# Home Assessment Validation and Entry System (HAVEN)
# System Reference Manual

## Version 10.2

## October 1, 2010

## Contents

# OVERVIEW

## INTRODUCTION

The Outcome Assessment Information Set (OASIS) was developed by the Centers for Medicare & Medicaid Services (CMS) to set a standardized protocol for assessing the clinical characteristics of Home Health Agency (HHA) patients. This information is used to better support the regulatory process and policy-making by providing survey agencies with a mechanism for objectively measuring facility performance and quality. It also is used to support a prospective payment system for HHAs. In addition, it provides researchers with a rich set of information to support the development of improved standards of care through the study of patient care outcomes.

The purpose of the OASIS National Automation Project is to provide computerized storage, access, and analysis of the OASIS data on HHA patients across the U.S. The OASIS System consists of several interrelated components, including data communications and an OASIS National Data Repository, and is intended to create a standard, nationwide system for connecting HHAs to their respective State agencies for the purpose of electronic interchange of data, reports, and other information.

To achieve these goals, CMS has sponsored the development of a data entry system known as the OASIS Home Assessment Validation and Entry (HAVEN) System. HHAs can use HAVEN for collecting OASIS data in a standardized format and electronically creating OASIS data records to be sent to State agencies.

As of OASIS Version 1.30 (Reduced Burden) a number of changes to the assessments reduce the number of OASIS items required to be entered for some assessment types. In particular, assessment types 04 (Recertification) and 05 (Other Follow-Up) include primarily those items required to calculate the HIPPS code. Furthermore, assessment types 02 and 10 have been eliminated.

For Version 9.0, the code was migrated to Visual Basic 2008 in order to take advantage of new accessibility features in that development environment. As a result, HAVEN is now designed to work with external screen reader software (e.g., JAWS) for compliance with Section 508. At the login screen, users have the checkbox option to select "enhanced 508 compatibility". This option should be checked when an external screen reader will be used. This option also controls the availability of some HAVEN functions. If a function only exists when enhanced 508 compatibility is checked, then it will be described as available only in 508 mode. If a function only exists when "enhanced 508 compatibility" is unchecked, then it will be described as available only in non-508 mode.

# CONVENTIONS

Standard conventions have been adopted in the *HAVEN System Reference Manual* to facilitate locating and identifying desired information. These conventions and their definitions include the following:

| | |
|---|---|
| *Bolded Title Case* | Windows, screen titles, program functions, variable names, and dialog boxes (e.g., the **HAVEN Patient Information** screen). |
| ***Title Case and Italicized*** | Text box or list box descriptions (e.g., the *Select an Employee* list box). |
| **Title Case** | Menu options (e.g., the General Help menu option). |
| **<CAPITALS>** | Menus, buttons, icons, and function keys (e.g., the HELP menu, the <CANCEL> button, the <NOTES> icon, and the <T> key). |
| **Bolded** | User entered data (e.g., Enter the password **HAVEN**). |

In non-508 mode only, a toolbar is available on the HAVEN Management screen in order to provide quick access to common HAVEN functionality. The user can move the mouse over the icons to see tool tip titles describing these functions. Note that all of the functions on the toolbar are also available on the HAVEN Management screen menu.

# QUICK START

## INSTALLATION AND START UP

This section discusses the following topics:

- Hardware/Software
- Installation
- Help

## HARDWARE/SOFTWARE

To operate HAVEN, the following hardware and software are required:

- IBM or IBM-compatible personal computer with Pentium or Athlon processor
- VGA or VGA-compatible display monitor with a minimum resolution of 800x600 pixels
- Hard disk with a minimum of 40 megabytes of available space
- 1 Gigabyte of RAM
- CD-ROM drive (if installing from CD)
- Microsoft Windows XP or Vista
- Microsoft or Microsoft-compatible mouse or pointing device

HAVEN was designed using Super VGA resolution (800x600).  At a lower resolution (e.g., 640x480), all of the variables on a given screen may not be visible.  Use the scroll bars to view the entire screen and perform data entry.

## INSTALL THE HOME ASSESSMENT VALIDATION AND ENTRY (HAVEN) SYSTEM APPLICATION

Detailed installation instructions are contained in README.TXT.  This file is located in the root directory of the HAVEN Installation CD.  For the Internet version of HAVEN (downloaded from the CMS OASIS web site), extract the contents of the downloaded ZIP file (e.g., SETUPHAVEN10.ZIP) into a temporary directory (e.g., C:\TEMP).  This action will decompress all of the installation files as well as README.TXT.

Run the SETUP.EXE program to begin the installation and follow the steps to install the HAVEN program.

# Operating HAVEN within Large Agencies

HAVEN Version 1.0 was intended to provide software to agencies who either: 1) could not afford to purchase software from a vendor and/or 2) did not require a full-featured, client/server application that would be integrated with existing systems. As such, Version 1.0 was designed as a stand-alone application and was not intended to run in a network environment. Version 1.0 was designed to run on the Windows 3.1 platform for agencies that could not upgrade to Microsoft Windows 95 or 98. Consequently, HAVEN was built using the Visual Basic 6.0 development environment and Microsoft Access 2.0 databases for storage. These two technologies place limits on the software in terms of performance and capacity.

Since the release of Version 1.0, demand for HAVEN by large agencies has increased significantly. Large agencies have requirements that could not be met by Version 1.0; specifically, running in a network environment and entering a large number of assessments.

Recent releases of HAVEN were designed to address these two issues as follows:

- The HAVEN storage database can now be located on a shared, network drive. This capability allows multiple installations of the software to perform data entry against the same database. For more information, see the section below titled "Installing HAVEN in a Network Environment."

- HAVEN now includes archive/restore functionality. This functionality alleviates the burden on the primary storage database and allows HAVEN to operate in a high-capacity environment. However, this functionality does not operate automatically and requires tasks to be performed by the System Administrator. For more information, see the section titled "Archive Setup."

- HAVEN can utilize Microsoft Access 2.0, Access 97 or Access 2000 databases; however, HAVEN does not currently support Microsoft Access 2007 or higher databases.

- HAVEN now includes the ability to search for patients and assessments by Branch ID. Large agencies that use branches can take advantage of this to search for the applicable data.

Nevertheless, HAVEN should not be mistaken for a network application. HAVEN is still a stand-alone application, but now contains features that make it possible to operate in a network environment, under limited circumstances. Microsoft Access is not a full-featured Relational Database Management System (RDBMS). Although steps were taken to address collisions in the software, collisions that cause application errors may still occur. In addition, a high number of records in the storage database will degrade the performance and reliability of the system.

To ensure the best possible operation of HAVEN under a network environment and limit the number of collisions against the database, the following steps should be taken:

- Assign one user to perform all data entry for a particular patient;

- Assign one user to perform all maintenance of the patient information including the adding and deleting of patients;

- Assign one user to perform all maintenance of the agency and employee information;

- Assign one user to perform all imports and exports;

- Assign one user to perform all archiving and restoring;

- Assign one user to create all reports;

- Do not perform maintenance on the patient, employee, and agency information while other users are performing data entry;

- Do not perform imports and exports while other users are performing data entry;

- Do not perform archiving and restoring while other users are performing data entry; and

- Do not perform report creation while other users are performing data entry.

- Utilize the Archive/Restore functionality regularly to alleviate the burden on the storage database. In addition, be certain to compact the storage database (HHA.MDB) after every archive.

- If applicable, use the Branch ID filter ability to simplify access to the applicable patients and/or assessments.

## Installing HAVEN in a Network Environment

Several steps should be followed when installing HAVEN in a network environment. These steps are:

- For the first PC, install the HAVEN software. First-time users should then utilize the Location tab in the HAVEN Preferences screen to specify the location of the HHA.MDB and EMP.MDB files on a shared network drive. If the HHA.MDB and/or EMP.MDB are not found in the specified location, they will be copied from the application directory. However, if the HHA.MDB and/or EMP.MDB already exist in the specified location, they will be used by HAVEN.

- For each subsequent PC, install the HAVEN software. Run HAVEN. On the Preferences screen, click on the Location tab and enter the HHA.MDB location. Restart HAVEN and confirm that the software is utilizing the shared HHA.MDB and EMP.MDB.

When setting up a network configuration, a shared drive on a network file server MUST be used. Do not use a shared local drive on a PC since a peer-to-peer configuration is not supported.

# HELP

## General/About Help

The **General Help** provides HAVEN system help regarding how to use and maintain the HAVEN software. **About** help identifies HAVEN software and dictionary information. From the **HAVEN Management Screen** or any of the **HAVEN Data Entry** screens, click on the HELP menu and select either the General Help or the About options.

## Additional Help

Context sensitive help is available from any window by pressing the <F1> key. Individual variable help is also available (on data entry screens) by right mouse clicking anywhere within a variable's frame on the data entry screens.

# LOG IN

The user can log in to the HAVEN software by entering the user identification and password in the *User ID* and *Password* text boxes, respectively, and clicking the <Log in> button or pressing the <ENTER> key. To exit the **HAVEN Login** screen without actually logging in to the system, click on the <EXIT> button.

**NOTE:  To enable 508 mode, select the Enable improved 508 compatibility checkbox and make sure it is checked!  This checkbox is located after the password field, so 508 users should tab to it after entering the password INSTEAD of pressing the <ENTER> key.  After checking the checkbox, the 508 user may then tab to the <Log in> button and press the space bar.**

# USER IDS

Use the following Login identification and password for HAVEN the first time:

- User ID **HAVEN** and password **HAVEN** are the defaults.

# HAVEN PATCHES

The **HAVEN Patches** screen will be displayed if HAVEN detects that a patch is required.  Click on the <OK> button to execute the patches or click on the <CANCEL> button to exit HAVEN.

It is highly recommended that a backup of the HAVEN databases be performed <u>prior</u> to execution of these patches. Click the <CANCEL> button if any uncertainty exists about whether the data was saved and perform a backup procedure.  Users can then re-enter HAVEN and click the <OK> button on the HAVEN Patches screen.

After the patches are completed, review the items in the Status Messages box for additional information on the nature of the patches.  Click on the <PROCEED> button to continue into HAVEN.

# DATABASE MAINTENANCE

For a new HAVEN installation, a message box will be displayed, informing the user that Agency information must be entered before any other functions can be utilized.  From the ADMINISTRATION menu item, select the Maintain Agency Database option.  Once the **HAVEN Agency Information** screen is completed, the user Login identification and password can be added, modified, or deleted by using the **Maintain Employee Database** feature within the HAVEN software.

After installation, it is recommended that the System Administrator log in first, using **HAVEN** as both the User ID and password.  After completing the Agency information, the System Administrator should establish a new User ID and Password for the System Administrator account.  This step can be accomplished by using the **Maintain Employee Database** function described in System Setup.  The **HAVEN** account should then be deleted to ensure the security of the HAVEN software.

