



HCHS Recruitment Data Management System

Users Guide

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Prepared by the
Collaborative Studies Coordinating Center

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Introduction

The HCHS Recruitment Data Management System runs on hand-held computers and uses forms software with hand-writing recognition software. The system was developed to replace paper data collection at household screening and rostering. An algorithm programmed into the computer will compute the selection probability and determine household selection. The system is not dependent on an internet connection. When an internet connection is available, data files from the hand-held devices are uploaded to the HCHS server and integrated into the main HCHS Data Management System.

Using the Ultra-Mobile Hand-held Devices

A diagram of an Ultra-mobile device is shown below.



The hand-held devices do not have physical keyboards. The data entry software uses hand-writing recognition so when filling out forms, you use the stylus to write responses. However, to enter information outside the data entry system (such as login IDs or passwords) you must use an on-screen keyboard.

To display the on-screen keyboard, you can

- Press the keyboard button; or
- Use the stylus to tap the keyboard icon displayed in the system tray (located on the bottom right of the screen).

To use the on-screen keyboard, you can

- Use the stylus to tap each letter; or
- Use the cursor toggle to position the cursor over each letter and press the left mouse key to select.

Logins

To protect confidential information and prevent unauthorized data access, the HCHS Recruitment System includes several security components.

In order to access the device, you must log into Windows. To enter the password, use **the on-screen keyboard with the cursor and mouse** to enter your site Windows password. To enter any special characters, click the shift key on the left hand side of the on-screen keyboard. Once the shift is initialized, the number keys will change to special characters. Once the user clicks on the appropriate special character, the keyboard reverts back to display numbers on the keyboard.

All passwords are provided to Field Centers by the Coordinating Center.

Using TrueCrypt

The hard drive on the hand-held includes an encrypted volume where all HCHS data are stored. The software used for the encryption is called TrueCrypt.

The DMS requires access to the encrypted volume and in order to access or write to files to the encrypted volume, you must enter the password for the TrueCrypt application each time you power up the tablet PC. You may also need to restart TrueCrypt if your tablet goes into sleep mode. If that occurs, you should receive a notification from TrueCrypt.

Procedures

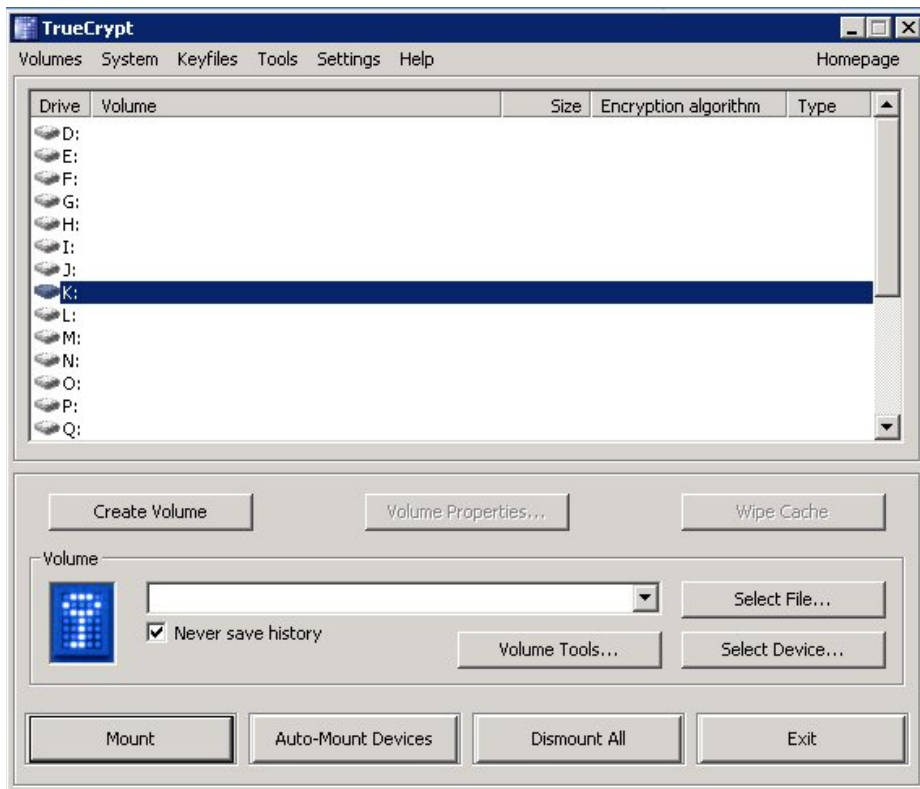
Truecrypt Automatic Start

If you boot the device from a powered-off state, Truecrypt will start automatically and prompt you for the password. Enter the password by using the stylus and on-screen keyboard and select 'OK'.

TrueCrypt Manual Start

If the device has gone into sleep mode and you restart it, you will have to start Truecrypt manually.

- 1) Double-click the TrueCrypt icon to start the application. The main TrueCrypt window will be displayed.



- 2) From the upper menu, choose 'Volumes' -> 'Mount Favorite Volumes'.
- 3) Volume K should be assigned a file location.

- 4) Enter password. For this password you can use the on-screen keyboard and the stylus. Press **'OK'**. Click **'Exit'**.

If the 'Mount Favorite Volumes' fails to find the correct file, you can select it manually.

- 1) Make sure that the line representing the K: drive letter is highlighted.
- 2) Press the **Select File** button
- 3) Navigate to *My Documents/encryption_volume/test.txt* and press **Open**. You will be returned to the main TrueCrypt screen.
- 4) Press **Mount**. You will be prompted to enter your password. Enter your password and press **OK**.
- 5) Information about your encrypted volume should now be displayed on the K: drive line. If you see this information, you should have access to your encrypted files.
- 6) Press **Exit** to exit the main TrueCrypt window.

Using Mi-Forms

To navigate through forms in the HCHS Recruitment system, ALWAYS use the buttons on each form rather than the Mi-Co tool bar buttons. We have programmed a work flow that facilitates form entry. The Mi-Co provided tool bars and icons can cause problems with this flow and with the data collected.

It is recommended that certain Mi-Co tool bar icons be hidden in order to remove them from the screen. Specific icons that need to be hidden are "Finish current session" and "Close current session". To hide these icons, while in Mi-Forms, go to Tools->Options->Toolbars. To hide the icon, uncheck each item to be removed from the on-screen tool bar.

Entering Data

Checkboxes

Checkbox groups are form data elements that can be selected by placing marks in one or more checkboxes. If you need to override a checkbox entry, simply mark the desired checkbox, and the system will recognize that entry as the final response.

If you need to remove an entry, use the scribble-out mechanism. To scribble-out an entry, move the stylus back and forth over the entry. This method will clear any unwanted entry and return the field to blank. You may need practice to perfect this technique.

Text Fields

Constrained text fields allow you to enter text data. These fields are made up of boxes, each of which can contain at most a single character. To enter data into this type of field, just write in the box or boxes you wish to populate.

After you finish writing, handwriting recognition is performed by the software and the ink is replaced with the actual recorded data. Ink will be in either blue or red. Red is considered a questionable response. However, both blue and red color responses are acceptable for upload into the study DMS. Confirming that the computer has correctly recognized all the writing is strongly encouraged at this stage because once a form is saved the data is locked and cannot be changed using Mi-Forms.

If you need to correct the value in a field on an active form, do that by writing over each incorrect character with a replacement character. Handwriting recognition is run again and the values are replaced.

If you need to remove a character, the scribble-out mechanism used with checkbox groups also works here.

Picklists

Picklists are drop-down lists. To select a value, click the picklist to drop the list of values down. Click a value from the list.

Notelogs

In order to record additional information, notelog fields are provided on the roster entry screen, on the last page of the ELE, and on the last page of the PSE. Information entered into a notelog can be viewed in the study DMS once the data has been uploaded (click "Problem->Note log (CTRL G)" in the top bar menu). Information entered on the roster entry page can be viewed in the HSRB on the DMS in the case code field for each roster entry. The information entered on the ELE and PSE can be viewed in the date entry field for each form.

