Handling actions with counterpart MPI/PD VistA stand-alone options

The actions in the MPI/PD Exception Handling option are functionally identical to the counterpart stand-alone MPI/PD VistA options. For more information on MPI/PD VistA stand-alone options, see the "MPI/PD VistA User Manual" located at the following Web site:

<http://www.va.gov/vdl/Infrastructure.asp?appID=16> .

```

MPI/PD EXCEPTION HANDLING      Jul 24, 2002@10:25:10      Page: 1 of 1
MPI/PD Exception Handling

      Patient          SSN          Dt Rec'd  Exception Type
1  PATIENT48,ZEETTIE  999936785  5/15/02  SSN Match Failed
2  PATIENT72,JAMES D  999223333  6/11/02  Potential Matches Returned
3  PATIENT47,DAVID    999455455  12/11/01 Death Entry on Vista not in MPI
4  PATIENT46,MICHAEL  999102102  10/22/01 Death Entry on MPI not in VISTA
5  PATIENT44,TESTING  999457457P 4/29/02  Potential Matches Returned
6  PATIENT45,ACKS     999456456  7/3/02   Potential Matches Returned
Enter ?? for more actions
SD Sort Exceptions by Date          VT View Selected Exception Type
SN Sort by Patient Name            SE Select Exception
ST Sort by Exception Type
Select Action:Quit// SE <Enter> Select Exception
Select : (1-14): 1
HI Hinq Inquiry          ED Edit Patient Data      NT Edit Note

MPI/PD EXCEPTION ACTIONS      Jul 24, 2002@10:28:50      Page: 1 of 1
MPI/PD EXCEPTION HANDLING ACTIONS.

Exception Data
Name:  PATIENT48,ZEETTIE
SSN:   999936785
DOB:   OCT 10,1910
DFN:   7169377
ICN:   500000073
Date of Death:
Exception Type:  SSN Match Failed
Exception Date:  May 15, 2002
Exception Status: NOT PROCESSED

Exception Notes:
Enter ?? for more actions
AUD Patient Audit          DO MPI Display Only Qry  UPD Update to Processed
PI Patient Inquiry        SPI Single Patient Init  DI MPI/PD Data Inquiry
HI Hinq Inquiry          ED Edit Patient Data      NT Edit Note
Select Action:Quit//

```

Figure 3-7: MPI/PD Exception Handling option Select Exception action

"Single Patient Init" and "Update to Processed" Actions Remove Exception Message from List

When the exception has been processed, meaning that you have verified data, corrected where necessary, and contacted the Coordinating Master of Record (CMOR) site if necessary, then depending on the exception, use either the Single Patient Init to the MPI or Update the Status to Processed action and the exception will no longer appear on the exception list. In general, Single Patient Init to MPI is used if the patient currently has a locally assigned ICN or no ICN while Update Status to Processed would be used if the patient already has a nationally assigned ICN. To determine the type of ICN, use the Patient MPI/PD Data Inquiry option under the Message Exception Menu to look at the ICN (national) and Locally Assigned ICN (local) fields in your PATIENT file (#2).



When using the Single Patient Init to MPI action, you may receive a list of possible matches to your patient. Sometimes a number of these are obviously the same patient. If you feel that **more than one** of the choices presented matches your patient, **do not** initialize your patient to the MPI at this time. Please send a message to the MPIF EXCEPTIONS mail group on your local VistA system. Forwarding this information will allow the MPI Data Quality Management team to research and resolve the duplicate. If your patient appears to be the same as a unique entry on the MPI, match your patient to that entry. If your patient is unique from all others listed, add the patient as a new entry.



For an up-to-date list of the MPI/PD Exception Type Numbers and Messages see “Appendix A: MPI/PD Exception Messages” in this document.

MPI/PD Data Inquiry Action

This MPI/PD exception handling action is located in the MPI/PD Exception Handling option. It is helpful in resolving exceptions because it allows you to query any facility at which a selected patient has been seen, check the query, and display the remote patient data that is returned from that site. The remote data fields retrieved include the Integration Control Number (ICN), the Coordinating Master of Record (CMOR) site, MPI/PD Activity Score, Treating Facility list, CMOR History and CMOR Change Request History.

```

MPI/PD EXCEPTION ACTIONS      Nov 28, 2001@15:31      Page:    1 of    1
MPI/PD EXCEPTION HANDLING ACTIONS.

Exception Data
Name:    PATIENT74 ,DANIEL
SSN:    999337777
DOB:
DFN:    700000
ICN:    1099999999
Date of Death:
Exception Type:    Required field(s) missing for patient sent to MPI
Exception Date:    Oct 16, 2001
Exception Status:    NOT PROCESSED

Exception Notes:

Enter ?? for more actions
AUD Patient Audit      DO MPI Display Only Qry      UPD Update to Processed
PI Patient Inquiry     SPI Single Patient Init      DI MPI/PD Data Inquiry
HI Hing Inquiry        ED Edit Patient Data         NT Edit Note
Select Action:Quit//  DI <Enter> MPI/PD Data Inquiry
    
```

Figure 3-8: MPI/PD Data Inquiry action

SND—Send Remote Query

```

MPI/PD PATIENT DATA ACTIONS   Nov 28, 2001@15:35:10           Page: 1 of 4
MPI/PD PATIENT DATA

Patient Data

MPI/PD Data for: PATIENT74,DANIEL (DFN #700000)
Printed Nov 28, 2001@15:35 at ALBANY
=====
SSN      : 999337777                      ICN : 1099999999
Sex      : MALE                          CMOR: BATTLE CREEK
Claim #: 999337777                      CMOR Activity Score : None
Date of Birth:                          Subscription Control #: None
Address: 123 COLLEGE TOWN DR
        SACRAMENTO, CALIFORNIA 95826

Treating Facilities:  Station:  DT Last Treated  Event Reason
-----
BATTLE CREEK         515         Jun 10, 1999@13:20  PATIENT DISCHARGE

+          Enter ?? for more actions
SND  Send Remote Query                DSP  Display Query Data
CHK  Check Remote Query
Select Action:Next Screen//  SND <Enter> Send Remote Query

-> For ICN 1099999999
Query last sent for this ICN on Nov 28, 2001

Select one or more of the following:
1. (502) ALEXANDRIA
2. (504) AMARILLO HCS
3. (515) BATTLE CREEK
4. (520) BILOXI
5. (521) BIRMINGHAM
6. (526) BRONX
7. (619) CENTRAL ALABAMA HCS
8. (674) CENTRAL TEXAS HCS
9. (537) CHICAGO HCS
10. (553) DETROIT
11. (677) EASTERN KANSAS HCS
12. (437) FARGO VAMROC
13. (564) FAYETTEVILLE AR
14. (578) HINES
15. (ALL)

Select site(s) 1-14 or 15 for all: 3,6,9-14
Remote patient data queries will be sent to:
1. (515) BATTLE CREEK
2. (526) BRONX
3. (537) CHICAGO HCS
4. (553) DETROIT
5. (677) EASTERN KANSAS HCS
6. (437) FARGO VAMROC
7. (564) FAYETTEVILLE AR
8. (578) HINES

Do you want to continue? Yes// <Enter> YES
Sending Remote Query to: 437  FARGO VAMROC
Sending Remote Query to: 515  BATTLE CREEK
Sending Remote Query to: 526  BRONX
Sending Remote Query to: 537  CHICAGO HCS
Sending Remote Query to: 553  DETROIT
Sending Remote Query to: 564  FAYETTEVILLE AR
Sending Remote Query to: 578  HINES
Sending Remote Query to: 677  EASTERN KANSAS HCS
    
```

Figure 3-9: Send Remote Query action

CHK—Check Remote Query

```

MPI/PD PATIENT DATA ACTIONS   Nov 28, 2001@15:35:10           Page: 1 of 4
MPI/PD PATIENT DATA

Patient Data
-----
MPI/PD Data for: PATIENT74,DANIEL (DFN #700000)
Printed Nov 28, 2001@15:35 at ALBANY
=====
SSN      : 999337777                      ICN : 1099999999
Sex      : MALE                          CMOR: BATTLE CREEK
Claim #: 999337777                      CMOR Activity Score : None
Date of Birth:                          Subscription Control #: None
Address: 123 COLLEGE TOWN DR
                SACRAMENTO, CALIFORNIA 95826

Treating Facilities:  Station:  DT Last Treated  Event Reason
-----
BATTLE CREEK        515        Jun 10, 1999@13:20  PATIENT DISCHARGE

+      Enter ?? for more actions
SND  Send Remote Query                DSP  Display Query Data
CHK  Check Remote Query
Select Action:Next Screen//  CHK <Enter> Check Remote Query

-> For ICN 1099999999

Select one or more of the following:
1. (515) BATTLE CREEK
2. (526) BRONX
3. (537) CHICAGO HCS
4. (553) DETROIT
5. (677) EASTERN KANSAS HCS
6. (437) FARGO VAMROC
7. (564) FAYETTEVILLE AR
8. (578) HINES
9. (ALL)
Select site(s) 1-8 or 9 for all: 9
    BATTLE CREEK status: (Response Received)
    BRONX status: (Response Received)
    CHICAGO HCS status: (Response Received)
    DETROIT status: (Response Received)
    EASTERN KANSAS HCS status: (Response Received)
    FARGO VAMROC status: (Response Received)
    FAYETTEVILLE AR status: (Response Received)
    HINES status: (Response Received)