# SYSTEM SETUP

## MAINTAIN AGENCY DATABASE

The Agency Database collects agency and agent information. It is accessed from the main menu by selecting the ADMINISTRATION menu item and then choosing the Maintain Agency Database option. In non-508 mode, users may alternatively click on the <MAINTAIN FACILITY DATABASE> icon.

The **HAVEN Agency Information** screen collects agency and agent information used to customize the operation of the HAVEN software. It is recommended that a user with System Administrator rights complete this information after installation. This screen is divided into two tabs: Agency Information and Agent Information.

### AGENCY INFORMATION

The Agency Information section enables the user to specify unique agency-identifying information such as Agency Name, Address, Contact Person, and Medicare, Medicaid, and State-specified provider numbers. Fields shown in bold are required.

When an assessment is created, three agency fields are copied from the agency database into the assessment record. These four fields are: Agency State Assigned Unique ID; Agency CCN (formerly Medicare Provider Number) (M0010); and National Provider ID (NATL_PROV_ID). Because agency information can be edited at any time, the existing assessment records (except non-key field corrections) are not automatically updated when changes are made to the Agency fields. However, HAVEN will ask the user whether all non-exported assessments should be updated.

HAVEN will first ask if the Agency fields should be updated. It is recommended that this update be completed to maintain the integrity of the export files.

Upon entering a Zip Code for Agency and Agent Information, the city and state will be automatically looked up if a valid Zip code is entered. The state will be automatically entered into the state field. As the user types a city name, HAVEN will suggest a complete city name matching the text already entered, assuming the user has entered a valid city for the current zip code. If needed, users may override these values.

### AGENT INFORMATION

The Agent Information section collects unique agent data such as tax identifier, name, address, and phone number.

The Agency Information and Agent Information data are included as header information for each export from the HAVEN software. Information about HAVEN export capabilities is provided in the Export Section.

# MAINTAIN BRANCH DATABASE

The Branch Database collects branch information. It is accessed from the main menu by selecting the ADMINISTRATION menu item and choosing the Maintain Branch Database option.

The **HAVEN Select Branches** screen allows the user to specify a default Branch ID for assessments when they are created from the HAVEN Management Screen. The user may select N, P, or a specific branch as a default value, or the user can specify that no default value be populated in a new assessment. **NOTE:** This default value is used when the user has <u>not</u> filtered by a specific branch on the HAVEN Management Screen, i.e., the user has <Everything>, <All Branches>, or <No Branches> selected in the Branch dropdown list on the HAVEN Management Screen.

The **HAVEN Select Branches** screen also allows the user to add a new branch, delete a branch or edit data for an existing branch. This screen will be automatically populated with Branch IDs (M0016_BRANCH_ID) from existing assessments that are imported, added during assessment data entry, archived, or present in assessments when the Branch database is first added.

The user can add a new branch (or edit an existing branch) using the **HAVEN Edit Branch Information** screen. On this screen the user can enter the branch id (M0016_BRANCH_ID). A default Branch State (M0014_BRANCH_STATE) can also be entered. This state will be used to populate M0014_BRANCH_STATE when a new assessment is added.

A descriptive branch name and notes can be entered for each branch.

If a new Branch ID is added, the user will be given the option of updating all of the non-exported and non-completed assessments with the new Branch ID.

Branches will always be available for selection, provided they exist in at least one assessment.

A branch can only be deleted if that branch is not being used on <u>any</u> assessment.

Note: Users do not need to maintain the branch database using the above features. They can continue to maintain branches as before using data entry of the assessments in data entry. When a new Branch ID is added during assessment data entry, it will automatically be added to the branch database. This flexibility is there for convenience and to maintain consistency with older versions.

# MAINTAIN EMPLOYEE DATABASE

The Employee Database provides centralized management of employee records that will be used continuously in the entry of assessment data. From the **HAVEN Management** screen, select the Maintain Employee Database option from the ADMINISTRATION menu item. In non-508 mode, users may alternatively click on the <MAINTAIN EMPLOYEE DATABASE> icon.

Note that this screen is only accessible to users with System Administrator rights. After installation, the user (authorized as System Administrator) will want to define the expected users of the HAVEN software. The **Maintain Employee Database** screen is used to add, edit or delete employee identification and authorization information. As of Version 10.0, HAVEN began encrypting employee passwords and storing employee data in a separate database (EMP.MDB). This database is located in the same directory as HHA.MDB.

The Select an Employee section contains a list of employees defined in the database. The list fields include: User ID; On (* indicates the employee is currently logged in); Login Time; Location; Phone; Patient, Assessment the employee is working on (if the user is logged in), and the Status of the assessment for all employees currently defined in the database.

When the user selects a specific entry from the employee list, the entry is highlighted and the user may now perform several functions using the buttons at the bottom of the screen:

The <VIEW DETAILS> button allows the user to view additional data for the currently selected employee read-only in the **Employee Information** pop-up window.

The <NEW> button allows the user to add a new employee record in the **Employee Information** pop-up window. The employee record contains the following fields: User ID; Password; Title; First Name, Middle Initial, Last Name; Access Rights; and Allow Multiple Logins. The User ID and Password fields must be completed. The *Allow Multiple Logins* check box allows the user to login using the same Employee ID from multiple installations in a network environment. For stand-alone installations, it is recommended that this option be checked. Upon completion of data entry, click on the <SAVE> button to update the employee database. Saving will also refresh the employee list box on the Maintain Employee Database screen, and the new employee will be displayed. Clicking the <CANCEL> button will abandon the new employee record.

The <DELETE> button allows the user to delete the currently selected employee record.

**NOTE:**
> Since the System Administrator has access to all functions of the HAVEN software, the user is prevented from deleting the last System Administrator record from the database or changing the rights (from System Administrator to Data Entry) for the last System Administrator record.


The <RESET USER LOGON FLAG> button allows the user to clear the On field (i.e., remove the asterisk) for the currently selected employee. This may be useful if an employee does not exit HAVEN normally (e.g., power failure) and is still listed as actively using HAVEN.

The <EDIT> button allows the user to edit the currently selected employee record in the **Employee Information** pop-up window. The employee record contains the following fields: User ID; Password; Title; First Name, Middle Initial, Last Name; Access Rights; and Allow Multiple Logins. The User ID and Password fields must be completed. The *Allow Multiple Logins* check box allows the user to login using the same Employee ID from multiple installations in a network environment. For stand-alone installations, it is recommended that this option be checked. Click on the field or checkbox of interest to edit the data. Clicking the <SAVE> button will save all changes made to the employee record to the database, while clicking the <CANCEL> button will abandon all changes made to the employee record since the last save.

The <CLOSE> button allows the user to close the **Maintain Employee Database** screen and return to the HAVEN Management screen.


# MAINTAIN PATIENT DATABASE

The Patient Database provides centralized management of patient information records that will be used continuously in the entry of assessment data. From the **HAVEN Management** screen, select the Maintain Patient Database option from the ADMINISTRATION menu item. In non-508 mode, users may alternatively click on the <MAINTAIN PATIENT DATABASE> icon.

The **Maintain Patient Database** screen displays a list of patients stored in the HAVEN database.  For each patient, information is collected that is reused in HAVEN assessments.  This screen consists of two sections: the Search and Filter section and the patient list section.

The Search and Filter section allows the user to restrict the patients displayed in the patient list to those matching specified criteria.  The user may search the patient database by first selecting the Search tab, then choosing the field to search (last name, Social Security Number (SSN), Medicare number, Medicaid number, or Patient ID) in the *Search* drop-down combo box.  The user may then enter a value in the search text field and click the <SEARCH> button.  All patients containing a value matching the search value in the specified field will be displayed in the patient list below.

For Social Security Numbers, please enter digits only.  Do not enter dashes.

Please note that matches are based on the patient field containing the search text as the beginning of the field.  For example, if the user searches by last name for the value "SMITH", then the patient list will contain all users with last name "SMITH" and those with last name beginning with "SMITH" (e.g., "SMITHERS").

The user may want to reduce the number of patients available from which to choose by filtering on Branch.  The user may filter the patient list by first selecting the Filter tab, then entering a value in the filter text field and click the <FILTER> button.  All patients containing a value matching the search value in the Branch field will be displayed in the patient list below.  Note that the user can filter by branch without performing a search first.  Also, note that the branch value used to match for a patient is the most recent branch in an assessment for that patient.

In order to display the complete list of patients,  clear the Search text and Filter text fields, then click either <SEARCH> or <FILTER>.

Two additional checkboxes are available which affect the contents of the patient list:  the View Archived Patients and the View Hidden Patients checkboxes.  By default, archived and hidden patients are not displayed in the patient list.  Checking the checkbox for either or both of these options will refresh the patient list accordingly.  Patients can be specified as hidden in the Patient Information window.  Patients are flagged as archived when the <ARCHIVE PATIENT> function on the **HAVEN Management** screen is used successfully.

After searching and/or filtering, the patient list will contain patients in the database meeting the specified criteria.  By default, the patient list is displayed in alphabetical order.  Use the scroll bars on the *Patient* list box (or the arrow keys) to navigate the list box and view the available patients.  Click or use the spacebar on a row to select a patient.

Users can also sort by any field in the patient list by clicking on the column header.  Clicking once on the column header will sort the list in ascending order.  Clicking on the column header again will sort the list in descending order.  Alternatively, use Ctrl-Alt-Z when the patient list has the focus.  A context menu will appear containing the list of columns that can be selected for sorting.

When the user selects a specific entry from the patient list, the entry is highlighted and the user may now perform several functions using the buttons at the bottom of the screen:

The <VIEW DETAILS> button allows the user to view additional data for the currently selected patient read-only in the **Patient Information** pop-up window.  The **Patient Information** window consists of data entry fields for demographic and identification information such as gender and race/ethnicity.

The <NEW> button allows the user to add a new patient record in the **Patient Information** window.  The information collected here will be utilized to pre-fill the corresponding fields on the HAVEN assessment forms for the selected patient.  Fields shown in **bold** are required to complete and export HAVEN assessments.  Upon completion of data entry, click on the <SAVE> button to update the patient database.  Saving will also

refresh the patient list box on the **Maintain Patient Database** screen, and the new patient will be displayed. Clicking the <CANCEL> button will abandon the new patient record.

The <DELETE> button allows the user to delete the currently selected patient record. Please note that a patient cannot be deleted if assessments exist in the HAVEN database for the patient.

