Home Assessment Validation and Entry (HAVEN) Reference Manual

OVERVIEW

INTRODUCTION

The Outcome Assessment Information Set (OASIS) was developed by the Health Care Financing Administration (HCFA) to set a standardized protocol for assessing the clinical characteristics of Home Health Agency (HHA) patients. This information will be 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 will also be used to support a prospective payment system for HHAs. In addition, it will provide 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, HCFA 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. Based on HCFA's MedQuest tool, HAVEN enables the user to electronically enter patient assessment data into OASIS standard record formats and export the patient assessment data records to the State.

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**).

Information Symbol. This symbol indicates that the user should take notice of the information.

Question Mark Symbol. This symbol prompts a user to review the procedure that is about to be invoked. For example, if a user adds a new patient and then decides to cancel the addition, a message box with a question mark will appear asking the user to verify the request.

X Symbol. This symbol indicates that the requested procedure cannot be completed and displays a short message explaining why.

Exclamation Point Symbol. This warning symbol indicates that an action has been selected that may have undesirable results. The warning provides an explanation and asks for verification before continuing with the selected action.

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 200 MHz or higher processor
- VGA or VGA-compatible display monitor with a minimum resolution of 800x600 pixels

Note:

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.

- Hard disk with a minimum of 30 megabytes of available space
- Sixteen megabytes of RAM (32 are recommended)
- CD-ROM drive (if installing from CD)
- Microsoft® Windows 95, 98, NT, or 2000
- Microsoft or Microsoft®-compatible mouse or pointing device

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 HCFA OASIS web site), execute the downloaded file (SETUPHHA.EXE—a self-extracting ZIP file) in a temporary directory (e.g., C:\TEMP). This action will decompress all of the installation files as well as README.TXT.

After running SETUPHHA.EXE to extract the setup files, run the SETUP.EXE program to begin the installation and follow the steps to install the HAVEN program.

OPERATING HAVEN WITHIN LARGE AGENCIES

The intent of HAVEN Version 1.0 was to provide software to agencies to whom 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 be run in a network environment. In addition, Version 1.0 was designed to run on the Windows 3.1 platform for agencies that could not upgrade to Microsoft® Windows 95, 98, NT, or 2000. Consequently, HAVEN was built using the Visual Basic 4.0 development environment and utilizing 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. These agencies have requirements that could not be met by Version 1.0. Specifically, these requirements include 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 and Restore Patients".

These two enhancements not withstanding, 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. Access 2.0 is not a full-featured RDBMS. Although a number of steps have been taken to address collisions in the software, collisions that will cause application errors can still occur. In addition, when the number of records in the storage database becomes very high, the performance and reliability of the system will degrade.

To ensure the best possible operation of HAVEN under a network environment, the following steps should be taken:

- Limit the number of collisions against the database:
  - 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 employee information
  - Assign one user to perform all maintenance of the agency 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 information while other users are performing data entry
  - Do not perform maintenance on employee information while other users are performing data entry
  - Do not perform maintenance on 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
  - 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.

INSTALLING HAVEN IN A NETWORK ENVIRONMENT

There are several steps to follow when installing HAVEN in a network environment. These steps are:

- For the first PC, install the HAVEN software. If this is a first time install, move the HHA.MDB storage database from the installation directory to a shared network drive. Make sure the HHA.MDB no longer exists in the installation directory.
- Run HAVEN. The HHA.MDB will not be found in the installation directory by the system and the user will be prompted for the new location. Indicate the shared network drive. Set up the agency and employee information databases.
- For each subsequent PC, install the HAVEN software. Delete the HHA.MDB storage database from the installation directory.
- Run HAVEN. The HHA.MDB will not be found in the installation directory by the system and the user will be prompted for the new location. Indicate the shared network drive.

Note:
When setting up a network configuration, it is required that a shared drive on a network file server be used. Do not use a shared local drive on a PC.

HELP

GENERAL/ABOUT HELP

The **General Help** provides HAVEN system help regarding how to use and maintain the HAVEN software. **About (HAVEN) Help** identifies software and data dictionary version information as well as application and storage 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 Help options.

ADDITIONAL HELP

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.

LOGIN

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. To exit the **Login** screen without actually logging in to the system, click on the “X” in the upper right corner of the screen.

USER IDS

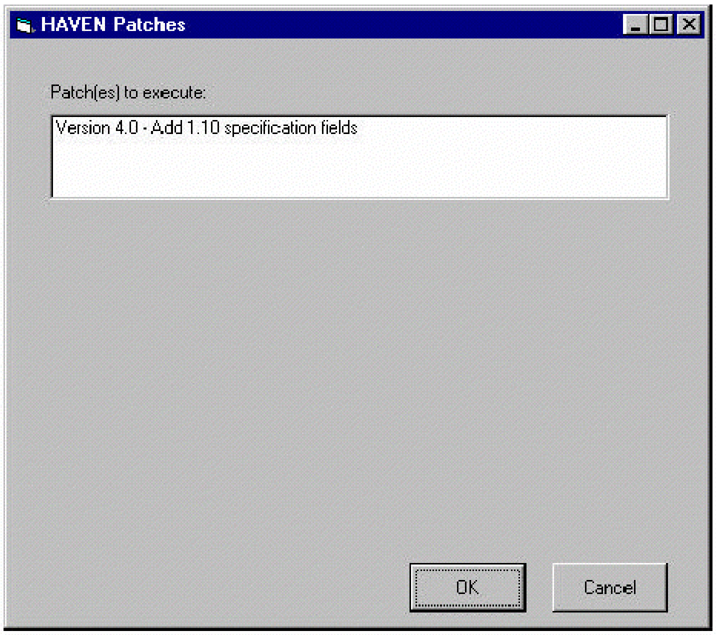
Use the following Login identification and password for HAVEN the first time:

- User ID **HAVEN** and password **HAVEN**

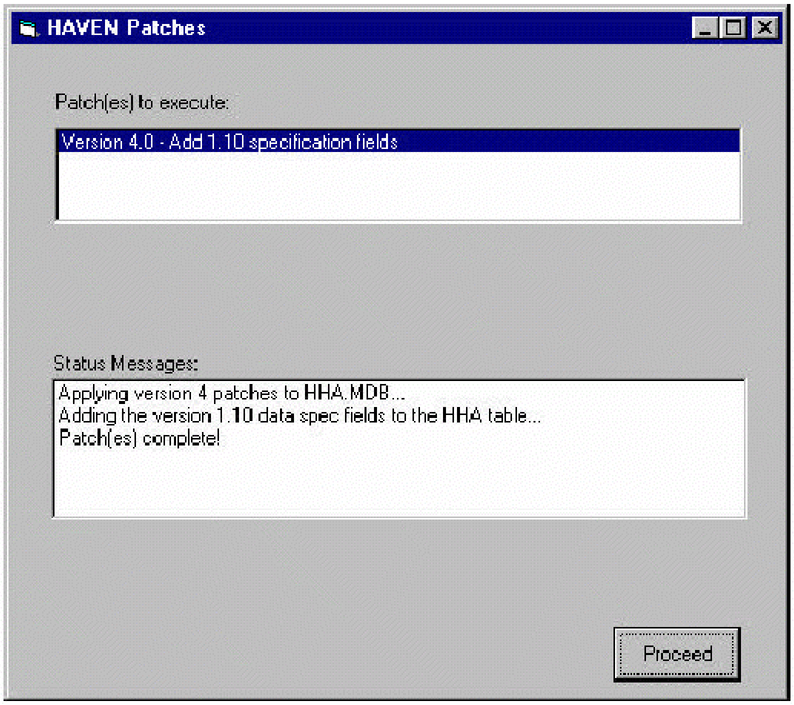
HAVEN PATCHES

Note:

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



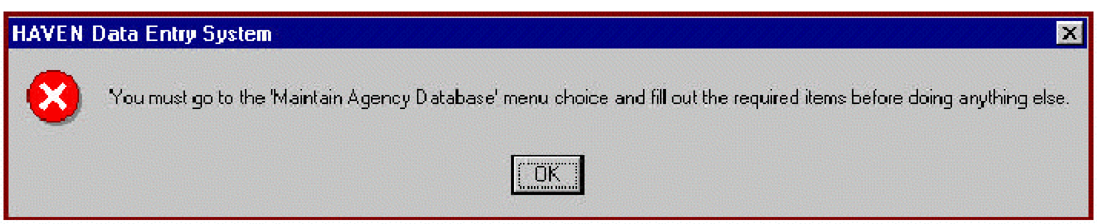
The **HAVEN Patches** screen will be displayed if HAVEN detects that patch(es) are required. Click on the <OK> button to execute the patches or click on the <CANCEL> button to exit HAVEN.



Then click on the <PROCEED> button to continue to the **HAVEN Management Screen**.

DATABASE MAINTENANCE

For new HAVEN installation, the following message box will be displayed.



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 has been completed, the user Login identification and password can be added, modified, or deleted by using the **Maintain Employee Database** feature within the HAVEN software.

Note:

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 next task the System Administrator should complete is to establish a new User ID and password that will be used as 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.

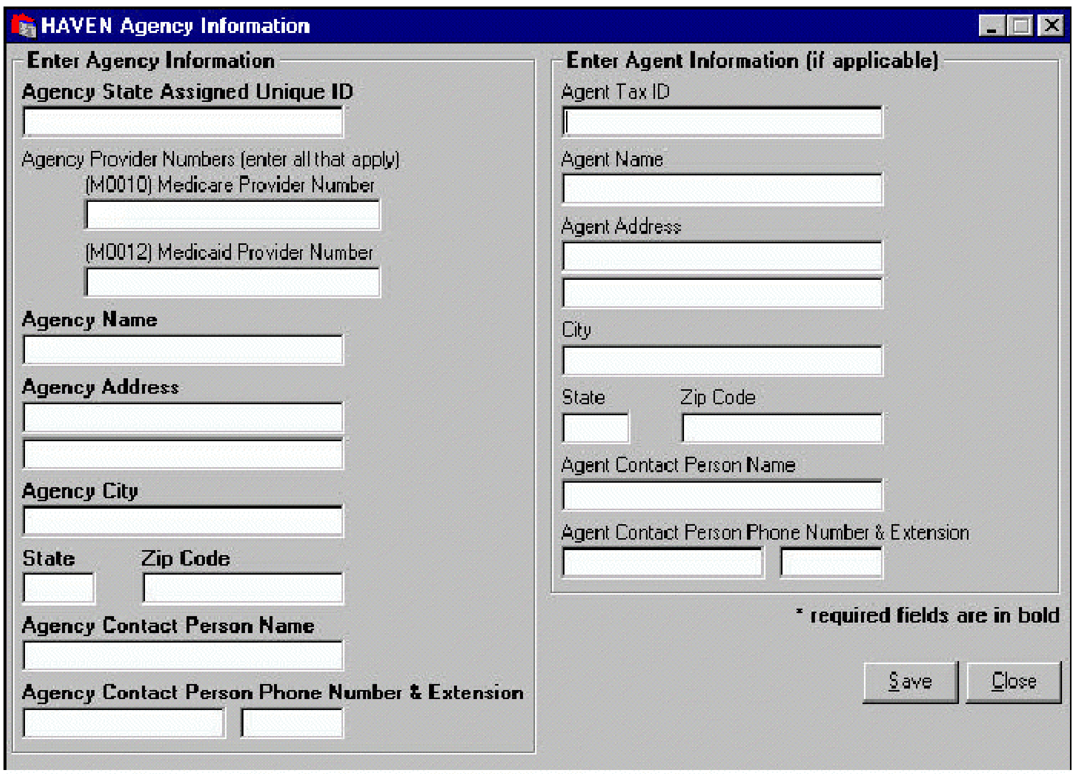
- **Authorization Rights.** The *Authorization* radio buttons on the **HAVEN Employee Information** screen—Data Entry, System Administrator, and View Only—determine the level of access for the currently selected employee. When adding an employee record, the Authorization field must be specified.
    - **Data Entry Rights.** Users are able to edit Agency information, add/edit Patient database information, add/edit assessments, review assessments performed by other users, perform data entry for all HAVEN forms, and view/print Reports.
    - **System Administrator Rights.** Users are able to add/edit/delete Employee database information, add/edit/delete/hide/unhide Patient database information, edit Agency information, add/edit/correct/delete assessments, review assessments performed by other users, perform data entry for all HAVEN forms, view/print Reports, and Import and Export files.
    - **View Only Rights.** Users are able to review assessments performed by other users and view/print Reports.