```

Figure 3-10: Check Remote Query action

DSP—Display Query Data

```

MPI/PD PATIENT DATA ACTIONS   Nov 28, 2001@15:35:10           Page: 1 of 4
MPI/PD PATIENT DATA

Patient Data
-----
MPI/PD Data for: PATIENT74,DANIEL (DFN #700000)
Printed Nov 28, 2001@15:35 at ALBANY
=====
SSN      : 999337777              ICN : 1099999999
Sex      : MALE                  CMOR: BATTLE CREEK
Claim #: 999337777              CMOR Activity Score : None
Date of Birth:                  Subscription Control #: None
Address: 123 COLLEGE TOWN DR
          SACRAMENTO, CALIFORNIA 95826

Treating Facilities:   Station:  DT Last Treated   Event Reason
-----
BATTLE CREEK          515         Jun 10, 1999@13:20   PATIENT DISCHARGE

+          Enter ?? for more actions
SND  Send Remote Query          DSP  Display Query Data
CHK  Check Remote Query
Select Action:Next Screen//  DSP <Enter> Display Query Data

Display data returned from remote patient data queries.

-> For ICN 1001169316

Select one or more of the following:
1. (515) BATTLE CREEK
2. (526) BRONX
3. (537) CHICAGO HCS
4. (553) DETROIT
5. (677) EASTERN KANSAS HCS
6. (437) FARGO VAMROC
7. (564) FAYETTEVILLE AR
8. (578) HINES
9. (ALL)
Select site(s) 1-8 or 9 for all: 1

Enter RETURN to continue or '^' to exit: <Enter>

-----
MPI/PD REMOTE DATA QUERY      Nov 28, 2001@15:56:31           Page:1 of 3
MPI/PD REMOTE PATIENT DATA

REMOTE PATIENT DATA
-> For ICN 1099999999
    BATTLE CREEK status: (Response Received)

Printed Dec 11, 2001@07:39 at BATTLE CREEK
Enter RETURN to continue or '^' to exit: <Enter>

=====
SSN      : 999337777              ICN : 1099999999
Sex      : MALE                  CMOR: BATTLE CREEK
Claim #: 999337777              CMOR Activity Score : None
Date of Birth:                  Subscription Control #: None
    
```

Exception Message Processing

```
Address: 123 COLLEGE TOWN DR
          SACRAMENTO, CALIFORNIA 95826

Treating Facilities:  Station:  DT Last Treated      Event Reason
-----
BATTLE CREEK        515          Jun 10, 1999@13:20  PATIENT DISCHARGE
BRONX                526          Aug 13, 1998@9:45   PATIENT DISCHARGE
CHICAGO HCS         537          Sept 11, 1999@13:00 PATIENT DISCHARGE

Select Action:Next Screen// <Enter>
```

Figure 3-11: Display Query Data action

Use Patient MPI/PD Data Inquiry Option to View Patient Exception Information at Your Site

The Patient MPI/PD Data Inquiry [RG EXCEPTION TF INQUIRY] shows you patient information at your site that is useful when dealing with exceptions, Patient Data Reviews, and CMOR Change Requests. To determine the type of ICN, use the Patient MPI/PD Data Inquiry option under the Message Exception Menu.

```
Select Message Exception Menu Option: Patient MPI/PD Data Inquiry

This report prints MPI/PD Data for a selected patient. The
information displayed includes the Integration Control Number
(ICN), Coordinating Master of Record (CMOR), MPI/PD Activity
Score, Subscription Control Number, Treating Facility list,
CMOR History and CMOR Change Request History.

The information is pulled from the Patient (#2) file, Treating
Facility List (#391.91) file, and MPIF CMOR Request (#984.9) file.

Patient lookup can be done by Patient Name/SSN or by ICN.

Select PATIENT: PATIEN100,SAM <Enter> 01-01-42    999111111    YES    SC VETERAN
(OTHER)

DEVICE: HOME// <Enter>

MPI/PD Data for: SERIOUS,SAM (DFN #100000105)
Printed Feb 15, 2001@12:19 at ALBANY
=====
SSN      : 999111111          ICN : 1001111111
Sex      : MALE              CMOR: ALBANY
Claim #: 999111111          CMOR Activity Score   : None
Date of Birth: Jan 01, 1942  Subscription Control #: None
Address: 1100 MAIN ST
          BUTLER, MARYLAND 16001

Treating Facilities:  Station:  DT Last Treated      Event Reason
-----
ALBANY              500          JUN 7,1985@15:00   PATIENT ADMISSION
DETROIT             553          none found          none found
```

```

ICN History:
-----

CMOR History:
-----
ALBANY - changed SEP 15,2000@14:12:20
DETROIT - changed OCT 17,2000@10:45:18
500TEMP - changed OCT 17,2000@10:45:26

CMOR Change Request History:
-----
REQUEST #500-38 - SENT OCT 30,2000
  Type of Request: TRANSFER TO DETROIT
  Status          : REQUESTED

Additional DPT Data for: SERIOUS,SAM (DFN #100000105)
=====
PLACE OF BIRTH [CITY]      :
PLACE OF BIRTH [STATE]    :
FATHER'S NAME             :
MOTHER'S NAME             :
MOTHER'S MAIDEN NAME      :
NAME OF PRIMARY NEXT OF KIN : REMOTE,RICHARD
NEXT OF KIN PHONE NUMBER  : 555-555-1212
NAME OF DESIGNEE          :
EMERGENCY NAME            : REMOTE,EMERGENCY
MARITAL STATUS            : DIVORCED
RELIGIOUS PREFERENCE      : NO PREFERENCE
RACE                      :
PRIMARY ELIGIBILITY CODE  : NSC
VETERAN (Y/N)?           : YES
SERVICE BRANCH [LAST]    : AIR FORCE
SERVICE NUMBER [LAST]    : 333337777
SERVICE CONNECTED PERCENT :
SERVICE ENTRY DATE [LAST] :
SERVICE SEPARATION DATE [LAST] : JAN 24, 1987
PERIOD OF SERVICE         : VIETNAM ERA
DATE ENTERED IN PATIENT FILE : DEC 19, 2000

```

Figure 3-12: Patient MPI/PD Data Inquiry



Exceptions Deleted for Patient Records Removed Because of a Merge

When records were merged using the Toolkit Duplicate Resolution System [XDR MAIN MENU], there have been cases where exceptions existed for some of these records that were removed. When a facility attempted to resolve these exceptions using the MPI/PD Exception Handling option [RG EXCEPTION HANDLING], these exceptions were sent to the MPI.

MPI/PD Patch RG*1*29 corrects this pattern by deleting any existing exceptions on file for a patient being removed because of a merge. Also, users will no longer be restricted from merging records when both records in a duplicate pair have a national ICN. A call to the API A40^MPIFA40 was added to send HL7 messages to the MPI to remove the "FROM" record and send messages to the "FROM" record's Treating Facilities to change ICNs to the "TO" record ICN. These changes address NOIS PUG-0902-51018.

Chapter 4: Resolving the Exceptions

This chapter provides strategies for resolving the various exception message types, both included and not included in the MPI/PD Exception Handling option. The information is organized in two sections:

- MPI/PD HL7 Exception Messages Listed on the Exception Handling Option
- MPI/PD HL7 Exception Messages Not Listed on the Exception Handling Option

Within each section it's categorized by first listing the exception message itself, then by providing the recommended approach to its resolution.

MPI/PD HL7 Exception Messages Listed on the Exception Handling Option

Exception Message: "Required field(s) missing for Patient sent to MPI"

This exception occurs during the initialization of the MPI with your local PATIENT file (#2) if the required field "Name" has not been populated. This required field must have a value before patients can be assigned ICNs.



This exception should only exist for "old" exceptions. These kinds of exceptions won't be generated any longer on the VistA side. They will be logged on the MPI Austin side.

Resolution:

To resolve this exception first correct any missing fields identified. Use the Edit Patient Data action to update the Name, Social Security Number, Date of Birth and Date of Death fields. Use the Single Patient Initialization to MPI action to initialize this patient to the MPI.

```
MPI/PD EXCEPTION ACTIONS          Jan 14, 2000 11:12:11          Page: 1 of 1
MPI/PD EXCEPTION HANDLING ACTIONS.

Exception Data
1  Name:  PATIENT101,MARY
2  SSN:   999333333
3  DOB:
4  DFN:   3
5  ICN:   100333333
6  Date of Death:
7  Exception Type:  Required field(s) missing for patient sent to MPI
8  Exception Date:  Nov 02, 1999
Exception Status:  NOT PROCESSED

-----Enter ?? for more actions-----
AUD Patient Audit      DO MPI Display Only Qry      UPD Update to Processed
PI  Patient Inquiry    SPI Single Patient Init      DI  MPI/PD Data Inquiry
HI  Hing Inquiry       ED Edit Patient Data         NT  Edit Note
```