Handwriting Recognition Tips

- Write in the middle of the box; not too big, not too small, but just right.
- Use UPPERCASE block letters.
- Distinguish clearly between the curved parts of characters and the angled parts of characters.
- Use a simple diagonal slash through checkboxes; no big tails.
- Avoid retracing lines when possible.
- Write as quickly, but as neatly as you can.

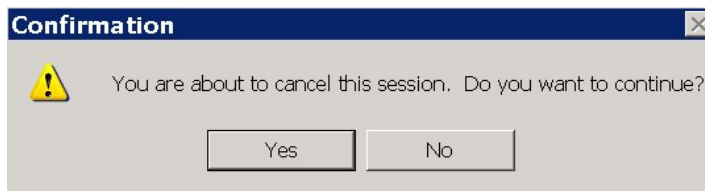
If Mi-Co cannot interpret your writing, you might see a blue select arrow below the box. You can click on this arrow to see what Mi-Co thinks you might mean. You can choose a letter listed or re-write your entry.

Navigating and Saving Forms

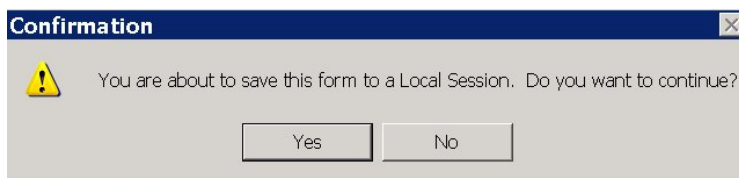
To move from form to form and page to page; to save data in a local session; to cancel a data form; or to save data to the server, **ONLY** use the buttons on the displayed forms. Do NOT use the Mi-Co tool bar and icons. As mentioned previously, the use of the Mi-Co tool bar and icons will interrupt the programmed flow and cause problems with data collection.

The following buttons are available on some, but not all the forms or pages of the forms. The buttons prompt the user for confirmation.

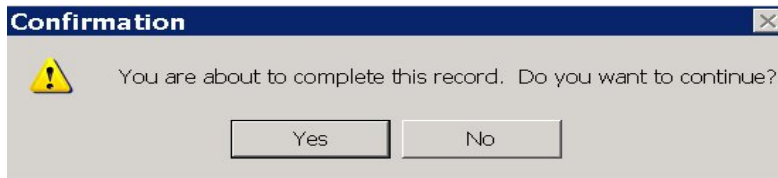
- **Cancel** – from the first page of any form. Clears the data from the form and returns to the roster display or, if on HSR page 1, to the Mi-Forms entry screen. Displays the confirmation prompt to make sure:



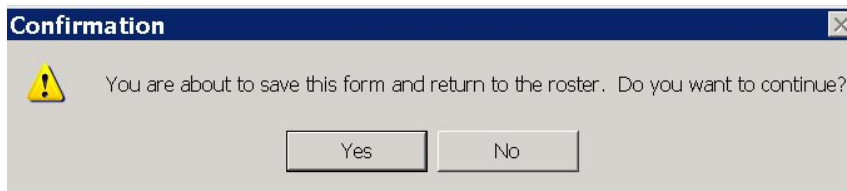
- **Previous Page** – available in the ELE and PSE. Allows user to go to the previous page of the form.
- **Next Page** – goes to the next page of a form.
- **Save Local Session** – from page two (roster) of the HSR form. Choosing this button saves the current forms entered for this household in the appropriate EXCEL spreadsheets on the Kdrive AND allows the user to access the HHID record at a later time. Although the user can go back to the record for this household ID, page 1 of the HSRB is locked and cannot be modified from the hand-held device. The user can enter new rows into the roster and can enter ELE and PSE forms for any roster rows that do not have existing ELE and PSE forms. Displays the confirmation prompt:



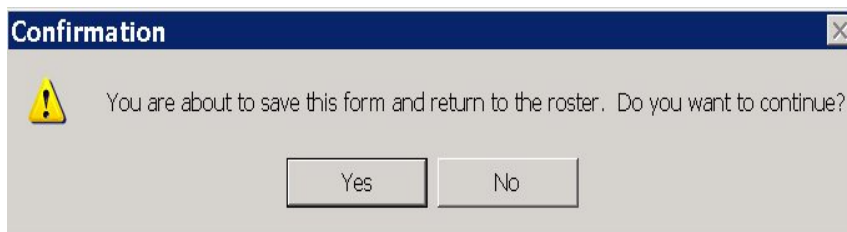
- **Household Complete** – from any page of the HSR form. Choosing this button saves all household information to the HSRB EXCEL spreadsheet on the Kdrive on the hand-held device. After completing a household, you are not able to view any information for this household on the hand-held device. Displays the confirmation prompt:



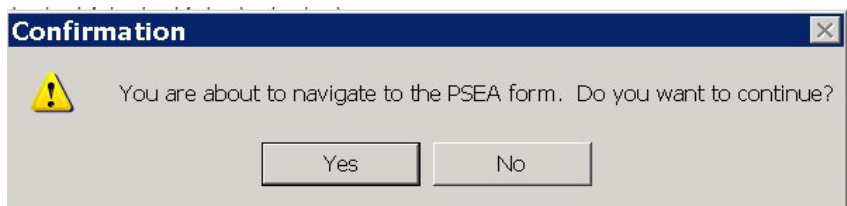
- **Save Roster Entry** – from the roster entry form. Saves the data from the active roster row and returns to the roster display form. Displays the confirmation prompt:



- **Save Back to Roster** – from the last page of the ELE or PSE form. Choosing this button saves the current form and returns to the roster display form. Displays the confirmation prompt:

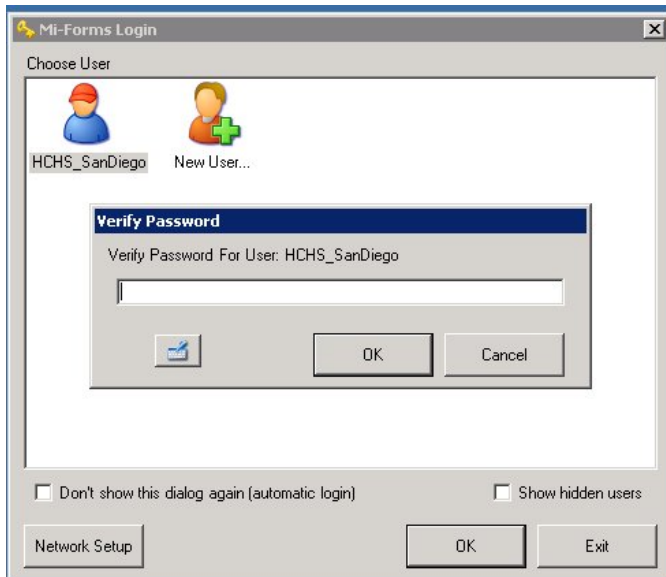


- **Go to PSE** – from the last page of the ELE form. Choosing this button saves the ELE form and displays the PSE form for the same participant ID. Displays the confirmation prompt:



Logging on to Mi-Forms

- 1) Double-click the Mi-Forms icon to start the application.
- 2) With the stylus, choose the user.