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 or from the button bar by clicking on the <MAINTAIN AGENCY DATABASE> button.

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 sections: Agency Information and Agent Information.



AGENCY INFORMATION

The Agency Information section enables the user to specify information that can uniquely identify the agency 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 three fields are: Agency State Assigned Unique ID; Agency Medicare Provider Number (M0010); and Agency Medicaid Provider Number (M0012). Since agency information can be edited at any time, if changes are made to any of these three agency fields, the existing assessment records (except non-key field corrections) are not automatically updated. However, 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.

AGENT INFORMATION

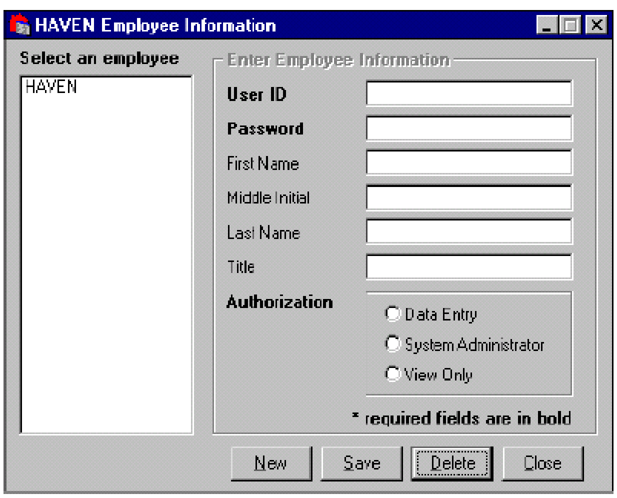
The Agent Information section collects unique agent data such as tax identifier, name, address, and phone number.

Note:
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 EMPLOYEE DATABASE

The Employee Database provides centralized management of employee records that will be used continuously in the entry of assessment data. It also provides the capability to customize the operation of the HAVEN software. The database is accessed from the main menu by selecting the ADMINISTRATION menu item and then choosing the Maintain Employee Database option or from the button bar by clicking on the <MAINTAIN EMPLOYEE DATABASE> button.

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 **HAVEN Employee Information** screen is used to collect employee identification and authorization information. This screen consists of two sections: Employee Selection and Employee Information. The *Employee Selection* list box consists of the User IDs for all employees currently defined in the database. When the user clicks on a specific User ID, that ID is highlighted and the corresponding employee data is displayed in the *Employee Information* text boxes.



The user may:

- **Add a New Employee Record.** Click on the <NEW> button to add a new employee record. The required fields, User ID, Password, and Authorization must be completed. Upon completion of the Employee Information section, click on the <SAVE> button to update the employee database. This action will also refresh the *Employee Selection* list box to display the new user.

- **Edit an Existing Employee Record.** Select an employee record and then click on the field or check box of interest to edit the data. Clicking on the <SAVE> button will save all changes made to the employee record to the database. Clicking on the <CLOSE> button and selecting "Yes" (Cancel [and lose changes]?) will abandon all changes made to the employee record since the last save.

- **Save All Changes made to an Employee Record.** Click on the <SAVE> button to save all information entered for a new or existing employee record.

- **Delete an Employee Record.** Click on the <DELETE> button to remove the currently selected employee record from the database. Note that when a System Administrator is logged in as him/herself, he/she cannot delete his/her own User ID. He/she must log in as another System Administrator and then delete his/her User ID.

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

- **Cancel All Edits to an Employee Record.** Click on the <CLOSE> button and select "Yes" (Cancel [and lose changes]?) to abandon all changes made to the employee record since the last save.

- **Assign Authorization Rights.** The *Authorizations* radio buttons—Data Entry, System Administrator, and View Only—determine the level of access for the currently selected employee. When adding an employee record, the Authorization field must be specified.

  - **Data Entry Rights.** Users are able to edit Agency information, add/edit Patient database information, add/edit assessments, review assessments performed by other users, perform data entry for all HAVEN forms, view HIPPS, and view/print reports.

  - **System Administrator Rights.** Users are able to add/edit/delete Employee database information, add/edit/delete/hide/unhide Patient database information, edit Agency information, add/edit/correct/delete assessments, review assessments performed by other users, perform data entry for all HAVEN forms, view HIPPS, view/print reports, and import and export files.

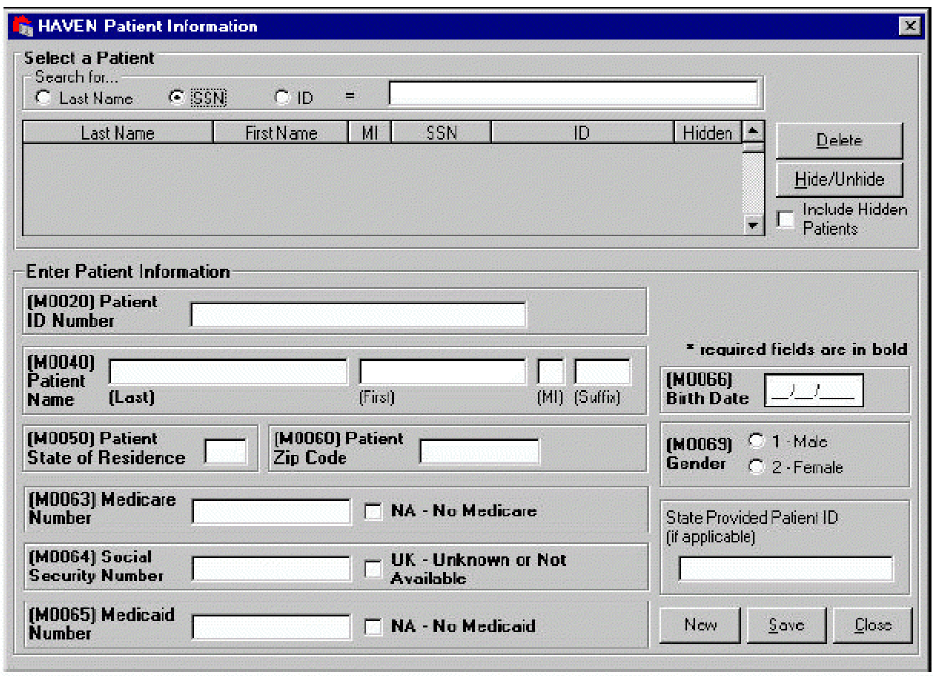
  - **View Only Rights.** Users are able to review assessments performed by other users, view HIPPS, and view/print Reports.

MAINTAIN PATIENT DATABASE

The Patient Database provides centralized management of patient information records that will be used continuously in the entry of assessment data. It also provides the capability to customize the operation of the HAVEN software. The database is accessed from the main menu by selecting the ADMINISTRATION menu item and then choosing the Maintain Patient Database option or from the button bar by clicking on the <MAINTAIN PATIENT DATABASE> button.

The **HAVEN Patient Information** screen collects patient information that is reused in HAVEN assessments. This screen consists of two sections: Patient Selection and Patient Information.

The Patient Selection section on this screen is similar to the Patient Selection section on the **HAVEN Management Screen**. The only option available in the Patient Selection section on the **HAVEN Management Screen** is the capability to add a patient. Any maintenance (i.e., edit/delete) for a patient record must be completed through the Maintain Patient Database menu option.



The Patient Selection section allows the user to select or search for a patient in the same manner as the **HAVEN Management Screen**. 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. Once a patient is selected, the corresponding data appears in the *Patient Information* text boxes. This section consists of data entry fields for demographic and identification information such as gender and birth date. The information collected here will be utilized to prefill the corresponding fields on the HAVEN assessment records for the selected patient.

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, however, 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:

However, if the Patient ID Number (M0020) is changed for each new episode, it is recommended that the user NOT update all non-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 non-exported assessments (except for non-key field correction assessments) should not be updated with the new Patient ID Number.

Note:

ZIP codes less than five or nine digits long or containing 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"?** will appear. 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.

The user may:

- **Add a New Patient Record.** Click on the <NEW> button and begin entering data in the Patient Information section. All of the fields, excluding **Patient First Name, Middle Initial, Suffix, and Unique Patient ID Code (State Provided)**, must be completed before the record can be saved. Click on the <SAVE> button to save the new patient record when data entry is complete. The user will be prompted with a message to "Save new patient currently displayed". Click on the <YES> button to save the changes or the <NO> button to cancel the changes.
  - HAVEN does not allow duplicate patient records identified by:
    - Same first name, last name, date of birth, and gender
    - Same Medicare number
    - Same Social Security Number
    - Same Medicaid number
    - Same Patient ID number (M0020)
    - Same State Provided Patient ID
- **Edit an Existing Patient Record.** Select a patient record and then click on the field or check box of interest to edit the data. Clicking on the <SAVE> button will save all changes made to a patient record to the database. Clicking on the <CLOSE> button and selecting "Yes" (Cancel [and lose changes]?) will abandon all changes made to the patient record since the last save.
- **Save All Changes made to a Patient Record.** Click on the <SAVE> button to save all information entered for a new or existing patient record.
- **Delete a Patient Record.** Only a System Administrator may delete a patient record. Select a patient record to delete and then click on the <DELETE> button. Two messages will appear before the patient record and all the assessments associated with that patient will be deleted from the database. Note that when a patient record is deleted from the database, it cannot be recovered.
- **Hide/Unhide a Patient Record.** A patient record may be hidden/unhidden only by a System Administrator. Select a patient record to hide and then click on the <HIDE/UNHIDE> button. To view a hidden patient record, click on the *Include Hidden Patients* check box. To unhide a patient record, highlight a patient record and click on the <HIDE/UNHIDE> button.
- **Cancel All Edits to a Patient Record.** Click on the <CLOSE> button and select "Yes" (Cancel [and lose changes]?) to abandon all changes made to the patient record since the last save.