Resolving the Exceptions

```
Select Action:Quit// ED <Enter> Edit Patient Data
NAME: PATIENT101,MARY// <Enter>
DATE OF BIRTH: 08/22/1941
SOCIAL SECURITY NUMBER: 999333333// <Enter>
DATE OF DEATH: <Enter>

MPI/PD EXCEPTION ACTIONS          Jan 14, 2000 11:12:11          Page: 1 of 1
MPI/PD EXCEPTION HANDLING ACTIONS.

-----Exception Data-----
1  Name:      PATIENT101,MARY
2  SSN:      999333333
3  DOB:      AUG 22,1941
4  DFN:      3
5  ICN:      1003333333
6  Date of Death:
7  Exception Type:      Required Field(s) Date of Birth
8  Exception Date:      Nov 02, 1999
   Exception Status:      NOT PROCESSED

-----Enter ?? for more actions-----
AUD Patient Audit      DO MPI Display Only Qry      UPD Update to Processed
PI Patient Inquiry     SPI Single Patient Init      DI MPI/PD Data Inquiry
HI Hinq Inquiry       ED Edit Patient Data      NT Edit Note
Select Action:Quit// SPI <Enter> Single Patient Init to MPI

Attempting to connect to the Master Patient Index in Austin...

Patient was not found in the MPI...

Adding Patient to Master Patient Index...

Enter RETURN to continue or '^' to exit: <Enter>
```

Figure 4-1: Resolve Exception for Date of Birth or Name missing

The screen is then updated with the new (national) ICN and the status is changed to PROCESSED.

```
MPI/PD EXCEPTION ACTIONS          Jan 14, 2000 11:12:11          Page: 1 of 1
MPI/PD EXCEPTION HANDLING ACTIONS.

-----Exception Data-----
1  Name:      PATIENT101,MARY
2  SSN:      999333333
3  DOB:      AUG 22,1941
4  DFN:      3
5  ICN:      1003333333
6  Date of Death:
7  Exception Type:      Required field(s) missing for patient sent to MPI
8  Exception Date:      Nov 02, 1999
   Exception Status:      PROCESSED

-----Enter ?? for more actions-----
AUD Patient Audit      DO MPI Display Only Qry      UPD Update to Processed
PI Patient Inquiry     SPI Single Patient Init      DI MPI/PD Data Inquiry
HI Hinq Inquiry       ED Edit Patient Data      NT Edit Note
Select Action:Quit// <Enter>
```

Figure 4-2: Patient with new ICN and status of PROCESSED

Exception Message: "SSN Match Failed"

This exception occurs when a discrepancy exists in a patient's SSN between your local PATIENT file (#2) and the MPI. The facility's local PATIENT file may have a pseudo SSN for a patient, while the MPI does **not** have one at all (i.e., the field is not populated in the MPI).

This exception can also occur when an SSN is populated in both your local PATIENT file and the MPI for the same patient but the values are different (e.g., the site has a pseudo SSN and the MPI has a "national" SSN for the same patient). Based on a review by Patient Administration personnel, it can be decided if the SSN should be updated in your local PATIENT file.

Another example of an event that would cause this exception is a lost connection to the MPI when the patient is being added to the MPI. This would cause the patient to be assigned a national Integration Control Number (ICN) on the MPI but have a local ICN assigned at your site. If a user then updates the patient's Social Security Number, the MPI finds a potential match but the ICN is different than on your system.

Resolution:

First, determine if the SSN you have is correct. If not, use the Edit Patient Data action to correct it. Once corrected (or if it is already correct), use the Single Patient Initialization to MPI action to initialize this patient to the MPI. If the SSN matches now, the patient will automatically be matched up with the entry on the MPI.

If the SSN still does not match, you will get a list of one patient or more to pick a match from. You will not be able to match to a patient on the MPI if the SSN on your site and the MPI aren't the same. If you have verified that the SSN you have for this patient is correct, send a message to the CMOR noting what you have found so they can correct their entry. Once the CMOR is corrected, you'll be able to use Single Patient Initialization to MPI option to get the ICN for your patient. If you aren't able to get the site to update the SSN, send a message to the MPI Data Quality Management team for assistance.

A current MPI Admin POC listing can be obtained at:

http://vista.med.va.gov/mpi_dqmt/cirn_points_of_contact.htm

Exception Message: "Name Doesn't Match"

This exception is used to inform Patient Administration personnel that the Name returned from the MPI does not match the entry in your local PATIENT file (#2). This message should be forwarded to the Patient Administration Coordinator at your facility to see if this patient's name should be updated in the local PATIENT file.

Another example of an event that would cause this exception would be a lost connection to the MPI when the patient is being added to the MPI. This would cause the patient to be assigned a national ICN on the MPI but have a local ICN assigned at your site. If a user then updates the Name, the MPI finds a potential match but the ICN is different from that on your system.

Resolution:

To resolve this exception, you will need to move the current SSN to the Name prior to making the change.

Exception Message: "Death Entry on MPI Austin, not in VistA"

This exception message occurs when the Date of Death field is populated in the MPI for a particular patient. However, that same field is **not** populated in your local PATIENT file (#2).

Resolution:

The resolution for all three Death Entry Exceptions is the same. The first step is to use the Patient Inquiry to identify the patient's CMOR site. If you are the CMOR, use the MPI Display Only Query to identify that the MPI data and your facility data match. If they do match, no action is necessary. If you are not the CMOR, do a HINQ inquiry to see if the patient has a date of death there and contact the CMOR to resolve the issue. If you are the CMOR, and the data has not been updated on the MPI, you will want to trigger an A08 message to the MPI. This can be done by re-entering the Name or DOB (or any of the other fields that MPI/PD monitors, including date of death). Use the Update Status to Processed action when you have resolved the exception. This will take the exception off the list.

Exception Message: "Death Entry on VistA not in MPI Austin"

This exception message occurs when the Date of Death field is populated in your local PATIENT file (#2) for this patient. However, that same field is **not** populated in the MPI.

Resolution:

Use the same resolution as with Death Entry on MPI Austin, not in VistA.

Exception Message: "Death Entries on MPI Austin and VistA do Not Match"

This exception occurs when the MPI and your local PATIENT file (#2) have different dates of death for the same patient.

Resolution:

Use the same resolution as with Death Entry on MPI Austin, not in VistA.

Exception Message: "Potential Matches Returned"

Many of these exceptions are likely to occur. It is very important for the sharing of information between sites, that they be resolved as quickly as possible.

During the ListManager display when presented with a list of potential matches, the following message may also be displayed to the user if this ICN is already in use by another patient:

```
You are attempting to assign an ICN that has already been assigned
to another patient in your Patient file.
An Exception will be recorded noting that these 2 patients
need to be reviewed to determine if they are a duplicate
```

Figure 4-3: ListManager display disclosing there are potential matches

Resolution:

Once you have determined either the correct match or that the patient is indeed new to the MPI, use the Single Patient Initialization to MPI action to resolve the exception.

If more than one potential match is identified (duplicate on the MPI), **do not** initialize your patient to the MPI. Instead, send a message to the MPIF EXCEPTIONS mail group on your local VistA system. Forwarding this information will allow the MPI Data Quality Management team to research and resolve the duplicate.

MPI/PD HL7 Exception Messages *Not* Listed on the Exception Handling Option

Exception Message: "Multiple ICNs"

This message is intended for Patient Administration personnel who are responsible for resolving potential duplicates in the PATIENT file (#2). The message indicates that the MPI identified both of these patients as being the same person. However, MPI/PD Business Rules prevent two or more patients in the same PATIENT file from having the same ICN.

```
Subj: MPI/PD Exception: Multiple ICNs [#707] 21 Sep 99 02:03 1 Line
From: HL7 Msg # 2001179104 In 'IN' basket. Page 1 *New*
-----
Multiple ICNs: Patient dfn ##### returned ICN 1000000000 that is already in use for
Patient dfn ##### Checkout pair to determine if a Duplicate.

Select MESSAGE Action: DELETE (from IN basket)// <Enter>
```

Figure 4-4: MPI/PD Exception: Multiple ICNs message

Resolution:

To resolve this, it is necessary to look up both of the patients whose DFNs are provided and determine if they are a duplicate pair. If it is a duplicate pair, determine which patient should remain as the "active" entry. The "wrong" patient should be ZZ'd and Duplicate Record Merge scheduled.

Glossary

.001 FIELD	A field containing the internal entry number of the record.
.01 FIELD	The one field that must be present for every file and file entry. It is also called the NAME field. At a file's creation the .01 field is given the label NAME. This label can be changed.
10-10EZ	Form used to apply for health benefits.
AAC	Austin Automation Center
ABBREVIATED RESPONSE	This feature allows you to enter data by typing only the first few characters for the desired response. This feature will not work unless the information is already stored in the computer.
ACCESS CODE	A code that, along with the Verify code, allows the computer to identify you as a user authorized to gain access to the computer. Your code is greater than 6 and less than 20 characters long; can be numeric, alphabetic, or a combination of both; and is usually assigned by a site manager or application coordinator. It is used by the Kernel's Sign-on/Security system to identify the user (see Verify Code).
ACTIVE PATIENTS	Patients who have been seen at a site within the past three years.
ADPAC	Automated Data Processing Application Coordinator
ADT	Admission Discharge and Transfer —Part of the Patient Information Management System (PIMS).
ADT/HL7 PIVOT FILE	Changes to any of the fields of patient information will be recorded and an entry created in the ADT/HL7 PIVOT file (#391.71). When an update to a patient's treating facility occurs, this event is added to the ADT/HL7 PIVOT file and marked for transmission. A background job will collect these updates and broadcast the appropriate HL7 message (A08 Patient Update or Master Files Notification [MFN] Treating Facility Updates). This is an ADT HL7 message designed for MPI/PD.
ALERTS	Brief online notices that are issued to users as they complete a cycle through the menu system. Alerts are designed to provide interactive notification of pending computing activities, such as the need to reorder supplies or review a patient's clinical test results. Along with the alert message is an indication that the View Alerts common option should be chosen to take further action.
ANCILLARY REVIEWER	This can be a single person or group of people given the responsibility to conduct reviews of potential duplicate record pairs with data in files other than the PATIENT file (#2). For example, selected personnel in Laboratory, Radiology, and Pharmacy.