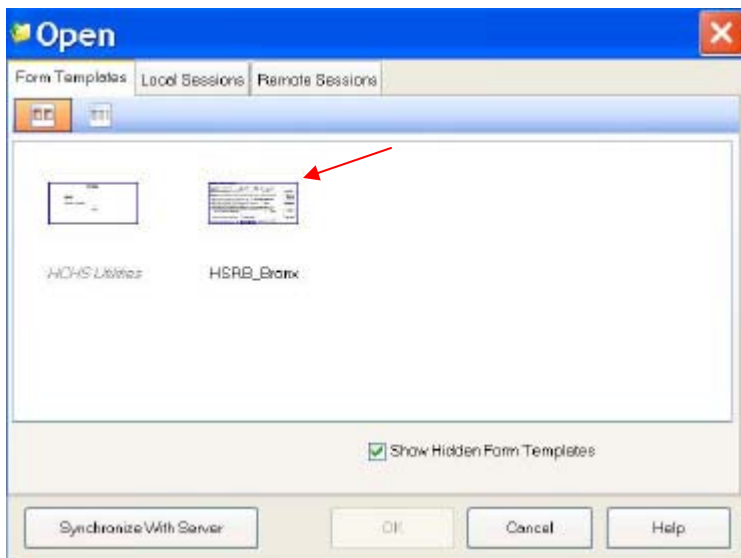


- 3) In the 'Verify Password' box, enter your Mi-Forms password using the stylus and on-screen keyboard.
- 4) Once you have entered the appropriate password, Mi-Forms will try to download form templates via an internet connection. If an internet connection is available, Mi-Forms will automatically download form templates, and the user can continue in the Mi-Forms application. If a connection is not available, a message pops-up stating "Server reported an error while listing available templates". **Unless field centers have received notification of form template updates, the user should click okay and continue with the Mi-Forms application.** If field centers have received notification of form template updates from the CC, it is imperative that users move to an area where an internet connection is available in order to download updates to the form template.
- 5) Mi-Forms screen will appear.
- 6) Click the yellow folder with the green arrow to open a form template.

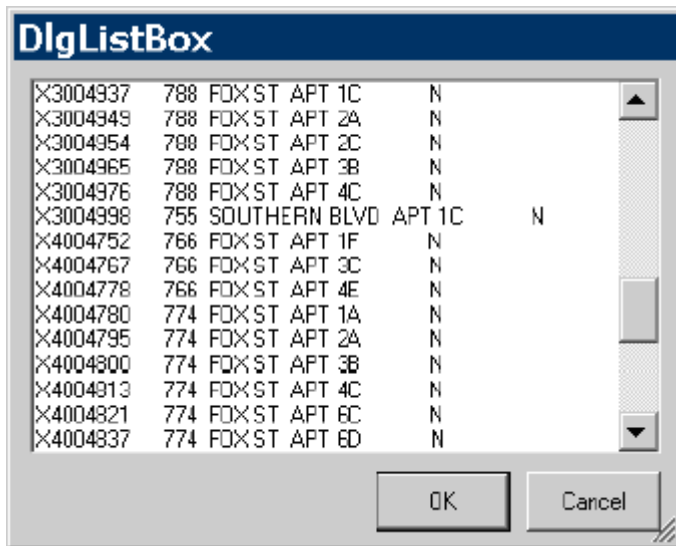


Entering Data

To enter data into a form, double click on the displayed HSRB form template.



Before the HSRB form opens, a list of Household IDs that have been assigned to this hand-held PC is displayed. The list displays the Household ID and the street address. To screen a household, pick the appropriate Household ID from the list by highlighting it with your stylus and clicking the 'OK' button to populate a HSRB form with the appropriate information for the household selected.



Multi-Unit Feature

The HSRB household screening application used in the HCHCS/SOL has the capability to be used to screen single or related groups (e.g. drop units) of households in a dwelling.

The multi-unit feature is to be used in the following way:

- The upper limit for use of the “multi-unit” feature is 30. Dwellings that have more than 30 units must be handled manually via an address discrepancy enumeration method so that a modified screening list can be supplied by the coordinating center. Follow instructions for completing the Address Discrepancy form and submitting it to the CC
- Apartment buildings at the Bronx and San Diego will have individual units listed singularly so that a limited number of households is screened per building, i.e. users will **ONLY** use this feature with drop points
- *Only* Chicago and Miami have a household screening list structured so that all units in an apartment building or at one address can be screened using the “multi-unit” feature

Using the Multi-Use Feature

To use the multi-use feature, the recruiter selects an address from the HHID drop list. Note that initially each address has an indicator field of ‘Y/N’ which informs the recruiter of the possible drop point status. If the address is denoted as a drop point on the HHID drop list (i.e. a ‘Y’ appears for that household entry in the list), on the “HCHS/SOL Household Selection” screen the recruiter selects ‘Yes’ and submits the information. The feature can be overridden by simply striking ‘No’.

Mi-Forms

File Edit View Tools Help

Multi-Dwell | Home Page (HCHS_Miami) | HSRB - Miami

HCHS/SOL Household Selection

Is this a multi-dwelling household?

☒ Yes ☐ No

SUBMIT

Once an address has been identified as a multi unit or not, and the recruiter has clicked “submit”, the field is locked, and the recruiter cannot change the status of that field.

Mi-Forms

File Edit View Tools Help

Multi-Dwell | Home Page [uccpnp (local user)] | HSRB_Development

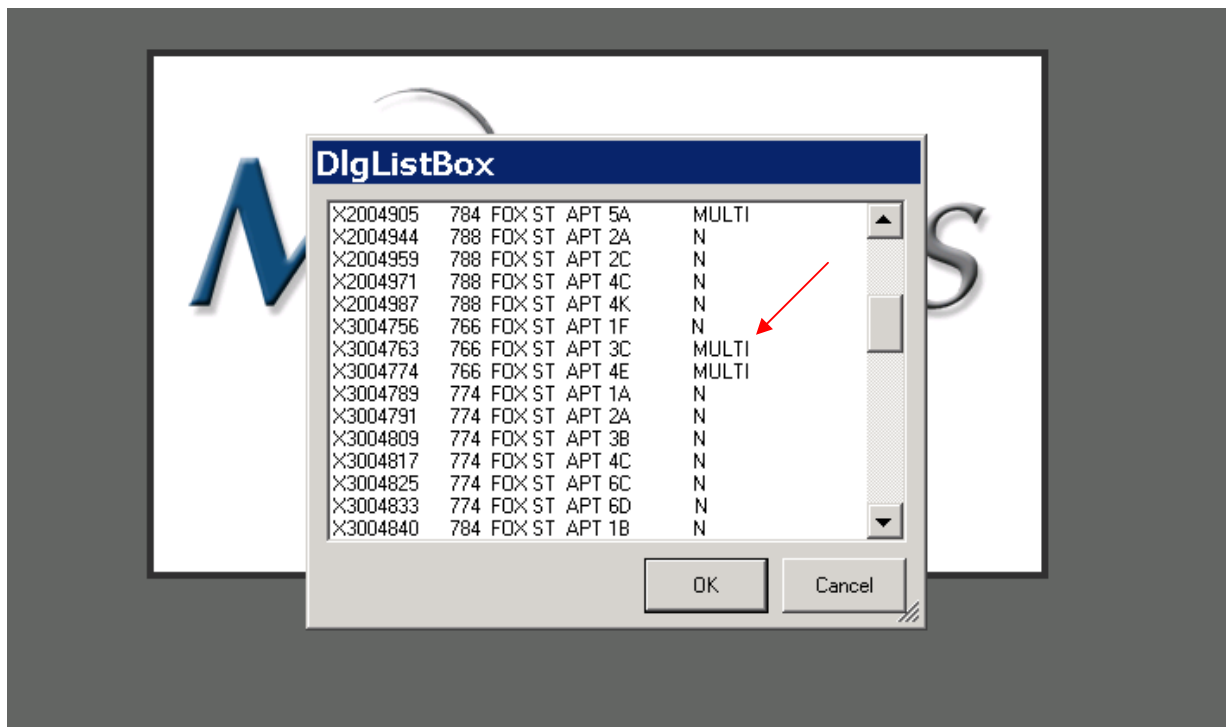
HCHS/SOL Household Selection

Is this a multi-dwelling household?

☒ Yes ☐ No

SUBMIT

For addresses denoted as multi unit dwellings, the program generates a HSRB form with a different HHID so that the initial (original) HHID on the drop list becomes the reference HHID. The indicator field also changes to ‘MULTI’. The recruiter continues to select the reference HHID until all units (up to 30) have been screened. Currently, any address identified as ‘MULTI’ remains on the HHID drop list.