ENABLE BACKUP

HAVEN has the option to make a backup copy of the data collection (HHA.MDB, EXPORT.MDB, and archive [*.ARK]) databases each time the user exits HAVEN normally. If these databases are corrupted due to abnormal termination of HAVEN (e.g., power failure, system lockup), 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 can click on the PREFERENCES menu and select the Paths option. Then the user can specify a directory location for the backup files. Note that this directory cannot be the directory where the application and databases currently reside. Also note that if a path is not provided, the backup option is disabled. Once a path has been specified, when HAVEN is exited, the data will be backed up to the designated directory in a zip file called HHAMDB.EXE. The second time a HAVEN session is exited, the original HHAMDB.EXE file will be moved to the installation path for the HAVEN software and the new HHAMDB.EXE will be saved. From that point forward, the process will repeat itself, supplying the user with the HAVEN database from the two most recent sessions.

Note:

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

Once the backup path has been set, if the path is later deleted or renamed (e.g., the directory name is changed/deleted using Windows Explorer), upon exiting the system, HAVEN will notify the user that the backup failed because the path no longer exists.

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., floppies, removable disk, and tape). For additional suggestions regarding backup, read the HAVEN Help Desk Note on Backup (HELPDESK.PDF).

WINDOWS SETTINGS

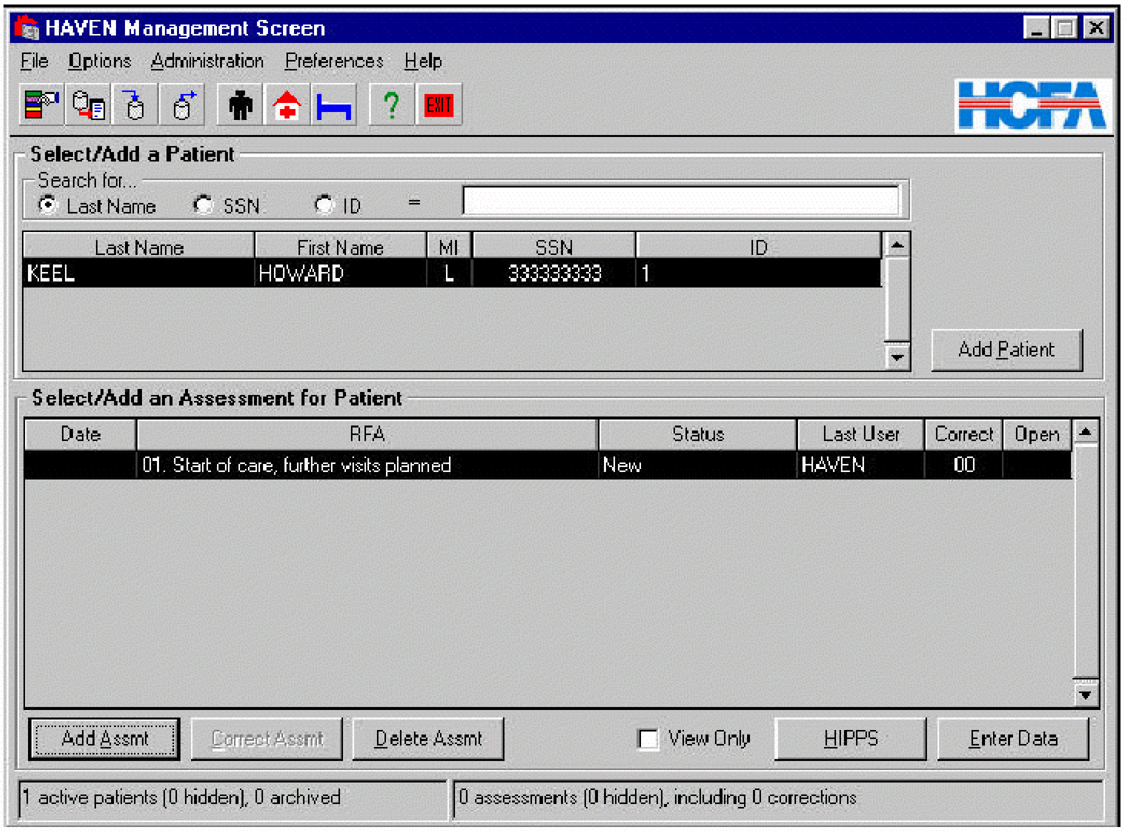
In order to ensure the reliable operation of the HAVEN software, it is imperative that the following Windows property be set properly:

For Microsoft® Windows 95, 98, NT, and 2000, 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 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 of these functions contains additional options. These options are displayed by using the mouse.
- **Button Bar.** Provides quick access to commonly used menu items.
- **Select a Patient.** 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.
- **Add a Patient.** Allows the user to add a patient.
- **Select Assessment for Patient.** 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 an Assessment.** Allows the user to add an assessment for a selected patient.

- **Correct an 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 an Assessment.** Allows the user to delete the highlighted assessment for a selected patient. Only a System Administrator has access to this feature.
- **Enter Data for an Assessment.** Allows the user to enter data for the highlighted assessment for a selected patient.
- **View Only for an Assessment.** Allows the user to view an assessment for a selected patient in read-only mode.
- **HIPPS.** Allows the user to view the HIPPS category of reimbursement for an assessment. Users can view HIPPS categories for assessments 1-5.

MENU FUNCTIONS

UNDER THE FILE MENU, THE USER CAN:

Exit

This option allows the user to exit the HAVEN software. To exit HAVEN, select the Exit option from the FILE menu on the **HAVEN Management Screen**.

UNDER THE OPTIONS MENU, THE USER CAN:

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.

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.

UNDER THE ADMINISTRATION MENU, THE USER CAN:

Maintain Employee, Agency, And Patient Databases

These maintenance functions are discussed in the System Setup section.

Archive And Restore

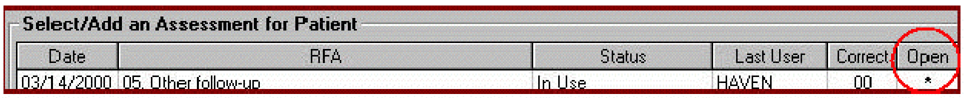
This feature is discussed in the Archive and Restore section.

Fix Inactive Fields

This feature is discussed in the Import section.

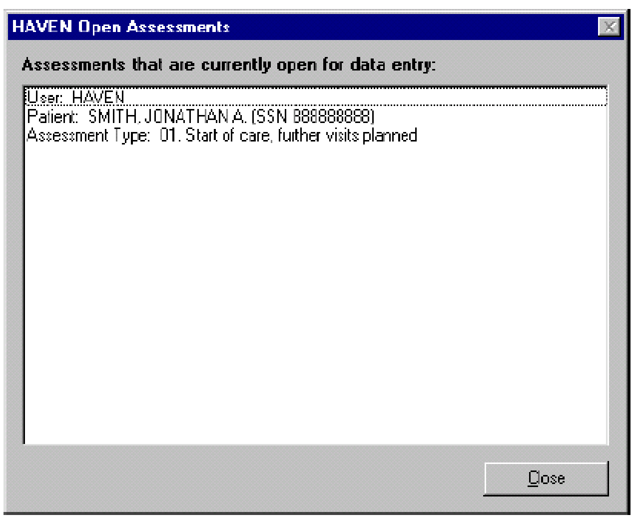
List Open Assessments

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. This 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

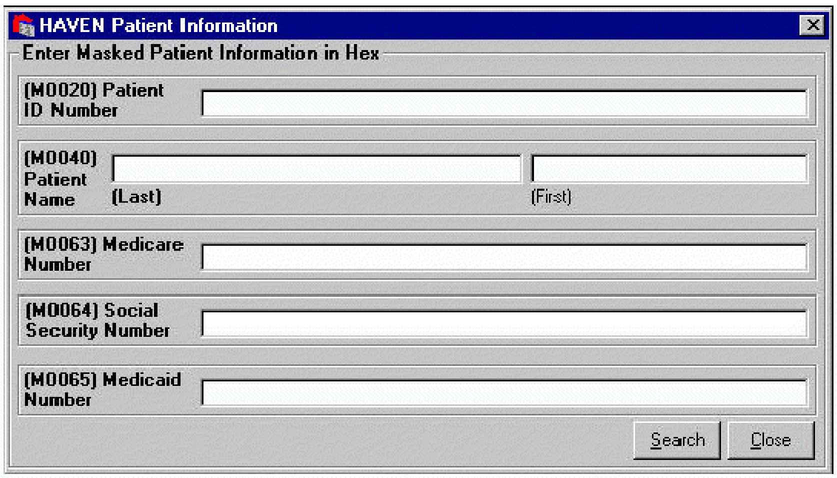
This feature allows a System Administrator to reset an assessment's open status. The open status is normally reset (the * disappears from the Open box) when a user exits data entry for an assessment.

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 that were 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 AMINISTRATION 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.

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 Administrator's 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, first name, last name, Medicare number, Social Security Number, or Medicaid number.

UNDER THE PREFERENCES MENU, THE SYSTEM ADMINISTRATOR CAN:

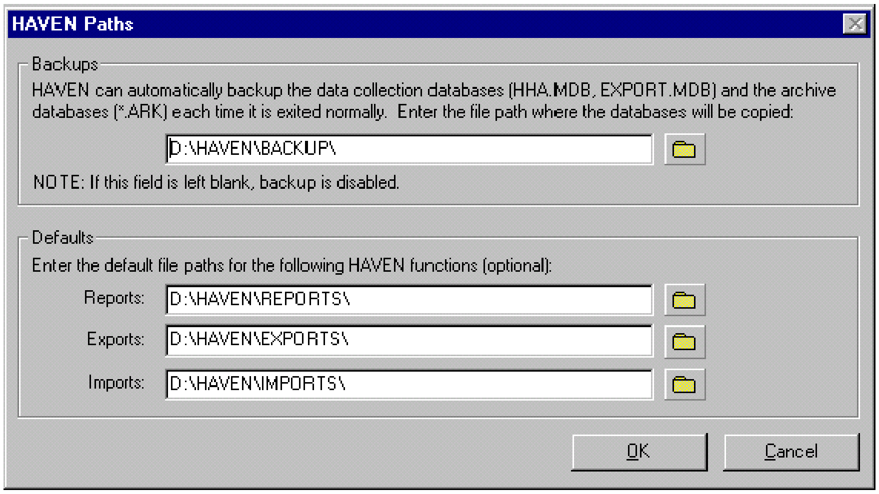
Select the Options Item and Choose:

Choose Radio Button/Check Box Display For Variable Type (Option Pick One)

For variables that allow only one choice (i.e., option pick one), the default display uses check boxes. Check boxes utilize keyboard data entry. Keyboard data entry allows tabbing to and from option pick one-type variables without forcing the user to select an option. It also makes each option accessible using the <TAB> key. When an option is selected in the check box mode, HAVEN will still enforce the rule that ensures that only one option from the list of items will be selected.

Radio buttons automatically select the first item displayed in the list. Radio buttons also require the use of the tab and arrow keys to implement keyboard data entry.

Select The Paths Item And Choose:



This feature allows a System Administrator to enter the paths for the **Backups, Reports, Export,** and **Import** functions.

