

# **INPATIENT REHABILITATION VALIDATION AND ENTRY SYSTEM (IRVEN)**

**VERSION 2.0**

**SYSTEM REFERENCE MANUAL**

**OCTOBER 1, 2008**

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# Overview

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## Introduction

The Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) was developed by the Centers for Medicare & Medicaid Services (CMS) to establish a standardized protocol for assessing the clinical characteristics of patients in rehabilitation hospitals and rehabilitation units in acute care hospitals. This information will be used to better support the regulatory process and policy-making by providing survey agencies with a mechanism for objectively measuring and comparing facility performance and quality. 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.

CMS has sponsored the development of a data entry system known as the Inpatient Rehabilitation Validation and Entry (IRVEN) System. IRVEN can be used by rehabilitation facilities for collecting IRF-PAI data in a standardized format. This system enables the user to electronically enter patient assessment data into IRF-PAI standard record formats and export the patient assessment data records files appropriate for submission to the IRF-PAI National database.

IRVEN was originally developed using Visual Basic 6. For Version 2.0, the code has been migrated to Visual Basic 2008 in order to take advantage of new accessibility features in that development environment. As a result, IRVEN 2.0 is designed to work with external screen reader software (e.g., JAWS), and is compliant with Section 508. At the login screen, users have the checkbox option to select “enhanced 508 compatibility”. This option should be checked when an external screen reader will be used. This option also controls the availability of some IRVEN functions. If a function only exists when enhanced 508 compatibility is checked, then it will be described as available only in 508 mode. If a function only exists when “enhanced 508 compatibility” is unchecked, then it will be described as available only in non-508 mode.

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## Conventions

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

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

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## Tool Bar Icons

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

# Quick Start

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## Installation and Start Up

This section discusses the following topics:

- Hardware/Software Specifications
- Printing
- Installation
- Help

### Hardware/Software Specifications

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

- IBM or IBM-compatible personal computer with Pentium or Athlon processor
- VGA or VGA-compatible display monitor with a minimum resolution of 800x600 pixels

**NOTE:**

IRVEN 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 40 megabytes of available space
- 1 gigabyte of RAM
- Microsoft Windows 2000, XP or Vista
- Microsoft or Microsoft-compatible mouse or pointing device

### Installing the IRVEN System Application

Extract the installation files (including README.TXT) from the downloaded file (SETUPIRF.ZIP) in a temporary directory (e.g., C:\TEMP). Review installation instructions contained in README.TXT. Run the SETUP.EXE program to begin the installation and follow the steps to install the IRVEN program.

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## ***Operating IRVEN within Large Facilities***

IRVEN is designed as a stand-alone application and is not intended to be run in a multi-user environment. However, IRVEN can operate in a network environment and allow entry and maintenance of a large number of assessments:

- The IRVEN storage database can be located on a shared, network drive while the IRVEN application files are located on the client PC. This capability allows multiple installations of the software to perform data entry against the same database. For more information, see the Installing IRVEN in a Network Environment section below.
- Archive functionality is included in IRVEN. This functionality alleviates the burden on the primary storage database and allows IRVEN to operate in a high capacity environment. However, this functionality does not operate automatically and requires conscious effort on the part of the System Administrator. For more information, see the section titled Archive Setup.

**IRVEN should not be mistaken for a network application.** IRVEN is a stand-alone application containing features that make it possible to operate in a network environment under limited circumstances. Microsoft Access 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 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 facility information.
- Assign one user to perform all imports and exports.
- Assign one user to perform all archiving and restoring.
- Do not perform maintenance of the patient information while other users are performing data entry.
- Do not perform maintenance of employee information while other users are performing data entry.
- Do not perform maintenance of facility 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.
- Utilize the **Archive** functionality regularly to alleviate the burden on the storage database. In addition, be certain to compact the storage database (IRF.MDB) after several archives.

## ***Installing IRVEN in a Network Environment***

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

- For the first PC, install the IRVEN software. Log in to the IRVEN System, click on the ADMINISTRATION menu, and select the Preferences option. Click on the Location tab and enter the network path where the IRF.MDB and IRFTRACK.MDB will reside. Exit IRVEN.
- Copy IRF.MDB and IRFTRACK.MDB to the network path that was specified in the previous step.

- Log in to IRVEN and set up employee, facility, and patient information. If desired, specify an archive database. Also, go to the **IRVEN Preferences** screen and select the desired options and paths. Exit IRVEN.
- Repeat the installation process above on all additional client PCs.

## Help

The **General Help** provides IRVEN System help regarding how to use and maintain the **IRVEN** software. The **About (IRVEN)** identifies software and dictionary version information. From the **IRVEN Management** screen or any of the **IRVEN Data Entry** screens, click on the HELP menu and select either the General Help or the About options. The **General Help** can also be accessed by clicking on the <?> icon from the **IRVEN Management** screen.

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## Login

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

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

## User IDs and Passwords

Use the following login identifications and passwords for IRVEN the first time:

User login identification **IRF** and password **IRF**.

**IMPORTANT NOTE:** Passwords are case-sensitive in IRVEN 2.0.

The user login identification and password can be added, modified, or deleted by using the **Maintain Employee Database** function within the IRVEN software. For information on Authorization Rights, see Authorization Rights under the System Setup section.

**NOTE:**

After installation, it is recommended that the System Administrator log in first, using **IRF** as both the User ID and Password. The first task that the System Administrator should complete is to establish a new User ID and Password that will be used as the System Administrator account. This task can be accomplished by using the **Maintain Employee Database** function described in the System Setup section. The **IRF** account should then be deleted to ensure the security of the IRVEN software.

## Authorization Rights

The *Access Rights* radio buttons on the **Employee Information** screen (Data Entry, Clinical Supervisor, System Administrator, and View Only) determine the functionality available for the currently selected employee.



Employees with Data Entry rights may perform the following functions: add and edit assessments, perform data entry of IRF-PAI assessments, edit facility and patient information from within assessment data entry, print assessment data on IRF-PAI forms, view and print reports, and view the current list of IRVEN users.

Employees with Clinical Supervisor rights may perform the following functions: add and edit assessments, perform data entry of IRF-PAI assessments, add and edit facility and patient information, print assessment data on IRF-PAI forms, view and print reports, view hidden assessments, and view the current list of IRVEN users.

Employees with System Administrator rights can do everything in IRVEN, including the following functions: add and edit assessments, delete assessments, perform data entry of IRF-PAI assessments, add and edit facility and patient information, hide or delete patient information, print assessment data on IRF-PAI forms, view and print reports, export assessments, import assessments, set up event tracking, set up IRVEN preferences, view hidden assessments, and view the current list of IRVEN users.