A periodic cleaning up of the HHID drop list is recommended. See Addendum 1: Clean up of Main HHID Pick List to this manual for detailed instructions on cleaning up the main HHID file.

HSRB

- 1) The HSRB form is displayed. Administrative fields such as Household ID, Contact Occasion, Sequence #, and Completion Date are pre-filled.

HCHS/SOL Household Screening Form
 766 FOX ST APT 1F

HOUSEHOLD ID NUMBER:	X 4 0 0 4 7 5 2	FORM CODE: HSR VERSION: B	Contact Occasion	0 1	SEQ #	0 1
ADMINISTRATIVE INFORMATION		0a. Completion Date:	0 2 / 1 8 / 2 0 0 9	0b. Staff ID: [][]		

- 2) Fill in your staff ID by block printing in the boxes provided. Check that the form has correctly interpreted your writing. Make any corrections necessary by simply writing over the incorrectly identified character. Staff ID is a required field and must be filled before the form is saved. The user cannot move forward in the rostering process until this field is complete.
- 3) Check 'yes' or 'no' as appropriate for question 1. If you check 'no', you are finished with the screening of this household. To close the HSRB form, the recruiter must complete questions 2 and 3 and calculate the random selection value. The recruiter should enter the special numerical code of "99" and then strike through "Calculate Selection". Once every field has an entry, select the button labeled **'Household Complete'** to save all the entered information to the

HSRB EXCEL spreadsheet on the Kdrive on the hand-held device and to exit the form.

- 4) Fill in the text boxes associated with questions 2 and 3 as appropriate. Again, check the accuracy of the handwriting recognition software and correct as needed. If you filled in "00" as the response to question 3, calculate the random selection value and then choose '**Household Complete**' to save the data and exit the form.
- 5) To calculate the random selection value, pass your stylus through (stroke) the box labeled 'Calculate Selection'. The selection probability and cut-point c values in the text boxes will automatically fill with values computed by the program. Based on the result of comparing the values, the checkbox for question 3a will be filled automatically by the computer. Additionally, a message box showing the selection status of this household will be displayed, i.e. roster individuals 18 – 74 or roster individuals 45 – 74. Press '**OK**' on the message box to clear it from the screen. NOTE: The Calculate Selection box can be used only once for a household since it is "deactivated" after each use. Once calculated, the selection probability and cut-point c values and question 3a fields are now locked and cannot be altered.

Double-check that you have correctly completed all of the information on page 1 of the HSRB before using the '**Next Page**' box to advance to the roster page. When you are ready, stroke the '**Next Page**' box to advance to page 2 (roster) of the HSR. NOTE: Unless saved to a local session, you will NOT be able to return to page 1 to view the information if needed. Once you advance to the roster page, the information on page 1 is locked and saved to the HSRB EXCEL spreadsheet on the Kdrive. You will not be able to make any further changes to page 1 of the HSRB on the hand-held device once you advance to the roster. ALL changes to page 1 of the HSRB form must be made on the study wide DMS once the data have been uploaded.

- 6) As the roster displays, you will note that the script displayed at the top of the page is dynamically keyed to the auto-filled response to question 3a using the selection rules for the HSRB.

We would like to invite all persons who are between the ages of 18-74 who are Hispanic/Latino living in this household to participate in the study. Please list the names of all individuals aged 18-74 who are Hispanic/Latino and who consider this their permanent residence (include yourself). We will need first name and last name, gender of the person, age, and relationship to you, and if possible, the telephone number.

Nos gustaría invitar a todas las personas que tienen entre 18 a 74 años de edad que son hispanas o latinas que viven en este hogar para participar en el estudio. Por favor, déjenos saber los nombres de todas las personas que tienen entre 18 a 74 años de edad que son hispanas o latinas y que consideran este lugar su dirección (hogar, vivienda) permanente (inclúyase usted). Necesitamos el nombre, el apellido, el sexo, la edad, y el parentesco o tipo de relación que tienen estas personas con usted. Y, si posible, el número de teléfono.

First Name	Last Name	Telephone	Case Code
A.			
B.			

- 7) If this is the first time the user has accessed the roster page for this household you will see a blank grid with roster row letters A-H displayed down the left-hand column and headers for First Name, Last Name, Telephone Number, and Case Code displayed along the top row. Use '**Next Page**' to access rows I-L of the

roster. Use **‘Household Complete’** to save all work for this household to the HSRB EXCEL spreadsheet on the Kdrive. Use **‘Save Local Session’** if you have not finished rostering this household and want to continue the roster another time. This feature allows you to continue entering roster information and the ELE and PSE forms associated with those roster rows.

- 8) To complete roster information for the first individual in this household pass your stylus through (stroke) the “A” in the left-most column on the first roster row. A full screen to enter information on this individual will be displayed. The roster row letter will be pre-filled.

Please list the names of all individuals aged 18-74 who are Hispanic/Latino and who consider this their permanent residence (include yourself). We will need first name and last name, gender of the person, age, and relationship to you, and, if possible, the telephone number.
 Por favor, déjenos saber los nombres de todos las personas que tienen entre 18 a 74 años de edad que son hispanas o latinas y que consideran este lugar su dirección (hogar, vivienda) permanente (inclúyase usted). Necesitamos el nombre, el apellido, el sexo, la edad, y el parentesco o tipo de relación que tienen estas personas con usted. Y, si es posible, el número de teléfono.

A															
First Name:	B	I	L	L											
Last Name	J	O	N	E	S										

- 9) Enter the fields on the screen. As before, check and correct the interpretation of the hand-writing recognition software as you go. Double-check all of your information before you stroke **‘Save Roster Entry’** because you will not be able to return to this roster row entry screen to update information. When you are satisfied that all of the information is correct, stroke **‘Save Roster Entry’**. Use the **‘Cancel’** button if you want to cancel this form and return to the roster listing screen.
- 10) You will be returned to the roster page. The first and last name, telephone number, and case code you just entered will be displayed. These fields are displayed for your information in non-editable fields. No changes may be made to the information on this screen.
- 11) To proceed in filling the roster simply stroke the roster row letter to the left of any blank row and follow the instructions in step 10. Stroke the **‘Next Page’** button to access roster rows I-L if needed

ELE

- 1) To complete an ELE form for an entry on the roster, on the HSRB roster list, stroke the roster row letter to the left of any filled row -- that is a row on which the first and last name, phone and case code information is displayed.

	First Name	Last Name	Telephone	Case Code
A.	BILL	JONES		

- 2) A blank ELE form will be displayed. A participant ID will automatically be selected and pre-filled. The Contact Occasion, Sequence #, Completion Date, Household ID and roster row are pre-filled. As with the HSRB form, you **MUST** fill in your Staff ID. Fill the check boxes and text boxes to complete the form as necessary.

HCHS/SOL Individual Eligibility Checklist									
ID NUMBER:	X	6	0	0	2	5	4	6	
					FORM CODE: ELE VERSION: A 2/19/08		Contact Occasion		01
							SEQ #		01
Acrostic:									
ADMINISTRATIVE INFORMATION									
0a. Completion Date (mm/dd/yyyy):					02	/	18	/	2009
					0b. Staff ID:				
0c. Household ID (HSR):					X	4	0	0	4752
					0d. Roster row letter (HSR Q5):				
					A				

- 3) Stroke the **'Next Page'** button to advance to page 2 of the ELE form. Stroke **'Cancel'** if you have entered information incorrectly and do not want to save this ELE form. You will be returned to the roster display page.
- 4) If you have completed the ELE and are ready to exit this form, on the last page of the ELE form you can:
 - a. Select the **'Save Back to Roster'** to return to the roster display page
 - b. Select the **'Go to PSE'** button to display a PSE form for this participant.