Choose to Specify a Path to Backup the Data Collection Databases and the Archive Databases (HHA.MDB/EXPORT.MDB/*.ARK)

By specifying a path for the **Backup** function in HAVEN, the collection and archive databases in the HAVEN Data Entry System will be automatically backed up every time the system is exited normally. The path for the backup process cannot be the same as the path of the application or databases. For example, if HAVEN is installed to C:\HAVEN, the backup path cannot be C:\HAVEN.

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

Choose to Specify Default Paths for the HAVEN Reports, Export, and Import Functions

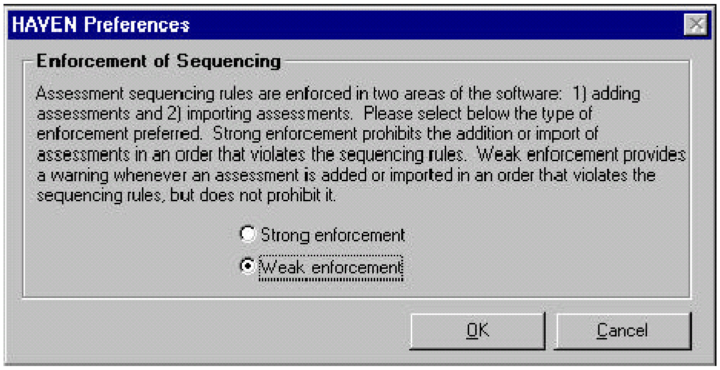
The user can optionally specify default locations for the following:

- Where reports are generated
- Where export files are created
- Where import files are located

Note that for reports the default output file name will be "TEMP.TXT". This file will be written to the report path, if specified.

Select the Sequencing Item and Choose:

This feature allows a System Administrator to specify the type of enforcement for assessment sequencing. The user can select strong or weak enforcement.



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. Weak enforcement allows an assessment to be added or imported in an order that violates the sequencing rules. In addition, if weak assessment is set, the user may delete assessments other than the most recent one.

UNDER THE HELP MENU, THE USER CAN:

Access General and About Help

G**eneral Help** provides HAVEN system help regarding how to use and maintain the HAVEN software. **About (HAVEN)** identifies software and dictionary version information as well as application and 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.

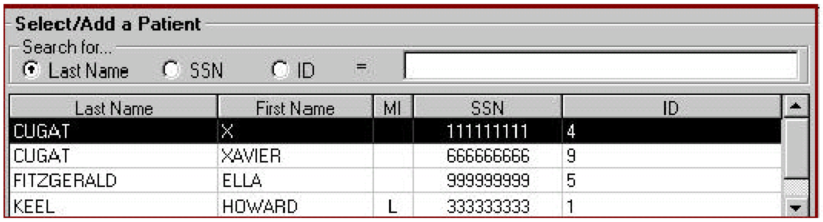
Note:

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.

SELECT/ADD A PATIENT

The Patient Selection section enables the user to select the patient whose assessment history will be accessed. Patients can be displayed in alphabetical order or numerically by Social Security Number (SSN) or ID. Select the *Last Name* radio button to display patients in alphabetical order. To display patients in numerical order select the *SSN* or *ID* radio buttons. Use the scroll bars on the *Patient* list box to view the available patients and click on the preferred row to select a patient.

The user may search the Patient database by specifying the last name, Social Security Number, or ID of a patient in the *Search for...* text box. Type in the first letter of the patient's last name or the first number in the Social Security Number or ID. The system will highlight the match.



To discontinue the search, clear the *Search for...* text box. The patients will then be displayed either alphabetically or numerically for selection within the *Patient* list box.

The <ADD PATIENT> button allows the user to add a new patient record. To edit/delete an existing patient record, the Maintain Patient Database option from the ADMINISTRATION menu item or the <MAINTAIN PATIENT DATABASE> button on the button bar must be selected. Refer to the Maintain Patient Database section for a detailed explanation of how to add/edit/delete a patient.

SELECT/ADD/EDIT/CORRECT/DELETE AN ASSESSMENT

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 as the first item in the list. For each assessment, the effective date, assessment type, status, last user to access the assessment, and a correction number are displayed. An assessment is selected 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.

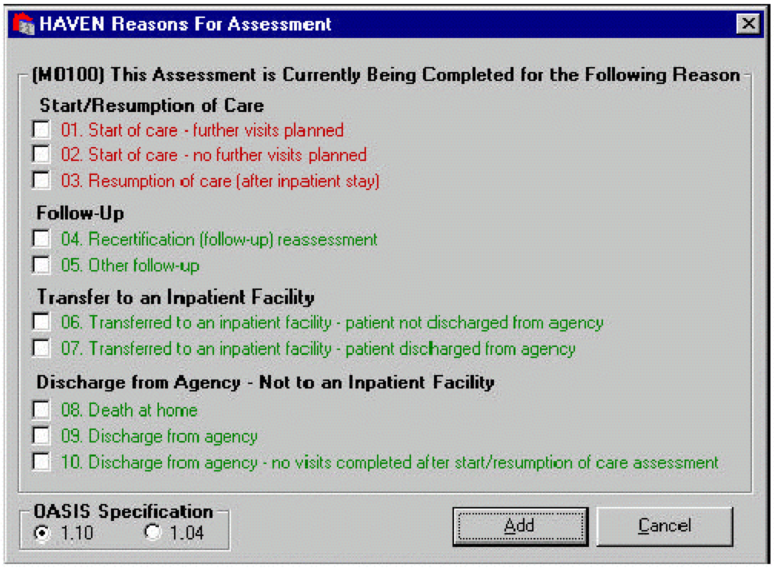
The Add Assessment section also enables the user to initiate a new assessment for the selected patient. Click on the <ADD ASSMT> button to access the **HAVEN Reasons for Assessment** screen (described below) before the assessment is added to the patient.

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 “Locked (Export Ready)”
- Exported assessments have a status of “Locked (Exported)”

REASON FOR ASSESSMENT

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



If weak enforcement is selected, the Reason for Assessments will be displayed in green or red. Green 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:

- **Response 1.** 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.
- **Response 2.** 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).
- **Response 3.** 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.
- **Response 4.** Recertification (follow-up) reassessment—The comprehensive assessment is being conducted during the last five days of the certification period.
- **Response 5.** 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.
- **Response 6.** 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" 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 7.** 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" 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 8.** 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” 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 9.** 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” 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 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” included in the response. This response should not be used if the patient is transferred to an inpatient facility or dies at home.

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 <ADD> 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**.

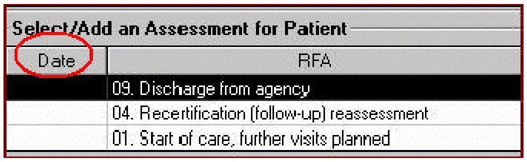
SEQUENCE OF ASSESSMENTS

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, 9, or 10
- After adding RFA 2, the user may add RFA 1 or 2
- After adding RFA 3, the user may add RFA 4, 5, 6, 7, 8, 9, or 10
- 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, 2, or 3
- After adding RFA 7, the user may add RFA 1 or 2
- After adding RFA 8, the user cannot add any RFA record
- After adding RFA 9, the user may add RFA 1 or 2
- After adding RFA 10, the user may add RFA 1 or 2

For more information on sequencing enforcement, see Select the Sequencing Item and Choose, under the section Under the Preferences Menu, the System Administrator Can.

EFFECTIVE DATE OF ASSESSMENT



After an assessment has been added, the Effective Date for the assessment will be blank. Following is a list of the assessments and the date variables that will 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)

Note:
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 four 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 Key Fields Only is Necessary. To correct an assessment with key field errors inactivate the assessment, then create a new assessment for resubmission. With the release of HAVEN 5.0, this option is not longer available.

Note:

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 p*opup box will appear. Click on the <OK> button to create the assessment prepopulated with the data from the inactivation record. The correction number for this assessment will be 00.

- **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 "Locked (Export Ready)".

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 HCFA at http://www.hcfa.gov/medicaid/oasis/datasubm.htm.

DELETE AN ASSESSMENT

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

Note:

Because of the sequencing requirements, assessments may be deleted from the top down only. Start with number one 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 weak enforcement is selected this restriction does not apply, the user may delete any assessment.

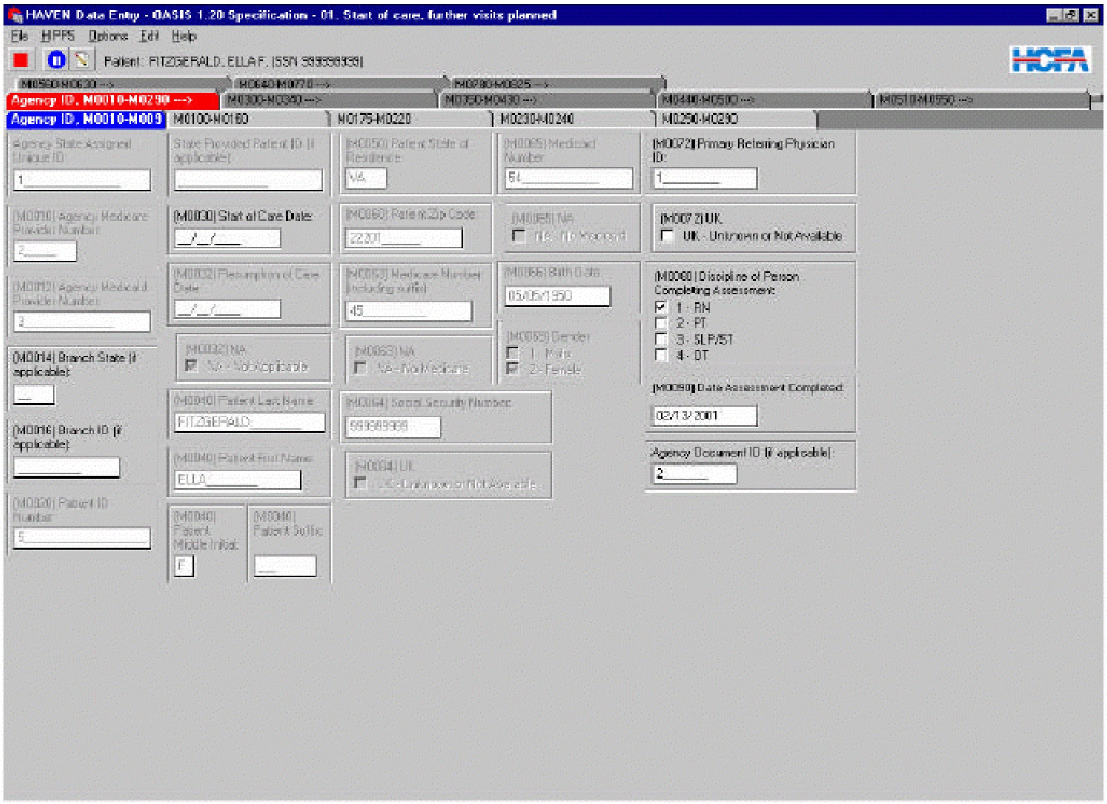
VIEW ONLY

If the View 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 the HAVEN **Data Entry** function and the assessment type.
- **Menu Bar.** Displays the list of functions that can be performed on the **Data Entry** window. Each of these functions contains additional options that can be displayed by using the mouse.
- **Data Entry Button Bar.** Provides the various **Data Entry** functions. Currently, three functions are available: **Stop Data Entry**, **Pause Data Entry** (pause abstraction time for data entry), and **Enter Notes** (for an assessment).
- **Data Entry Top.** Displays the Last Name, First Name, Middle Initial, and Social Security Number (SSN) of the selected patient at the top of the **Data Entry** window.
- **Tabs/Subtabs.** Displays the names of the selected screens. Each tab can have up to five subtabs associated with it. When a tab or subtab is selected, the **Data Entry** window of the selected screen or subscreen will open in the space below it. Users can switch between tabs and subtabs by using the <PAGE UP> and <PAGE DOWN> keys.
- **Data Entry Window.** Contains variables that belong to the selected screen or subscreen. On this screen, data entry can be performed for each variable.