The <EDIT> button allows the user to edit the currently selected patient record in the **Patient Information** window. Click on the field, radio button, or checkbox of interest to edit the data. Please note the Mark Patient as Hidden checkbox. If this checkbox is checked, the patient will not be displayed in the patient list by default. However, the patient and associated assessments will still exist in the HAVEN database. Clicking the <SAVE> button will save all changes made to the patient record to the database, while clicking the <CANCEL> button will abandon all changes made to the patient record since the last save.

The <Close> button allows the user to close the **Maintain Patient Database** screen and return to the HAVEN Management screen.

When an assessment is created, all of the patient fields are copied from the patient database into the assessment record. Since patient information can be edited at any time, the existing assessment records are not automatically updated. When changes are made to any of the patient fields, HAVEN will ask the user whether all non-exported assessments (except for non-key field correction assessments) should be updated. It is recommended that this update be completed to maintain consistent patient information across assessments in the export files.

NOTE: If the Patient ID Number (M0020) is changed for each new episode, it is recommended that the user NOT update all un-exported assessments (except for non-key field correction assessments) unless they are associated with that episode. For example, if 10 assessments exist for an episode with a Patient ID Number of 12345A and a new episode starts and the Patient ID Number is changed from 12345A to 12345B, the existing un-exported assessments (except for non-key field correction assessments) should not be updated with the new Patient ID Number.

ZIP codes that (a) are not five or nine digits long, or (b) contain letters, are no longer rejected in the patient ZIP code field (M0060); instead a warning is provided to the user. If letters or a short ZIP code are entered and the user clicks on the <SAVE> button, the warning **"M0060 Zip Code is not 5 or 9 digits long or contains letters. Do you wish to continue?"** appears. Clicking on the <YES> button allows the user to continue and save the entered information. Clicking on the <NO> button returns the user to the Patient Information screen. Upon entering a valid ZIP Code for Agency and Agent Information, the state will be automatically populated. If needed, users may overwrite the value.

The items M0072 (Primary Referring Physician ID), M0140 (Race/Ethnicity), and M0150 (Current Payment Sources for Home Care) were added to the patient information screen in HAVEN Version 6.0 and are now tracked by patient. To help complete these items for patients who already exist, items M0072 and M0140 are copied during data entry from the assessment if the values for the patient are blank. HAVEN asks the user if M0150 should be updated, since payment sources can vary from assessment to assessment. If Unknown is checked for item M0150, the value will only be copied to Start of Care and Resumption of Care assessments, since the Unknown option is inactive for other assessment types. NOTE: M0072 is now known as M0018 for OASIS-C, so M0018 is now displayed on the Patient Information screen.

HAVEN will not allow duplicate patient records. Duplicate records are identified by:

- Same first name, last name, date of birth, and gender;

- Same Medicare or Medicaid number;

- Same Social Security Number;

- Same Patient ID number (M0020); or

- Same State Provided Patient ID.

# ENABLE BACKUP

HAVEN has the capability to make a backup copy of the data collection databases (e.g., HHA.MDB, EMP.MDB, EXPORT.MDB, and the current archive database) each time the user exits HAVEN normally.  If these databases are corrupted due to abnormal termination of HAVEN (e.g., power failure, system lockup) and cannot be repaired, the System Administrator can copy the backup databases into the installation directory and only the last HAVEN session will be lost.

To enable the backup, the System Administrator may select the ADMINISTRATION menu, click on the PREFERENCES option, and select the Backup tab on the HAVEN Preferences window.  The user can then specify a directory location for the backup files.

**NOTE:**  The backup directory cannot be the same directory where the application and databases currently reside.

As of Version 8.1, a backup path is once again optional.  However, if a backup path has not been entered, the user will receive warning messages that a backup path has not been specified when entering and exiting HAVEN.  If the user provides a path, then later removes the path, the warning messages will no longer appear.  It is **strongly recommended** that HAVEN users carefully consider their backup options, in hopes that there will be no data loss due to PC failures.

Once a path has been specified and HAVEN is exited, the data will be backed up to the designated directory in the specified compression format.  If <No compression> is selected, then the files are copied to the designated directory.  If <Enable compression of databases to ZIP format> is selected, then a ZIP file named HHAMDB.ZIP will be created in the designated directory.  Similarly, if <Enable compression of databases to self-extracting EXE> is selected, then an executable named HHAMDB.EXE will be created in the designated directory.

NOTE:  The backup process should be completed to a network drive, a removable disk, a CD, or a diskette (for smaller files).  If possible, do not backup the files to a user's local hard drive only.

If the backup path is later deleted or renamed (e.g., the directory name is changed/deleted using Windows Explorer), HAVEN will notify the user upon exiting the system that the backup failed because the path no longer exists.  The user will then be required to specify a valid path in order to exit HAVEN.

NOTE:  The HAVEN Backup capability is no substitute for a comprehensive backup strategy.  It is HIGHLY RECOMMENDED that HAVEN users institute a regular procedure of backing up the databases to a reliable media (e.g., external hard drive).

NOTE:  For users who upgraded to HAVEN 10.0, a one-time backup of the HHA.MDB was performed at startup.  The HHA.MDB was copied to a new subdirectory of its current location, named ONE_TIME.  The backup version of the HHA.MDB was named HHABKUP.MDB.

# WINDOWS SETTINGS

In order to ensure the reliable operation of the HAVEN software, it is imperative that the following Windows property be set properly:

NOTE:  For Microsoft Windows XP, and Vista, the Windows Font Size property must be set to "Small Fonts" and not "Large Fonts."  This property can be found under the Settings tab of desktop properties.

# HAVEN DATA ENTRY

## HAVEN MANAGEMENT SCREEN

Once HAVEN has been loaded, a number of functions can be performed.  These functions are all activated from icons or drop down menus available on the HAVEN Management Screen.

The **HAVEN Management Screen** consists of the following components:

- Title Bar.  Displays the title **HAVEN Management Screen**.

- Menu Bar.  Displays the list of functions that can be performed on the **HAVEN Management** window.  Each function (File, Options, Administration, Help) contains additional options.  These options are displayed by using the mouse or by using the function's shortcut key.  The shortcut key is the <ALT> key and the underlined letter key, (i.e., the FILE menu option can be accessed by pressing the <ALT> key and the <F> key simultaneously).  In addition, key combinations are defined for all of the functions available on the menu bar.

- Button Bar.  In non-508 mode, some of the common functions are available on a toolbar underneath the menu bar.  The toolbar is not available in 508 mode.

- Filter by Branch.  The branch filter dropdown box contains the following values:  <Everything>, <All Branches>, <No Branches>, and individual Branch IDs/Names (if they exist in the HAVEN branch database).  <Everything> is the default value; when selected, all patients are shown.  If <All Branches> is selected, then all patients with assessments at a branch are shown.  If <No Branches> is selected, then all patients with assessments at the home agency are shown.  Note that patients without an assessment will appear if <Everything> is selected for the Branch.  Also, if the patient meets the current selection criteria, all of the patient's assessments will always be displayed even if they have different assessments assigned to different branches.

- Patient Info.  Enables the user to select a patient to access his/her assessment history. The list of patients is sorted by last name, but can be sorted by any of the column names by clicking on the column heading.

- **Archive Patient.**  Allows the user to archive a patient (and their assessments) to the default archive database.

- **Restore Patient.**  Allows the user to restore a patient (and their assessments) from the default archive databases (only available in archive mode).

- Add Patient.  Allows the user to add a patient.

- Assessment Info.  Allows the user to view the history of previous assessments and their status for the currently selected patient.  For additional information on the status of assessments, see the Assessment Status Screen section.

- Add Assessment.  Allows the user to add an assessment for a selected patient.

- Correct Assessment. Allows the user to correct an assessment (once it has been Locked [Exported]) for a selected patient. Only a System Administrator has access to this feature.

- Delete Assessment. Allows the user to delete the highlighted assessment for a selected patient. Only System Administrators have access to this feature.

- **Print Report.** Allows the user to print the highlighted assessment.

- Enter Data. Allows the user to enter data for the highlighted assessment for a selected patient.

NOTE: When the "Open Archive" option is selected, this option is set to "View Data" since the data is "View Only" by default in this mode.

- View Only. Allows the user to view an assessment for a selected patient in read-only mode.

- HIPPS Grouper. Allows the user to view the HIPPS category of reimbursement for an assessment. Users can view HIPPS categories for assessments with reason for assessment values of 01 - 05.

- Enable Read Only. This checkbox allows the user to enable or disable read-write functionality (e.g., when checked, the Enter Data button becomes View Data).

# FILE MENU

From under the File menu, the user can access the following functions:  Open Archive and Exit.

## Open Archive

This feature allows the user to switch between Archive Mode and Normal Mode.  When selected, this menu choice will switch between checked (Archive Mode) and unchecked (Normal Mode).

When in Archive Mode, the software points to the active archive database (as identified in the Archive Setup menu, described later).  This feature allows the user to view the archived patients (and their assessments). In addition, the following features are available in Archive Mode.

- Restore Patient.  This function restores the patient (and patient assessment) data from the active archive database to the HHA.MDB database so the user can access the patient and perform all functions in Normal Mode.

- Print Report.  This function allows the assessment data entry form to be displayed in a format ready to print and save in various file formats.

- View Data.  This function allows the user to view the selected assessment in "View Only" mode using the data entry screens.  If any changes need to be made, the patient should be restored.

- View/Print Reports.  This function allows the Assessment Data Entry Report to be produced using the archive database.

- HIPPS Grouper.  This function enables the user to view the HIPPS code for the currently selected assessment.

These are the only functions available in the Archive Mode, aside from the functions that allow the user to search for and select a patient and assessment.

## Exit

This option allows the user to exit the HAVEN software.  To exit HAVEN, select the Exit button in the lower right-hand corner of the **HAVEN Management Screen,** or select the Exit option from the FILE menu on the **HAVEN Management Screen**.

The user can also exit HAVEN by selecting the 'X' (Close Window) in the upper right hand corner of the HAVEN Management Screen.

# OPTIONS MENU

From under the Options menu, the user can access the following functions:  Log Off/On, View/Print Reports, Import, and Export.

## Log Off/On

This option allows the user to return to the **HAVEN Login** screen.  From here, the user can return to the **HAVEN Management Screen** or exit HAVEN.  If the user returns to the **Login** screen, he/she can return to the HAVEN system by clicking on the "X" in the upper right corner of the screen.

## User List

This option allows a user to view other users who are logged on and the patient and assessment on which they are working.  Select the User List option from the OPTIONS menu to display the **User List** screen.  The **User List** screen contains the same information as the **Maintain Employee Database** screen.  The items include: User IDs; On* (indicates the employee is currently logged in); Login time; Location; Phone; Patient, Assessment that the employee is working on, and the Status of the assessment.