Employees with View Only rights are restricted to the following functions: view assessments read-only, view facility and patient information read-only within assessment data entry, print assessment data on IRF-PAI forms, view and print reports, and view the current list of IRVEN users.

## Printing IRVEN Assessment Forms

Before printing the IRVEN assessment forms, it will be necessary to activate the Adobe Acrobat Reader. If the software is not installed, the user can download the installation file from the Adobe web site ([www.adobe.com/](http://www.adobe.com/)).

**NOTE:**

Instructions on how to activate the Adobe Acrobat Reader are provided in the System Setup section.

# System Setup

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## Maintain Employee Database

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

Note that this screen is only accessible to users with System Administrator rights. After installation, the user (authorized as System Administrator) will want to define the expected users of the IRVEN software. The **Maintain Employee Database** screen is used to add, edit or delete employee identification and authorization information.

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

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

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

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

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

**NOTE:**

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

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

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

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

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## Maintain Facility Database

The Facility Database collects the facility and agent identification information. From the **IRVEN Management** screen, select the Maintain Facility Database option from the ADMINISTRATION menu item. In non-508 mode, users may alternatively click on the <MAINTAIN FACILITY DATABASE> icon. It is recommended that a user with System Administrator rights complete this information after installation.

The **Maintain Facility Database** screen contains two sections of information: facility information and agent information. If this is the first time facility information has been entered, then the fields will be editable by default. However, to make changes to existing facility data, the user must first click the <Edit> button at the bottom of the screen, as the fields will be in read-only status by default. After data entry is complete, click the <Save> button to store the changes, or click the <Close> button to cancel the changes.

### Facility Information

The Facility Information section enables the user to specify information that can uniquely identify the facility such as Facility Name, Address, Contact Person, State and Federal Facility Provider numbers. Fields shown in **bold** are required to complete and export IRVEN assessments.

### Agent Information (Optional)

The Agent Information (Optional) section collects unique agent data such as Name, Address, Tax Identification Number (TIN), and Telephone Number.

**NOTE:**

The Facility Information and Agent Information data are included as header information for each export from the IRVEN software. Information about **IRVEN Export** capabilities is provided in the Export section.

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## Maintain Patient Database

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

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

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

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

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

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

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

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

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

In non-508 mode, users can also sort by any field in the patient list by clicking on the column header. Clicking once on the column header will sort the list in ascending order. Clicking on the column header again will sort the list in descending order.

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

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

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

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

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

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

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## Enable Printing

Before accessing the **Print Forms** function on the **IRVEN Management** screen, it is necessary to activate the Adobe Acrobat Reader. If this software is installed, then a System Administrator can click on the ADMINISTRATION menu item, select the Preferences option, and click on the Print tab. The System Administrator can then use the Browse button to select the file path/name for the Adobe Acrobat Reader executable file (e.g., C:\PROGRAM FILES\ADOBE\READER 8.0\READER\ACRORD32.EXE).

### NOTE:

If the Adobe Acrobat Reader is not installed, then the user can download the installation file from the Adobe web site ([www.adobe.com/](http://www.adobe.com/)).

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## Enable Backup

IRVEN provides the option to make a backup copy of the data collection databases (e.g., IRF.MDB, IRFTRACK.MDB, EXPORT.MDB and the currently active archive database) each time the user exits IRVEN normally. If these databases are corrupted due to abnormal termination of IRVEN (e.g., power failure, system lockup), the System Administrator can copy the backup databases into the installation directory and only the last IRVEN session will be lost.

To enable the backup, the System Administrator can click on the ADMINISTRATION menu item, select the Preferences option, and click on the Backup tab. 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, if a path is not provided or the Disable Backup checkbox is checked, the backup option is disabled.

### NOTE:

The **IRVEN Backup** capability is no substitute for a comprehensive backup strategy. It is **HIGHLY RECOMMENDED** that IRVEN users institute a regular procedure of backing up the databases to a reliable media (e.g., CD-R, thumb drive).

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## Windows Settings

In order to ensure the reliable operation of the IRVEN software, the following two Windows properties **must** be set accordingly:

- The Windows short date style must be set to display a four-digit year (e.g., 2000) instead of a two-digit year (e.g., 00).

For Windows 2000, XP and Vista, click on the <START> button, select the Settings option and then select the Control Panel option to display the **Control Panel** screen. Next, click on the <REGIONAL SETTINGS> icon to display the **Regional Settings Properties** screen. Then, click on the Date tab to review the short date style properties. Verify that the short date style includes a four-digit year. A style that includes "YYYY" will satisfy this condition. The recommended setting is "MM/DD/YYYY".

- For Windows 2000, XP and Vista, the Windows Font Size property must be set to "Small Fonts" and not "Large Fonts". From the Control Panel screen, click on the <DISPLAY> icon to display the **Display Properties** screen. Then click on the Settings tab and verify that the font size property is set to small fonts.

# IRVEN Data Entry

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## IRVEN Management Screen

Once IRVEN has been set up, a number of functions can be performed. These functions are activated from buttons or drop-down menu items available on the screen.

The **IRVEN Management** screen consists of the following components:

- **Title Bar.** Displays the title IRVEN Management.
- **Menu Bar.** Displays the list of functions that can be performed from the **IRVEN Management** screen. Each of these functions contains additional options that can be displayed by using the mouse or by using the function's shortcut key. The shortcut key is the <ALT> key and the underlined letter key, (i.e., the FILE menu option can be accessed by pressing the <ALT> key and the <F> key simultaneously). In addition, key combinations are defined for all of the functions available on the menu bar.
- **Toolbar.** . In non-508 mode, some of the common functions are available on a toolbar underneath the menu bar. The toolbar is not available in 508 mode. The functions available to all users include: **Log Off/On; View/Print Reports; Print Assessment(s) From File; and Help.** Additional functions, **Maintain Facility and Patient Database** information, are available to Clinical Supervisors and System Administrators. **Import, Export, Hide/Display Assessment, Hide All Assessments (Current Patient), Delete Assessment, and Maintain Employee Database** information, are only available to a System Administrator.

**NOTE:**

Additional features available to the System Administrator not displayed on the Button Bar include: **Archive Setup; Tracking Setup; List Open Assessments; Reset Open Status; and Preferences.** All of these features can be accessed from the ADMINISTRATION menu item.

