



**MASTER PATIENT INDEX/PATIENT  
DEMOGRAPHICS (MPI/PD) VISTA  
RELEASE NOTES**

Version 1.0

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Patches MPIF\*1\*52 and RG\*1\*54

Department of Veterans Affairs  
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# 1 Introduction

These are the Release Notes for the Master Patient Index/Patient Demographics (MPI/PD) Patches MPIF\*1\*52 and RG\*1\*54. They are in support of the MPI Identity Hub Project for the Healthcare Identity Management (HC IdM) team. The project enables the change from the current MPI patient deterministic lookup to an Identity Hub based probabilistic patient lookup.

Initiate was purchased to be integrated with the MPI and Person Service Identity Management (PSIM) for the purpose of improving the matching of patients and persons across VHA. PSIM will serve as the interface to the commercial Identity Management system and the MPI will interact with PSIM.

The Initiate centralized probabilistic search algorithm will replace the local VistA KERNEL DUPLICATE RECORD MERGE search process for identifying local potential duplicate PATIENT file (#2) records. When the search algorithm identifies potential duplicates, they are automatically added to the VistA DUPLICATE RECORD file (#15).

Please also see the following Release Notes for the supporting applications involved in this project:

- Master Patient Index (MPI) Release Notes for Patches MPI\*1\*62 and MPI\*1\*71.
- Master Patient Index/Patient Demographics (MPI/PD) Release Notes for Patch DG\*5.3\*712, dated July 2009.
- Duplicate Record Merge: Patient Merge Release Notes for Kernel Toolkit Patch XT\*7.3\*113.



Note: For more information on the VistA KERNEL DUPLICATE RECORD MERGE release, please refer to VistA patch XT\*7.3\*113.

## 1.1 Software Requirements

Before installing Patches MPIF\*1\*52 and RG\*1\*54, the following patches must be installed:

**Table 1: VistA Software Dependency for Patches MPIF\*1\*52 and RG\*1\*54**

Software	Version	Required Patches
Master Patient Index Vista, Patch MPIF*1*52	V. 1.0	MPIF*1*35 MPIF*1*39 MPIF*1*43 MPIF*1*48 XT*7.3*113
Clinical Info Resource Network, Patch RG*1*54	V. 1.0	RG*1*48 RG*1*52

In addition, the following software (fully patched) *must* be installed at the site:

**Table 1: Applications that need to be installed and fully patched for MPI/PD VistA**

<b>Application</b>	<b>Version # and Patches</b>
CIRN	Version 0.5 fully patched
Health Level 7 (HL7) VistA	Version 1.6 fully patched NOTE: Place HL*1.6*39 in Production account only.
Kernel	Version 8 fully patched
Kernel Toolkit	Version 7.3 fully patched
MailMan	Version 7.1 fully patched
Master Patient Index/Patient Demographics (MPI/PD)	RG Version 1.0 fully patched MPIF Version 1.0 fully patched
Pharmacy	If running Computerized Patient Record System (CPRS), fully patched version of Outpatient Pharmacy V. 7.0, and Inpatient V. 5.0.
PIMS	Version 5.3 fully patched
Registration	Version 5.3 fully patched
VA FileMan	Version 22 fully patched



**RG\* and MPIF\* patches should NOT be installed on legacy systems to avoid issues with the legacy systems ending up as Treating Facilities.**

## 2 MPI Maintenance Project FY09 Initiate Release: Patch MPIF\*1\*52

This section contains the Release Notes for Master Patient Index/Patient Demographics (MPI/PD) Patch MPIF\*1\*52, which is part of the Master Patient Index (MPI) Maintenance Project FY09 Initiate Release.

### 2.1 MPI/ Duplicate Record Merge: New Austin MPI DO NOT LINK File (#985.28)—Screens Out Records Previously Identified as Different Patients

A new file that will reside in the Austin MPI server is being implemented with Patch MPIF\*1\*52 to screen out records that have previously been identified as different patients, so that they are not continuously logged as potential or automatic matches. A new Remote Procedure Call (RPC) MPIF DNL ADD UPD at the Master Patient Index (MPI) adds, activates, or inactivates records in the MPI DO NOT LINK file (#985.28).

If called from the Verify Potential Duplicates [XDR VERIFY ALL] option, part of the Duplicate Record Merge software, and the user sets the STATUS field on a pair of patients to VERIFIED, NOT A DUPLICATE, then the Remote Procedure in the MPI system adds (or activates) the patient pair to the MPI DO NOT LINK file (#985.28) so that Person Service Identity Management (PSIM) does not attempt to link the patients in the future.

If called from the Edit the Status Field of a Duplicate Record [XDR EDIT DUP RECORD STATUS] option and the STATUS field of a patient pair is set from VERIFIED, NOT A DUPLICATE back to POTENTIAL DUPLICATE, UNVERIFIED, the Remote Procedure is called to inactivate the record that was previously added to the MPI DO NOT LINK file (#985.28).