PSE

- 1) To enter a PSE form for a participant, select the **'Go to PSE'** button on the last page of the ELE form. This is the **only way** to enter a PSE form on hand-held system.
- 2) When the PSE form is displayed, the participant ID will automatically be pre-filled. The Contact Occasion, Sequence #, Completion Date, Household ID and roster row will all be pre-filled. You **MUST** fill in your Staff ID. Fill the check boxes and text boxes to complete the form as necessary.

HCHS/SOL Participant Safety Screening Form									
ID NUMBER:	X	6	0	0	2	5	4	6	
					FORM CODE: PSE VERSION: A 12/04/07		Contact Occasion		01
							SEQ #		01
Acrostic:									
ADMINISTRATIVE INFORMATION									
0a. Completion Date (mm/dd/yyyy):					02	/	18	/	2009
					0b. Staff ID:				

- 3) Stroke the **'Next Page'** button to advance to page 2 and page 3 of the PSE form. As with the ELE, stroke **'Cancel'** if you have entered information incorrectly and do not want to save this form. You will be returned to the roster display page.

- 4) On the last page of the PSE form, select the ‘**Save Back to Roster**’ to return to the roster display page.
- 5) The roster row display indicates whether an ELE and/or a PSE form has been entered for a participant.

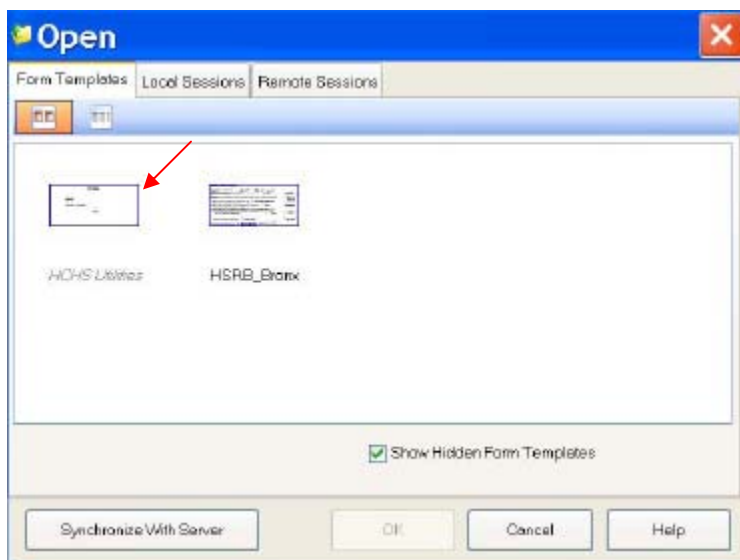
B. VERA LONG 7 EP

Notice the “EP” on the far right side of this roster row display. This indicates that both an ELE and a PSE form have been entered for this participant.

Sending Data to the Server Database

When you are finished with a household, you are ready to send the data to the server database. Once you have chosen to upload the data, the household data that has been saved to the EXCEL spread sheets are uploaded to the HCHS web-based DMS. In order to complete this function, the user **MUST** have a good wireless connection or the upload will not complete successfully.

To upload data that has been saved, open the HCHS Utilities form in MiForms and click the ‘**Upload to Database**’ button. You will be asked to confirm the action, click ‘Yes’ at the prompt. Click ‘Exit’ to return to the MiForms start screen.



Uploaded data are processed at the CC overnight and are available in the HCHS web-based DMS the day after uploads have occurred. Each site has the capability to run the MiForms Upload report in the DMS to view which records were uploaded.

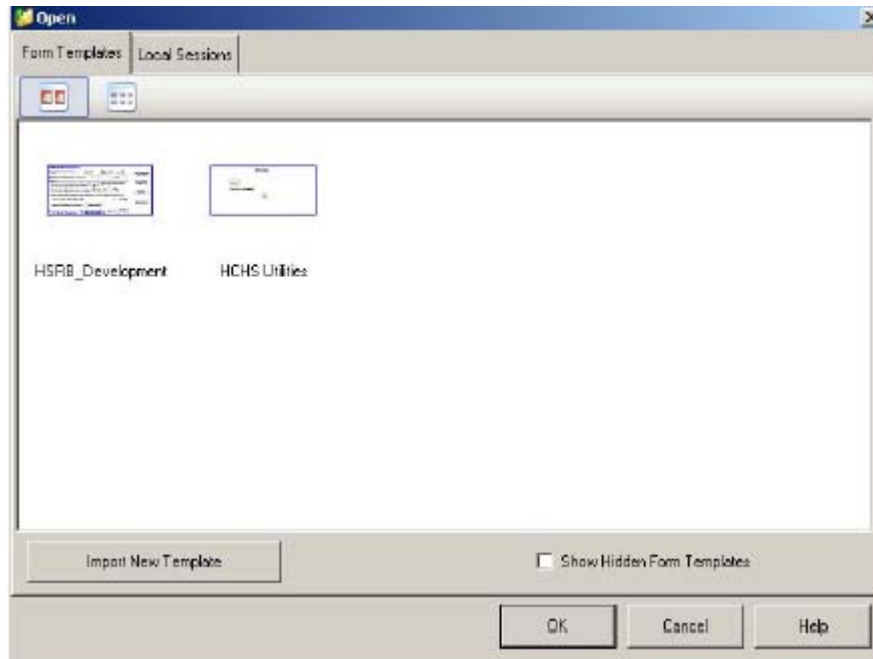
Saving and Retrieving Local Sessions

If you have rostered some participants in a household but want to return to the household to continue the roster or to enter additional ELE or PSE forms, you can save your session locally. To save a local session, choose the **'Save Local Session'** button from page 2 (roster) of the HSR form.

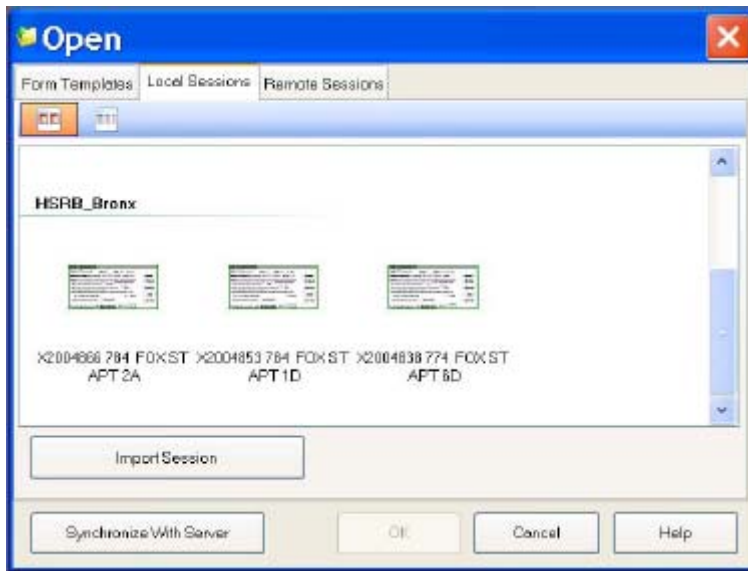
To return to a session saved locally, use the Mi-forms menu.



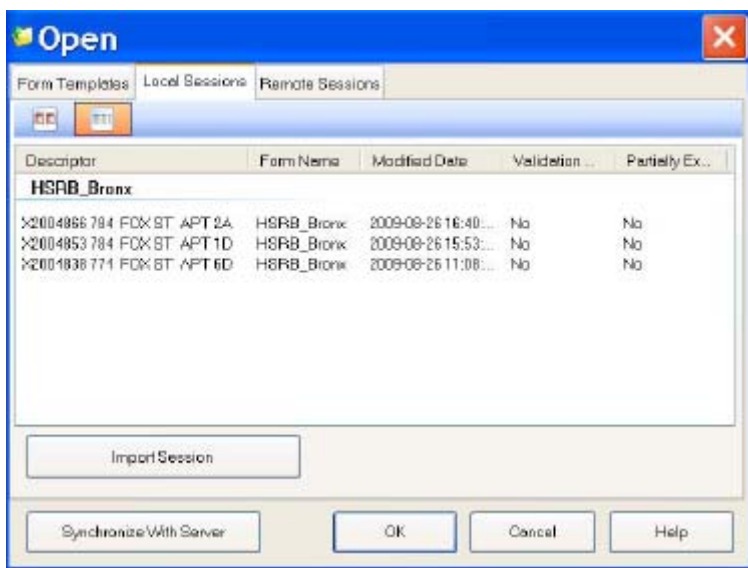
After you click the folder icon, the Open screen will be displayed.