- **Patient Info.** Enables the user to select a patient to access his/her assessment history. The search and filter features assist the user in selecting the patient
- **Add Patient.** Allows a user with Clinical Supervisor or System Administrator access rights to add a patient.
- **Archive Patient.** Allows the user to archive a patient and his/her assessments once all assessments have been completed and exported.
- **Assessment Info.** Allows the user to view the history of previous assessments and their status for the currently selected patient. Hidden assessments will not be visible. For additional information on the status of assessments, see the Assessment Status Window section below.

- **Add Assessment.** Allows the user to add an assessment for a selected patient.
- **Correct Assessment.** Allows the user to create a modification or inactivation record for the currently selected assessment for a selected patient. Corrections can only be created for assessments in exported status.
- **Enable Read Only.** This checkbox allows the user to enable or disable read-write functionality (e.g., when checked, the Enter Data button becomes View Data).
- **View Hidden Assessments.** This checkbox allows the user to see the complete history of assessments for the currently selected patient, as assessments flagged as hidden become visible in the assessment list.
- **CMG.** Allows the user to view the CMG values for the currently selected assessment.
- **Print Report.** Allows the user to generate a report containing the entered and calculated values for the currently selected assessment. For assessment questions that utilize checkboxes or radio buttons, this report displays the available responses and denotes the selected response with a check.
- **Print Form.** Allows the user to print the assessment data on the official IRF-PAI Assessment Instrument forms. This function requires Adobe Acrobat Reader.
- **Enter Data.** Allows the user to launch the data entry screens for the currently selected assessment.
- **Exit.** Allows the user to exit the IRVEN software.

## Under the File Menu, the User Can:

### *Open Archive*

This option allows the System Administrator to open the currently active archive database and view the archived patients (and their associated assessments). By opening the archive database, the user also has the option to restore a patient. See the Restore a Patient section for a complete explanation of the **Restore** function.

### *Exit*

This option allows the user to exit the IRVEN software. To exit IRVEN, select the Exit option from the FILE menu on the **IRVEN Management** screen or click the <EXIT> button.

## Under the Options Menu, the User Can:

### *Log Off/On*

This option allows the user to return to the **IRVEN Login** screen. From here, the user can log in as a different user or click on the <CANCEL> button and return to the **IRVEN Management** screen.



## ***User List***

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

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

### **NOTE:**

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

## ***View/Print Reports***

This feature is discussed in the Reports section.

## ***Print Assessment(s) from File***

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.

## ***Hide/Display Assessment***

This option gives the System Administrator the capability to specify whether an exported or completed assessment for the current patient can be viewed in the assessment list. To hide an exported or completed assessment, highlight the desired assessment and select the Hide/Display Assessment option from the OPTIONS menu (in non-508 mode, users may alternatively click on the <HIDE/DISPLAY ASSESSMENT> button). The selected assessment will be removed from the list and given the status of "Hidden". Hidden assessments are only visible when the *View Hidden Assessments* checkbox is checked. This feature is automatically enabled when an assessment is hidden.

To display a hidden assessment, click on the *View Hidden Assessments* check box to display the hidden assessment(s). Highlight an assessment and select the Hide/Display Assessment option from the OPTIONS menu (in non-508 mode, users may alternatively click on the <HIDE/DISPLAY ASSESSMENT> button). When the *View Hidden Assessments*

check box is unchecked, the assessment will remain in the list. The assessment status will be reset to the status it had prior to being hidden.

**NOTE:**

Although a Clinical Supervisor cannot hide/unhide an assessment, he/she can view hidden assessments by checking the *View Hidden Assessments* check box.

### ***Hide All Assessments (Current Patient)***

This option gives the System Administrator the capability to remove all exported or completed assessments for the current patient from view in the assessment list. Highlight a patient and select the Hide All Assessments (Current Patient) option from the OPTIONS menu (in non-508 mode, users may alternatively click on the <HIDE ALL ASSESSMENTS (CURRENT PATIENT)> button). All assessments marked exported or completed will be hidden from view and given the status of "Hidden".

To display a hidden assessment, click on the *View Hidden Assessments* check box to display the hidden assessment(s). Highlight an assessment and select the Hide/Display Assessment option from the OPTIONS menu (in non-508 mode, users may alternatively click on the <HIDE/DISPLAY ASSESSMENT> button). When the *View Hidden Assessments* check box is unchecked, the assessment will remain in the list. The assessment status will reset to the status it had prior to being hidden.

**NOTE:**

Although a Clinical Supervisor cannot hide/unhide an assessment, he/she can view hidden assessments by checking the *View Hidden Assessments* check box.

### ***Delete Assessment***

This option gives the System Administrator the capability to delete a specific assessment for the current patient. Note that the assessment is deleted not only from the assessment list but also from the database. Once an assessment has been deleted, it cannot be retrieved.

To delete an assessment, highlight it and select the Delete Assessment option from the OPTIONS menu (in non-508 mode, users may alternatively click on the <DELETE ASSESSMENT> button).

**NOTE:**

Assessments with a status of "Exported", "Completed", or "Hidden" cannot be deleted.

## **Under the Administration Menu, the User Can:**

### ***Maintain Employee, Facility, and Patient Databases***

The maintenance functions for the Employee, Facility, and Patient databases are discussed in the System Setup section.

### ***List Open Assessments***

This feature allows a System Administrator to view the assessments that have open status. To display the assessment list, click on the ADMINISTRATION menu and select the List Open Assessments option. For each open assessment,

the user ID of the employee that is working on an assessment, the patient name, Social Security Number, and assessment reference date are displayed in the List Open Assessments window. In a multi-user environment, this enables the administrator to easily monitor the current IRVEN workload.

In addition, the **List Open Assessments** function is useful in pinpointing which assessments require a reset of the open status (see **Reset Open Status**) in the event of an abnormal termination of IRVEN.

## ***Reset Open Status***

This feature allows a System Administrator to reset the open status of the currently selected assessment. 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 IRVEN (e.g., power failure, system lockup) occurs. When IRVEN 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 ADMINISTRATION menu, and select the Reset Open Status option. This action will clear the *Open* box and reset the currently selected assessment. If more than one assessment needs to be reset, highlight the next assessment and repeat the process until all of the desired assessments have been reset.

## ***Archive Setup***

The **Archive Setup** function allows the user to manage archive databases for patients and assessments. By default, when the IRVEN software is installed, the IRFARCH.MDB archive database is created and made active.