ENTER DATA FOR A VARIABLE

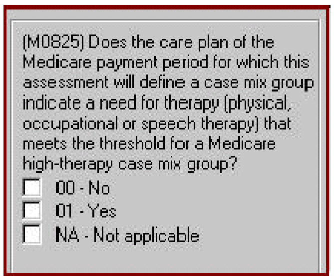
Perform data entry after selecting a Patient record and an Assessment form. (See previous sections: Select/Add a Patient and Select/Add/Edit/Correct/Delete an Assessment.) Data entry can be exited at any time by clicking on the FILE menu item and selecting the Stop Data Entry (Validate and Exit Assessment) option.

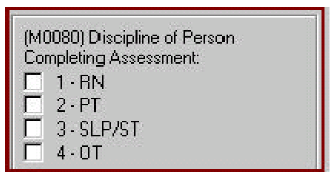
The most efficient way to move around the data entry system is to use the mouse. Since Microsoft® has restrictions pertaining to variables with radio buttons, the mouse must be used to move between variables of this type (**Option (Pick One)**). However, tabbing is also available to move around in the data entry system from the PREFERENCES menu by choosing check boxes instead of radio buttons for variable type **Option (Pick One).**

Note:
The PREFERENCES menu is only available to users with System Administrator rights. This option can be requested from the System Administrator.

To begin data entry, point to the preferred tab or subtab and click on it to open that screen. Follow the descriptions below to enter data for the various variable types.

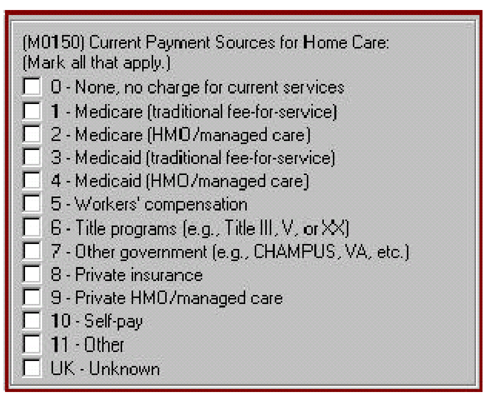
OPTION (PICK ONE)





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. Radio buttons can be cleared by clicking on the <RIGHT MOUSE> button and selecting the Clear Variable option.

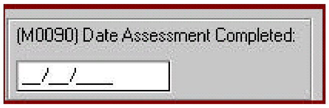
OPTION (PICK ONE OR MORE)



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. However, one example of an exception to this rule is for variable **M0310** on the **Living Arrangements 1** screen, in which the first item on the list clears the other items.

Note:
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

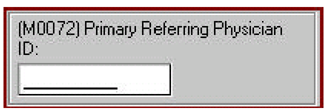


The variable type **Date** accepts data entered in the date format that has been specified in the design (the default format for date is MM/DD/YYYY). If a complete date is not available for **[M0066] Birth Date**, the user can enter a partial date in the form of " / /YYYY" or "MM/ /YYYY".

Note:

If a complete or partial date is not available for variable **[M0066] Birth Date**, the user can enter <SHIFT> + ? as the UTD (unable to determine) option. A dash will be displayed. This function is available only for the **[M0066] Birth Date** variable.

STRING



The variable type **String** accepts up to 99 characters in any alphanumeric combination.

SPECIAL FEATURES (HAVEN DATA ENTRY SCREEN)

NOTE BOX

To enter a general note about a variable during data entry, select the <NOTE BOX> button. The displayed popup 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 (e.g., **[M0072] Primary Referring Physician ID**) 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> button. Click on the <CLOSE> button to save the notes and return to the **Data Entry** window.

PAUSE BUTTON

When the user selects the <PAUSE> button, the internal HAVEN clock that keeps track of the amount of time spent on an assessment is stopped. This feature is useful for agencies that want to keep track of abstraction time for performance reasons but do not want the breaks in data entry to be counted.

Note:

When in View Only mode, abstraction time does not accumulate.

CLEAR VALUE ON A VARIABLE RADIO BUTTON

To clear variables with radio buttons, click on the <RIGHT MOUSE> button and select the Clear Variable option.

VIEW HELP

To display the Help available for each variable, click on the <RIGHT MOUSE> button and select the View Help option. For variables that do not have any other associated options (e.g., the Clear Variable option), the help will be displayed immediately.

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.

ICD-9 LOOKUP

During data entry, an on-line resource for viewing the ICD-9 diagnosis codes (and descriptions) is available. Selecting the ICD-9 Lookup option from the OPTIONS menu item provides the user with the **HAVEN ICD-9 Code Lookup** screen. The user can search for a code by typing a code into the Search by Code text box (the codes will be displayed automatically) or by typing a description into the *Search by Description* text box and then clicking on the <GO> button. Click on the <CLOSE> button to return to data entry.

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.

When an assessment is created, three agency fields are copied from the agency database into the assessment record. These three fields are: Agency State Assigned Unique ID; Agency Medicare Provider Number (M0010); and Agency Medicaid Provider Number (M0012). If changes are made to any of these fields, only the current assessment record is updated. However, 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 the integrity of the export files. The user may choose not to update any non-exported assessments (except for non-key field correction assessments) and HAVEN will still update the current assessment.

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 non-exported assessments (except for non-key field correction assessments) and HAVEN will still update the current assessment.

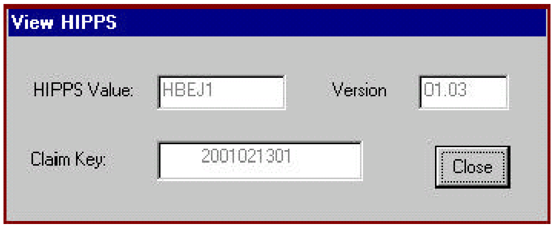
Note:

This 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 "Locked (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> button. If the assessment status is "Locked (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. All rules must be satisfied before an assessment can be marked as complete. One such rule is the mandatory rule. All mandatory variables must have valid data values. If a mandatory variable is left blank (data not entered), the user will be warned that the 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.

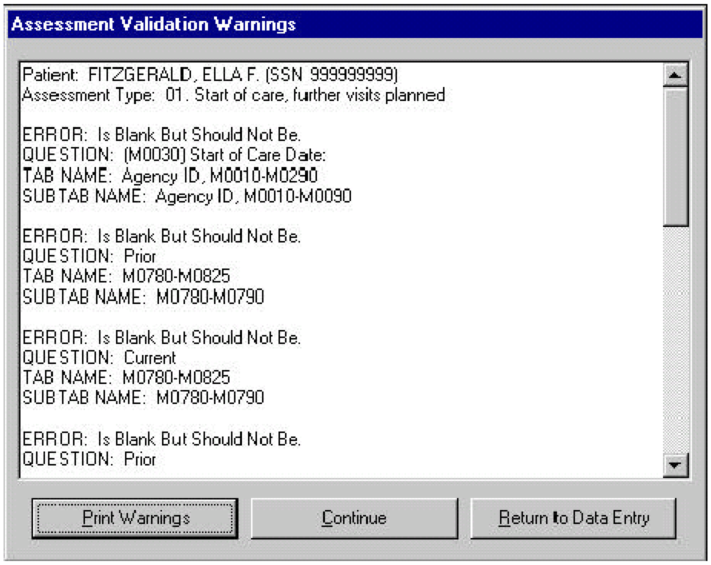
Note:

For easy access, variable validation messages also contain the name of the screen on which a variable is located.

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

Note:

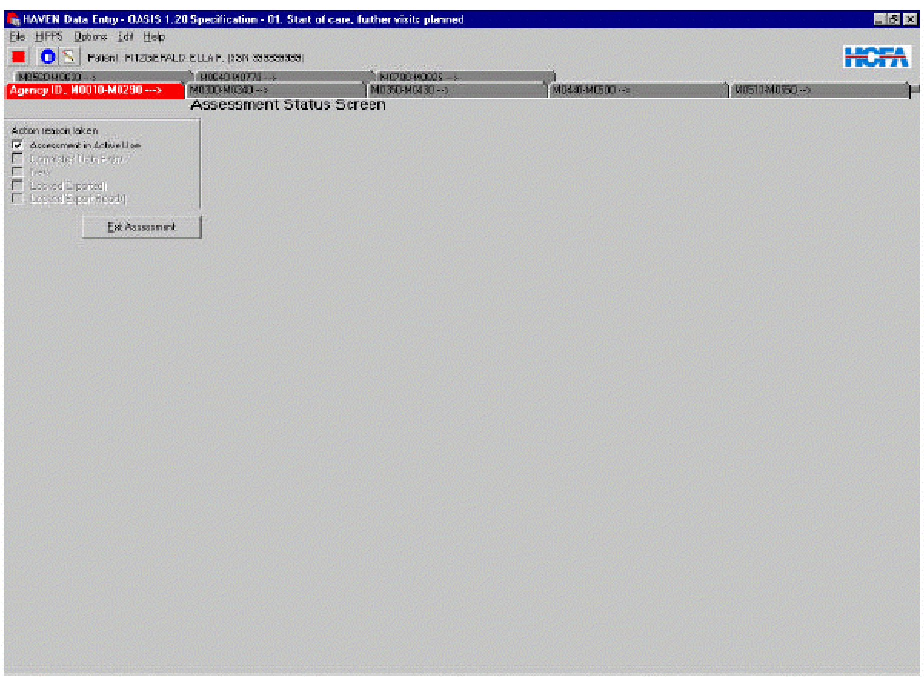
Messages marked as "FATAL" are errors not addressable by data entry personnel. These errors should be referred to the System Administrator.



Three options are available on the **Assessment Validation Warnings s**creen. Clicking on the <PRINT WARNINGS> button will print the first 30 errors/warnings listed on the screen. Selecting the <CONTINUE> button will take the user to the **Assessment Status** screen where the assessment can be exited by marking it 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.



Listed below are the various options available when exiting the Assessment Status screen:

- Assessment in Active Use—An assessment has been edited
- Completed Data Entry—Data entry has been completed for an assessment
- New—A newly created assessment
- Locked (Exported)—An exported assessment
- Locked (Export Ready)—An assessment with a status of closed (data entry completed)

At a minimum, the user will be required to mark the assessment as "Assessment in Active Use" or "Completed Data Entry". These are the default options on the **Assessment Status** screen.