Click the 'Local Session' tab at the top to show saved local sessions which are identified by Household ID and address. Sessions can be displayed by icon



or in list format.



Select the Household ID you want to use and press OK.

Page 1 of the completed HSRB will be shown. Use 'Next Page' to go to the row display to add new roster entries.

Location and Structure of Supporting Excel Spreadsheets

There are several Excel spreadsheets used by the system or generated by the system.

- All data entered into the recruitment system is saved to an Excel file.
- Household and Participant IDs used by the system are stored in Excel files.

Data

Data entered into the HSR, ELE and PSE forms is saved locally to EXCEL spreadsheets located in the root of K: (the encrypted portion of the hand-held hard-drive). The spreadsheets are named according to form and version with the .XLS extension. For example the ELEA spreadsheet is named ELEA.xls.

The spreadsheets have the same format as the corresponding DMS tables with the exceptions explained below.

- 1) The HSRB is split into two spreadsheets. HSR1B holds columns associated with the fields on page one of the HSRB form. HSR2B holds one row for each entry on the roster page. This means that the structure of HSR1B and HSR2B is quite different from the structure of the DMS table.
- 2) ELEA.xls matches the data entry screen.
- 3) There are a few additional fields in each spreadsheet. These are used for internal processing.

ID Lists

The primary list of household IDs is stored in a subdirectory on K: called

K:\mainhouseholdIDS

The folder name (subdirectory) CANNOT be changed. The application will NOT work if this occurs.

The file can be named whatever you choose as long as

- There is a single file in the directory.
- The file has the .xls extension.

The file holds the information on the households that will be visited with this particular hand-held device. This file is managed by the site and put onto the device as recruiters are assigned to visit certain addresses.

This spreadsheet has information in columns A-E as follows:

A: Household ID

B: Street Address

C: Y/N for drop point (or multi unit) status

D: Filled with the text FREE. The application will switch this text to SELECTED as each Household ID has been accessed.

E. Date and time stamp

The list of participant IDs is stored in a subdirectory on K: called

K:\participantIDS

The folder name (subdirectory) CANNOT be changed. The application will NOT work if this occurs.

The Excel file can be named whatever you choose as long as

- There is a single file in the directory.
- The file has the .xls extension

The file holds a bank of participant IDs for use on the individual device assigned by the CC. This spreadsheet has information in columns A-C as follows:

A: Participant ID

B: Filled with the text FREE. The application will switch this text to SELECTED as each participant ID has been accessed.

C. Date and time stamp

The list of extra household IDs is stored in a subdirectory of K: called

K:\additionalhouseholdIDS

The folder name (subdirectory) CANNOT be changed. The application will NOT work if this occurs.

The Excel file can be named whatever you choose as long

- There is a single file in the directory.
- The file has the .xls extension

The file holds Household IDs which are automatically assigned to HSRB forms by the software for multiple units associated with one physical address.

This spreadsheet has information in columns A-F as follows:

A: Household ID

B: Blank

C: Blank

D: Filled with the text FREE. The application will switch this text to SELECTED as each Household ID has been accessed.

E. Date and time stamp

F. Original HH ID. Referred to as the “reference ID”, this ID is the ID that is displayed on the main HHID pick list. This ID will appear more than once on the Excel spread sheet.

Managing Excel Files of Household Information and Participant IDs

The CC will distribute the needed Excel files to each field center: one master file with main Household IDs and addresses, additional Household IDs files specifically assigned to each handheld device and Participant IDs files specifically assigned to each handheld device. For example, if your site has 5 handheld devices, you will receive: 1 master file with main Household IDs and addresses, 5 files with additional Household IDs and 5 files with Participant level IDs.

To assign a set of Household IDs to a hand-held device so that an interviewer has access to the addresses and associated Household IDs, the master spreadsheet of Household IDs must be subset and the subset copied to the device. It is the responsibility of the each field center to keep track of which households have been assigned to which device and which are unused.

To put a subset of the main Household ID Excel list on a handheld device

1. Open the file in Excel.
2. Highlight the rows to be copied. Select ‘Copy’ from the Edit menu.
3. Open a new spreadsheet. Select ‘Paste’ from the Edit menu.
4. Save the new file as appropriate for your site with the file extension ‘xls’.
5. Copy this file to **K:\mainhouseholdIDS** on the handheld device. Note: You must invoke the True Crypt drive encryption software so the drive K: is available.

Participant level IDs and additional Household IDs are put on the handheld device as described above. However, Participant level ID files are copied to **K:\participantIDS**

and additional Household ID files to **K:\additionalhouseholdIDS**. None of the Excel files should be modified, and only one Excel file can be in the subdirectory at a time.

Below is a list of definite DON'Ts and suggested DOs.

- Do NOT modify file structure of Excel files sent to the field center from the Coordinating Center. If these files are modified, the application will not work properly.
- Do NOT modify folder name/subdirectory structure. If name/structure is modified, the application will not work.
- Do NOT move Excel files between handheld devices. In doing so, there is a high probability of data loss occurring.
- DO name Excel files as appropriate for your site in order to better manage case load.
- DO load a “workable” portion of the master file of main Household IDs list to each handheld device once.
- DO update main Household ID list of each handheld device as necessary by adding rows to the existing Excel spread sheet on the device.
- DO keep a separate tracking file of IDs that are uploaded on each device.

Creation of Supplemental Paper HSRB Screening Forms

In order to create paper HSRB forms while maintaining the dynamic creation of the selection p value for screening, sites can select to save a record to a special EXCEL spread sheet on the Kdrive that can be used to create a hard copy HSRB.

The use of these procedures has been approved for use with **no more than 30% of the sampled address list disseminated from the CC**, i.e. if the list includes 1000 address, you can load 300 household addresses on a device to be used with these procedures. Note that if your site is using the multi unit feature, the potential number of paper forms to be created from the addresses loaded on the device will increase. Addresses can be screened in only one manner, i.e. electronically via the handheld or via hard copy. For quality control, the CC will monitor the implementation of these procedures.

These steps should be carefully followed in order to generate electronic HSRB records that can be used to create paper forms.

A. Preparation of the Handheld Device

1. Choose a specific handheld to be dedicated to be used with these procedures.
2. Select addresses to be loaded on the device for which paper forms will be created.

Before using a device for the creation of paper forms, the initial address pick list should be cleaned up (see Addendum 1: Clean up of Initial HHID Picklist). Any address denoted as “multi” in the picklist **MUST** be finalized, uploaded to the DMS, and removed from the main household ID file.

For management purposes, it is recommended that no more than 100 household addresses are loaded on the device for this purpose at one time. Remember, if the multi unit feature is implemented at your site, the number of records generated could be doubled, tripled or more.

B. Creation of Records

3. Create a log that allows the documentation of the number of units associated with each address when the multi unit feature is invoked
4. In Mi-Forms create a “dummy” HSRB record by completing page 1 of the HSRB. This step requires that all fields are completed using the special entry of “99” for Question 2 and Question 3 on the form.
5. Click “Save Record for Print”

Clicking “Save Record for Print” creates a record in the HSRPRINT.xls file that can be used for the creation of paper forms AND does NOT send this information to the DMS. Once this feature has been invoked, the record is no longer accessible electronically.