After selecting the ADMINISTRATION menu item, select the Archive Setup option to display the **Archive Setup** screen. The System Administrator can use this screen to add an archive entry (and create the archive database), edit an archive database description, delete an archive entry (note that the actual archive database itself is not deleted), and change the active archive database.

The **Archive Setup** screen displays two separate sections. The *Select an Archive Database* section displays the name of the archive database, a flag indicating whether that archive database is the active archive database, the location of the archive database, and a description. To add a new archive database, click on the <NEW> button and enter the following information in the *Enter Archive Information* section:

- Up to an eight character archive database name
- A path for the location of the archive databases, using the Browse button
- A description for the archive databases

After completing the *Enter Archive Information* section, click on the <SAVE> button to save the archive database entry or on the <CANCEL> button to cancel the archive database entry.

### **NOTE:**

A database name and the path of the databases must be completed when adding archive databases.

A user may choose to delete an archive database entry if all of the records contained in it have been restored, or if it was created in error, or if it was never utilized. To delete an archive database entry, select an archive database from the *Select an Archive Database* list and click on the <DELETE> button.

To select an archive database as the active archive database, select an archive database from the *Select an Archive Database* section. Click on the *Make this Database the Active Archive Database* button to mark the selected archive database as the active archive database.

To exit the **Archive Setup** function, click on the <CLOSE> button.

## ***Tracking Setup***

The purpose of the **Tracking** function is to record significant events associated with the primary objects in the IRVEN System: Patient, Facility, Assessment, and Employee. If the Tracking system is enabled, then any events enabled for these objects will be captured and saved to the IRFTRACK.MDB database. This function enables the System Administrator to generate a history of events.

After a System Administrator selects the Tracking Setup option from the ADMINISTRATION menu item, the **Event Tracking Setup** screen will be displayed. Click on the *Enable Event Tracking* check box to enable the **Tracking** function. Select one of the objects, Patient, Facility, Assessment, or Employee, from the *Tracking Parameters* combo box to display a list of the possible events to track in the *Events* list. Click on an event to toggle the enabled status of that event. Alternatively, highlight the desired event and use the <ENABLE THIS EVENT> button (if the event is currently disabled) or the <DISABLE THIS EVENT> button (if the event is currently enabled) to toggle the status. After defining the required Tracking events, click on the <CLOSE> button to exit the **Tracking** function.

### **NOTE:**

To stop the tracking of IRVEN events, yet maintain the tracking settings, set the *Enable Event Tracking* check box to unchecked in order to disable the **Tracking** function.

## ***Preferences***

The **Preferences** screen consists of several tabs, each containing fields and/or checkboxes for adjusting IRVEN functionality as desired. In addition, the screen contains an <Apply> button for saving changes, which is enabled any time that a value is changed on a tab. There is also a <Cancel> button for exiting the screen. If the <Cancel> button is clicked before changes have been saved with the <Apply> button, a message box will confirm whether the user wants to cancel and lose those changes.

The contents of the various tabs available on the **Preferences** screen are described below.

## **Accessibility**

### **Opening Assessments**

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

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

## General Accessibility

As of version 2.0, IRVEN has been enhanced to work with external screen reader software (e.g., JAWS) for Section 508 compliance. Users can enable improved Section 508 compatibility with the checkbox on the Login screen (as discussed earlier) or in the Accessibility tab located on the Preferences screen. Note that in 508 mode, the toolbar and CMS logo on the **IRVEN Management** screen will be hidden. Also, all reports will be sent to a PDF file and not be presented in the report viewer first. Furthermore, the user will notice the appearance of additional message boxes while operating IRVEN; these are added to aid visually impaired users in understanding the current IRVEN status.

In 508 mode, the assessment data entry screens present the variable in a single scrolling column, as opposed to the fixed-position multiple columns shown in non-508 mode. Therefore, for 508 mode, users can specify a font size (usually, a larger one) to be used in data entry. On the Accessibility tab, click the <Change Font> button to specify a new font, using a standard Windows font dialog box. The selected font will then be used to display a sample of the text seen by the user in assessment data entry. To change the font back to the IRVEN default, click the <Default> button on the Accessibility tab.

## Print

### Specify a Path for the Adobe Acrobat Reader in Order to Print Assessment Forms

To print the IRVEN assessment forms, the file/path name for the Adobe Acrobat Reader must be selected. The executable name is ACRORD32.EXE. From the ADMINISTRATION menu item, select the Preferences option and then click on the Print tab and use the Browse button to select the file path/name into the *Adobe Acrobat Reader Executable File Path/Name* text box (e.g., C:\PROGRAM FILES\ADOBE\READER 8.0\READER\ACRORD32.EXE).

#### NOTE:

A complete explanation of the **Print Forms** function is available in the System Setup section.

### Enable Silent Printing

IRVEN can prevent the printer dialog box from appearing when launching Adobe Acrobat Reader to print an assessment on the IRF forms. After selecting the Preferences option from the ADMINISTRATION menu and clicking on the Print tab, check the *Enable Silent Printing* check box to enable this feature.

## Other

### Specify Location Name and Telephone Number

By specifying a location name and telephone number for this installation of IRVEN, employees who *log in* will be associated with this location. The User List menu option from the **IRVEN Management** screen displays this

information. After selecting the Preferences option from the ADMINISTRATION menu and clicking on the Other tab, type the location name and telephone number of the current installation in the *Location Name* and *Telephone* text boxes provided.

**NOTE:**

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

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

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

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

## **Backup**

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

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

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

## **Location**

### **Specify Location of Databases**

By default, IRVEN looks for the data entry databases (IRF.MDB) in the application directory. To specify a different location for these files, select the Preferences option from the ADMINISTRATION menu item and click on the Location tab, then select the desired path using the <BROWSE> button. The selected path will be displayed in the *Location* text box.

**NOTE:**

To use the new path, exit the system and restart the IRVEN software.

## Specify Default Paths for the IRVEN Reports, Export, Import, and Print (from file) Functions

The user can optionally specify default locations for the following:

- Where saved reports are stored (e.g., PDF files)
- Where export submission files are created
- Where import files are located
- Where submission files for the print (from file) function are located

After selecting the Preferences option from the ADMINISTRATION menu item and clicking on the Location tab, go to the Defaults section and use the corresponding <BROWSE> buttons to specify the desired path locations. The resulting paths will be displayed in the associated text boxes.