In addition, the other options available on the **Assessment Status** screen (New, Locked (Exported), and Locked (Export Ready)) will automatically be selected depending on the type and status of the Assessment.

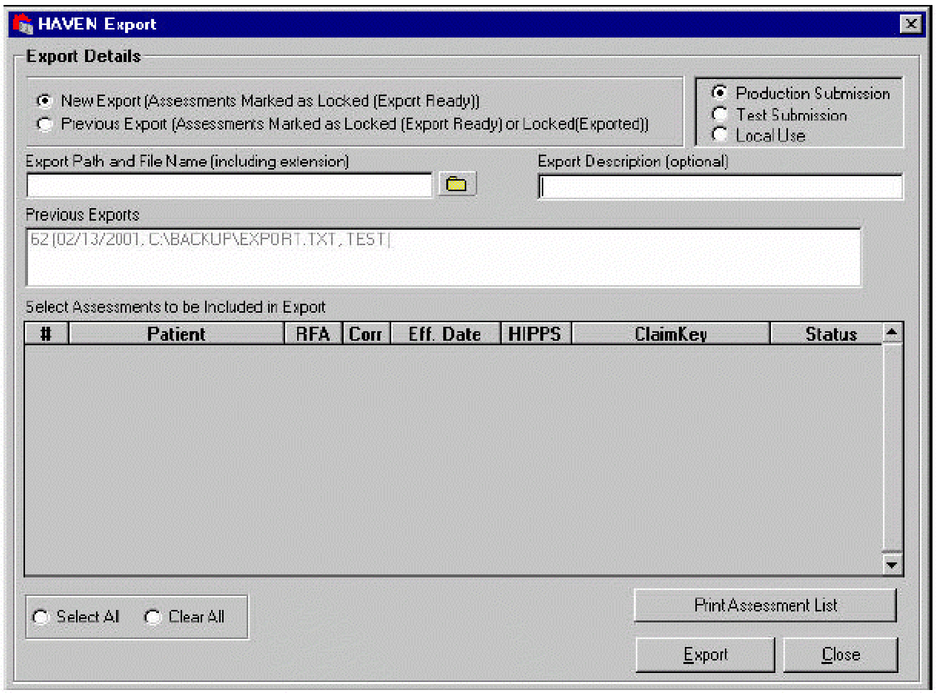
To mark the status, select the best choice and press the <EXIT ASSESSMENT> button.

Note:
Once an assessment has been marked "Locked (Exported)", only users with System Administrator rights can reopen it if a correction needs to be made.

HAVEN DATA EXPORT

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 data for "Export Ready" assessments to be output from the HAVEN database into the Data Record Layout format (i.e., 1,448-byte string), 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.

Identifying information is masked for private pay assessments using the SHA-1 hashing algorithm. The fields with identifying information include: the patient's first and last names, patient ID, Social Security Number, and Medicaid and Medicare numbers. Identifying information is masked at export time and written to the export file. During the export process, embedded and trailing blanks are masked. An embedded blank is the space between two words or two characters. A trailing blank is the space at the end of a word or a string of numeric characters.

For example, the default number of characters allowed in the first name field is 12. If a patient's first name is less than 12 characters long, the system will include embedded and trailing blanks during export to meet the default requirement of 12 characters. For instance, the name Mary Beth has nine characters, including one embedded blank. During export, the entire string of nine characters plus three trailing blanks after Beth, for a total of 12 characters, will be masked.

Note:

For 1.04 assessment specifications:

The rules for determining private pay status are as follows. If the Reason for Assessment is 01, 02, 03, 04, 05, or 09 the private pay status will be determined by looking at **M0150** field. If one of the following options: 1 - Medicare (traditional fee-for-service), 2 - Medicare (HMO/managed care), 3 - Medicaid (traditional fee-for-service), or 4 - Medicaid (HMO/managed care) is selected for the **M0150** field, then the assessment is considered not private pay and will not be masked during export. If none of the options 1-4 are selected, then the assessment is considered private pay and will be masked during export.

The **M0150** field is not included in Reason for Assessments 06, 07, 08, or 10. If the user selects either 06, 07, 08, or 10 as the Reason for Assessment, the private pay status is based on the last assessment with a completed **M0150** field. If no previous assessment with a completed **M0150** field exists, the system default is to not mask the patient's information. If either 06, 07, 08, or 10 are selected as the Reason for Assessment, the user has the option to override the masking decision after the private pay status has been determined.

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 (including extension)* text box. Either type the information in the text box or click on the <FILE FOLDER> icon and select a path and enter a file name. The data will be saved in text file format. The user may want the file name to correspond to the description used in the *Export Description* text box.

The assessments will be displayed in the *Select Assessments to be Included in Export* text box. Select the assessment(s) to be included with this export from the *Select Assessments to be Included in Export* text box. To select one assessment, highlight the desired file. To select more than one assessment, use the <SHIFT> or <CTRL> keys. To include all of the displayed assessments for export, click on the <SELECT ALL> radio button. To cancel the current selections, click the <CLEAR ALL> radio 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\1998\AUGUST\WEEK1.TXT). It is important to remember to include the file extension .TXT. Review the "Create a Directory/Folder" section below for complete instructions on creating a directory/ folder.

- Select the type of submission—Production, Test, or Local Use. An assessment receives the status "Locked (Exported)" once it has been exported. The export header record contains a field called the Test/Production Indicator that identifies the type of submission.

Note:

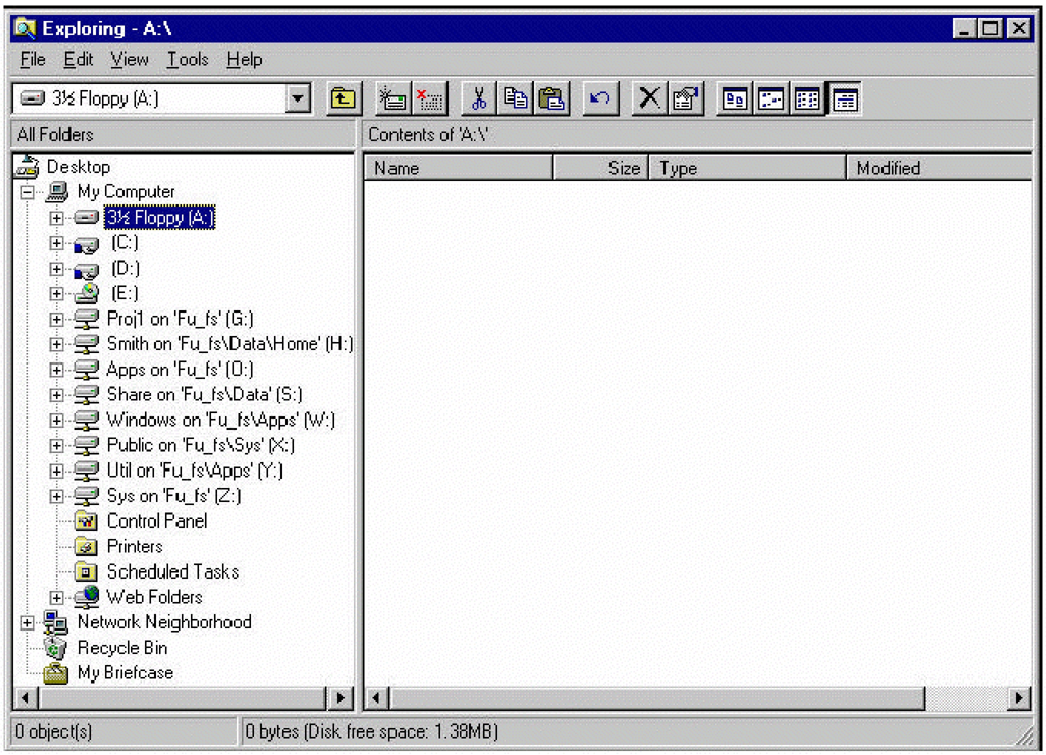
On export, if either production or test submission is selected, any private pay assessments will be masked and the **M0160** field will be blanked out in the export file. If local use is selected, no masking is done and the **M0160** field is not blanked out. The submission type Local Use should be used whenever transmission within an agency is required.

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 has been completed, the current date, file and path name, and the description of the exported file will be displayed in the *Previous Exports* text box. Click on the <CLOSE> button to exit the Export function and return to the **HAVEN Management** window.

CREATE A DIRECTORY/FOLDER

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, the following screen will appear.



To 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. From here, 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. Suggested naming conventions include HAVEN\Backup as a backup directory and HAVEN\Export as an export directory.

To add a subdirectory/folder to an existing directory/folder (e.g., add Backup 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 (NOTE: 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.

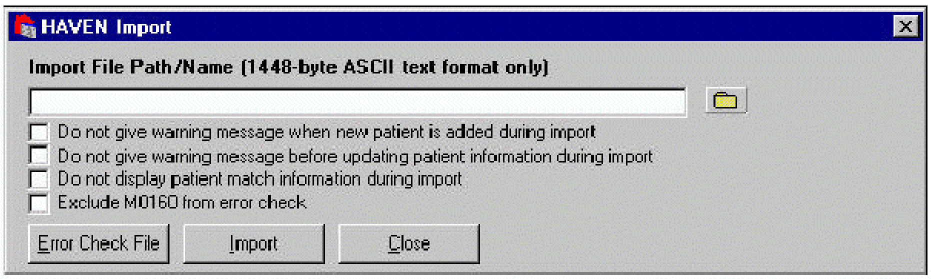
RE-EXPORT LOCKED ELECTRONIC FORMS

It is also possible to re-submit previously exported (i.e., locked) assessments should an error be detected by the State System. The user selects the Resubmission radio button and is presented with a list of previous submissions in the *Previous Exports* list box. After selecting a previous submission, the user may then generate a new export file that contains data for each of the assessments displayed in the *Select Assessments to be Included in Export* list box.

HAVEN DATA IMPORT

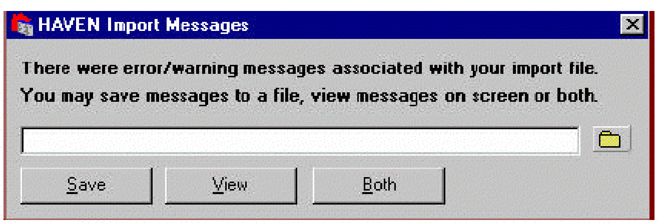
PERFORM ERROR CHECK ON AN IMPORT FILE

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). In addition, only files created with the export submission type of Local Use may be imported. These files contain a value of '2' for the test and production indicator at position 574 in the header record. On the **HAVEN Management Screen**, the user may click on the <IMPORT> button or select the **Import** function from the OPTIONS menu item.