When using HAVEN across a network environment, only one user can access a particular assessment at a time.  The User List option displays any users who are currently logged on to the system and the assessment each user has open for data entry.  Note that open assessments can also be detected using the assessment list on the **HAVEN Management** screen.  If an asterisk is present in the Open column, then the assessment is open for data entry.

**NOTE:**
An assessment is "Open" once it is accessed for data entry.  The *Open* box in the assessment list will only contain an asterisk when HAVEN is set up in a multi-user (i.e., network) configuration.  The *Open* box will be empty when a user is working in a stand-alone configuration.

## View/Print Reports

This feature is discussed in the Reports section.

## Import

This feature is discussed in the Import section.

## Export

This feature is discussed in the Export section.

# ADMINISTRATION MENU

From under the Administration menu, the user can access the following functions: Maintain Employee, Agency, Branch and Patient Databases; Preferences; Archive Setup; Fix Inactive Fields; List Open Assessments; Reset Open Status; Reset Open Status on All Assessments; and Retrieve Patient with Hex Format.

## *Maintain Employee, Agency, Branch and Patient Databases*

These maintenance functions are discussed in the System Setup section.

## *Preferences*

Preferences can be specified for assessment data entry and sequencing; the location of the primary HAVEN database (HHA.MDB); the default paths for use with import and export files; the operation of the HAVEN Backup function; and the desired number of assessments to be contained in a single archive file.

### Sequencing Tab

The user can also enable or disable strong enforcement of assessment sequencing under this tab. Assessment sequencing rules are enforced in two areas of the software: 1) adding assessments and 2) importing assessments. Strong enforcement prohibits the addition or import of assessments in an order that violates the sequencing rules. If strong enforcement is disabled, then assessments can be added or imported in an order that violates the sequencing rules. The user may also delete more than just the most recent assessment.

### Location Tab

This feature allows a System Administrator to enter the path where the HAVEN databases HHA.MDB and EMP.MDB will be located. HAVEN will then look for HHA.MDB and EMP.MDB in the path specified. If the HHA.MDB and/or EMP.MDB cannot be found, HAVEN will prompt the user to specify another. Select the "Help Me Find It" button to allow HAVEN to search your local disk for HHA.MDB and EMP.MDB.

In addition, the System Administrator can specify where import files are located and where export files are created. A reports path may also be specified, which is the default location for any reports that are saved as external files (e.g., PDF, TXT).

### Backup Tab

HAVEN can backup the data collection databases (HHA.MDB, EMP.MDB, EXPORT.MDB, and the currently active archive MDB) when exited normally. After selecting the Preferences option from the ADMINISTRATION menu and clicking on the Backup tab, click the Browse button to select a backup location. To disable the backup process, select the Disable backup checkbox and set the value to checked.

NOTE:  The path for the backup process cannot be the same as the HAVEN installation path.  For example, if HAVEN is installed to C:\HAVEN, the backup path cannot be C:\HAVEN.  If the path is left blank, the **Backup** function is disabled, even if the Disable backup checkbox is unchecked.

In addition, users may choose to have the backup files compressed.  Use the radio buttons in the Compression section to choose one of the following three compression options:  no compression (the database files are copied to the backup location); enable compression of databases to ZIP format (database files are compressed to HHAMDB.ZIP, located in the backup location), or enable compression of databases to self-extracting EXE (database files are compressed to HHAMDB.EXE, located in the backup location).

NOTE:  A complete explanation of the **Backup** function is available in the System Setup section.

## Other Tab

### Specify Location Name and Telephone Number

By specifying a location name and telephone number for this installation of HAVEN, employees who *log in* will be associated with this location.  The User List menu option from the **HAVEN Management** screen displays this information.  After selecting the Preferences option from the ADMINISTRATION menu and clicking on the Other tab, type the location name and telephone number of the current installation in the *Location Name* and *Telephone* text boxes provided.

**NOTE:**

The location name and telephone number are not displayed for employees unless they are logged in to HAVEN.

### Enable Warning for Number of Assessments in Archive Database

By default, HAVEN will not warn the user of the number of assessments contained in an archive database.  However, HAVEN gives the user the capability to display a warning message when an archive database has reached a specific number of records.

After selecting the Preferences option from the ADMINISTRATION menu and clicking on the Other tab, click on the *Warn if an Archive Database Contains ___ or More Assessments* check box to display warning messages during the archiving process.  The default value is 1,000 for the number of assessments on which to warn.  To change the default number, click in the box and enter the desired number, up to 99,999.

## Accessibility Tab

### Opening Assessments

By default, a user has the option of accessing an assessment already marked as open for data entry.  HAVEN has the capability to allow only one user to access an assessment at a time.  This option is useful for network environments.

After selecting the Preferences option from the ADMINISTRATION menu and clicking on the Accessibility tab, click on the *Stop Users from Entering Open Assessments* check box.  This selection will prevent multiple users from opening the same assessment.

### General Accessibility

As of version 9.0, HAVEN has been enhanced to work with external screen reader software (e.g., JAWS) for Section 508 compliance.  Users can enable improved Section 508 compatibility with the checkbox on the Login screen (as discussed earlier) or in the Accessibility tab located on the Preferences screen.  Note that in 508 mode, the toolbar and CMS logo on the **HAVEN Management** screen will be hidden.  Also, all reports will be sent to a PDF file and not be presented in the report viewer first.  Furthermore, the user will notice the appearance of additional message boxes while operating HAVEN; these are added to aid visually impaired users in understanding the current HAVEN status.

In 508 mode, the assessment data entry screens present the variable in a single scrolling column, as opposed to the fixed-position multiple columns shown in non-508 mode.  Therefore, for 508 mode, users can specify a font size (usually, a larger one) to be used in data entry.  On the Accessibility tab, use the Size dropdown to specify a new font size.  The selected font size will then be used to display a sample of the text seen by the user in assessment data entry.  To change the font back to the HAVEN default, click the <Default> button on the Accessibility tab.  The single scrolling column mode of data entry can also be used in non-508 mode by checking the Force Vertical Data Entry Method Always checkbox.

### UI Tab

A checkbox option has been added to force HAVEN to start with the HAVEN Management Screen maximized.  By default, this option is unchecked.

## Archive Setup

One or more archive databases can be used to save archive patients and their assessments.  From the Archive Information setup window, the user can create a new archive database, delete an archive database, and identify the active archive database.

To create a new archive database, click on the <NEW> button.  Enter up to an eight-character file name in the *Database Name* text box.  The location (path) for the database must be selected using the Browse button.  The user must also type in a description of the archive database by entering up to 25 characters in the *Description* text box.  Users can click on the <SAVE> button to create the archive database or click on the <CANCEL> button to cancel the creation of the archive database.

If several archive databases have been created, the user can specify a particular archive database by selecting it from the list.

An archive database can only be deleted when it is empty (i.e., no records are contained in the database).  When a selected database displays a record count of zero in the *Select an archive database* section, it can be deleted.  A user might choose to delete an archive database if all of the records contained in it have been restored, if it was created in error, or if it was never utilized.

To delete an archive database, select an empty archive database and click on the <DELETE> button.  HAVEN will verify the deletion.  Click on the <OK> button to return to the **Archive Information** screen.

Only one archive database can be active at a time.  To select the active archive database, highlight the databases you want to be active and select the "Make this database the active archive database" check box.

## Fix Inactive Fields

The **Fix Inactive Fields** feature allows a System Administrator to clear any data entry in inactive fields for a particular assessment.  After highlighting an assessment, the System Administrator can select the Fix Inactive Fields option from the ADMINISTRATION menu.  HAVEN will review the selected assessment and clear any variables that are inactive and should be empty.  When the process is complete, HAVEN will verify whether or not any inactive fields were fixed.

## List Open Assessments

This feature allows users to view a list of assessments currently marked (*) as open.

When using HAVEN across a network environment, only one user can access an assessment at a time.  The List Open Assessments option displays the current user's ID, the patient's name and Social Security Number, and the assessment type for each assessment marked as open.

To view the open assessments, click on the ADMINISTRATION menu and select the List Open Assessments option.  The **HAVEN Open Assessments** screen will display the assessments currently open for data entry.

NOTE:  An assessment is considered open while data entry is being performed.

## Reset Open Status

This feature allows a System Administrator to reset an assessment's Open status.  The Open status is normally reset (the * disappears from the *Open* box) when a user exits data entry for an assessment.

The **Reset Open Status** function is especially useful when abnormal termination of HAVEN (e.g., power failure, system lockup) occurs.  When HAVEN is restarted, a user cannot access any assessments marked as Open.  A System Administrator must reset these assessments before data entry can continue.

To reset the Open status of an assessment, the System Administrator should highlight an assessment that needs to be reset, click on the ADMINISTRATION menu, and select the Reset Open Status option.  This action will clear the *Open* box and reset the currently selected assessment.  If more than one assessment needs to be reset, highlight the next assessment and repeat the process until all of the desired assessments have been reset.

## Reset Open Status on All Assessments

This feature allows a System Administrator to reset the Open status of all assessments.  The Open status is normally reset (the * disappears from the *Open* box) when a user exits data entry for an assessment.

The **Reset Open Status on All Assessments** function is especially useful when abnormal termination of HAVEN (e.g., power failure, system lockup) in a network configuration occurs.  When HAVEN is restarted,

users cannot access any assessments that are marked as Open.  A System Administrator must reset these assessments before data entry can continue.

To reset the Open status of all assessments, the System Administrator should click on the ADMINISTRATION menu, and select the Reset Open Status on All Assessments option.  This action will clear the *Open* box and reset all assessments.

## Retrieve Patient with Hex Format

The **Retrieve Patient with Hex Format** feature allows a System Administrator to retrieve patient information that has been masked.

To search for a patient in hex format, click on the ADMINISTRATION menu, and select the Retrieve Patient with Hex Format option.  System Administrators can search for patient information by entering the hex representation of the masked value in one or more of the following fields: the Patient ID Number, Patient Name, Medicare Number, Social Security Number, or Medicaid number.

**NOTE:**  With the release of HAVEN 10.0, private pay assessments were no longer masked and exported from HAVEN.  This function remains in HAVEN for backward compatibility.

# HELP MENU

From under the Help menu, the user can access the following options:  General Help and About.

## Access General and About Help

**General Help** provides HAVEN system help regarding how to use and maintain the HAVEN software.  **About** identifies HAVEN software and dictionary Version information as well as application and data collection database (HHA.MDB) path locations.  From the **HAVEN Management Screen** or any of the **HAVEN Data Entry** screens, click on the HELP menu and select either the General Help or the About options.

Context sensitive help is available from any window by pressing the <F1> key.  Individual variable help is also available by right mouse clicking anywhere within a variable's frame on the data entry screens.