## Error Check

IRVEN can display special warning messages as part of the error checking process. These messages indicate whether assessments are in violation of the timing requirements as defined by the IRF-PAI specifications. The messages do not prevent completion or submission of assessments – they are for informational purposes only. By default, these messages are not shown when exiting data entry. However, they are always shown when the user performs an error check from the **Export** screen.

To show the warning messages when exiting data entry, select the Preferences option from the ADMINISTRATION menu item and click on the Error Check tab. Set the *Show warnings messages when error checking assessments* checkbox value to checked.

## Under the Help Menu, the User Can:

### ***Access General Help and About (IRVEN)***

**General Help** provides IRVEN System help regarding how to use and maintain the IRVEN software. **About (IRVEN)** identifies software version information. From the **IRVEN Management** screen or any of the **IRVEN Data Entry** screens, click on the HELP menu and select either the General Help or the About options.

## Patient Info

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

The Search and Filter section allows the user to restrict the patients displayed in the patient list to those matching specified criteria. The user may search the patient database by first selecting the Search tab, then choosing the field to

search (last name, Social Security Number (SSN), Medicare number, Medicaid number, or Facility Patient ID) in the *Search*. drop-down combo box. The user may then enter a value in the search text field and click the <SEARCH> button. All patients containing a value matching the search value in the specified field will be displayed in the patient list below.

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

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

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

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

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

In non-508 mode, users can also sort by any field in the patient list by clicking on the column header. Clicking once on the column header will sort the list in ascending order. Clicking on the column header again will sort the list in descending order.

## Add a Patient

The <ADD PATIENT> button allows the user with Clinical Supervisor or System Administrator rights to add a new patient record. The user must complete First Name, Last Name, Gender, Birth Date, Social Security Number, and Medicare Number before the record can be saved. The remaining fields are optional.

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

## Archive a Patient

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



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

**NOTE:**

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

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

## Restore a Patient

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

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

## Assessment Info

The Assessment Selection section allows the user to view the history of previous assessments and their status for the currently selected patient. For each assessment, the date, assessment type, status, last user to access the assessment, open status (an asterisk [\*] indicates an assessment is currently open for data entry), and IRVEN internal ID are displayed.

**NOTE:**

An assessment is "Open" once it is accessed for data entry. The open status only occurs when an assessment is accessed in a network installation of IRVEN. The *Open* box will be empty when a user is working in a stand-alone configuration.

An assessment is selected by scrolling through the list and clicking on the preferred assessment. The user can access the selected assessment to perform data entry by clicking on the <ENTER DATA> button or by double-clicking on the assessment.

## Add an Assessment

The Add Assessment function enables the user to initiate a new assessment for the selected patient. Click on the <ADD ASSESSMENT> button to add an assessment.

Note the following:

- Newly created assessments have a status of "New"
- Edited assessments have a status of "In Use"
- Completed assessments have a status of "Export Ready" if they are eligible for export; otherwise, they have a status of "Completed"
- Exported assessments have a status of "Exported"
- Hidden assessments have a status of "Hidden"
- Assessments that have only the admission-related variables completed may have a status of "Adm Complete"
- Hidden assessments are only visible when the "View Hidden Assessments" checkbox is checked. This feature is automatically enabled when an assessment is hidden.

When the user clicks on the <ADD ASSESSMENT> button, an assessment with a status of "New" is automatically added to the system and is displayed in the assessment list on the **IRVEN Management Screen**.

## Correct an Assessment

Once an assessment has "Exported" status, only a user with System Administrator rights has access to it. Therefore, if it is determined that an assessment needs to be corrected, the user with System Administrator rights can select the assessment in the assessment list and click the <Correct Assessment> button. The Correction Type window appears and the user may now specify one of the two types of corrections:

- **Modify the assessment.** By selecting this option, a copy of the assessment record is created with an incremented correction number and a status of "New". After the necessary corrections are made via assessment data entry, the assessment can be completed, exported, and re-submitted to the National Database.
- **Inactivate the assessment.** By selecting this option, a copy of the assessment record is created with a correction number of 99 and a status of "Export Ready". It is not necessary to go into assessment data entry for an inactivation record; it is now ready to be exported and submitted to the National Database.

### **NOTE:**

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

## Special Features (IRVEN Management Screen)

### *Enable Read Only*

The Enable Read Only option is only visible to users with Clinical Supervisor or System Administrator rights. If checked, this option allows the user with Clinical Supervisor or System Administrator rights to view an assessment in read-only mode. This option is useful in reviewing the work of other users to ensure that no data is accidentally edited.

## ***View Hidden Assessments***

The View Hidden Assessments option is available only to users with Clinical Supervisor or System Administrator rights. If checked, this option enables the user to see and access previously hidden assessments (i.e., assessments saved in the database but not available for viewing by users with Data Entry privileges only).

## **CMG**

CMG calculations are automatically performed for an assessment when the data entry for the assessment has been completed and its status is made Export Ready. The CMG data can be viewed from the **IRVEN Management Screen** using the <CMG> button. Click on the <CMG> button and the CMG will be recalculated and then displayed in a pop-up window. After viewing the values, the user can click the <OK> button to close the window and return to the **IRVEN Management screen**.

### **NOTE:**

The CMG will be calculated with the Version 1.0 DLL (CMG\_100.DLL) if the assessment has a discharge date prior to October 1, 2005. If the discharge date is on or after October 1, 2005, the CMG will be calculated with the Version 2.0 DLL (CMG\_200.DLL). If the discharge date is on or after October 1, 2006, the CMG will be calculated with the Version 2.10 DLL (CMG\_210.DLL). If the discharge date is on or after October 1, 2007, the CMG will be calculated with the Version 2.20 DLL (CMG\_220.DLL). If the discharge date is on or after October 1, 2008, the CMG will be calculated with the Version 2.30 DLL (CMG\_230.DLL).

## **Print Report**

This feature is discussed in the Reports section.

## **Print Form**

This feature is discussed in the Reports section.

## **Enter Data**

Users may perform data entry for the currently selected assessment by clicking the <Enter Data> button and launching the IRVEN Data Entry Window. The IRVEN Data Entry Window is described in the next section. Note that this button is renamed to <View Data> under the following circumstances: (1) the Enable Read Only checkbox is checked, or (2) the user has View Only access rights, or (3) an archive database is open.