Glossary

ANSI M (formerly ANSI MUMPS)	The M programming language is a standard recognized by the American National Standard Institute (ANSI). M stands for Massachusetts General Hospital Utility Multi-programming System .
APPLICATION COORDINATOR	Designated individuals responsible for user-level management and maintenance of an application package such as IFCAP, Lab, Pharmacy, Mental Health, etc.
APPLICATION PACKAGE (SOFTWARE)	Software and documentation that support the automation of a service, such as Laboratory or Pharmacy, within VA medical centers. The Kernel application package is like an operating system relative to other VistA applications.
APPLICATION PROGRAM INTERFACE (API)	<p>Application Program Interface. VistA Application Program Interfaces (APIs) are units of programming code provided by a custodial development domain to permit developers outside the custodial domain to accomplish a specified purpose. APIs in VistA may be defined as extrinsic functions, extrinsic special variables, or label references to routines. They allow programmers to carry out standard computing activities without needing to duplicate utilities in their own software. APIs also further DBA goals of system integration by channeling activities, such as adding new users, through a limited number of callable entry points.</p> <p>VistA APIs fall into the following three categories: The first category is "Supported API (IA)" These are callable routines, which are supported for general use by all VistA applications. The second category is "Controlled Subscription API (IA)." These are callable routines for which you must obtain an Integration Agreement (IA—formerly referred to as a DBIA) to use. The third category is "Private API (IA)," where only a single application is granted permission to use an attribute/function of another VistA package. These IAs are granted for special cases, transitional problems between versions, and release coordination.</p>
ARRAY	An arrangement of elements in one or more dimensions. An M array is a set of nodes referenced by subscripts that share the same variable name.
ASCII	American Standard Code for Information Interchange . A standardized coding scheme that assigns numeric values to letters, numbers, punctuation marks, and other characters to enable computer systems to exchange information.
AT-SIGN ("@")	A VA FileMan security Access code that gives the user programmer-level access to files and to VA FileMan's developer features. See Programmer Access. Also, the character "@" (i.e., at-sign, Shift-2 key on most keyboards) is used at VA FileMan field prompts to delete data.
BATCH ACKNOWLEDGMENTS	The format of an HL7 batch acknowledgement message consists entirely of a group of ACK (acknowledgment) messages. In the case of

	<p>MPI, batch acknowledgments are returned during the initialization process and during the Local/Missing ICN Resolution job. The background job files the ICN, ICN checksum, and CMOR, then updates the Treating Facility list. Data returned from this process constitute the acknowledgment of the batch message.</p>
BATCH MESSAGES	<p>There are instances when it is convenient to transfer a batch of HL7 messages. Common examples related to MPI are queries sent to the MPI for an ICN during the initialization process, the resolution of Local or Missing ICNs, and CMOR Batch Comparisons. Such a batch could be sent online using a common file transfer protocol. In the case of the MPI, the HL7 Batch Protocol uses the Batch Header Segment (BHS) and Batch Trailer Segment (BTS) message segments to delineate the batch.</p>
BATCH PROTOCOL, HL7	<p>Protocol utilized to transmit a batch of HL7 messages. The protocol generally uses File Header Segment (FHS), BHS, BTS and File Trailer Segment (FTS) segments to delineate the batch. In the case of the MPI, the protocol only uses the BHS and BTS segments.</p>
BOOLEAN EXPRESSION	<p>A logical comparison between values yielding a true or false result. In M, zero means false and non-zero (often one) means true.</p>
BULLETIN	<p>Electronic mail message that is automatically delivered by MailMan under certain conditions. For example, a bulletin can be set up to fire when database changes occur, such as adding a record to the file of users. Bulletins are fired by bulletin-type cross-references.</p>
CALLABLE ENTRY POINT	<p>Authorized programmer call (API) that may be used in any VistA application package. The DBA maintains the list of DBIC-approved entry points.</p>
CARET	<p>A symbol expressed as up caret (“^”), left caret (“<”), or right caret (“>”). In many M systems, a right caret is used as a system prompt and an up caret is an exiting tool from an option. Also known as the up-arrow symbol or shift-6 key.</p>
CHECKSUM	<p>The result of a mathematical computation involving the individual characters of a routine or file.</p>
CLIENT	<p>A single term used interchangeably to refer to the user, the workstation, and the portion of the program that runs on the workstation. In an object-oriented environment, a client is a member of a group that uses the services of an unrelated group. If the client is on a local area network (LAN), it can share resources with another computer (server).</p>
CMOR (COORDINATING MASTER OF RECORD)	<p>The CMOR site is the designated "owner" of the patient's descriptive data. A patient has only one CMOR at a time, but the CMOR can change. Initially, the MPI assigns the Coordinating Master of Record based upon the first site at which the MPI encounters the patient. The designation of a site as the CMOR for a patient does not provide</p>

"workload credit" or any other distinction. This field is found in the PATIENT file (#2).

The CMOR keeps the Treating Facility List updated every time a new facility where the patient has been seen identifies itself to the MPI. The CMOR then broadcasts, via the MPI, the updated lists to all the other facilities that share this patient.

COMMON MENU

The Common menu consists of options that are available to all users. Entering two question marks at the menu select prompt displays any secondary menu options available to the signed-on user, along with the common options available to all users.

COMPONENT

An object-oriented term used to describe the building blocks of GUI applications. A software object that contains data and code. A component may or may not be visible. These components interact with other components on a form to create the GUI user application interface.

CONTROLLED
SUBSCRIPTION
INTEGRATION
AGREEMENT

This applies where the IA describes attributes/functions that must be controlled in their use. The decision to restrict the IA is based on the maturity of the custodian package. Typically, these IAs are created by the requesting package based on their independent examination of the custodian package's features. For the IA to be approved, the custodian grants permission to other VistA packages to use the attributes/functions of the IA; permission is granted on a one-by-one basis where each is based on a solicitation by the requesting package. An example is the extension of permission to allow a package (e.g., Spinal Cord Dysfunction) to define and update a component that is supported within the Health Summary package file structures.

COTS

Commercial Off-the-Shelf. COTS refers to software packages that can be purchased by the public and used in support of VistA.

CROSS-REFERENCE

An attribute of a field or a file that identifies an action that should take place when the value of a field is changed. Often, the action is the placement of the field's value into an index. A Traditional cross-reference is defined with a specific field. A New-Style cross-reference is a file attribute and can be composed of one or more fields. New-Style cross-references are stored in the INDEX file (#.11).

A cross-reference on a file provides direct access to the entries in several ways. For example, the PATIENT file is cross-referenced by name, Social Security Number (SSN), and bed number. When asked for a patient, the user can then respond with the patient's name, SSN, or bed number. Using cross-references speeds up access to the file for printing reports. A cross-reference is also referred to as an index or cross-index.

DATA

A representation of facts, concepts, or instructions in a formalized manner for communication, interpretation, or processing by humans or by automatic means. The information you enter for the computer to

	store and retrieve is data. Characters are stored in the computer system as the values of local or global variables. VA FileMan fields hold data values for file entries.
DATA ATTRIBUTE	A characteristic unit of data such as length, value, or method of representation. VA FileMan field definitions specify data attributes.
DATA DICTIONARY (DD)	<p>The Data Dictionary is a global containing a description of what kind of data is stored in the global corresponding to a particular file. The data is used internally by VA FileMan for interpreting and processing files.</p> <p>A Data Dictionary contains the definitions of a file's elements (fields or data attributes), relationships to other files, and structure or design. Users generally review the definitions of a file's elements or data attributes; programmers review the definitions of a file's internal structure.</p>
DATA DICTIONARY ACCESS	A user's authorization to write/update/edit the data definition for a computer file. Also known as DD Access.
DATA DICTIONARY LISTING	This is the printable report that shows the data dictionary. Users and programmers use DDs.
DATABASE MANAGEMENT SYSTEM	A collection of software that handles the storage, retrieval, and updating of records in a database. A Database Management System (DBMS) controls redundancy of records and provides the security, integrity, and data independence of a database.
DATABASE	A set of data, consisting of at least one file, that is sufficient for a given purpose. The VistA database is composed of a number of VA FileMan files. A collection of data about a specific subject, such as the PATIENT file (#2); a data collection has different data fields (e.g., patient name, SSN, Date of Birth, and so on). An organized collection of data about a particular topic.
DATABASE, NATIONAL	A database that contains data collected or entered for all VHA sites.
DATE OF DEATH	A patient may be entered as deceased at a treating facility. If a shared patient is flagged as deceased, an RG CIRN DEMOGRAPHIC ISSUES bulletin is sent to each treating facility telling where, when, and by whom the deceased date was entered. Each site can then review whether the patient should be marked as deceased at their site.
DBA	Database Administrator . With respect to VistA, the DBA oversees package development with respect to VistA Standards and Conventions (SAC) such as namespacing. Also, this term refers to the Database Administration function and staff.
DBIC	Database Integration Committee . Within the purview of the DBA, the committee maintains a list of DBIC approved callable entry points and publishes the list on FORUM for reference by application programmers