# PATIENT INFO

The Patient Info section enables the user to select the patient whose assessment history will be accessed.  Patients are displayed in alphabetical order by default.  Use the scroll bars on the *Patient* list box to view the available patients and click on the preferred row to select a patient.  After selecting a patient, the assessments previously created for the patient will display in the assessment list in the Assessment Info section.

The Search and Filter section allows the user to restrict the patients displayed in the patient list to those matching specified criteria.  The user may search the patient database by first selecting the Search tab, then choosing the field to search (last name, Social Security Number (SSN), Medicare number, Medicaid number, or Patient ID) in the *Search* drop-down combo box.  The user may then enter a value in the search text field

and click the <SEARCH> button.  All patients containing a value matching the search value in the specified field will be displayed in the patient list below.

For Social Security Numbers, please enter digits only.  Do not enter dashes.

Please note that matches are based on the patient field containing the search text as the beginning of the field.  For example, if the user searches by last name for the value "SMITH", then the patient list will contain all users with last name "SMITH" and those with last name beginning with "SMITH" (e.g., "SMITHERS").

The user may want to reduce the number of patients available from which to choose by filtering on Branch ID.   The user may filter the patient list by first selecting the Filter tab, then selecting a branch value from the dropdown list, and then clicking the <FILTER> button.  All patients containing a value matching the search value in the Branch field will be displayed in the patient list below.  Note that the user can filter by branch without performing a search first.

In order to display the complete list of patients,  clear the Search text and Filter text fields, then click either <SEARCH> or <FILTER>.

After searching and/or filtering, the patient list will contain patients in the database meeting the specified criteria.  By default, the patient list is displayed in alphabetical order.  Use the scroll bars on the *Patient* list box (or the arrow keys) to navigate the list box and view the available patients.  Click or use the spacebar on a row to select a patient.

Users can also sort by any field in the patient list by clicking on the column header.  Clicking once on the column header will sort the list in ascending order.  Clicking on the column header again will sort the list in descending order.  Alternatively, the user can press Ctrl-Alt-Z when the patient list is in focus – a context menu will appear containing the list of columns to sort by.  The user may select a column and the patient list will be sorted accordingly.

# ADD A PATIENT

The <ADD PATIENT> button allows the user with to add a new patient record.  The user must complete the fields with labels in Bold before the record can be saved.  Any remaining fields are optional.

To edit, hide, or delete an existing patient record, the Maintain Patient Database option from the ADMINISTRATION menu item must be selected.  Refer to the Maintain Patient Database section for a detailed explanation of how to add/edit/hide/delete a patient.

# ARCHIVE A PATIENT

The purpose of the **Archive** feature is to help maintain the size of the system database HHA.MDB.  The **Archive** function allows the System Administrator to archive a patient and his or her associated assessments if all of the assessments for that patient have a status of "Exported" or "Completed".  For instance, if a patient is not expected to return to the facility, all of the assessments for the patient can be archived for storage purposes, thus reducing the size of the system database HHA.MDB.

To begin the **Archive** function, select a patient whose assessments have all been exported and click on the <ARCHIVE PATIENT> button.   HAVEN will archive that patient's assessments to the active archive database.  The System Administrator also has the capability to create an archive database and specify the location of that archive database.  Click on the ADMINISTRATION menu item and select the Archive Setup

option to display the **Archive Setup** screen. See the Archive Setup section for a complete explanation of creating an archive database.

**NOTE:**

To view archived patient records on the **Patient Information** screen, click on the ADMINISTRATION menu item, select the Maintain Patient Database option, and click on the *View Archived Patients* check box. To view archived patient records from the **HAVEN Management** screen, click on the FILE menu item and select the Open Archive option.

It is recommended that the system database, HHA.MDB, be repaired and compacted after several archives have been performed. In order to complete the repair/compact process, all users must exit the HAVEN software. See Appendix A for a complete description of executing the **Repair/Compact** function.

## RESTORE A PATIENT

The **Restore** function allows the System Administrator to reinstate a patient who has been archived and removed from the system database HHA.MDB. To begin the **Restore** function, select the Open Archive option from the FILE menu to display the patients who have been archived in the default archive database or in the archive database specified on the **Archive Information** screen. All archived patients will be displayed on the **HAVEN Management** screen. Select a patient and click on the <RESTORE PATIENT> button to reinstate that patient. To close the archive database and display the active patients in the system database, HHA.MDB, reselect the Open Archive option from the FILE menu.

While in the **Archive** mode of HAVEN, the user has limited functionality. Features include: switching between the **Archive** and **Restore** functions; the **Reports** function; accessing **Help**; and viewing and printing assessments.

NOTE: There have been situations where users have lost their archive databases from their PCs. Without the archive databases, they were unable to restore the patient to the HHA.MDB (in order to add additional assessments). A special function is available to resolve this situation. On the **Maintain Patient Database** screen, highlight the patient and press Ctrl-R. This will reset the archive status for the patient. It is STRONGLY RECOMMENDED that this function ONLY be used if the archive database is missing.

## ASSESSMENT INFO

The Assessment Selection section allows the user to view the history and status of previous assessments for the currently selected patient. Assessments are displayed in the order they were added, with the most recent assessment displayed first in the list. For each assessment, the effective date, assessment type, status, last user to access the assessment, and a correction number are displayed. Select an assessment by scrolling through the list and clicking on it. The user can access the selected assessment to perform data entry or edits by clicking on the <ENTER DATA> button.

The Add Assessment section also enables the user to initiate a new assessment for the selected patient. Click on the <ADD ASSESSMENT> button to access the **HAVEN Reasons for Assessment** screen (described below) before the assessment is added to the patient.

Note the following:

- Newly created assessments have a status of "New"
- Edited assessments have a status of "In Use"
- Completed Data Entry assessments have a status of "Export Ready" for non-private pay

- Completed Data Entry assessments have a status of "Completed" for private pay
- Exported assessments have a status of "Exported"

NOTE: As of OASIS Version 1.30 (Reduced Burden), assessment types 02 and 10 no longer exist. However, these assessment types can be created using the 1.20 specification. Note that these assessments cannot be exported, since the OASIS State System will not accept any 02 or 10 assessments.

NOTE: If applicable, the selected Branch ID and its associated Branch State will be added to the new assessment. If any of the Branch options <Everything>, <All Branches>, or <No Branches> are selected, then the default Branch ID and State entered using the Maintain Branch Database menu option will be used (if present).

## Reason for Assessment

When the user clicks on the <ADD ASSESSMENT> button, the **HAVEN Reasons for Assessment** screen is displayed.

If strong enforcement is disabled, the Reasons for Assessment will be displayed in black or red. Black indicates the user will be adding assessments in sequencing order. Red indicates the user will be adding assessments out of sequencing order.

The response-specific instructions available for an assessment include:

**Start/Resumption of Care**

- **Response 01.** Start of care—further visits planned - This is the start of care comprehensive assessment. A plan of care is being established, and further visits are planned.

NOTE: When 01, Start of Care, is selected, the M0030 Start of Care Date must be entered. The date will be tracked across assessments until a new start of care occurs. The user has the ability to change the date during data entry.

- **Response 02**. Start of care—no further visits planned - This is the first visit; a comprehensive assessment has been performed. However, no additional visits will be made. Mark this response if the original order is for a one-time visit only. No additional data will be provided on this patient, as no plan of care is established (e.g., a subsequent discharge assessment is not expected).

NOTE: As of OASIS Version 1.30 (Reduced Burden) this reason type was removed. However, it is allowed using OASIS Version 1.20. Note that 02 assessments cannot be exported, however.

- **Response 03**. Resumption of care (after inpatient stay) - The comprehensive assessment is being conducted when the patient resumes care following an inpatient stay of 24 hours or longer.

NOTE: When 03, Resumption of Care, is selected, the M0032 Resumption of Care Date must be entered. This date will be tracked across the subsequent assessments until a new Start of Care or Resumption of Care assessment is added.

**Follow-Up**

- **Response 04**. Recertification (follow-up) reassessment - The comprehensive assessment is being conducted during the last five days of the certification period.

- **Response 05.** Other follow-up - The comprehensive assessment is conducted due to a significant change in patient condition at a time other than during the last five days of the certification period. This assessment is completed to update the patient's care plan.

**Transfer to an Inpatient Facility**

- **Response 06.** Transferred to an inpatient facility—patient not discharged from agency - Data regarding the patient's transfer to an inpatient facility for 24 hours or longer (for reasons other than diagnostic tests) are reported. The patient is expected to resume care and is not discharged from the agency. When the patient resumes care, a Resumption of Care comprehensive assessment is conducted. Note the "skip pattern" that is included in the response. This response does not require a home visit; a telephone call may provide the information necessary to complete the required data items.

- **Response 07.** Transferred to an inpatient facility—patient discharged from agency - Data regarding the patient's transfer to an inpatient facility for 24 hours or longer (for reasons other than diagnostic tests) are reported. The patient is discharged from the agency. Note the "skip pattern" that is included in the response. This response does not require a home visit; a telephone call may provide the information necessary to complete the required data items.

**Discharge from Agency – Not to an Inpatient Facility**

- **Response 08.** Death at home - Data regarding patient death other than death in an inpatient facility. A patient who dies before being admitted to an inpatient facility would have this response marked. Note the "skip pattern" that is included in the response. A home visit is not required to mark this response; a telephone call may provide the information necessary to complete the data items.

- **Response 09.** Discharge from agency - The comprehensive assessment is being conducted at the patient's discharge from the agency. This discharge is not occurring due to an inpatient facility admission or patient death. An actual patient interaction is required to complete this assessment. Note the "skip pattern" that is present in the response.

- **Response 10.** Discharge from agency—no visits completed after start/resumption of care assessment - This response is marked in the event of an unusual occurrence. The agency visits the patient at the start (or resumption) of care and establishes a plan of care. However, before another skilled visit is made, the patient is discharged. (For example, a family member may move the patient to another location.) This response is not marked at the same time as Response 2; this situation is very different. Note the "skip pattern" that is included in the response. This response should not be used if the patient is transferred to an inpatient facility or dies at home.

NOTE: As of OASIS Version 1.30 (Reduced Burden) this reason type was removed. However, it is allowed using OASIS Version 1.20. Note that a Reason 10 assessment cannot be exported.

Select the OASIS Specification for the assessment being added. The default is the current OASIS specification. After a selection has been made (one response per assessment), click on the <OK> button to save the choice and return to the **HAVEN Management Screen**, or click on the <CANCEL> button to cancel the assessment and return to the **HAVEN Management Screen**.

NOTE: As of OASIS Version 1.30 (Reduced Burden), a number of changes were made to the assessment to "reduce the burden" of data entry. When the user selects Version 1.30 or higher, fewer data entry items are required for RFAs 4 and 5, a number of items are removed from all of the assessments, and two assessments (RFAs 2 and 10) are no longer valid. In addition, in Versions 1.30 or higher, a new tracking form makes it easier for repeating information to be duplicated on each successive assessment.

