RESOURCE AND PATIENT MANAGEMENT SYSTEM

IHS Patient Merge

(BPM)

Process Manual

Version 1.0
March 2010

Office of Information Technology (OIT)
Division of Information Resource Management
Albuquerque, New Mexico
PREFACE

The purpose of this manual is to provide user information about the IHS Patient Merge software version 1.0, a component of the VA Duplicate Record Merge application. This manual includes process guidance to Health Information Management (HIM) staff for identifying and merging duplicate patient records.
# TABLE OF CONTENTS

1.0 Introduction ..................................................................................................... 1  
2.0 Merge Process Overview ................................................................................ 2  
3.0 Users ................................................................................................................ 2  
4.0 Merge Process Description ............................................................................ 3  
  4.1 Search Process ......................................................................................... 3  
  4.2 Review and Verify Process ........................................................................ 3  
  4.3 Merge Process ........................................................................................... 4  
5.0 Contact Information ........................................................................................ 6  
1.0 Introduction

This software has been developed to assist local facility HIM staff in identifying and merging duplicate records found in RPMS Registration files. Record pairs are identified as potential duplicates through comparisons that are conducted during a search of the database. These potential duplicates are then validated through a review process to verify that they are duplicates, and then merged. This software is intended to provide a reliable approach to correctly identify and merge duplicate records.

Other related documents are the IHS Patient Merge user manual, technical manual, installation guide and security manual. The user manual provides instructions on the use of the software. The technical manual is provided to assist the site manager in maintenance of the software and details Indian Health Service (IHS) modifications made to the VA module. The installation guide provides assistance in installation of the package. The security manual provides technical information about the security measures incorporated in the IHS Patient Merge package.
2.0 Merge Process Overview

Patient Merge provides an automated method to eliminate duplicate patient records within an RPMS database. It is an operational implementation of the VA Duplicate Resolution Utilities, which were released to the field with Kernel Toolkit.

The overall process consists of three major steps:

1. Search for potential duplicate record pairs
2. Review and verification of those pairs
3. The merge itself

The figure below illustrates the process for completing the merge process.

3.0 Users

Where possible, each facility should identify at least two members of the medical records or HIM staff as Patient Merge users. The first user shall be responsible for searching, reviewing and verifying (steps 1 and 2). The second user shall be responsible for approving and merging (step 3). The keys that should be assigned to each user are given in the table below. Additional information about these keys is given in the Patient Merge Technical Manual.

<table>
<thead>
<tr>
<th>User</th>
<th>Required Keys</th>
</tr>
</thead>
<tbody>
<tr>
<td>User 1 (Search and Verify)</td>
<td>BPMZMENU, XDR, DG ELIGIBILITY</td>
</tr>
<tr>
<td>User 2 (Merge)</td>
<td>BPMZMENU, XDR, BPMZMERG, DG ELIGIBILITY</td>
</tr>
<tr>
<td>Manager</td>
<td>BPMZMENU, XDR, BPMZMERG, DG ELIGIBILITY, XDRMGR</td>
</tr>
</tbody>
</table>
4.0 Merge Process Description

The process description below incorporates software use with external processes. Additional details regarding the use of the Patient Merge software may be found in the User Manual.

4.1 Search Process

Step 1 in the process of removing duplicates from your database is to search for and identify potential duplicate pairs. The search process should be performed by User 1.

1. Use the S1/SRCH menu option to initiate the search for potential duplicate pairs.
   a. The search process can be lengthy and is recommended for off-peak hours.
   b. Utilities are available for pausing and restarting the search process under the S1/SRCH menu option. When restarted, the search will pick up where it left off. It will not begin again at the start of the file, recycling through records that have already been searched.
   c. Use the Basic search option to initiate a search on a file for the first time. Use the New search option to check all patients added since the last search.

2. When Patient Merge finds a pair with a duplicate score greater than the threshold score, the pair is stored for further processing.