6. Once records have been created for each desired household address, copy the HSRPRINTB.xls file from the encrypted K drive to a thumbdrive.
7. Merge the saved file with an electronic version of the HSRB form to create paper HSRB forms. **Fields that MUST be part of the merge are the HHID and the selection p value and cut-point c value.** Other suggested fields to be a part of the merge are the reference ID and the automated recorded response to Question 3.

C. Clean-Up

8. After creating the paper forms, the initial address pick list on the handheld device should be cleaned up (see Addendum 1: Clean up of Initial HHID Picklist).
9. The HSRBPRINT spreadsheet should be archived. It is recommended that key identifiers be in the file name: date, device number, and site name, e.g, PaperHSRB_(DATE)_(DEVICE NUMBER)_(SITE)
10. Send a copy of the HSRBPRINT spreadsheet to the CC. The CC MUST have a copy of the EXCEL file in order to document the linkage between the main HH ID and the reference ID when the multi unit feature is invoked. This information is vital in regards to sampling.

Each field center is responsible for entering the completed paper HSRB form directly into the DMS. Field centers MUST review the duplicate record report generating in the DMS to insure duplicate records have not been created. If a duplicate record is accidentally created, the field center must delete the invalid record.

If this feature is inadvertently invoked by a recruiter while in the field, please instruct the recruiter to **NOT** take measures to correct the error. Instruct recruitment staff to notify the recruitment manager so that a hard copy form can be generated for the household address.

Appendix A Data File Data Dictionaries

HSRB1

Field Descriptor	Field Type	Field Name
Household ID	char(20)	HSR1B_HouseholdID
Reference ID	char(20)	HSR1B_ReferenceID
Contact Occasion	char(5)	HSR1B_Contact
Sequence	char(5)	HSR1B_Seq
Completion Date	datetime	HSR1B0A
Staff ID	char(5)	HSR1B0B
Does anyone live in this household who is Hispanic	char(5)	HSR1B1
Total number of Hispanic/Latino people in this household	char(5)	HSR1B2
How many between 18-74	char(5)	HSR1B3
Selection less than cutpoint	char(5)	HSR1B3A
Selection	char(10)	HSR1B3A1
Cutpoint	char(10)	HSR1B3A2
File No	char(5)	HSR1B_FileNo
Username	char(50)	HSR1B_Username
Timestamp	datetime	HSR1B_Timestamp
Data Sent	char(10)	HSR1B_DataSent
Machine Name	char(50)	HSR1B_MachineName

HSRB2

Field Descriptor	Field Type	Field Name
Household ID	char(20)	HSR2B_HouseholdID
Roster Row	char(5)	HSR2B_RosterRow
First Name	char(25)	HSR2B1
Last Name	char(25)	HSR2B2
Gender	char(5)	HSR2B3
Age	char(5)	HSR2B4
Relationship to respondent	char(25)	HSR2B5
Telephone number	char(20)	HSR2B6
Case Code	char(25)	HSR2B7
Notelog	char(50)	HSR2B_Notelog
File No	char(5)	HSR2B_FileNo
Username	char(50)	HSR2B_Username
Timestamp	datetime	HSR2B_Timestamp
Data Sent	char(10)	HSR2B_DataSent
Machine Name	char(50)	HSR2B_MachineName

ELEA

Field Descriptor	Field Type	Field Name
Participant ID	char(10)	ELEA_ParticipantID
Contact Occasion	char(5)	ELEA_Contact
Sequence	char(5)	ELEA_Seq
Completion Date	datetime	ELEA0A
Staff ID	char(5)	ELEA0B
Household ID	char(10)	ELEA0C
Roster Row	char(5)	ELEA0D
Do you prefer to communicate in Spanish or English	char(5)	ELEA1
How old are you	char(5)	ELEA2
Do you consider yourself Hispanic/Latino	char(5)	ELEA3
Do you have plans to move away from the area	char(5)	ELEA4
Are you on active military duty	char(5)	ELEA5
Individual participation status	char(5)	ELEA6
Appointment Date	datetime	ELEA7A
Appointment Time - Hour	char(10)	ELEA7B1
Appointment Time - AM/PM	char(5)	ELEA7B2
Notelog	char(50)	ELEA_Notelog
File No	char(5)	ELEA_FileNo
Username	char(50)	ELEA_Username
Time Stamp	datetime	ELEA_Timestamp
Data Sent	char(10)	ELEA_DataSent
Machine Name	char(50)	ELEA_MachineName

PSEA

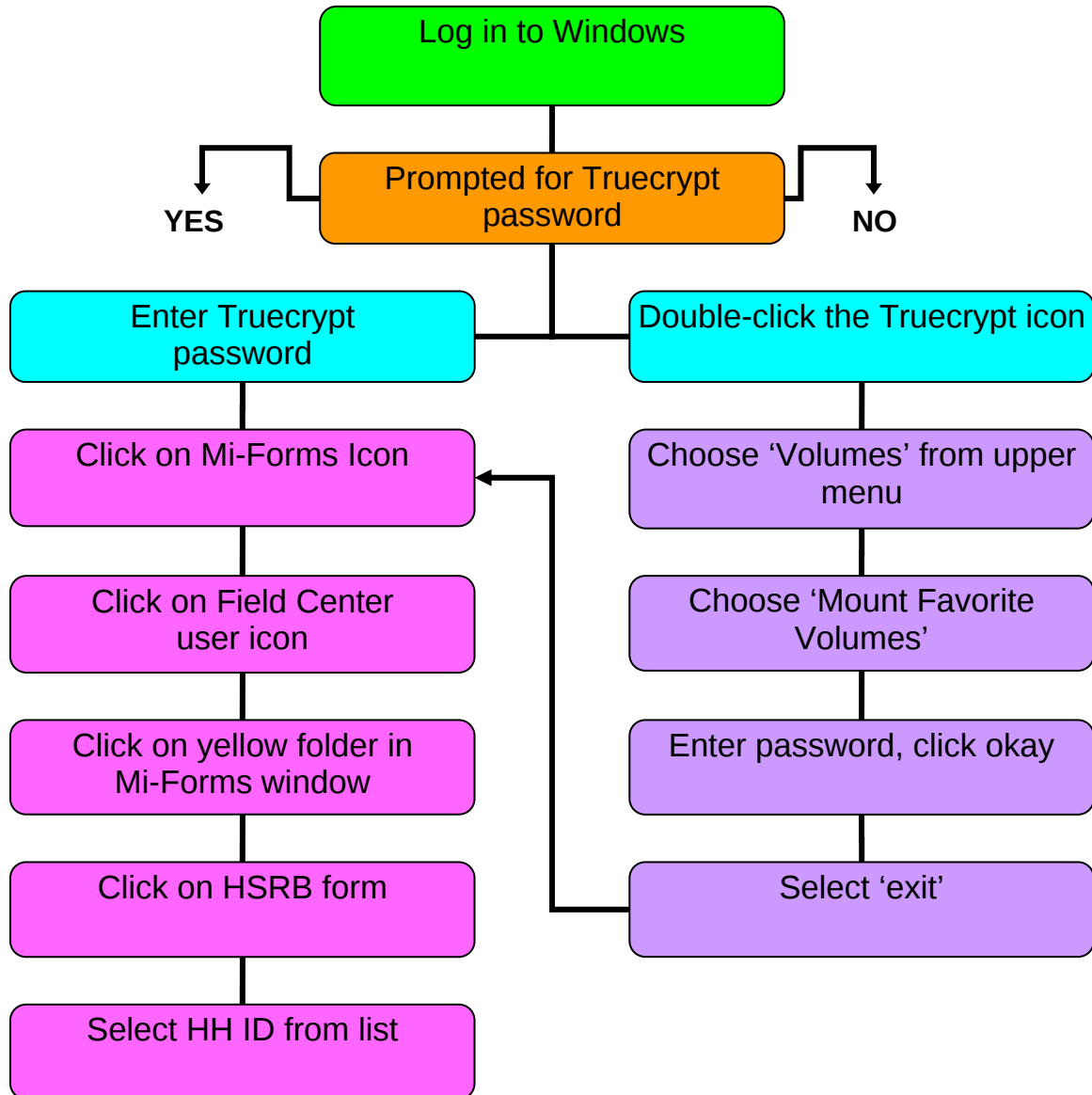
Field Descriptor	Field Type	Field Name
Participant ID	char(10)	PSEA_ParticipantID
Contact Occasion	char(5)	PSEA_Contact
Sequence	char(5)	PSEA_Seq
Completion Date	datetime	PSEA0A
Staff ID	char(5)	PSEA0B
Are you pregnant or breastfeeding	char(5)	PSEA1
"Do you need assistance reading, hearing, or getting on exam table"	char(5)	PSEA2
Specify	char(50)	PSEA2A
Do you have a pacemaker or defibrillator	char(5)	PSEA3
Have you been told you have diabetes	char(5)	PSEA4
Do you have artificial valves in your heart	char(5)	PSEA5
Have you been treated for infective	char(5)	PSEA6