## **Exit**

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

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# IRVEN Data Entry Window

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

- **Title Bar.** Displays **IRVEN Data Entry** along with the assessment type (Original, Modification or Inactivation), the patient first and last names, the patient SSN, and the patient Date of Birth.
- **Menu Bar.** Displays the list of functions that can be performed on the **Data Entry** screen. Each of these functions contains additional options that can be displayed by using the keyboard or mouse.
- **Data Entry Button Bar.** Provides the available **Data Entry** functions. Currently, four functions are available: **Previous**, **Next**, **Exit (Validate)** and **Exit (No Validate)**. All of these functions also exist on the Menu Bar.
- **Go To Dropdown Box.** Contains a list of screens for the selected set of screens. When the box is dropped down, the user can navigate the screens with the up and down arrow keys. If a screen is clicked with a mouse or selected by pressing the Enter key, the **Data Entry** screen of the selected screen will open in the space below it.
- **Data Entry Screen.** Contains variables that belong to the selected screen. On this screen, data entry can be performed for each variable.

## Entering Data for a Variable

Perform data entry after selecting a Patient record and an Assessment form. See the previous sections, Patient Info and Assessment Info for additional information. Data entry can be exited at any time by clicking on the FILE menu item and selecting the Exit (Validate) or Exit (No Validate) options.

By default, the first screen in the set of screens is opened for data entry. To select a different screen, use the Go To Dropdown Box as described above to select the desired screen. Follow the descriptions below to enter data for the various variable types.

### ***Option (Pick One)***

The variable type **Option (Pick One)** includes the options from which only a single option can be chosen. Choose an item by selecting the radio button next to the item. Clicking the <RIGHT MOUSE> button and selecting the Clear Variable option clears variables with radio buttons.

### ***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(es) next to the desired item. If the last item on the list contains None of the Above, then selecting that item will clear all the other items.

#### **NOTE:**

Check boxes have three possible states: checked, unchecked, and checked/grayed. Checked indicates that the option is true. Unchecked indicates that the option is false. Checked/grayed indicates that the Unable to Determine (UTD) has

been selected. To set the option to UTD, click the <RIGHT MOUSE> button on the check box and select the Set as Unable to Determine option.

**NOTE:**

Depending on the data specifications not all check lists will have UTD functionality available.

If the variable has a None of the Above option, and all other options are either false or UTD, then None of the Above will automatically be set to true.

## ***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 the date cannot be determined, press the hot key combination <SHIFT> and <?> (shift and question mark keys). A dash will be displayed.

**NOTE:**

Depending on the data specifications not all data fields will have UTD functionality available.

## ***Number***

The variable type **Number** accepts data entered in numeric format, including one decimal point, if applicable. If the value cannot be determined, press the hot key combination <SHIFT> and <?>. A dash will be displayed.

**NOTE:**

Depending on the data specifications not all data fields will have UTD functionality available.

## ***String***

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

If the value cannot be determined, press the hot key combination <SHIFT> and <?>. A dash will be displayed.

## ***ICD-9***

The ICD-9 variable type provides an applicable assistive data entry button <ICD9> for retrieving ICD9-CM Diagnosis Codes, as well as a read-only text field that displays the code and the first 30 characters of its description. The button provides access to the **ICD9 Diagnosis Codes** window from which the data abstractor can search for a code by either the code or the code description, then select the desired code from the search result list. Alternatively, the user can enter the ICD-9 code manually. Click the <OK> button to save the selected or entered code to the field in the Assessment Data Entry Window. Click the <Cancel> button to clear the field in the Assessment Data Entry Window.

## ***External List (Impairment Codes)***

This variable type is used to display the available Impairment codes in a dropdown list. Click on a code to select it. The user can right-click the selected code to launch a menu with the Clear Value option. Click the Clear Value option to deselect the code. Only one Impairment code can be selected.

## Special Features (IRVEN Data Entry Screen)

### *Clear Value on a Variable Radio Button or Dropdown List*

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

### *View Help*

To display the Help available for each variable, click the <RIGHT MOUSE> button and select the View Help option or press F1. For variables that do not have any other options associated with them (e.g., the UTD 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 is available.

Several steps need to be followed when capturing a screen for printing. To copy a screen, press the <PRINT SCRN> button or press 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 the <CTRL> + <V> buttons. The screen can also be copied into a document by using the paste function available in the application being used.

### *Edit Facility Data*

During data entry, the user will have access to the **Facility Information** screen by selecting the Edit Facility Data option from the ADMINISTRATION menu item. This feature allows the user to correct the Facility Information for an assessment.

For example, if incorrect information is added during the setup process for the facility, the user can edit this information during the data entry process. This edit will correct the information for this assessment and future assessments. Prior assessments are not automatically corrected. It is necessary to revisit those assessments to update their facility information.

After returning to the **IRVEN Management** screen, select each assessment by patient that contains the incorrect information and click on the <ENTER DATA> button. A message indicating that the data has been changed for the facility will appear and the user has the option to update the current assessment.

### *Edit Patient Data*

During data entry, the user will have access to the **Patient Information** screen by selecting the Edit Patient Data option from the ADMINISTRATION menu item. This feature allows the user to correct the Patient Information for an assessment.

For example, if incorrect information is added during the setup process for the patient, the user can edit this information during the data entry process. This edit will correct the information for this assessment and future assessments. Prior assessments are not automatically corrected. It is necessary to revisit those assessments to update their patient information.

After returning to the **IRVEN Management** screen, select each assessment for a patient that contains the incorrect information and click on the <ENTER DATA> button. A message indicating that the data have been changed for the patient will appear and the user has the option to update the current assessment.

## Assessment Validation after Exit

When the user attempts to exit data entry, the system will check all of the rules in place. One such rule is the mandatory variable rule. All mandatory variables must have valid data values. If a mandatory variable is left blank (i.e., data are not entered), the user will be warned that this variable is mandatory [e.g., ERROR: A value is required for this field. (B1. Comatose Persistent vegetative state/no discernible consciousness)]. The user will not be able to mark an assessment as complete until all mandatory variables have been entered.

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

If an assessment contains errors, the **Assessment Validation Warnings** screen will be displayed. This screen contains a list box of all errors detected during the validation process. As the user selects an error entry from the list box, a full description of the error is displayed in the text box below.

There are four buttons at the bottom of the **Assessment Validation Warnings** screen. Clicking on the <GO TO SCREEN WITH ERRORS> button will return the user to the IRVEN Data Entry Window and automatically display the screen containing the variable selected in the errors list box. Clicking on the <PRINT ERRORS> button will print the errors/warnings listed in the errors list box. Selecting the <CONTINUE> button will take the user to the Assessment Status screen where the assessment can be exited by marking it as complete, admission complete or in use. Choosing the <RETURN TO DATA ENTRY> button will allow the user to continue the data entry process.