# Sequence of Assessments

In accordance with OASIS Data Specification 1.50 (and 1.40), the sequence of assessments for a patient should conform to certain requirements. These requirements are described below:

- After adding RFA (Reason for Assessment) 1, the user may add RFA 4, 5, 6, 7, 8, or 9;

- After adding RFA 3, the user may add RFA 4, 5, 6, 7, 8, or 9;

- After adding RFA 4, the user may add RFA 4, 5, 6, 7, 8, or 9;

- After adding RFA 5, the user may add RFA 4, 5, 6, 7, 8, or 9;

- After adding RFA 6, the user may add RFA 1, 3, 4, 5, 7, 8, or 9;

- After adding RFA 7, the user may add RFA 1, 3, 4, 5, 6, 8, or 9;

- After adding RFA 8, the user cannot add any RFA record; and

- After adding RFA 9, the user may add RFA 1.

For more information on sequencing enforcement, see the Preferences section.

# Effective Date of Assessment

After an assessment is added, the Effective Date for the assessment will be blank. Following is a list of the assessments and the date variables that need to be completed in data entry before the Effective Date will be displayed on the **HAVEN Management Screen**.

- Start of care—further visits planned M0030_START_CARE_DT (Start of care date)

- Start of care—no further visits planned M0030_START_CARE_DT (Start of care date)*

- Resumption of care (after inpatient stay) M0032_ROC_DATE (Resumption of care date)

- Recertification (follow-up) reassessment M0090_INFO_COMPLETED_DT (Date assessment completed)

- Other follow-up M0090_INFO_COMPLETED_DT (Date assessment completed)

- Transferred to an inpatient facility—patient not discharged from agency M0906_DC_TRAN_DTH_DT (Discharge/transfer/death date)

- Transferred to an inpatient facility—patient discharged from agency M0906_DC_TRAN_DTH_DT (Discharge/transfer/death date)

- Death at home M0906_DC_TRAN_DTH_DT (Discharge/transfer/death date)

- Discharge from agency M0906_DC_TRAN_DTH_DT (Discharge/transfer/death date)

- Discharge from agency—no visits completed after start/resumption of care assessment M0906_DC_TRAN_DTH_DT (Discharge/transfer/death date)*

*Although these types of assessments can no longer be created or exported, it is still possible to complete data entry for these assessments.

The date displayed with each assessment on the **HAVEN Management Screen** will not be visible until the effective date is determined.

# Correct an Assessment

Once an assessment has been Locked (Exported), only a System Administrator has access to it. Listed below are the three supported types of corrections:

- Assessment was submitted to the State and was rejected. By selecting this option, the assessment lock dates are cleared and the user is taken directly into data entry for that assessment. After the necessary corrections are made, the assessment can be completed, locked, exported, and re-submitted to the State.

- Assessment was submitted to the State and was accepted. Correction to non-key fields only is necessary. To correct an assessment with non-key field errors in the assessment, a copy of the assessment is made and the correction number is incremented by one. After the corrections are made, the assessment can be exported. (This is no longer a valid type of correction. Use inactivation of the assessment instead.)

- Assessment was submitted to the State and was accepted. Correction to non-key fields is necessary. To correct an assessment with non-key field errors in the assessment, a copy of the assessment is made and the correction number is incremented by one. After the corrections are made, the assessment can be exported.

- Assessment was submitted to the State and was accepted. **Inactivation of the assessment is necessary.** By selecting this option, a copy of the assessment record is created. The user is taken directly into data entry for that assessment, however the entire assessment is view-only. After viewing the assessment, the user can exit the assessment. The correction number on the **HAVEN Management** screen and the assessment status will be "Export Ready."

After exporting an inactivation record, a new assessment containing the data from the inactivated assessment can be created. Select the inactivation record from the HAVEN Management screen and click on the <CORRECT ASSESSMENT> button. The *HAVEN Data Entry System* pop-up box will appear. Click on the <OK> button to create the assessment pre-populated with the data from the inactivation record. The correction number for this assessment will be 00.

If corrections are done for a submitted assessment from a prior version of HAVEN, the prior version will be used for an error check.

For further information on OASIS correction procedures, see the *OASIS Data Submission Specifications* link available from CMS at **http://www.cms.hhs.gov/oasis.**

# Delete an Assessment

Only a System Administrator may delete an assessment. To delete an assessment, select the assessment and click on the <DELETE ASSESSMENT> button. The user will receive two messages asking for verification before the assessment will be deleted from the database. Note that once an assessment is deleted from the database, it cannot be recovered.

Because of the sequencing requirements, assessments may be deleted from the top down only. Start with the first number in the *Select/Add an Assessment for Patient* text box and delete the necessary assessment records. As records are deleted, the assessments are automatically renumbered. If strong enforcement is disabled, this restriction does not apply and the user may delete any assessment.

## Print an Assessment

Select the <PRINT ASSMT> button to print the currently selected assessment. Once selected, the user can choose to display all the sections or a subset of the OASIS data entry sections. Selecting the <CANCEL> button will stop the print process. When the assessment report is completed, it will appear in the **Report View** window. From the window the user has the option to print the report as well as save it in .PDF (Adobe Acrobat), .RTF (Rich Text Format), or .TXT (Text) format.

## Enable Read Only

If the Enable Read Only option is checked, the user is allowed to view an assessment in read-only mode. This option is useful for reviewing the data entered and ensuring that no data are accidentally edited.

## EXIT

The user may exit the HAVEN software by clicking on the <EXIT> button or by selecting the FILE menu item and clicking on the Exit option.

# HAVEN DATA ENTRY WINDOW

The **Data Entry** screen typically consists of the following components:

- Title Bar. Displays **HAVEN Data Entry** along with the assessment type (Original, Modification or Inactivation), the patient first and last names, the patient SSN, and the patient Date of Birth.

- Menu Bar. Displays the list of functions that can be performed on the **Data Entry** screen. Each of these functions contains additional options that can be displayed by using the keyboard or mouse.

- Data Entry Button Bar. Provides the available **Data Entry** functions. Currently, four functions are available: **Previous, Next, Exit (Validate) and Exit (No Validate)**. All of these functions also exist on the Menu Bar.

- Go To Dropdown Box. Contains a list of screens for the selected set of screens. When the box is dropped down, the user can navigate the list of screens with either the up and down arrow keys or the left and right arrow keys. If a screen is clicked with a mouse or selected by pressing the Enter key, the **Data Entry** screen of the selected screen will open in the space below it.

- Data Entry Screen. Contains variables that belong to the selected screen. On this screen, data entry can be performed for each variable.

- Font Size. In vertical (i.e., single column) data entry, the font size may be adjusted by entering a size between 8 and 28 in the Size textbox. Alternatively, the user can press F11 to decrease the font size by one, or press F12 to increase the font size by one.

# ENTER DATA FOR A VARIABLE

Perform data entry after selecting a Patient record and an Assessment form. (See previous sections: Select/Add a Patient and Select/Add/Edit/Correct/Delete an Assessment.)

Data entry can be exited at any time by selecting the Exit (Validate) or Exit (No Validate) buttons, or by clicking on the File menu item and selecting the Exit (Validate) or Exit (No Validate) items. If Exit (Validate) is selected, HAVEN will perform error checks for the current set of assessment values. If errors are found, they will be displayed on the **Assessment Validation Warnings** screen. This screen is described below. If Exit (No Validate) is selected, the data entry screen will close immediately and the user will be returned to the **HAVEN Management Screen**.

To begin data entry, select the desired screen using the <PREVIOUS> button, the <NEXT> button, or the Go To Dropdown Box. Follow the descriptions below to enter data for the various variable types.

## Option (Pick One)

The variable type **Option (Pick One)** includes the items from which only one item can be chosen. Choose an item by selecting the radio button or check box (if the Check Boxes option has been selected from the

Preferences menu) next to the item.  Users may clear radio buttons by clicking on the <RIGHT MOUSE> button and selecting the Clear Variable option.

## Option (Pick One or More)

The variable type **Option (Pick One or More)** includes options from which one or more items can be chosen.  Choose the item(s) by marking the check box next to the desired item.  Note that, normally, the last item on the list (usually None of the Above) clears all the other items.

Check boxes have two possible states: checked and unchecked.  Checked indicates that the option is true.  Unchecked indicates that the option is false or not applicable.

## Date

The variable type **Date** accepts data entered in the date format that has been specified in the design (the default format for date is MM/DD/YYYY).

## String

The variable type **String** accepts text entered in any alphanumeric combination.  The string is limited in length by variable type.

## ICD-9

The ICD-9 variable type allows the user to select a Diagnosis or Procedure code by clicking on the ICD-9 Dx or ICD-9 Pr button respectively, which displays the **ICD-9 Codes** window.  In this window, the user can search for a code by typing the code into the Search on Code text box (the codes will be displayed automatically) or by typing a description into the Search by Description text box.  As entries are made into either search box, the list of ICD-9 codes/description matching the pattern entered will appear in the list below.  To select an ICD-9, the user can check (highlight) the code of interest and select the <OK> button, or simply double-click the desired code.

# SPECIAL FEATURES (HAVEN DATA ENTRY SCREEN)

## Enter Notes

To enter a general note about a variable during data entry, use a right-click to generate a context menu (or press the asterisk key on the keyboard).  The displayed pop-up box allows the user to enter a note containing up to 32,000 alphanumeric characters.  Since all of the notes for a given assessment are stored in one file, copying the Variable Screen Title before writing a note provides a good reference point to the variable.  To paste the screen title of the current variable into the note, select the <COPY TO NOTES>

button. Click on the <SAVE> button to save the notes; click on the <CLOSE> button to return to the **Data Entry** window.

## Clear Value on a Variable Radio Button

To clear variables with radio buttons, click on the <RIGHT MOUSE> button (or press the asterisk key on the keyboard) and select the Clear Variable option.

## View Help

To display the Help available for each variable, click on the <RIGHT MOUSE> button while the mouse is on the variable label, or press F1 while a variable has the focus.

## Print Screen

Selecting the Print Screen option from the File menu item allows the user to print the current screen. If the screen does not print properly (possibly due to the default printer settings), another process, screen capturing, is available.

There are several steps to follow when capturing a screen in design or data entry for printing. To copy a screen, press on the <PRINT SCRN> button or press on the <ALT> + <PRINT SCRN> buttons to capture only the active window. After opening a word processing package such as Word or a graphics package such as Paint, paste the screen into the document by pressing on the <CTRL> + <V> buttons. The screen can also be copied into a document by using the paste function available in the application being used.