3. When the search is completed, print a list of Unverified Potential Duplicates using the S1/PRNT menu option. This list should be used as a guide to completing the research in the Review and Verify step.

4.2 Review and Verify Process

The review and verify process should be performed by User 1, the same user who initiated the search.

1. Using the list of Unverified Potential Duplicates, begin research to determine if the listed pair does represent a single individual.
   a. The review and verification process may begin while the search is running, as soon as at least one pair has been identified.
   b. The goal of the review process is to determine whether the record pair is a duplicate, is not a duplicate, or that the status cannot be determined.
   c. In reviewing and verifying merge pairs, the reviewer will be required to examine medical records or other data to positively identify that the
patients are the same individual. This record review must be thorough and occurs outside of the software. In certain cases, staff may required to retrieve archived charts, talk to the patient or talk to other service units in order to determine if the duplicate pair represents the same patient.

d. Be very cautious of merging a deceased patient to a living patient. If either patient in the merge pair is deceased, pay extra attention to the verification process. Data access for deceased patients may be limited at your facility.

e. Additional patient data can be examined by viewing selected Health Summary reports prior to verifying the duplicate record status.

2. Use the S2/VPD menu option to mark the status of all researched record pairs.

3. Still within the S2/VPD menu option, if the pair does represent a duplicate record, select the merge direction (identifies the From and To patients).

   a. In general, the patient with less data should be the From patient and the patient with more data should be the To patient. However, data in both records should be thoroughly checked before selecting a merge direction.

4. Where appropriate, specific data fields may be marked to be overwritten. In these case, the From patient has better data than the To patient. This process occurs immediately following the merge direction.

5. Use the S2/PMP menu option to identify any potential merge problems prior to approving the pairs for merging.

   a. The merge process performs this same test during the merge. However, many of the "broken database/bad data" events that would have upset an actual merge can be detected through this option. The intent is to give the site the opportunity to make any necessary edits prior to merging duplicate record pairs.

4.3 Merge Process

The approval and merge process should be performed by User 2. This process permits a second user to check the verification performed by the first user.

1. Using external data, the user should verify that the pairs are the same individual before approving the merge. This may be done through a review of medical records or by a review of information from the user who completed steps 1 and 2.

2. Using the S3/AVD menu option, mark pairs as approved.
a. The intent of the approval step is to ensure that a conscious decision is made as to which verified duplicate record pairs should be merged.

b. Approve pairs one at a time. This will place a single pair in each merge batch, conserving system resources and greatly assisting in potential debugging.

c. Only pairs with a status of Verified Potential Duplicate can be approved.

d. The approval step follows a site-defined waiting period, which can be set to zero.

3. Using the S3/SCH menu option, schedule approved pairs for merging.

   a. All approved, marked as “ready” pairs are included in a merge process when scheduled. Therefore, approve and schedule pairs one at a time.

   b. The merge process is lengthy and is recommended for off-peak hours. It can vary in length of time depending upon the number of parallel jobs (threads) selected (a site parameter).

   c. Utilities are available for pausing and restarting the merge process. These utilities are found under the menu options S3/SMP and S3/RMP.

   d. The merge is a non-reversible process. Once the pair of records is merged, there is no automated way of undoing the process.

4. In order to monitor the merge process, use menu option S3/CMP. This option displays detailed information regarding the status of each component of the merge.

5. Run the following reports to check the status of the merging and to ensure that the process ran with no errors.

   a. Once duplicate pairs have been approved and scheduled for merging, use the PMR/TSM menu option to monitor the status of duplicate pairs as they move through the merge process.

6. Once the merge process is complete, merge any paper records belonging to the merged patients. This may include merging paper charts and patient indices. Additionally, since many patients and providers have memorized patient record numbers, patients and providers may need to be informed of the merge.
5.0 Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

Phone: (505) 248-4371 or (888) 830-7280 (toll free)
Fax: (505) 248-4363
Web: http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm
Email: support@ihs.gov