### 2.2 Potential Matches Returned Exceptions No Longer Added to the MPI/PD Exception Handling [RG EXCEPTION HANDLING] Option

All references to logging Potential Matches have been removed from the VistA HL7 message processor routines. This functionality is now addressed by the Remote Procedure in the probabilistic search algorithm on the MPI. For the VistA user, this means that there will no longer be any Potential Matches Returned exceptions added to the MPI/PD Exception Handling [RG EXCEPTION HANDLING] option. Instead, potential matches will now be added directly to the VistA DUPLICATE RECORD file (#15) for processing as described previously in the section above titled "MPI/ Duplicate Record Merge: New Austin MPI DO NOT LINK File (#985.28)—Screens Out Records Previously Identified as Different Patients."

### 2.3 Additional Fields Sent from PATIENT File (#2) to MPI for PSIM Query of the Search Algorithm

The following additional fields are now being sent from the VistA PATIENT file (#2) to the Master Patient Index (MPI) in a VistA HL7 message builder for use by the PSIM query for the search algorithm:

- STREET ADDRESS [LINE 1] (#.111)
- STREET ADDRESS [LINE 2] (#.112)
- STREET ADDRESS [LINE 3] (#.113)
- CITY (#.114)
- PHONE NUMBER [RESIDENCE] (#.132)

## **2.4 MPI Display Only Query Enhanced to Reduce Duplicate Records Added to MPI via VAMC Registration Processes**

The Display Only Query [MPIF DISPLAY ONLY QUERY TO MPI] display has been enhanced to assist in reducing the number of duplicate records added to the Master Patient Index (MPI) via the VAMC registration processes. Before registering a patient, the Display Only Query [MPIF DISPLAY ONLY QUERY TO MPI] option should be used to determine if the patient already exists on the MPI or if there is a duplicate (or duplicates) on the MPI.

The user is asked if the patient is currently in the VistA PATIENT file (#2). If so, the patient name is entered and all of the identity traits are collected from the PATIENT file (#2) record to send a HL7 query to the MPI.

If the patient has not previously been registered, the user is prompted for a set of identity traits. When entering the patient name, input can be either upper or lower case. Using the identity traits, the HL7 query is sent to the MPI where the new probabilistic search algorithm is used to get all matching records that have a match score from PSIM. The list is sent back to the MPI and displayed to the user. Whether the records are an exact match or a potential match is determined by the match score in conjunction with established thresholds and are displayed in hierarchical order.

After the user selects a record from the list, a Remote Procedure, MPIF EDAT REMOTE, extracts the patient information from the MPI. This is the same information that HC IdM has available on the MPI Extended Patient Data Inquiry (EDAT) [MPI DATA MGT PDAT EXT MPI] report. This will enable the VAMC user to register the patient with the correct information, thereby reducing duplication. This option can also be used for viewing potential matches after the registration process.

## **2.5 New Notification Sent to VA Facilities: Potential Duplicate Pair Added to DUPLICATE RECORD File (#15)—Need to be Verified and if Applicable, Merged**

When the Healthcare Identity Management (HC IdM) team used the Resolve MPI Duplicate [MPI DATA MGT DUP RES] option on the MPI for two records which are duplicates and should have the same Integration Control Number (ICN), a message was being sent to the facilities associated with the ICN that was deprecated. The mail message, "MPI/PD Exception: Multiple ICNs", stated the following: "Multiple ICNs: Patient DFN=xxxxxxxx is trying to be assigned ICN 123456786980 which is already in use for DFN=yyyyyyyyy".

The previous e-mail message is now no longer sent. Instead, the potential duplicate pair is added to the DUPLICATE RECORD file (#15) with a status of POTENTIAL DUPLICATE, UNVERIFIED.



To inform VA Facilities that potential duplicate(s) have occurred, a new message is generated so that the pair can be verified/merged as applicable.

## 2.6 Obsolete Date of Death Exceptions

VistA Patch RG\*1.0\*52 removed code references to the following three obsolete Date of Death exceptions:

- 215 - Death Entry on MPI not VISTA
- 216 - Death Entry on Vista not MPI
- 217 - Death Entries on MPI and Vista DON'T MATCH

Additional references to these exception types have been removed.

## 2.7 MPI Options Obsolete and Deleted at VA Facilities

The following options were distributed with patch MPIF\*1.0\*44 (released 2/6/07) as obsolete with an Out of Order message. These options are being distributed in this build as DELETE AT SITE in order to remove them from the VistA OPTION file (#19). There are other MPI/PD options in the VAFC\* namespace that are also obsolete that will be removed in a future DG\* patch:

- AUTO CHANGE CMOR NIGHT JOB [MPIF CMOR REQUEST AUTO JOB]
- Batch Review of CMOR Change Requests [MPIF BATCH REVIEW]
- Coordinating Master of Record (CMOR) Request [MPIF CMOR MGR]
- Create a New CMOR Change Request [MPIF NEW REQUEST]
- Display a CMOR Change Request [MPIF VIEW REQUEST]
- Edit Open CMOR Change Request [MPIF EDIT REQUEST]
- Push CMOR Request [MPIF PUSH CMOR]
- Report - CMOR Requests Approved [MPIF APPROVED REPORT]
- Report - CMOR Requests Disapproved [MPIF DISAPPROVE REPORT]
- Report - Pending Received Requests [MPIF RECEIVED REQUESTS]
- Report - Sent Requests Still Pending [MPIF SENT REQUESTS]
- Review Pending Change of CMOR Requests [MPIF REVIEW REQUEST]
- Site Parameters Edit for CMOR [MPIF SITE PARAMETER]