	and verifiers.
DEFAULT	Response the computer considers the most probable answer to the prompt being given. It is identified by double slash marks (//) immediately following it. This allows you the option of accepting the default answer or entering your own answer. To accept the default you simply press the Enter (or Return) key. To change the default answer, type in your response.
DELIMITER	Special character used to separate a field, record or string. VA FileMan uses the ^ character as the delimiter within strings.
DEMOGRAPHIC DATA	Identifying descriptive data about a patient, such as: name, sex, date of birth, marital status, religious preference, SSN, address, etc.
DEPARTMENT OF VETERANS AFFAIRS	The Department of Veterans Affairs, formerly called the Veterans Administration.
DEVICE	Peripheral connected to the host computer, such as a printer, terminal, disk drive, modem, and other types of hardware and equipment associated with a computer. The host files of underlying operating systems may be treated like devices in that they may be written to (e.g., for spooling).
DHCP	D ecentralized H ospital C omputer P rogram of the Veterans Health Administration (VHA), Department of Veterans Affairs (VA) is the former name for Veterans Health Information Systems and Technology Architecture VistA. VistA software, developed by VA, is used to support clinical and administrative functions at VA Medical Centers nationwide. It is written in M and, via the Kernel, runs on all major M implementations regardless of vendor. VistA is composed of packages that undergo a verification process to ensure conformity with namespacing and other VistA standards and conventions.
DICTIONARY	Database of specifications of data and information processing resources. VA FileMan's database of data dictionaries is stored in the FILE of files (#1).
DIRECT CONNECT	The Direct Connect is a real-time TCP/IP connection to the Master Patient Index to allow for an immediate request for an ICN. As of MPI Version 1.0, the Direct Connect is activated when using any one the following PIMS options: <ul style="list-style-type: none">• Register A Patient,• Load/Edit Patient Data,• 10-10T Registration processes in PIMS, or• Electronic 10-10EZ Processing, and when using the following MPI options: <ul style="list-style-type: none">• MPI Single Patient Initialization,

	<ul style="list-style-type: none"> • Display Only Query option.
DIRECT MODE UTILITY	A programmer call that is made when working in direct programmer mode. A direct mode utility is entered at the MUMPS prompt (e.g., >D ^XUP). Calls that are documented as direct mode utilities <i>cannot</i> be used in application package code.
DoD	Department of Defense
DOMAIN	A site for sending and receiving mail.
DOUBLE QUOTES ("")	Symbol used in front of a Common option's menu text or synonym to select it from the Common menu. For example, the five-character string "TBOX" selects the User's Toolbox Common option.
DUPLICATE RECORD MERGE: PATIENT MERGE (Also see Kernel Toolkit: Duplicate Record Merge: Patient Merge or Patient Merge.)	<p>Patient Merge is a VistA application that provides an automated method to eliminate duplicate patient records within the VistA database (i.e., the VistA PATIENT [#2] file). It consists of three steps:</p> <ol style="list-style-type: none"> 1. Search for potential duplicate record pairs. 2. Review, verification, and approval of those pairs. 3. Merge process.
DUZ	Local variable holding the user number that identifies the signed-on user.
DUZ(0)	Local variable that holds the File Manager Access Code of the signed-on user.
ELIGIBILITY CODES	Codes representing the basis of a patient's eligibility for care.
ENTER key	Pressing the Return or Enter key tells the computer to execute your instruction or command or to store the information you just entered.
ENTRY	VA FileMan record. It is uniquely identified by an internal entry number (the .001 field) in a file.
ERROR TRAP	A mechanism to capture system errors and record facts about the computing context such as the local symbol table, last global reference, and routine in use. Operating systems provide tools such as the %ER utility. The Kernel provides a generic error trapping mechanism with use of the ^%ZTER global and ^XTER* routines. Errors can be trapped and, when possible, the user is returned to the menu system.
EVS (Formerly National VistA Support—NVS)	Enterprise VistA Support
EXCEPTION MESSAGE	MPI/PD generates messages and bulletins to alert the user to problems that occur in generating or processing HL7 messages. The MPI/PD

	Message Exception Menu contains options to manage the problems.
EXTRINSIC FUNCTION	Extrinsic function is an expression that accepts parameters as input and returns a value as output that can be directly assigned.
FACILITY	Geographic location at which VA business is performed.
FHIE	Federal Health Information Exchange. Formerly known as GCPR, FHIE allows for the sharing and transfer of electronic data from the DoD to the VHA for better patient care of Veterans.
FIELD	In a record, a specified area used for the value of a data attribute. The data specifications of each VA FileMan field are documented in the file's data dictionary.
FIELD NUMBER	The unique number used to identify a field in a file. A field can be referenced by "#" followed by the field number.
FILE	Set of related records treated as a unit. VA FileMan files maintain a count of the number of entries or records.
FILE MANAGER (VA FILEMAN)	VistAs Database Management System (DBMS). The central component of the Kernel that defines the way standard VistA files are structured and manipulated.
FORCED QUEUING	Device attribute indicating that the device can only accept queued tasks. If a job is sent for foreground processing, the device rejects it and prompts the user to queue the task instead.
FORM	Screen-oriented display (see ScreenMan).
FORUM	The central E-mail system within VistA. It is used by developers to communicate at a national level about programming and other issues. FORUM is located at the CIO Field Office—Washington, DC (162-2).
FREE TEXT	A DATA TYPE that can contain any printable characters.
GLOBAL VARIABLE	Variable that is stored on disk (M usage).
GUI	Graphical User Interface. A type of display format that enables users to choose commands, initiate programs, and other options by selecting pictorial representations (icons) via a mouse or a keyboard.
HEALTH LEVEL 7 (HL7) BATCH PROTOCOL	Protocol utilized to transmit a batch of HL7 messages. The protocol generally uses FHS, BHS, BTS and FTS segments to delineate the batch. In the case of the MPI, the protocol only uses the BHS and BTS segments.
HEALTH LEVEL 7 (HL7) VistA	Messaging system developed as a VistA software package that follows the HL7 Standard for data exchange.

HEALTH LEVEL 7 (HL7)	National standard for data exchange in all healthcare environments regardless of individual computer application systems.
HEALTH LEVEL 7(HL7) MFN MESSAGES	HL7 Update Treating Facility message type (Master File Notification [MFN]). When an update to a patient's treating facility occurs, this event is added to the ADT/HL7 PIVOT file (#391.71) and marked for transmission. A background job will collect these updates and broadcast the HL7 MFN messages. This is an ADT HL7 message designed for MPI/PD.
HEC	H ealth E ligibility C enter
HELP FRAMES	Entries in the HELP FRAME file (#9.2) that may be distributed with application packages to provide online documentation. Frames may be linked with other related frames to form a nested structure.
HELP PROCESSOR	Kernel module that provides a system for creating and displaying online documentation. It is integrated within the menu system so that help frames associated with options can be displayed with a standard query at the menu's select prompt.
HELP PROMPT	Brief help that is available at the field level when entering one question mark.
HINQ	H ospital I nquiry—The HINQ module provides the capability to request and obtain veteran eligibility data via the VA national telecommunications network. Individual or group requests are sent from a local computer to a remote Veterans Benefits Administration (VBA) computer where veteran information is stored. The VBA network that supports HINQ is composed of four computer systems located in regional VA payment centers.
HIPAA	H ealth I nsurance P ortability and A ccountability A ct
HOST FILE SERVER (HFS)	Procedure available on layered systems whereby a file on the host system can be identified to receive output. It is implemented by the Device Handler's HFS device type.
HSD&D (Formerly SD&D—System Design and Development)	H ealth S ystem D esign and D evelopment
I.H.S.	I ntegrated H ospital S ystem
ICN	The I ntegration C ontrol N umber is a unique identifier assigned to patients when they are added to the Master Patient Index. The ICN follows the ASTM E1714-95 standard for a universal health identifier. ICNs link patients to their records across VA systems.
IDCU	The I ntegrated D ata C ommunications U tility, which is a wide area

	network, used by VA for transmitting data between VA sites.
IEN	Internal Entry Number. The number used to identify an entry within a file. Every record has a unique internal entry number.
INITIALIZATION	The process of setting variables in a program to their starting value.
INPATIENT	Patient who has been admitted to a hospital in order to be treated for a particular condition.
INPUT TEMPLATE	A pre-defined list of fields that together comprise an editing session.
INPUT TRANSFORM	An executable string of M code that is used to check the validity of input and converts it into an internal form for storage.
INSTITUTION	A Veterans Affairs (VA) facility assigned a number by headquarters, as defined by Directive 97-058. An entry in the INSTITUTION file (#4) that represents the Veterans Health Administration (VHA).
INTEGRATION AGREEMENTS (IA) (Formerly known as DATABASE INTEGRATION AGREEMENTS [DBIA])	Integration Agreements define an agreement between two or more VistA packages to allow access to one development domain by another. Any package developed for use in the VistA environment is required to adhere to this standard; as such it applies to vendor products developed within the boundaries of DBA assigned development domains (e.g., MUMPS AudioFax). An IA defines the attributes and functions that specify access. All IAs are recorded in the Integration Agreement database on FORUM. Content can be viewed using the DBA menu or the System Design & Development's web page.
INTEGRATION CONTROL NUMBER (ICN)	The Integration Control Number is a unique identifier assigned to patients when they are added to the Master Patient Index. The ICN follows the ASTM E1714-95 standard for a universal health identifier. ICNs link patients to their records across VA systems.
INTERNAL ENTRY NUMBER (IEN)	The number used to identify an entry within a file. Every record has a unique internal entry number.
IRA	Initial Request Analysis
IRM	Information Resource Management. A service at VA medical centers responsible for computer management and system security.
ISO	Information Security Officer
ITAC	Information Technology Approval Committee was established as an advisory committee to the Chief Information Officer to ensure that the Information Technology (IT) program supports VHA goals and to provide guidance concerning priorities for IT initiatives.
IV&V	Independent Validation and Verification team acts to ensure the functional integrity and technical correctness of software, processes,