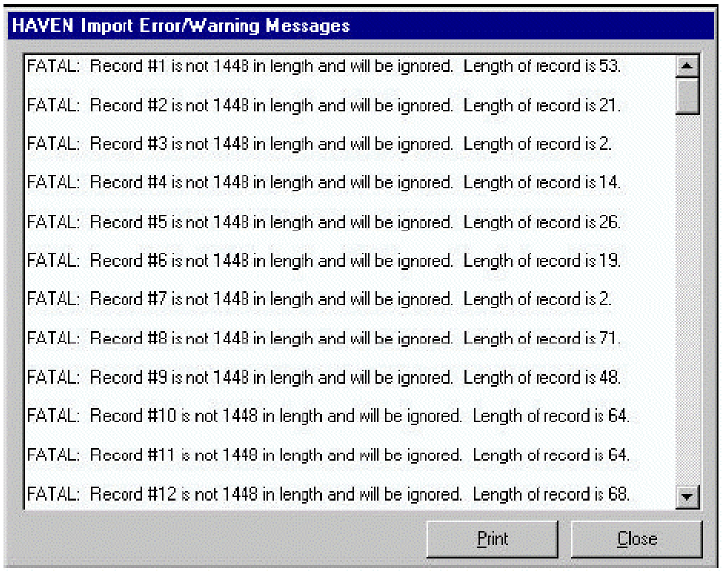


After selecting the **Import** function, the *HAVEN Import* popup box will be displayed. The user must enter a file path/name for the file to be imported. The user may check the file for errors by clicking on the <ERROR CHECK FILE> button. Each record in the import file is processed in accordance with the rules specified in the HAVEN Data Record Layout.

If any errors or warning messages were associated with the import file, the *HAVEN Import Messages* popup box will be displayed.



The user may save the messages to a file, view the messages on screen, or both. While viewing the messages, the user may also print the messages.



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.

If any errors or warning messages were associated with the import file, the *HAVEN Import Messages* popup box will be displayed. The user may save the messages to a file, view the messages on screen, or both.

The following paragraphs describe how the **Import** function handles agency, patient, and assessment data.

- **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 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]) 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 not all of the mandatory agency or patient fields are completed, 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 also will be rejected if it does not satisfy the consistency rules.

- **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:

- First Name, Last Name, Date of Birth, Gender
- Social Security Number
- Medicare Number
- Medicaid Number
- Patient ID Number
- State Provided Patient ID

If a match is not found, a new entry will be added to the patient database. For each assessment HAVEN displays 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 either "In Use" or "Locked (Export Ready)".

For an imported assessment to be "Locked (Export Ready)", the assessment must pass all error checking. 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
- Correction Number

Assessment sequencing rules are enforced in two areas of the software: 1) adding assessments and 2) importing assessments. Strong enforcement prohibits the import of assessments in an order that violates the sequencing rules. Weak enforcement allows an assessment to be imported in an order that violates the sequencing rules.

FIX INACTIVE FIELDS

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 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.

Note:

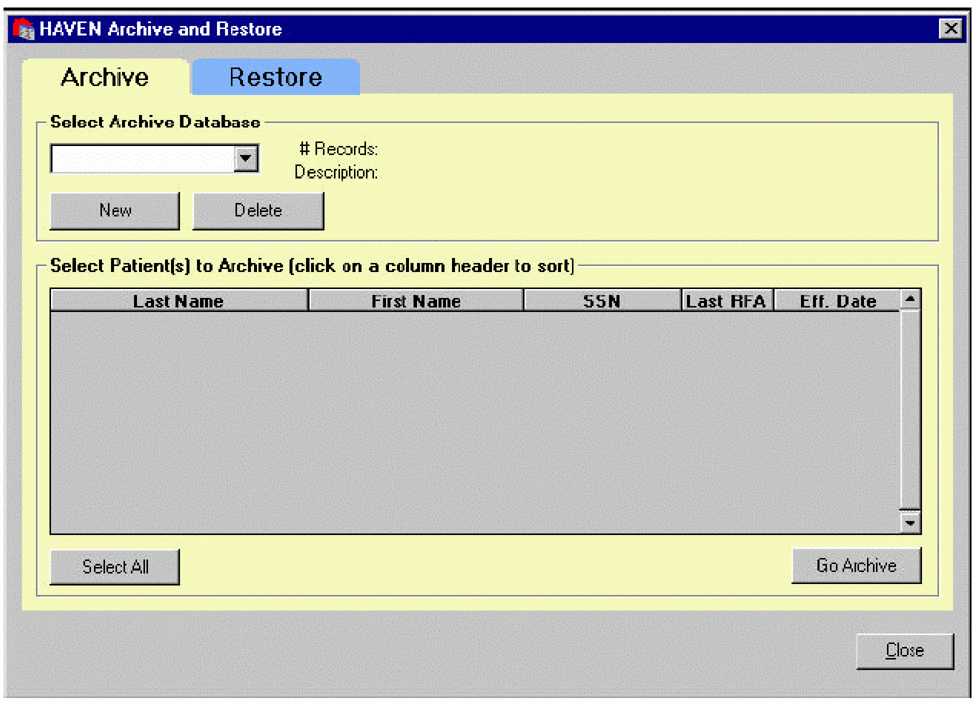
This option is only available for assessments that have a status of “New” or “In Use”.

ARCHIVE AND RESTORE PATIENTS

ARCHIVE PATIENT

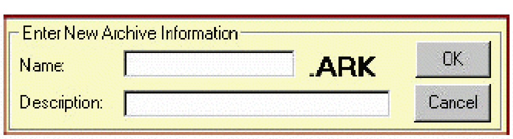
The purpose of the **Archive** feature is to help maintain the size of the system database HHA.MDB. The **Archive** function allows a System Administrator to archive every patient whose assessments all have a status of "Locked (Exported)". For instance, if a patient has been discharged due to death, has no intention of returning, or a specified amount of time has passed since a patient's last transfer or discharge assessment, that patient and all his/her assessments can be archived for storage purpose, to reduce the size of the system database (HHA.MDB).

To start the Archive function, select the Archive and Restore option to display the **HAVEN Archive and Restore** screen from the ADMINISTRATION menu. All patients whose assessments all have been exported will be displayed in the *Select Patient(s) to Archive* list box. The Archive tab will always be displayed by default when accessing the **Archive and Restore** function.



CREATE AN ARCHIVE DATABASE

To create a new archive database, click on the <NEW> button to display the *HAVEN New Archive Information* box.



Enter up to an eight-character file name in the *Name* text box. To help the user identify an archive database, the extension of all archive databases will end in **.ARK**. The user must also type in a description of the archive database by entering up to 25 characters in the *Description* text box. Click on the <OK> button to create the archive database or the <CANCEL> button to cancel the archive database. HAVEN will verify the creation of the archive database. Click on the <OK> button to return to the **HAVEN Archive and Restore** screen.

Note:
All archive databases are saved in the HAVEN application directory.

After several archive databases have been created, the user can select a specific archive database by clicking on the *Select Archive Database* drop-down list box and highlighting the desired archive database. The number of records as well as the description of the selected archive database will be displayed.

DELETE AN ARCHIVE DATABASE

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 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, it was created in error, or 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 **HAVEN Archive and Restore** screen.

SEARCH/SELECT/ARCHIVE A PATIENT

There are several ways to search for and select a patient for archiving. The easiest way to select a patient is to simply highlight one or more patients from the *Select Patient(s) to Archive* section. If the list is extensive, the user can sort the list by any of the displayed columns. Click on a column header to sort by that column header in ascending order. Click the column header again to sort in descending order.

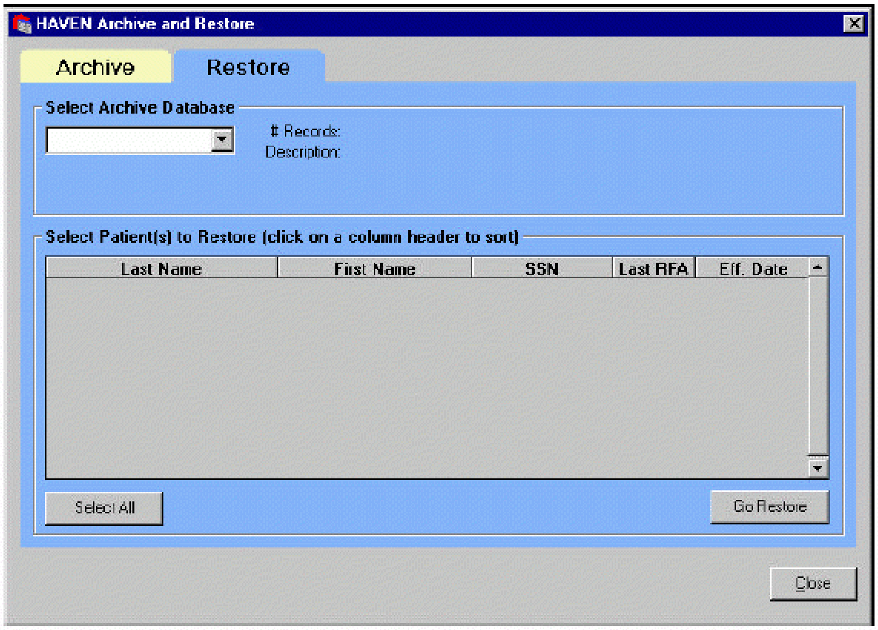
To select all of the patients in the *Select Patient(s) to Archive* list, click on the <SELECT ALL> button. Notice that the button has now switched its function to **De-select All**. To de-select all of the patients, click on the <DE-SELECT ALL> button. The button has now switched back to the **Select All** function.

After sorting, filtering, and selecting the desired patients to archive, click on the <GO ARCHIVE> button. HAVEN will verify the archive and recommend that the system database HHA.MDB be repaired and compacted. 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 and Compact** function.

Click on the <CLOSE> button to exit the archive process.

RESTORE PATIENT

The **Restore** function allows the user to reinstate a patient who has been archived and removed from the system database HHA.MDB. To begin the **Restore** function, select the Archive and Restore option from the ADMINISTRATION menu to display the **HAVEN Archive and Restore** screen. Click on the Restore tab and all archived patients in the selected archive database will be displayed in the *Select Patient(s) to Restore* list box.



SEARCH/SELECT/RESTORE A PATIENT

The processes for searching, selecting, and restoring a patient is identical to the archiving process.

After sorting, filtering, and selecting the desired patients to restore, click on the <GO RESTORE> button. HAVEN will verify the restore and recommend that the archive database *.ARK be repaired and compacted. Users do not need to exit the HAVEN software to complete the repair/compact process. See Appendix A for a complete description of executing the **Repair and Compact** function.

Click on the <CLOSE> button to exit the restore process.

HAVEN HELP

GENERAL/ABOUT HELP

The **General Help** provides HAVEN system help regarding how to use and maintain the HAVEN software. **About (HAVEN)** identifies software and data dictionary version information as well as application and 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.

ADDITIONAL HELP

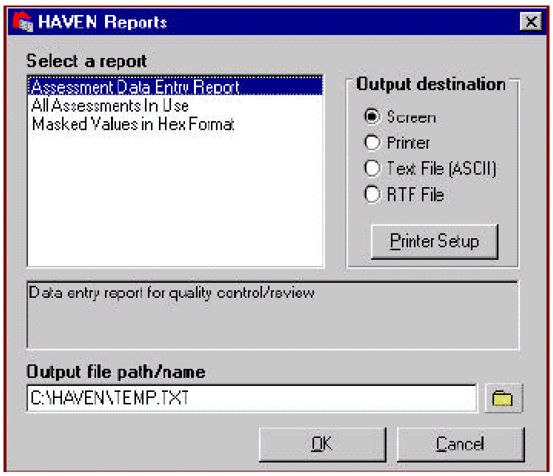
Context sensitive help is available from any window by pressing the <F1> key. Individual variable help is also available by right mouse clicking anywhere within a variable's frame.