## Assessment Status Window

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

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

- Case in active use: An assessment has been edited but is not complete
- Completed: Data entry has been completed for an assessment (both admission and discharge variables)
- Admission Completed: The admission portion of the assessment has been completed.

- Exported: An exported assessment

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

**NOTE:**

Once an assessment has been marked "Exported", only users with Clinical Supervisor or System Administrator rights can reopen it.

**NOTE:**

The status "Admission Completed" is available for an assessment if all admission-related variables have been completed and no errors are detected. After an assessment is marked "Admission Completed", it cannot be marked "Admission Completed" again. Upon exiting the next session of data entry, all errors for discharge-related variables will be reported and the assessment can only be marked as "Active Use" or "Completed".



# IRVEN Data Import

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## Import Options

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 1,260-byte string format specified in the IRF Data Record Layout, and a trailer record). On the **IRVEN Management** screen, the user can select the **Import** function from the **OPTIONS** menu item to display the **IRVEN Import Assessments** screen.

The user must enter an Import file path/name for the file to be imported or use the default file path/name. The default file path is the directory where the IRVEN software was initially installed.

The following Import option is available when importing files:

- **Mark Completed Assessments As Exported Instead of Export Ready.** This feature allows users to specify how completed assessments with no errors are handled by the **Import** function. By default, these assessments are given the status of "Export Ready". However, if this feature is checked, the assessment will be given the status of "Exported".
- **If necessary, change correction number to the next available value.** This feature allows a modification to be imported even if the correction number on the imported record is not the next number available for that assessment in IRVEN.

The **IRVEN Import Assessments** screen also contains two other option checkboxes. Set the Skip Header Check checkbox to checked to instruct IRVEN to skip the header record of the import file. Set the Ignore Data In Inactive Fields when importing assessments from non-IRVEN sources. The assessment strings may contain data in positions of the 1,260-byte string that are normally left blank.

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## Show Warning Messages

During the **Import** process, the user has the capability to display a warning message when the following events occur: (1) a new patient is added, (2) a modification request is processed, and (3) an inactivation request is processed. Select the desired warnings to be displayed during import by clicking in the warning check boxes.

For uninterrupted processing, leave these options unchecked.

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## Performing Error Checks on an Import File

Each record in the import file is processed in accordance with the rules specified in the IRF Data Record Layout. The user may check the file for errors by clicking on the <ERROR CHECK FILE> button.

If errors are encountered, a list box describing the line number, field name, and type of each error encountered, as well as the number of records processed, will appear. The user may then click on the <PRINT> button to print the error list. If no errors are detected, a message box appears announcing that the error check is complete and displaying the number of records processed.

**NOTE:**

This function only imports data in the 1,260-byte format.

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## Importing IRVEN 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. To close the **IRVEN Import Assessments** screen, click on the <CLOSE> button.

The following paragraphs describe how the import function handles facility, patient, and assessment data.

- Facility Data

The Facility information for the header record in the import file is compared with the existing facility information in the IRF-PAI database. If the information does not match, the user is given the option to update the facility database.

- 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, Social Security Number, and Gender. If a match on each field is not found, a new entry will be added to the patient database.

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

- Assessment Data

Imported assessments may either have a status of "In Use" or "Export Ready". In order for an imported assessment to be "Export Ready" or "Exported", depending on the selected option, the assessment must pass all error checks. All other assessments will be assigned the "In Use" status.

# IRVEN Data Export

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## Exporting Electronic Forms

To initiate the **Export** function, select the Export option from the OPTIONS menu item on the **IRVEN Management** screen. In non-508 mode, users may alternatively select the <EXPORT> button.

The **IRVEN Export** function enables data for "Export Ready" assessments to be output from the IRVEN database in the IRF-PAI Data Record Layout format (i.e., 1,260-byte string) suitable for submission to the IRF-PAI National database. Note that each data field in each exported assessment has been error-checked in accordance with the rules specified in the IRVEN Data Record Layout.

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

- Select the type of submission: New Export or Previous Export. Previous Exports are described in the next section.
- Select the export path using the <BROWSE> button. Enter the file name into the *Export Path and File Name (including extensions)* text box. After selecting New Export, enter a description of the file into the *Export Description (Optional)* text box.
- The assessments will be displayed in the *Select Assessments to be Included in Export* list box. Select the assessment(s) to be included with this export from the *Select Assessments to be Included in Export* list box. To select one assessment, click on the desired assessment. 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> button. Click on the <CLEAR SELECTION> button to deselect all highlighted assessments.

### EXAMPLE:

For easy reference, the user may wish to create a directory called IRVEN with subdirectories for the year/month. The saved file names could reference the weeks of the month (e.g., C:\IRF\2007\NOVEMBER\WEEK1.TXT). This structure will help to organize the export files for submission to the IRF-PAI National database.

- Select the type of submission: Production or Test. An assessment receives the status "Exported" once it has been exported using the Production Submission option. Note that the user has the capability to generate a test submission (i.e., create a test export file) without changing the status of the assessment records. This structure allows the agency to validate the submission format with the IRF-PAI National database.
- Click on the <ERROR CHECK> button to check the highlighted assessments for errors. This action should result in warning messages for timing violations only since each assessment is "Export Ready". The user has the option to print any warning messages that appear.

- 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 IRF-PAI National database. Click on the <OK> button to close the message box. After the export has been completed, the current date, file and path name, and a 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 **IRVEN Management** screen.

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## Re-Exporting Electronic Forms

It is also possible to resubmit previously exported assessments, should an error be detected by the IRF-PAI National database. To initiate a resubmission, the user selects the <PREVIOUS EXPORT> 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.

# IRVEN Help

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## General/About Help

The **General Help** provides IRVEN System help regarding how to use and maintain the IRVEN software. The **About (IRVEN)** identifies software and dictionary version information. From the **IRVEN Management** screen, or any of the **IRVEN Data Entry** screens, click on the **HELP** menu and select either the General Help or About options.

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## Additional Help

Context sensitive help is available by pressing F1.

# Reports

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## Assessment Data Entry Report

This report summarizes the data entered for an assessment(s) for quality control/review.

After selecting View/Print Reports from the OPTIONS menu on the **Management Screen**, the **View or Print Reports** screen will be displayed. Select the Assessment Data Entry Report tab, and select the Find By combo box. Select Patient from the combo box to enable the **Patient** method for selecting assessments on which to report, or the Status option to enable the **Status** method from which to select assessments on which to report.