	and documentation.
KERNEL	Set of VistA software routines that function as an intermediary between the host operating system and the VistA application packages such as Laboratory, Pharmacy, IFCAP, etc. The Kernel provides a standard and consistent user and programmer interface between application packages and the underlying M implementation.
KERNEL TOOLKIT	Kernel Toolkit is a robust set of tools developed to aid the Veterans Health Information Systems and Technology Architecture VistA development community, and Information Resources Management (IRM), in writing, testing, and analysis of code. They are a set of generic tools that are used by developers, documenters, verifiers, and packages to support distinct tasks.
KEY, SECURITY	The purpose of Security Keys is to set a layer of protection on the range of computing capabilities available with a particular software package. The availability of options is based on the level of system access granted to each user.
KEYWORD	Word or phrase used to call up several codes from the reference files in the LOCAL LOOK-UP file (#8984.4). One specific code may be called up by several different keywords.
KIDS	Kernel Installation & Distribution System
LAN	Local Area Network
LAYGO ACCESS	A user's authorization to create a new entry when editing a computer file. (Learn As You GO allows you the ability to create new file entries.)
LDAP	Lightweight Directory Access Protocol
LINK	Non-specific term referring to ways in which files may be related (via pointer links). Files have links into other files.
LOCAL	The system to which a user is currently signed on.
LOOKUP	To find an entry in a file using a value for one of its fields.
M (ANSI STANDARD)	A programming language recognized by the American National Standards Institute (ANSI) . The acronym M (formerly MUMPS) stands for Massachusetts General Hospital Utility Multi-programming System .
MAIL MESSAGE	An entry in the MESSAGE file (#3.9). The VistA electronic mail system (MailMan) supports local and remote networking of messages.
MAILMAN	VistA software that provides a mechanism for handling electronic communication, whether it's user-oriented mail messages, automatic

	firing of bulletins, or initiation of server-handled data transmissions.
MANAGER ACCOUNT	UCI that can be referenced by non-manager accounts such as production accounts. Like a library, the MGR UCI holds percent routines and globals (e.g., ^%ZOSF) for shared use by other UCIs.
MANDATORY FIELD	Field that requires a value. A null response is not valid.
MASTER PATIENT INDEX (AUSTIN)	The Master Patient Index is the master index of all VHA patients. The MPI assigns and maintains unique national patient identifiers (i.e., Integration Control Numbers or ICNs) that link patients to their records across VHA systems. The MPI also assigns the initial CMOR (first site to identify the patient to the MPI). It contains patient's identifying descriptive information (e.g., name, SSN, date of birth, mother's maiden name, place of birth state and place of birth city).
MASTER PATIENT INDEX (Vista)	<p>This software resides in VistA and supports the Austin side of the MPI, as well as the CMOR (Coordinating Master Of Record) change requests. MPI/PD VistA enables sites to query the MPI (Austin) for the:</p> <ul style="list-style-type: none">• Assignment of ICN (i.e., Integration Control Number) and CMOR.• Inactivation of an ICN for a patient.• Known data on the MPI (Austin). <p>Any updates to patient data are then sent to the MPI (Austin) and to sites where a patient has been seen. MPI/PD VistA also manages incoming and outgoing Change CMOR requests.</p>
MENU	List of choices for computing activity. A menu is a type of option designed to identify a series of items (other options) for presentation to the user for selection. When displayed, menu-type options are preceded by the word "Select" and followed by the word "option" as in Select Menu Management option: (the menu's select prompt).
MENU MANAGER	The Kernel module that controls the presentation of user activities such as menu choices or options. Information about each user's menu choices is stored in the Compiled Menu System, the ^XUTL global, for easy and efficient access.
MENU SYSTEM	The overall Menu Manager logic as it functions within the Kernel framework.
MENU TEMPLATE	An association of options as pathway specifications to reach one or more final destination options. The final options must be executable activities and not merely menus for the template to function. Any user may define user-specific menu templates via the corresponding Common option.
MENU TEXT	The descriptive words that appear when a list of option choices is

displayed. Specifically, the Menu Text field of the OPTION file (#19). For example, User's Toolbox is the menu text of the XUSERTOOLS option. The option's synonym is TBOX.

MENU TREES

The menu system's hierarchical tree-like structures that can be traversed or navigated, like pathways, to give users easy access to various options.

MESSAGE SEGMENTS

Each HL7 message is composed of segments. Segments contain logical groupings of data. Segments may be optional or repeatable. Square brackets ([]) indicate the segment is optional, curly brackets ({}) indicate the segment is repeatable. For each message category, there will be a list of HL7 standard segments and/or "Z" segments used for the message.

MESSAGE-ID

A message identifier that shows the message number and the domain name of the message.

MPI (AUSTIN)

See MASTER PATIENT INDEX (AUSTIN)

MPI (VistA)

See MASTER PATIENT INDEX (VistA)

MPI INITIALIZATION

The process of initializing a site's PATIENT file (#2) with the Master Patient Index (MPI). Initialization synchronizes PATIENT file (#2) information (for active shared patients) with the MPI and identifies facilities where the patient has been treated. This process transfers the Integration Control Number (ICN), Coordinating Master of Record (CMOR), and Treating Facility list for each patient to the patient's record in the VistA PATIENT file (#2) at all sites where the patient has been treated. It is also possible to initialize an individual patient to the MPI. This is done through menu options. The initial synchronization of PATIENT file (#2) information (for active, shared patients) with the Master Patient Index and with the patient's treating facilities is an important step in the implementation of the MPI/PD software system.

MPIF CMOR REQUEST mail group

Any requests to change the CMOR will be sent to this Mail Group. They will then be processed (i.e., accepted/rejected) via the CMOR options. The messages serve as a heads-up that there are CMOR requests to process.

MPIF EXCEPTIONS mail group

If a server address is not populated in the CIRN HL7 EXCEPTION TYPE file (#991.11), MAIL GROUP (#6) field, MPI exception e-mail messages (problems) that need to be addressed are sent to this mail group. These messages are all technical in nature, involving problems with HL7 messages or conflicts resulting from CMORs or ICNs not found. Any messages sent to the MPIF EXCEPTIONS mail group are

automatically sent to the remote mail group G.CIRN EXCEPTION MGT@FORUM.VA.GOV. Normally there isn't anything a site can do to resolve these messages, which is why they are not sent to local members. If necessary, members of this remote mail group will contact site personnel for assistance.



The remote member is populated automatically.

MULTIPLE	A multiple-valued field; a subfile. In many respects, a multiple is structured like a file.
MUMPS (ANSI STANDARD)	
See M (ANSI STANDARD)	
NAME FIELD	The one field that must be present for every file and file entry. It is also called the .01 field. At a file's creation, the .01 field is given the label NAME. This label can be changed.
NAMESPACING	Convention for naming VistA package elements. The DBA assigns unique character strings for package developers to use in naming routines, options, and other package elements so that packages may coexist. The DBA also assigns a separate range of file numbers to each package.
NODE	In a tree structure, a point at which subordinate items of data originate. A name and a unique subscript characterize an M (previously referred to as MUMPS) array element. Thus the terms: node, array element, and subscripted variable are synonymous. In a global array, each node might have specific fields or "pieces" reserved for data attributes such as name.
NON CMOR SITES	Sites where a patient has been seen that are <i>not</i> the CMOR for that patient.
NULL	Empty—A field or variable that has no value associated with it is null.
NUMERIC FIELD	Response that is limited to a restricted number of digits. It can be dollar valued or a decimal figure of specified precision.
OPTION	An entry in the OPTION file (#19). As an item on a menu, an option provides an opportunity for users to select it, thereby invoking the associated computing activity. Options may also be scheduled to run in the background, non-interactively, by Task Manager.
OPTION NAME	Name field in the OPTION file (e.g., XUMAIN for the option that has the menu text "Menu Management"). Options are namespaced according to VistA conventions monitored by the DBA.
PACKAGE (SOFTWARE)	The set of programs, files, documentation, help prompts, and installation procedures required for a given software application. For