## Edit Agency Data

During data entry, the user has access to the **HAVEN Agency Information** screen from the Edit menu items. This feature allows the user to edit the Agency Information for an assessment. For example, if incorrect information is added during the setup process for the agency, the user can edit this information during the data entry process.

## Edit Branch Data

During data entry, the user has access to Branch State (M0014) and Branch ID (M0016) variables for entry or modification. If the user creates a new Branch ID here, it will be automatically added to the Branch database when data entry is exited. Note that the user can use Ctrl-C (copy) and Ctrl-V (paste) to copy a Branch ID from the list into M0016_BRANCH_ID. The list of Branch IDs on the **HAVEN Management Screen** will always display all of the unique Branch Ids in the assessment database.

## Edit Patient Data

During data entry, the user has access to the **HAVEN Patient Information** screen from the Edit menu items. This feature allows the user to edit the Patient Information for an assessment. For example, if incorrect information is added during the setup process for the Patient database, the user can edit this information during the data entry process.

After saving the edited information, HAVEN will ask the user whether all non-exported assessments (except for non-key field correction assessments) should be updated. It is recommended that this process be completed to maintain consistent patient information across assessments in export files. The user may choose not to update any unexported assessments (except for non-key field correction assessments) and HAVEN will still update the current assessment.

The Edit Patient Data menu item is not available during data entry for non-key field correction assessments, since changes to patient information would result in non-key changes.

NOTE: When editing the **HAVEN Patient Information** screen during data entry, only the Patient Information portion of the screen will be visible. The user cannot search for or select another patient.

# CALCULATE/VIEW HIPPS (IF APPLICABLE)

HIPPS calculations are automatically performed for an assessment when the data entry for the assessment has been completed and its status is made "Export Ready." HIPPS can be calculated for assessments with RFAs 1-5. The HIPPS can be recalculated at any time during data entry. Click on the HIPPS menu item in data entry to recalculate the HIPPS. The **View HIPPS** screen will be displayed. Note, however, that the HIPPS values are not saved until the assessment is locked.

HIPPS can also be viewed from the **HAVEN Management Screen** using the <HIPPS GROUPER> button. If the assessment status is "Exported," the HIPPS have already been calculated and will merely be displayed in the **View HIPPS** screen; otherwise, the HIPPS will be recalculated and then displayed.

# ASSESSMENT VALIDATION AFTER EXIT

When the user attempts to exit data entry, the system will check all of the rules in place. One such rule is the mandatory variable rule. All mandatory variables must have valid data values. If a mandatory variable is left blank (i.e., data are not entered), the user will be warned that this variable is mandatory (e.g., ERROR: Is Blank But Should Not Be: (M0030_START_ CARE_DT - Start of Care Date)). The user will not be able to mark an assessment as complete until all mandatory variables have been entered.

In addition, any assessment validation warnings will be displayed. Since these warnings are for informational purposes and are not considered errors, they are not required to be resolved before an assessment can be marked as complete.

If an assessment contains errors, the **Assessment Validation Warnings** screen will be displayed. This screen contains a list box of all errors detected during the validation process. As the user selects an error entry from the list box, a full description of the error is displayed in the text box below. Messages marked as "FATAL" are errors not addressable by data entry personnel. These errors should be referred to the System Administrator.

There are four buttons at the bottom of the **Assessment Validation Warnings** screen. Clicking on the <GO TO SCREEN WITH ERRORS> button will return the user to the HAVEN Data Entry Window and automatically display the screen containing the variable selected in the errors list box. Clicking on the

<PRINT ERRORS> button will print the errors/warnings listed in the errors list box.   Selecting the <CONTINUE> button will take the user to the Assessment Status screen where the assessment can be exited by marking it as complete, admission complete or in use.   Choosing the <RETURN TO DATA ENTRY> button will allow the user to continue the data entry process.

## ASSESSMENT STATUS WINDOW

On the **Assessment Status** screen, the status of an assessment must be marked before the assessment can be exited.

The various options that can be selected when exiting the **Assessment Status** screen include:

- Case in active use: An assessment has been edited but is not complete

- Completed: Data entry has been completed for an assessment (both admission and discharge variables)

To mark the status, select the best choice and press the <OK> button.  The HAVEN Data Entry Window will close and the HAVEN Management screen will reappear.   To return to data entry and the HAVEN Data Entry Window, click the <CANCEL> button.

**NOTE:**
Once an assessment has been marked "Exported", only users with System Administrator rights can reopen it.

# OASIS PATIENT TRACKING DATA

As of OASIS Version 1.30 (Reduced Burden), a new patient tracking form was used for each assessment. The intention of the tracking form is to keep track of key information that does not change frequently between assessments, such as the patient's race/ethnicity.  Many of these patient items were being tracked across assessments by HAVEN.   However the following items were added in HAVEN Version 6.0 and are now tracked:

- M0030 (Start of Care Date);
- M0032 (Resumption of Care Date or Not Applicable);
- M0072 (Primary Referring Physician ID or Unknown or Not Available);
- M0140 (Race/Ethnicity); and
- M0150 (Current Payment sources).

These variables are tracked for each patient from the most recent assessment.  For example, if the user updates M0140 on the current assessment, the values become the default M0140 values tracked for the patient (if the user chooses).  The one exception is M0150; if this variable is changed, HAVEN asks the user if the patient database should be updated.  It is expected that M0150 values can change within an episode of care.

To ensure that data can be entered out of sequence, the user is given the option upon exiting data entry to not update the patient tracked variable. This exit is performed with warning messages. Under normal data entry circumstances, the warning messages will not appear.

For users upgrading to Version 6.0 or higher, the tracking items will be embedded in each existing assessment but will not yet be tracked for the patient. Each time an assessment is opened for an existing patient, the tracking variables will be copied into the patient database where the items are blank at the patient level.

If the most current tracked item value is already saved, the user is warned for confirmation purposes only when the user changes it.

Finally, the tracked variables are copied into each assessment (as applicable) as the assessment is created.

The process is designed to make it easier to track variables across assessments and only require a change when necessary.

# HAVEN DATA EXPORT

## CREATE DIRECTORIES/FOLDERS FOR EXPORT

It is strongly recommended that a separate directory from the installation directory be created for export files. The following instructions will enable a user to create a new directory/folder using Windows Explorer. To access Windows Explorer, click on the <START> button in the lower left corner of the screen, select the Programs option, and then select the Windows Explorer option.

After selecting the Windows Explorer option, add a new directory/folder to an available drive such as C. Click once on (C:) in the left window. Next, click on the File menu, select the New option, and then select the Folder option. After selecting the Folder option, a highlighted New Folder will be displayed at the bottom of the *Name* list in the right window.

With the NEW FOLDER highlighted, left mouse click inside the highlighted frame and type in a name for the directory/folder. Whatever is typed within the frame replaces the words "New Folder." After typing a name, press the <ENTER> key on the keyboard or left mouse click anywhere outside of the frame.

To add a subdirectory/folder to an existing directory/folder (e.g., add a subdirectory named Export to HAVEN), click on (C:) in the left window and select the newly created folder (i.e., HAVEN) displayed under the *Name* list in the right window. Next, click on the new folder (the right side of the screen should go blank) and repeat the instructions for adding a directory/folder.

Exit Windows Explorer by clicking on the "X" in the upper right corner of the screen or select the Close option from the FILE menu.

## EXPORT/LOCK ELECTRONIC FORMS

To initiate the **Export** function, select either the Export option from the Options menu item or the <EXPORT> button on the **HAVEN Management Screen**.

The HAVEN **Export** function enables users to export data for "Export Ready" assessments from the HAVEN database into the Data Record Layout format (i.e., 1,448-byte string). This format is suitable for submission to the state. Note that each data field in each exported assessment has been error-checked in accordance with the rules specified in the HAVEN Data Record Layout.

NOTE: As of HAVEN 10.0, private pay assessments could no longer be exported from HAVEN. After completion of data entry, these assessments are given a ":Completed" status and not included in the list of eligible assessments on the Export screen.

Following is a description of the **Export** function.

- Select the type of submission—New Export or Previous Export. Resubmissions are described in the next section.

- Enter a description of the file into the *Export Description* text box. (Optional—if left blank, the number of assessments exported will automatically be stored in the description).

- Enter the path/file name into the *Export Path* and *File Name* text boxes. Click on the <BROWSE> button and select a path, then enter a file name. The data will be saved in text file format with file extension .txt. The user may want the file name to correspond to the description used in the *Export Description* text box.

- If applicable, select one of the Branch options to display assessments ready to export for the specified Branch value (same as the Branch options on the **HAVEN Management Screen**).

- The assessments will be displayed in the *Select Assessments to be Included in Export* text box. To select one assessment to export, highlight the desired assessment. To select more than one assessment to export, use the <SHIFT> or <CTRL> keys. To include all of the displayed assessments available for export, click on the <SELECT ALL> button. To cancel the current selections, click the <CLEAR SELECTION> button.

**EXAMPLE:**

For easy reference, the user may wish to create a directory called EXPORT with subdirectories for the year/month. This structure will help to organize the export files for submission to the State. The saved file names could reference the weeks of the month (e.g., C:\EXPORT\2010\JANUARY\WEEK3.TXT). Review the "Create Directories/Folders For Export" section above for complete instructions on creating a directory/folder.

- Select the type of submission—Production or Test. For Production submissions, an assessment always receives the status "Exported" once it has been exported. The export header record contains a field called the Test/Production Indicator that identifies the type of submission.

Click on the <EXPORT> button to complete the export process. A message will be displayed stating that the export is complete and the file is ready to submit to the state. Click on the <OK> button to close the message box. After the export is completed, the batch of assessment submissions can be identified by the current date, file and path name, and the description of the exported file displayed in the *Previous Exports* text box. Click on the <CLOSE> button to exit the **Export** function and return to the **HAVEN Management** window.

# RE-EXPORT ASSESSMENTS

Users have the ability to re-submit previously exported assessments should an error be detected by the State System. To do this, users select the Resubmission radio button and are presented with a list of previous batches of assessment submissions in the *Previous Exports* list box. After selecting a previous batch, the user may then generate a new export file that contains the data for each of the assessments displayed in the *Select Assessments to be Included in Export* list box.

# HAVEN DATA IMPORT

## PERFORM ERROR CHECK ON AN IMPORT FILE

The System Administrator has the capability to import files. Import files must utilize the same format as export files (i.e., they must contain a header record, assessments in the 1,448-byte string format specified in the HAVEN Data Record Layout, and a trailer record). On the **HAVEN Management Screen**, the user may click on the <IMPORT> button or select the **Import** function from the Options menu item.

After selecting the **Import** function, the *HAVEN Import* pop-up box will be displayed. The user must use the <BROWSE> button to select the file path/name to be imported.