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
- A report to view all assessments with a status of "In Use"
- A report to view masked values in Hex format for fields subject to protection



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

The reports can be output in four different formats:

- Report to the Screen
- Report to the Printer
- Text File (ASCII)
- Rich Text Format (RTF) File (which is good for importing into a word processor)

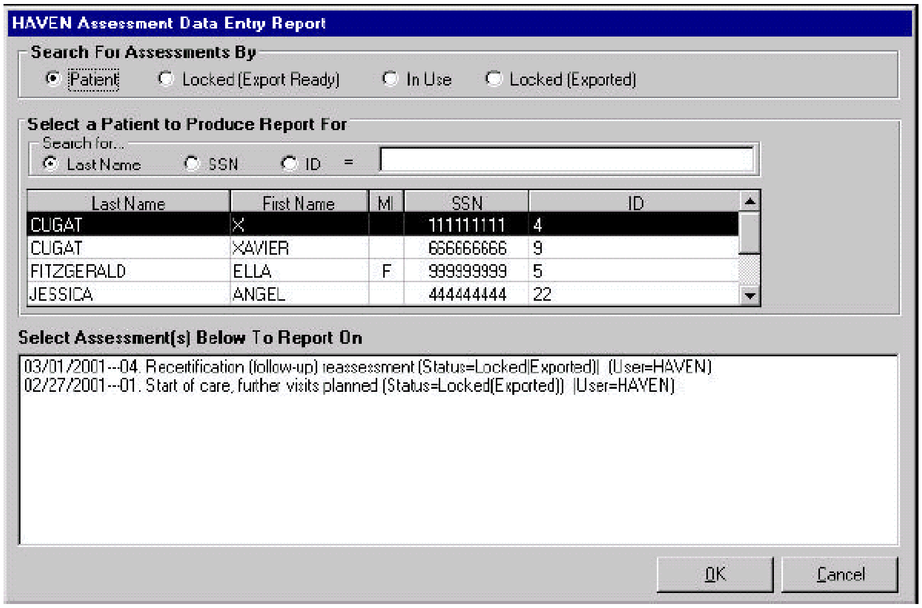
For each of these formats, a temporary file always is produced. Therefore, it is necessary to specify the location and the name of the file in order to change the default file location and the file name provided by HAVEN.

If the report is to be sent to the printer, the option to setup the printer is available using the function provided. Printing is also available when outputting to the screen.

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 report that was selected.

ASSESSMENT DATA ENTRY REPORT

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



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

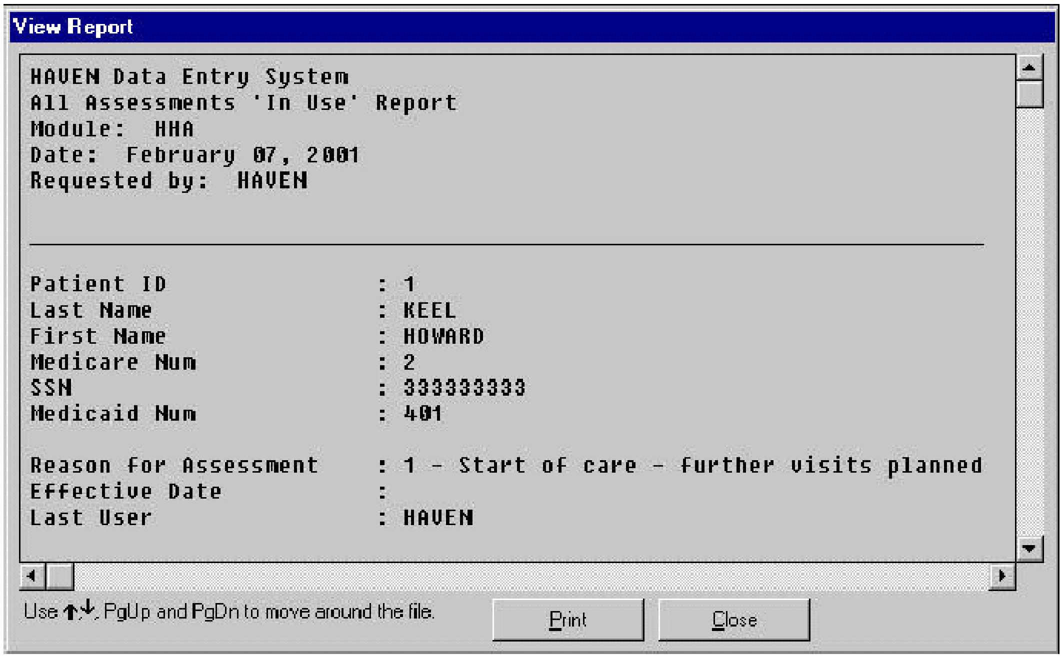
- Search for an assessment by Patient, Locked (Export Ready), In Use, or Locked (Exported).
  - **Patient.** Follow the instructions discussed in the HAVEN Data Entry section under Select/Add a Patient.
  - **Locked (Export Ready).** A list of assessments coded "Locked (Export Ready)" will be displayed in the S*elect Assessment(s) to Report* list box from which the user can choose.
  - **In Use.** A list of assessments coded "In Use" will be displayed in the *Select Assessment(s) to Report* list box from which the user can choose.
  - **Locked (Exported).** A list of assessments coded "Locked (Exported)" will be displayed in the *Select Assessment(s) to Report* list box from which the user can choose.
- After making a selection, click on the <OK> button to produce the report (s) or the <CANCEL> button to return to the **HAVEN Reports** screen. To exit Reports, click on the <CANCEL> button.

Note:

A report(s) 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.

ALL ASSESSMENTS IN USE

This report lists all assessments with an "In Use" status.

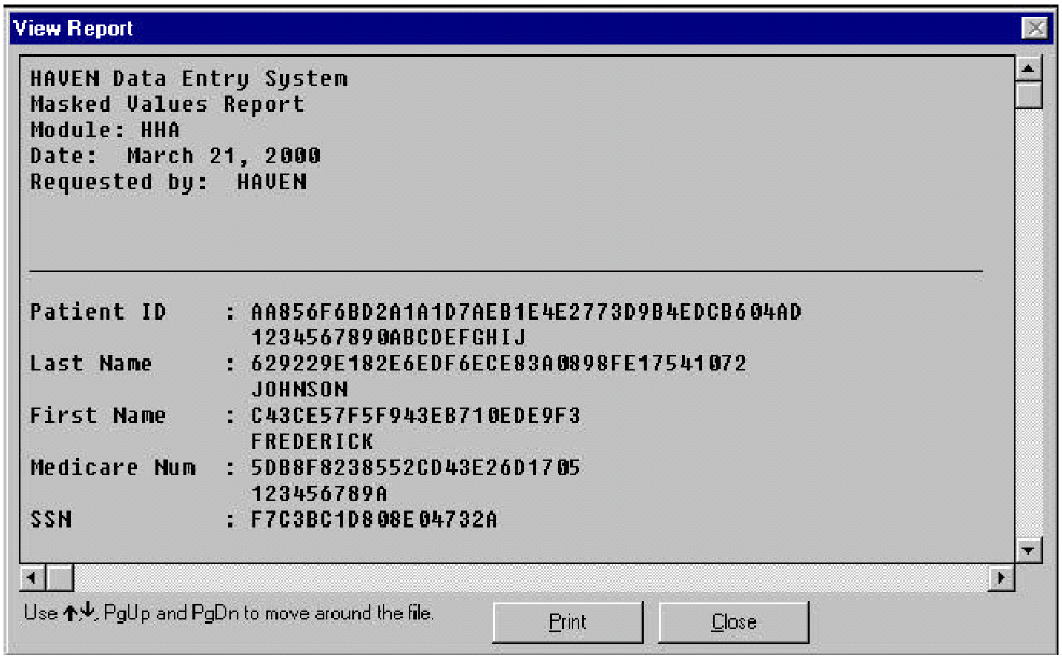


Included in the report for each assessment is the Patient ID, first and last name, Medicare, Medicaid, and Social Security Numbers, Reason for Assessment, effective date, and the last user to access the assessment.

Click on the <PRINT> button to print a copy of the report or the <CLOSE> button to return to the **HAVEN Reports** screen.

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.



APPENDIX A

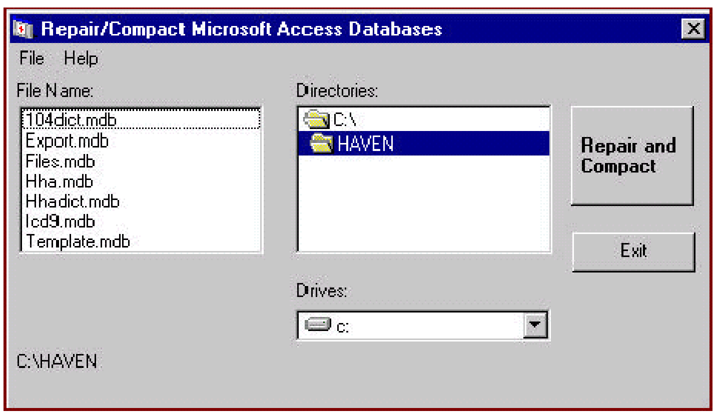
REPAIR/COMPACT UTILITY FOR MICROSOFT ACCESS DATABASE

REPAIR AND COMPACT

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

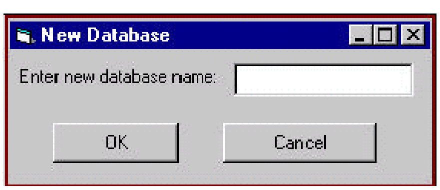
IMPORTANT: It is strongly recommended that the databases are backed up and archived before the Repair/Compact utility begins. Not all damaged Access databases can be repaired and compacted by this or any repair/compact utility. If a database is badly corrupted, data truncation may occur as the result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

IMPORTANT: This function only works on a valid Microsoft Access 2.0 database with an ".MDB" or ".ARK" extension.



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 file that has been selected 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 have been deleted from the database.



To begin the compacting process, click on the <REPAIR AND COMPACT> button. The user will be prompted for a new database name to which the data will be repaired and compacted. Enter the database name and click on the <OK> button to complete the repair and compact function. 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 cancel the **Repair/Compact** function, click on the <CANCEL> 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.

To exit the **Repair/Compact** utility, click on the <EXIT> button.

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.

Export

A process by which data in the current application are converted into a different format for use by an external entity.

Import

A process by which external data are transformed from their current format into a format used by the program.

Module

See **Data Entry System**.

Screen

A screen is an area beneath the tab where variables are presented. A tab represents a screen. The variables on the screen are displayed by selecting a tab. A tab may contain one or more subtabs.

Subscreen

A subscreen is an area beneath the subtab where variables are presented. A subtab represents a subscreen. The variables on the subscreen are displayed by selecting a subtab.

Tab/Subtab

A tab/subtab indicates the screen labels (e.g., Tab **Discharge** is the tab that is used for retrieving the Discharge screen).

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**.

- END -