	<p>example, Laboratory, Pharmacy, and PIMS are packages. A VistA software environment composed of elements specified via the PACKAGE file (#9.4). Elements include files and associated templates, namespaced routines, and namespaced file entries from the OPTION, HELP FRAME, BULLETIN, and FUNCTION files. As public domain software, packages may be requested through the Freedom of Information Act (FOIA).</p>
PASSWORD	<p>A user's secret sequence of keyboard characters, which must be entered at the beginning of each computer session to provide the user's identity.</p>
PATIENT DEMOGRAPHICS (PD)	<p>Identifying descriptive information about a patient. With MPI/PD, key demographic information for a patient is the same at each of the treating facilities where that patient is seen. Also, a module of the MPI/PD package.</p>
PATIENT MERGE (Also see Duplicate Record Merge: Patient Merge)	<p>Patient Merge is a VistA application that provides an automated method to eliminate duplicate patient records within the VistA database (i.e., the VistA PATIENT [#2] file). It consists of three steps:</p> <ol style="list-style-type: none"> 1. Search for potential duplicate record pairs. 2. Review, verification, and approval of those pairs. 3. Merge process.
PATIENT, SENSITIVE	<p>Patient whose record contains certain information, which may be deemed sensitive by a facility, such as political figures, employees, patients with a particular eligibility or medical condition. If a shared patient is flagged as sensitive at one of the treating sites, a bulletin is sent to the DG SENSITIVITY mail group at each subscribing site telling where, when, and by whom the flag was set. Each site can then review whether the circumstances meet the local criteria for sensitivity flagging.</p>
PIMS	<p>Patient Information Management System—VistA software package that includes Registration and Scheduling packages.</p>
POINTER	<p>The address at which a data value is stored in computer memory. A relationship between two VA FileMan files, a pointer is a file entry that references another file (forward or backward). Pointers can be an efficient means for applications to access data by referring to the storage location at which the data exists.</p>
PRIMARY KEY	<p>A Data Base Management System construct, where one or more fields uniquely define a record (entry) in a file (table). The fields are required to be populated for every record on the file, and are unique, in combination, for every record on the file.</p>
PRIMARY MENUS	<p>The list of options presented at sign-on. Each user must have a primary menu in order to sign-on and reach Menu Manager. Users are given primary menus by IRM. This menu should include most of the</p>

	computing activities the user needs.
PRIMARY REVIEWER	This can be a single person or group of people given the overall responsibility to initiate reviews of potential duplicate record pairs. For example, selected personnel in Patient Administration or a task force or group formed to oversee and conduct the effort of reducing or eliminating the occurrence of duplicate records in the site's database.
PROGRAM	List of instructions written in a programming language and used for computer operations.
PROGRAMMER ACCESS	The ability to use VA FileMan features that are reserved for application developers. Referred to as "having the at-sign ('@')" because the at-sign is the DUZ(0) value that grants programmer access.
PROMPT	The computer interacts with the user by issuing questions called <i>prompts</i> , to which the user returns a response.
PROTOCOL	Entry in the PROTOCOL file (#101). Used by the Order Entry/Results Reporting (OE/RR) package to support the ordering of medical tests and other activities. The Kernel includes several protocol-type options for enhanced menu displays within the OE/RR package.
PSEUDO-SSNs	<p>False Social Security Numbers that are calculated internally to VistA and cannot be mistaken for valid SSNs because they end in P. Updating active patients' missing or pseudo-SSNs is one of the functions of MPI/PD pre-implementation.</p> <p>Patients with pseudo-SSNs can be sent to the MPI (Austin) for a national ICN and CMOR assignment. However, pseudo-SSNs will NOT be used to assist in the lookup of that patient entry on the MPI. If that patient is found to already exist on the MPI, and if the MPI has record of their SSN, then the Pseudo-SSN will not be uploaded to the PATIENT file (#2).</p>
QUEUEING	Requesting that a job be processed in the background rather than in the foreground within the current session. Jobs are processed sequentially (first-in, first-out). The Kernel's Task Manager handles the queueing of tasks.
QUEUEING REQUIRED	Option attribute that specifies that the option must be processed by Task Manager (the option can only be queued). The option may be invoked and the job prepared for processing, but the output can only be generated during the specified time periods.
READ ACCESS	A user's authorization to read information stored in a computer file.
RECEIVING SITE	Receiving Site — As it relates to HL7 Messages, it is the site that the message was sent to.
RECORD	Set of related data treated as a unit. An entry in a VA FileMan file constitutes a record. A collection of data items that refer to a specific

entity (e.g., in a name-address-phone number file, each record would contain a collection of data relating to one person).

REGISTRATION PROCESS	During a registration, if a patient does not have an ICN , the patient is checked against the entries in the MPI to determine if the patient already is established or needs to be added. The MPI may return a list of patients who are possible matches. If the patient is truly new and there are no potential matches in the MPI, the MPI will assign an ICN and assigns the requesting site as the CMOR. If the patient is already known at the MPI, the ICN and CMOR is returned and a HL7 message is sent to the CMOR to add this new facility to the list of Treating Facilities for this patient. Registration for patients who already have an ICN at the Facility. At the CMOR site, A04 Registration HL7 messages are sent to the MPI and all sites where the patient is known. These messages update the date of last activity and any changes to the descriptive data. At a non-CMOR site, an A04 Registration HL7 message is sent to the Coordinating Master of Record.
REQUESTING SITE	Requesting Site—As it relates to HL7 Messages, it is the site initiating a message to another site requesting some action be taken.
REQUIRED FIELD	A mandatory field, one that must not be left blank. The prompt for such a field will be repeated until the user enters a valid response.
REVERSE VIDEO	The reversal of light and dark in the display of selected characters on a video screen. For example, if text is normally displayed as black letters on a white background, reverse video presents the text as white letters on a black background or vice versa.
RG CIRN DEMOGRAPHIC ISSUES mail group	PIMS Personnel (e.g., ADPACs and/or Coordinators, etc.) are automatically notified of problems relating to data. Problems such as: <ul style="list-style-type: none"> • Patient's dates of death not being synchronized between your local PATIENT file (#2) and the MPI. • Potential matches were found during the initialization or during the Local/Missing ICN resolution job that need to be resolved manually in order to obtain an ICN.
ROUTINE	Program or a sequence of instructions called by a program that may have some general or frequent use. M (previously referred to as MUMPS) routines are groups of program lines, which are saved, loaded, and called as a single unit via a specific name.
SAC	Standards and Conventions. Through a process of verification, VistA packages are reviewed with respect to SAC guidelines as set forth by the Standards and Conventions Committee (SACC). Package documentation is similarly reviewed in terms of standards set by the Documentation Standards and Conventions Committee (DSCC).
SACC	VistA's Standards and Conventions Committee. This Committee is responsible for maintaining the SAC.

SCHEDULING OPTIONS	The technique of requesting that Task Manager run an option at a given time, perhaps with a given rescheduling frequency.
SCREEN EDITOR	VA FileMan's Screen-oriented text editor. It can be used to enter data into any WORD-PROCESSING field using full-screen editing instead of line-by-line editing.
SCREENMAN FORMS	Screen-oriented display of fields, for editing or simply for reading. VA FileMan's Screen Manager is used to create forms that are stored in the FORM file (#.403) and exported with a package. Forms are composed of blocks (stored in the BLOCK file [#.404]) and can be regular, full screen pages or smaller, pop-up pages for multiples.
SECONDARY MENUS	Options assigned to individual users to tailor their menu choices. If a user needs a few options in addition to those available on the Primary menu, the options can be assigned as secondary options. To facilitate menu jumping, secondary menus should be specific activities, not elaborate and deep menu trees.
SECURITY KEY	The purpose of Security Keys is to set a layer of protection on the range of computing capabilities available with a particular software package. The availability of options is based on the level of system access granted to each user.
SEGMENT TABLE DEFINITIONS	For each segment, the data elements are described in table format. The table includes the sequence number (SEQ), maximum length (LEN), data type (DT), required or optional (R/O), repeatable (RP/#), the table number (TBL #), the element name, and the VistA description.
SENDING SITE	Sending Site—As it relates to HL7 Messages, it is the site that is transmitting the message to another site.
SENSITIVE PATIENT	Patient whose record contains certain information may be deemed sensitive by a facility, such as political figures, employees, and patients with a particular eligibility or medical condition. If a shared patient is flagged as sensitive at one of the treating sites, a bulletin is sent to the DG SENSITIVITY mail group at each subscribing site telling where, when, and by whom the flag was set. Each site can then review whether the circumstances meet the local criteria for sensitivity flagging.
SENSITIVIT	This is a mail group at each subscribing site telling where, when, and by whom the flag was set. Each site can then review whether the circumstances meet the local criteria for sensitivity flagging.
SEPG	Software Engineering Process Group
SERVER	The computer where the data and the Business Rules reside. It makes resources available to client workstations on the network. In VistA, it is an entry in the OPTION file (#19). An automated mail protocol that is activated by sending a message to a server at another location with the "S.server" syntax. A server's activity is specified in the OPTION file

	(#19) and can be the running of a routine or the placement of data into a file.
SET OF CODES	Usually a preset code with one or two characters. The computer may require capital letters as a response (e.g., M for male and F for female). If anything other than the acceptable code is entered, the computer rejects the response.
SHARED PATIENT	Patient who has been seen at more than one site. The CMOR keeps the Treating Facility List updated every time a new facility where the patient has been seen identifies itself to the MPI. The CMOR then broadcasts, via the MPI, the updated lists to all the other facilities that share this patient.
SIGN-ON/SECURITY	The Kernel module that regulates access to the menu system. It performs a number of checks to determine whether access can be permitted at a particular time. A log of signons is maintained.
SITE MANAGER/IRM CHIEF	At each site, the individual who is responsible for managing computer systems, installing and maintaining new modules, and serving as liaison to the CIO Field Offices.
SPACEBAR RETURN	You can answer a VA FileMan prompt by pressing the spacebar and then the Return key. This indicates to VA FileMan that you would like the last response you were working on at that prompt recalled.
SPECIAL QUEUING	Option attribute indicating that Task Manager should automatically run the option whenever the system reboots.
SPOOLER	Spooling (under any system) provides an intermediate storage location for files (or program output) for printing at a later time. In the case of VistA, the Kernel manages spooling so that the underlying OS mechanism is transparent. The Kernel subsequently transfers the text to the ^XMBS global for despooling (printing).
STOP CODE	Number (i.e., a subject area indicator) assigned to the various clinical, diagnostic, and therapeutic sections of a facility for reporting purposes. For example, all outpatient services within a given area (e.g., Infectious Disease, Neurology, and Mental Hygiene—Group) would be reported to the same clinic stop code.
SUBSCRIBER	A subscriber is an entity, which receives updates to a patient's descriptive data from other sites. All treating facilities are also made subscribers as part of the MPI/PD processes.
SUBSCRIPT	Symbol that is associated with the name of a set to identify a particular subset or element. In M (previously referred to as MUMPS), a numeric or string value that: is enclosed in parentheses; is appended to the name of a local or global variable; identifies a specific node within an array.