### Report on an Assessment(s) Using the Patient Method

- Search for an Assessment by Patient

Click on the <PATIENT> radio button and, from the *Search* dropdown list box, select the desired criteria on which to search. Follow the instructions discussed in the IRVEN Data Entry section under Patient Info. Click on the <SEARCH> button to perform the search and display the results in the *Patient* list box. After selecting a patient, the associated assessments will be displayed in the *Assessment* list box on which to report. Patient search options include:

- **Last Name**
- **SSN**
- **Medicare Number**
- **Medicaid Number**
- **Patient Identification Number**

**NOTE:**

To select assessments that are new or deleted, it is necessary to search by *Patient*.

After selecting one or more assessments on which to report, click on the <VIEW REPORT> button to produce the report(s) or the <EXIT> button to return to the **IRVEN Management** screen

**NOTE:**

A report(s) can take some time to produce depending on the size of the data entry system. 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 a report(s).

## Report on an Assessment(s) Using the Status Function

- Search for an Assessment by Status

Click on the <STATUS> radio button, and from the drop-down list, select the status on which to report. Click on the <SEARCH> button to perform the search and display the results in the *Assessments* list box. Status search options include:

- **In Use.** An alphabetical list of patients with assessments coded "In Use" will be displayed in the *Assessments* list box from which the user can choose.
- **Admission Complete.** An alphabetical list of patients with assessments coded "Adm Complete" will be displayed in the *Assessments* list box from which the user can choose.
- **Export Ready.** An alphabetical list of patients with assessments coded "Export Ready" will be displayed in the *Assessments* list box from which the user can choose.
- **Exported.** An alphabetical list of patients with assessments coded "Exported" will be displayed in the *Assessments* list box from which the user can choose.
- **Completed.** An alphabetical list of patients with assessments coded "Completed " will be displayed in the *Assessments* list box from which the user can choose.
- **Hidden.** An alphabetical list of patients with assessments coded "Hidden" will be displayed in the *Assessments* list box from which the user can choose.

After selecting one or more assessments on which to report, click on the <VIEW REPORT> button to produce the report(s) or the <EXIT> button to return to the **IRVEN Management** screen.

### NOTE:

A report(s) can take some time to produce depending on the size of the data entry system. 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 a report(s).

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## Event Tracking Report

The purpose of the **Tracking** function is to record significant events associated with the primary objects in the IRVEN System: Patient, Facility, Assessment, and Employee. If the Tracking system is enabled, then any events enabled for the aforementioned objects will be captured and saved to the IRFTRACK.MDB database. The Event Tracking Report summarizes the selected events for each object and enables the System Administrator to generate a history of these events.

After selecting the Event Tracking Report tab on the **View Or Print Reports** screen, click on the Select Object drop-down combo box to select an object on which to report.

Once an object has been selected, the instances associated with that object will be displayed in the list box below. Select an instance, and then click on the <VIEW EVENTS> button to display its event history.

Following is a list of the events available for each of the objects in the IRVEN System.

- Patient
  - PAT\_ADD: A patient was added to the system.
  - PAT\_DEL: A patient was deleted from the system.
  - PAT\_EDIT: Patient information was edited.
  - PAT\_ARCH: A patient was archived.
  - PAT\_HIDE: A patient was hidden from the system.
  - PAT\_DISP: A patient was displayed in the system.
  - PAT\_REST: A patient was restored from the archive.
- Facility
  - FAC\_EDIT: Facility information was edited.
  - AGT\_EDIT: Agent information was edited.
- Assessment
  - ASMT\_ADD: An assessment was added to the system.
  - ASMT\_EDIT: Assessment information was edited.
  - ASMT\_DEL: An assessment was deleted from the system.
  - ASMT\_HIDE: An assessment was hidden from the system.
  - ASMT\_DISP: An assessment was displayed in the system.
  - ASMT\_VIEW: An assessment was reviewed.
  - ASMT\_EXPT: An assessment was exported.
  - ASMT\_COMP: Data entry was completed for an assessment.
  - ASMT\_DONE: An assessment was marked as ready for export.
- Employee
  - EMP\_ADD: An employee was added to the system.
  - EMP\_DEL: An employee was deleted from the system.
  - EMP\_EDIT: Employee information was edited.

The report generated for each object instance will include the events that were defined by the System Administrator during the **Event Tracking Setup** function.



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## IRF-PAI Assessment Forms

The user can access the print function for an individual assessment from the **IRVEN Management** screen by clicking on the <PRINT FORMS> button located on the bottom of the screen. The Adobe Acrobat Reader will be launched with a PDF representation of the IRF forms and a data overlay containing the assessment data. As a result, the *Print* dialog box may appear if the silent printing option is not enabled. Click on the <OK> button to print the complete assessment.

IRVEN also has the capability to print multiple assessments contained in a standard export file. This capability can be accessed by selecting the Print Assessment(s) From File option from the OPTIONS menu item. The *IRVEN Print Assessment* dialog box will be displayed.

The user must provide the file path/name for the file containing the assessment(s). The user may then check for errors in the assessments by clicking on the <ERROR CHECK FILE> button. In order to proceed with printing, click on the <PRINT> button. A printer dialog box will appear for each assessment processed in the file. Click on the <OK> button to proceed. The user can stop printing assessments by pressing the <ESC> key. A message box will be displayed stating the number of assessments printed.

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## IRF-PAI Assessment Report

From the **IRVEN Management Screen**, users may print a report that displays the assessment data for selected screens. To print an assessment, select the assessment and click on the <PRINT REPORT> button. The *Select Report Options* popup box will appear.

Using the Include Screens list box, select the IRF-PAI assessment screens to be included in the report. To include all of the assessment screens, click on the <Select All> button. To clear the selections in the Include Screens list box, click on the <Clear All> button. For non-508 mode users, click on the <View Report> button to display the report in the **Report View** window. For 508 mode users, click on the <Save Report> button to save the report to a PDF file. Click on the <Close> button to return to the **IRVEN Management Screen**.

For non-508 mode users, the report appears in the **Report View Window**. The user can scroll through the report, move from page to page, and zoom in on the report. In addition, the user can save the assessment to PDF, RTF, or text files, or print the assessment.

# Appendix A

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## 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 be backed up and archived before the Repair/Compact utility begins. Not all damaged Microsoft 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 database with an ".MDB" 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** function of the **Repair/Compact** utility tries to repair any index corruption and attempts to recover from data loss.

The **Compact** function of the **Repair/Compact** utility program 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/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 a database 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.