The user may check the file for errors by clicking on the <ERROR CHECK> button. Each record in the import file is processed in accordance with the rules specified in the HAVEN Data Record Layout. When the error checking is complete, a message box will appear, giving counts of the records checked and errors found.

Any errors or warning messages will be displayed in the **HAVEN Errors/Warnings** window. From here, the errors can be printed. Alternatively, the errors can be viewed with an external text editor – the errors are saved to the file ASMTERRS.TXT in the Import path directory. (Note – if a specific Import path has not been specified in the Preferences section, ASMTERRS.TXT can be found in the application directory.)

## IMPORT HAVEN DATA

The user may proceed with the import by clicking on the <IMPORT> button. This action will process all records in the designated import file. After the import has been completed, a message box will appear stating that the import is complete and displaying the number of assessments that were imported.

Any errors or warning messages will be displayed in the **HAVEN Errors/Warnings** window. From here, the errors can be printed. Alternatively, the errors can be viewed with an external text editor – the errors are saved to the file ASMTERRS.TXT in the Import path directory. (Note – if a specific Import path has not been specified in the Preferences section, ASMTERRS.TXT can be found in the application directory.)

### AGENCY DATA

The Agency information in the header record is compared with the existing information in the agency database. If the information does not match, the user is given the option to abort the import. This action is useful if a wrong file is being imported. It is recommended that assessments from different agencies not be mixed together in order to maintain the integrity of the export files.

If the user continues with the import, he/she will be given the option to update the agency database. If changes are made to any of the three agency fields (i.e., Agency State Assigned Unique ID, Agency Medicare Provider Number [M0010]; and Agency Medicaid Provider Number [M0012]) or copied from the

agency database into the assessment records, HAVEN will ask the user whether all non-exported assessments should be updated. It is recommended that this update be completed to maintain the integrity of the export files.

If an imported assessment contains new or updated agency or patient information, but the mandatory agency or patient fields are incomplete, then the assessment will not be imported. The user will be notified that the agency or patient information was not added or modified and the assessment was not accepted. New or updated information will also be rejected if it does not satisfy the consistency rules.

# BRANCH DATA

If the imported assessment has any Branch Ids (M0016_BRANCH_ID) not in the Branch database, the Branch ID and its associated Branch State (M0014_BRANCH_STATE) will be added during the import.

# PATIENT DATA

The Patient information for each assessment in the import file is matched against the data in the existing patient database. The software compares the following fields:

- SSN, Date of Birth, Last Name, First Name, Gender;

- SSN, Gender, Last Name;

- Date of Birth, Last Name, First Name, Gender;

- SSN, Date Of Birth, Gender;

- SSN, Last Name, First Name, Gender;

- Agency ID, Date Of Birth (month and year only), Last Name, First Name, Gender; and

- SSN, Date of Birth, Last Name, First Name.

If a match is not found, a new entry will be added to the patient database. For each assessment, HAVEN will display how the patient was matched. The user can override this by checking the box "Do not display patient match information during import."

By default, a message will be displayed when a new patient is added; however, the user can override this feature by checking the box labeled "Do not give warning message when new patient is added during import." This override is useful when importing assessments for a large number of patients who do not have previous patient database information in HAVEN.

The patient information in the imported file is compared with the existing information in the patient database. If the information does not match, by default, the user is given the option to update the patient information in the patient database and the non-exported assessments. However, the user can override this feature by checking the box labeled "Do not give warning message before updating patient information during import." This override is useful when importing a large number of assessments that have non-static patient information.

# ASSESSMENT DATA

Imported assessments may have a status of "In Use," " Export Ready," or "Exported."

For an imported assessment to be "Export Ready" or "Exported," the assessment must pass all error checking. By default, assessments with no errors are assigned "Export Ready" status. However, if the "Assign Exported status to assessments without errors" checkbox is checked, then the assessments will be assigned "Exported" status. If the Lock Date is missing or invalid, the system will assign a Lock Date of the current date.

All other assessments will be assigned the "In Use" status.

Duplicate assessments are identified during the import process and are not added to the HAVEN database. The following fields are used to identify duplicate assessments:

- Agency State Assigned Unique ID;

- Patient Information;

- M0100_ASSMT_REASON;

- M0030_START_CARE_DT;

- Effective Date; and

- Correction Number.

Assessment sequencing rules are enforced in three areas of the software: 1) adding assessments, 2) correcting assessments, and 3) importing assessments. Strong enforcement prohibits the import of assessments in an order that violates the sequencing rules. If strong enforcement is disabled, then an assessment can be imported in an order that violates the sequencing rules. Note that a modification or inactivation record can only be successfully imported if the assessment to be modified or inactivated already exists in the HAVEN database.

If an ASCII file is created in a software package other than HAVEN, some variables, which should be empty, may contain data and therefore the assessment cannot be completed. However, when a user tries to access one of these variables inside HAVEN to clear its value, the variable cannot be cleared, because it is disabled. The Fix Inactive Fields feature discussed in the HAVEN Data Entry section can be used to clear these values.

# REPORTS

## SELECT A REPORT TO VIEW/PRINT

HAVEN provides the user with the following report options:

- A report to view the data entry for one or more assessments (Assessment Data Entry Report);

- A report to view all assessments with "In Use" status (All Assessments In Use); and

- A report to view masked values in Hex format for fields subject to protection (Masked Values in Hex Format).

When the **View/Print Reports** function is selected, the user will be presented with a **HAVEN Reports** window where the report of interest can be selected.

After selecting the report, click on the <OK> button to begin generating the report or, if applicable, go to the report specific selection criteria associated with the selected report.

## ASSESSMENT DATA ENTRY REPORT

For quality control/review purposes, this report displays the data entered for an assessment(s).

To report on an assessment(s), the user can:

- Search for an assessment by Patient or Status (Export Ready, In Use, or Exported).

- **Patient.** Follow the instructions discussed in the HAVEN Data Entry section under Patient Info.

- **Status.** A list of assessments coded "Export Ready", "In Use", or "Exported" will be displayed in the assessment list box from which the user can choose. If applicable, only assessments for the selected Branch will be displayed.

- After making a selection, click on the <VIEW REPORT> button to produce the report(s) or the <EXIT> button to return to the **HAVEN Management** screen.

NOTE: A report can take some time to produce depending on the size of the database. Also, if a large number of assessments exist in the system, it is not advisable to select all of the assessments at once because of the amount of time it takes to produce the reports.

When the report has been produced, it will be displayed in the **Report View** window. From there, the report can be printed or saved in several formats, including .PDF (Adobe Acrobat), .RTF (Rich Text Format), and .TXT (Text) format.

# ALL ASSESSMENTS IN USE

This report lists all assessments with an "In Use" status.  Included in the report for each assessment is the Patient ID, Last Name, First Name, Medicare Number, Social Security Number, Medicaid Number, Reason for Assessment, Effective Date, and the Last User to access the assessment.

From the **Report View** window, the user can print or save the report in several formats, including .PDF (Adobe Acrobat), .RTF (Rich Text Format), and .TXT (Text) format.

# MASKED VALUES IN HEX FORMAT

When an assessment is masked, the masked values are written to a separate table.  This report lists the masked values in hex format along with the original unmasked values.  Assessments only contain masked values AFTER they have been exported.

From the **Report View** window the user can print or save the report in several formats, including .PDF (Adobe Acrobat), .RTF (Rich Text Format), or .TXT (Text) format.


NOTE:  As of HAVEN 10.0, private pay assessments were no longer masked.  However, this report remains in HAVEN for backward compatibility.

# APPENDIX A

## REPAIR/COMPACT UTILITY FOR MICROSOFT ACCESS DATABASE

This utility module is named REPAIR32.EXE.  Use standard Windows procedures to execute this utility.

**IMPORTANT:  It is strongly recommended that the databases be backed up and archived before the Repair/Compact utility begins.  Not all damaged Access databases can be repaired and compacted by this or any repair/compact utility.  If a database is badly corrupted, data truncation may occur as the result of a repair and compact and data loss may result.**

**IMPORTANT:  This function only works on a valid Microsoft Access 2.0, 95/97 or 2000/2002/2003 database with an ."MDB" extension.  Access 2007 databases are not supported.**

The Microsoft Access Databases Repair Utility is designed to fix a Microsoft Access database that becomes corrupted.  To use the **Repair/Compact** utility, select the file using the drive, directory, and file list boxes on the single window that comprises this utility.  The name of the selected file appears in the lower left portion of the window.

The **Repair/Compact** function of the **Repair/Compact** utility tries to repair any index corruption attempts to recover from data loss, and compacts records on the selected database to recover space when records are deleted.  Since the size of the database files does **not** decrease when records are deleted from the database, it is recommended that this program function be used when a large number of records are deleted from the database.

To begin the compacting process, select the database of interest by using the <BROWSE> button.  Then click on the <REPAIR/COMPACT> button.  If successful, the message "Repair and compact completed!" is displayed; otherwise, an error message is displayed.

The amount of time it takes to repair and compact depends on the size of the database and the speed of the computer.  To exit the **Repair/Compact** function, click on the <CLOSE> button.

**IMPORTANT:  Do not interrupt the repairing and compacting process.  An interruption may leave the database in an unstable state and could result in data loss.**

After repairing, compacting, and verifying that the records have been repaired and compacted properly, it is important that the user replace the working database with the repaired and compacted one since the replacement is not performed automatically.

# GLOSSARY OF TERMS

## Data Entry

A MedQuest function that allows users to collect data for the data entry system designed by the MedQuest Design function by creating the data store file called **XXX.MDB,** where "XXX" represents the module acronym (e.g., HHA.MDB is the data store file for the data entry module HAVEN).

## Data Entry Rule

A rule specified during the design process that is executed during data entry.

## Data Entry System

A system designed by MedQuest to collect clinical data for a data analysis project. Each project is called a Module and is represented by a three-character acronym (e.g., HHA is the Data Entry System for the OASIS Home Assessment Validation and Entry (HAVEN) System project).

## Edit

The process by which data is modified. This term can also be used to reference features performed on data to ensure the correctness and integrity of the modified data.

## Module

See Data Entry System.

## Screen

A screen is an area beneath the Go To dropdown box where variables are presented. The variables on the screen are displayed by selecting a screen name in the Go To dropdown box.

## Validation

The process by which the integrity and correctness of data are established. Validation processes can occur immediately after a data item is collected or after a complete set of data is collected.

## Variable

A variable is a data entry field that accepts data according to the specifications and rules indicated by the designer during the design.

## Variable Type

Variable types and attributes determine the type of data the system will accept (e.g., a variable will accept date format, etc.) during the data entry. The designer defines a variable type for each variable. For example, if variable **Admission Date** accepts only data that are in date form, the variable type must be defined as variable type **Date**.