## 2.8 Corrected Unlocking Mechanism for Code

During a code review, it was found that the unlock code in MAKE+28 in routine MPIFRES was not unlocking the same global that was being locked in MAKE+27. This could cause a number of locks to remain in the lock table until the Local/Missing ICN Resolution Background Job [MPIF LOC/MIS ICN RES] completes and releases all associated locks. Since this background job runs frequently, there are not too many entries to be processed; therefore, it has not caused an issue. The unlock code in MAKE+28 has been changed to unlock the same global as the one locked in MAKE+27.

## **2.9 HL7 A28 Message Corrected to Assign ICN to Patient**

In situations where the MPI software was attempting to assign an ICN to a site's patient, but that ICN was already assigned to another patient and the MPIF LOC/MIS ICN RES background job was the process making the ICN update, the HL7 A28 message with the second patient attempting to be added to the MPI was not being triggered.

## **2.10 HL7 A24 Application Level Acknowledgement Corrected for ICN Already in Use in File (#2)**

If when processing an HL7 A24 Link Patient Information message the ICN is already in use for another PATIENT file (#2) entry, the application level acknowledgement was being sent back with a status of AA with an error message. The status should have been AE with an error message. This has been corrected.

## 3 MPI Maintenance Project FY09 Initiate Release: Patch RG\*1\*54

This section contains the Release Notes for Master Patient Index/Patient Demographics (MPI/PD) Patch RG\*1\*54, which is part of the Master Patient Index (MPI) Maintenance Project FY09 Initiate Release.

### 3.1 PSEUDO SSN REASON Now Correctly Updating/Deleting when a Duplicate Record Merge Occurred in VistA

If the PSEUDO SSN REASON (#.0906) field in the PATIENT file (#2) needed to be deleted as a result of processing a Health Level Seven (HL7) update message (ADT-A31) from the Master Patient Index (MPI), but the Social Security Number (SSN) in the HL7 message was unchanged, the deletion of the PSEUDO SSN REASON (#.0906) field did not take place. This situation happened when a Duplicate Record Merge occurred in VistA, with the TO record having a valid SSN and the FROM record having a pseudo SSN with a PSEUDO SSN REASON. At the completion of the merge, an ADT-A31 update HL7 message was sent to the MPI. The MPI rejected the PSEUDO SSN REASON because there should not be a PSEUDO SSN REASON without having a pseudo SSN, and it tried to update VistA.

### 3.2 HC IdM No Longer Getting a "SSN Field Failure" Exception for an Unchanged Pseudo SSN

Healthcare Identity Management reported that when they updated a record via a Health Level Seven (HL7) update message (ADT-A31), and the Social Security Number was previously a pseudo Social Security Number and remained as a pseudo Social Security Number (e.g., was not changed), they were receiving a "SSN field failure" exception on the Austin Master Patient Index. This occurred because the code only checked for null instead of null and "@" and has been corrected.

### 3.3 HC IdM Added SOURCE OF NOTIFICATION Field (#.353) to Integration Control Registration #2969

In order to address Remedy Ticket #23392, Integration Control Registration #2969 has been modified to include the SOURCE OF NOTIFICATION field (#.353) to the list of VistA PATIENT file (#2) fields that can be accessed and edited via the MPI/PD Exception Handler.

Adding the SOURCE OF NOTIFICATION field (#.353) to the Edit Patient Data action in the MPI/PD Exception Handling [RG EXCEPTION HANDLING] option remedies the situation whereby if a PATIENT file (#2) record has a DATE OF DEATH (#.351) and a value for the SOURCE OF NOTIFICATION (#.353), if the DATE OF DEATH (#.351) is edited through the MPI/PD Exception Handling [RG EXCEPTION HANDLING] option Edit Patient Data action, then the DATE OF DEATH (#.351) was updated, but the SOURCE OF NOTIFICATION (#.353), which is a required field, was deleted.

The following are the possible scenarios, and the outcome of each:

1. User is prompted for DOD, there is already a DOD value and the user changes it. In that case, the SOURCE OF NOTIFICATION (#.353) field would be prompted.
2. User is prompted for DOD, there is no previous DOD value and the user adds a date. In that case, the SOURCE OF NOTIFICATION (#.353) field would be prompted.
3. User is prompted for DOD, there is already a DOD value and the user deletes it. In that case, the SOURCE OF NOTIFICATION (#.353) field would NOT be prompted, but would also be deleted.
4. User is prompted for DOD, there is no previous DOD value and the user adds nothing for DOD. In that case, the SOURCE OF NOTIFICATION field (#.353) would NOT be prompted.