SUBSCRIPTION	Process used to identify the sites that will receive clinical and/or descriptive information for a patient.
SUPPORTED REFERENCE INTEGRATION AGREEMENT	This applies where any VistA application may use the attributes/functions defined by the IA (these are also called " Public "). An example is an IA that describes a standard API such as DIE or VADPT. The software that creates/maintains the Supported Reference must ensure it is recorded as a Supported Reference in the IA database. There is no need for other VistA software applications to request an IA to use these references; they are open to all by default.
SYNCHRONIZED PATIENT DATA	Key descriptive fields in the PATIENT file (#2) that are updated in all the descriptive subscriber's PATIENT files whenever the fields are edited by a subscriber.
SYNONYM	Field in the OPTION file (#19). Options may be selected by their menu text or synonym (see Menu Text).
SYSTEM MANAGER/IRM CHIEF	At each site, the individual who is responsible for managing computer systems, installing and maintaining new modules, and serving as liaison to the CIOFOs.
TASKMAN (TASK MANAGER)	Kernel module that schedules and processes background tasks (also called Task Manager).
TCP/IP	T ransmission C ontrol P rotocol/ I nternet P rotocol
TEMPLATE	Means of storing report formats, data entry formats, and sorted entry sequences. A template is a permanent place to store selected fields for use at a later time. Edit sequences are stored in the INPUT TEMPLATE file (#.402), print specifications are stored in the PRINT TEMPLATE file (#.4), and search or sort specifications are stored in the SORT TEMPLATE file (#.401).
TIMED-READ	The amount of time a READ command waits for a user response before it times out.
TOOLKIT	Toolkit (or Kernel Toolkit) is a robust set of tools developed to aid the Veterans Health Information Systems and Technology Architecture VistA development community, and Information Resources Management (IRM), in writing, testing, and analysis of code. They are a set of generic tools that are used by developers, documenters, verifiers, and packages to support distinct tasks. The Toolkit provides utilities for the management and definition of development projects. Many of these utilities have been used by the CIO Field Office—San Francisco for internal management and have proven valuable. Toolkit also includes tools provided by other CIO Field Offices based on their proven utility.
TREATING FACILITY LIST	Table of institutions at which the patient has received care. This list is

	used to create subscriptions for the delivery of patient clinical and demographic information between sites.
TREATING FACILITY	Any facility (VAMC) where a patient has applied for care, or has been added to the local PATIENT file (#2) (regardless of VISN) and has identified this patient to the MPI will be placed in the TREATING FACILITY LIST file (#391.91).
TREE STRUCTURE	Term sometimes used to describe the structure of an M array. This has the same structure as a family tree, with the root at the top and ancestor nodes arranged below according to their depth of subscripting. All nodes with one subscript are at the first level, all nodes with two subscripts at the second level, and so on.
TRIGGER EVENTS	An activity in VistA that creates HL7 messages.
TRIGGER	A type of VA FileMan cross-reference. Often used to update values in the database given certain conditions (as specified in the trigger logic). For example, whenever an entry is made in a file, a trigger could automatically enter the current date into another field holding the creation date.
TYPE-AHEAD	Buffer used to store characters that are entered before the corresponding prompt appears. Type-ahead is a shortcut for experienced users who can anticipate an expected sequence of prompts.
UCI	User Class Identification, a computing area. The MGR UCI is typically the manager's account, while VAH or ROU may be production accounts.
USER ACCESS	<p>This term is used to refer to a limited level of access, to a computer system, which is sufficient for using/operating a package, but does not allow programming, modification to data dictionaries, or other operations that require programmer access. Any option, for example, can be locked with the key XUPROGMODE, which means that invoking that option requires programmer access.</p> <p>The user's access level determines the degree of computer use and the types of computer programs available. The Systems Manager assigns the user an access level.</p>
USER INTERFACE	The way the package is presented to the user, such as Graphical User Interfaces that display option prompts, help messages, and menu choices. A standard user interface can be achieved by using Borland's Delphi Graphical User Interface to display the various menu option choices, commands, etc.
VA	The Department of Veterans Affairs, formerly called the Veterans Administration.
VA FILEMAN	Set of programs used to enter, maintain, access, and manipulate a database management system consisting of files. A package of online

(ALSO CALLED VA FILEMANAGER)	computer routines written in the M language, which can be used as a stand-alone database system or as a set of application utilities. In either form, such routines can be used to define, enter, edit, and retrieve information from a set of computer stored files.
VAMC	Veterans Affairs Medical Center
VARIABLE	Character, or group of characters, that refer to a value. M (previously referred to as MUMPS) recognizes 3 types of variables: local variables, global variables, and special variables. Local variables exist in a partition of main memory and disappear at sign-off. A global variable is stored on disk, potentially available to any user. Global variables usually exist as parts of global arrays. The term "global" may refer either to a global variable or a global array. A special variable is defined by systems operations (e.g., \$TEST).
VDSI	VistA Data Systems & Integration
VERIFY CODE (see PASSWORD)	Additional security precaution used in conjunction with the Access Code. Like the Access Code, it is also 6 to 20 characters in length and, if entered incorrectly, will not allow the user to access the computer. To protect the user, both codes are invisible on the terminal screen.
VISN	Veterans Integrated Service Network
VistA	Veterans Health Information Systems and Technology Architecture VistA (formerly the Decentralized Hospital Computer Program [DHCP]) of the Veterans Health Administration (VHA), Department of Veterans Affairs (VA). VistA software, developed by VA, is used to support clinical and administrative functions at VA Medical Centers nationwide. It is written in M, and, via the Kernel runs on all major M implementations regardless of vendor. VistA is composed of packages, which undergo a verification process to ensure conformity with namespacing and other VistA standards and conventions.
WAN	Wide Area Network
WINDOW	An object on the screen (dialog) that presents information such as a document or message.
Z SEGMENTS	HL7 custom segment format. Z segments are used when the standard HL7 V. 2.3 does not meet the needs to share data. Each Z segment must be approved by the HL7 Administrator within Technical Services.

Appendix A: MPI/PD Exception Messages

The following is a list of the MPI/PD HL7 exception type number and exception type messages displayed in the various actions selectable in the MPI/PD Exception Handling option. These entries are location in the CIRN HL7 EXCEPTION TYPE FILE (#991.11).

Exception Number	Exception Message
1	Invalid integration control number
2	Missing segment identifier
3	Missing message header
4	Invalid segment type
5	Unrecognized message/event type pair
6	Unexpected system error
7	Unknown segment identifier
8	Required field is missing
9	Invalid value for field
10	Missing patient identifier
11	Missing institution identifier
12	Invalid or missing observation date
13	Message chronology error
14	Patient not found
15	Incompatible units
16	Provider not found
17	Error updating narrative
18	Unclassified exception
19	Institution of origin is not known
20	Target of query is not known
21	Missing code identifier
22	Unknown coding system
23	Coding system not valid in current context
24	Error on code lookup
25	Code not found
26	Code not mapped
27	Patient validation error
28	Laboratory test not mapped
29	Drug not mapped

Appendix A: MPI/PD Exception Messages

Exception Number	Exception Message
30	Cannot determine DD entry for test
31	Invalid event stub
32	Not a container object
33	Master file names do not match
34	Master file does not exist on local system
35	Error updating master file
36	Incorrect update version
37	Master file update successful
38	Logical link is not known
39	Query rejected
40	File entry not mapped
41	Domain is not recognized
42	Domain is prohibited from sending to this receiver
43	Report entry not found
200	Missing BHS Segment
201	Missing MSH Segment
202	Missing QAK Segment
203	Missing MSA Segment
204	Missing RDF Segment
205	Missing RDT Segment
206	Could Not Create VTQ
207	Application Reject Error
208	Application Error
209	Required field(s) missing for patient sent to MPI
210	Patient DFN Failed
211	CMOR Lookup Failed
212	TF Update Failed in Pivot file
213	SSN Match Failed
214	Name Doesn't Match
215	Death Entry on MPI not in VISTA
216	Death Entry on Vista not in MPI
217	Death Entries on MPI and Vista DO NOT Match
218	Potential Matches Returned
219	Missing ICN

Appendix A: MPI/PD Exception Messages

Exception Number	Exception Message
220	Error Setting Up HL7
221	Missing Site/CMOR
222	Invalid Event Type
223	Missing Excepted Field
224	Missing/Unable to get Logical Link
225	Have Subscribers
226	Not CMOR
227	Multiple ICNs
228	Patient Does Not Exist
229	Duplicate Station Number in Institution File (#4)
230	Invalid Sender Of Facility Integration Message
231	Treating Facility Not Known To CMOR
232	Subscriber Not Known To CMOR
233	Cannot Merge Duplicate Pair

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