endocarditis		
Have you had a serious heart condition from birth	char(5)	PSEA7
Have you had a heart transplant	char(5)	PSEA8
Do you have artificial joints or prostheses	char(5)	PSEA9
"Have you had a heart attack, stroke, or eye surgery in the last 3 months"	char(5)	PSEA10
Notelog	char(50)	PSEA_Notelog
File No	char(5)	PSEA_FileNo
Username	char(50)	PSEA_Username
Time Stamp	datetime	PSEA_Timestamp
Data Sent	char(10)	PSEA_DataSent
Machine Name	char(50)	PSEA_MachineName

HSRBPRINT – EXCEL Data Output Fields

Field Descriptor	Field Type	Field Name
Household ID	char(20)	HSR1B_HouseholdID
Reference ID	char(20)	HSR1B_ReferenceID
Contact Occasion	char(5)	HSR1B_Contact
Household Address from Main HHID file	n/a	HSR1_Address
Sequence	char(5)	HSR1B_Seq
Completion Date	datetime	HSR1B0A
Staff ID	char(5)	HSR1B0B
Does anyone live in this household who is Hispanic	char(5)	HSR1B1
Total number of Hispanic/Latino people in this household	char(5)	HSR1B2
How many between 18-74	char(5)	HSR1B3
Selection less than cutpoint	char(5)	HSR1B3A
Selection	char(10)	HSR1B3A1
Cutpoint	char(10)	HSR1B3A2
File No	char(5)	HSR1B_FileNo
Username	char(50)	HSR1B_Username
Timestamp	datetime	HSR1B_Timestamp
Machine Name	char(50)	HSR1B_MachineName

Appendix B Logging in to Windows, Truecrypt and Mi-Forms



Appendix C Strike Button Quick List

To be used by administrator. Saves current record to a special EXCEL spread sheet on the Kdrive which does NOT get uploaded to the HCHS study wide DMS.

**SAVE RECORD
FOR PRINT**

Saves all household information to an EXCEL spread sheet on the Kdrive.

**HOUSEHOLD
COMPLETE**

Clears data from the current form and returns to the roster display or, if on HSR page 1, to the Mi-Forms entry screen.

CANCEL

Goes to the next page of a form.

NEXT PAGE

Goes to the previous page of a form.

**PREVIOUS
PAGE**

Saves the current forms entered for a household in the appropriate EXCEL spreadsheets AND allows the user to access the record at a later time and enter new rows into the roster.

**SAVE LOCAL
SESSION**

Saves the data entered on the roster entry page and returns to the roster display form.

**SAVE ROSTER
ENTRY**

Saves the current form and returns to the roster display form (ONLY on the last page of the ELE and PSE form).

**SAVE BACK
TO ROSTER**

Saves the ELE form for a participant and displays the m PSE for the same participant.

GO TO PSE

Appendix D MiForms Client and MiForms Agent

The Mi-Forms Client exists to display the form template(s) and allow real-time interaction by the recruiter through the touch-screen tablet PC. When the tablet PC has a wireless link, the Client establishes a connection with the Mi-Forms Server and automatically downloads any new form template(s) that may have been uploaded to the Server. The Mi-Forms Client attempts to poll the server whenever it is started. This may mean that the Client log will show some informational messages when a wireless link could not be established. This does not indicate an error condition. It just shows that there was no wireless connection present when the Client was started up.

The Mi-Forms Agent is a pop-up utility that is meant to inform a user that a new form template has been uploaded to the Mi-Forms Server. This information would only be useful in the case where a user was interacting with the Mi-Forms Client in a long, continuous session with a strong wireless connection. In this case, the user would be alerted to the existence of a new form template and use the "Synchronize with Server" button in the Mi-Forms Client to initiate a template download. In the HCHS study, there is very little (or no) real use for the Mi-Forms Agent. The Agent attempts to continuously poll the Mi-Forms Server to discover when a new template has been uploaded. Therefore, there is a high probability that the Agent log file will show multiple failed attempts to establish a connection with the Server. Again, all this shows is that the tablet PCs in our study do not maintain a continuous, strong wireless connection.

Appendix E Handheld Device Trouble Shooting Guide

Issue	Resolution
1. One of the tablets needs repair, what do we do?	The units have a one year limited warranty on parts and labor. The date of purchase is crucial in determining warranty service. The model eo V7110 units were purchased in two batches under different purchase orders by the University of North Carolina Biostatistics Department, CSCC. Therefore, you need to obtain the purchase order information from the CC for the serial number of the unit that needs repair before beginning the process of obtaining a RMA number from Tablet Kiosk. Their website is located at the URL http://www.tabletkiosk.com/
2. Can I initiate a repair to the device myself?	Yes, once you have proof of purchase information for your unit there is an online RMA request process that is needed in order to return the unit to the factory in California for repair/replacement.
3. How do I ship the mini-tablet to Tablet Kiosk?	First, backup your work! All Excel files on the Truecrypt partition drive should be copied to a secure location in case you need to restore them when the UMPC is returned to your center. See the Recruitment Data Management users guide for directions on where to find these files. Second, use the original packing material and box to encase and protect the unit. You need to pack the original box into a larger box filled with padding material (such as styrofoam noodles, airbags, or bubble wrap) for secure shipping. Follow the instructions on the Tablet Kiosk page for support.
4. Who pays for repairs out of warranty?	While the units are under warranty, the CC will cover parts & labor. After the warranty expires in 2009, each site is responsible for the repair of the device.
5. I opened up Mi-Forms and do not see the picklist.	Make sure that Truecrypt has been initialized. Review the users guide for specific instructions.
6. For some reason, a HHID is no longer appearing on the picklist and there is no data record from the screening of that HH.	If there is some documentation of screening, manually enter all available data into the DMS and setting any unknown fields to permanently missing. If there is no documentation of screening the HH, screen the HH on paper using a hard copy HSRB form provided to your site by the CC. The completed form and a HHID Change Notification Worksheet should be submitted to the CC.
7. The HHID is denoted as "selected" in the main HHID EXCEL file, but there is no documentation of screening.	Confirm that the HHID in question is not a multi unit. A HHID denoted as multi by the user will show as selected in the main HHID EXCEL file. However, column C will be designated as "multi" for that HHID. There should not be a SCT form for this HHID.

	If it is determined that the HHID is not a multi unit, then screen on a hard copy HSRB form provided to your site by the CC and submit the HSRB form and a HHID Change Notification Worksheet to the CC.
8. A HH was screened; the data was lost, but the final SCT code is known.	Enter any known available data directly into the DMS and set any unknown fields to permanently missing.
9. The machine froze while in the midst of screening. What do I do?	If the random selection value had been calculated and the value is known, continue to roster the HH, recording data on paper. Manually enter any known available data directly into the DMS and set any missing values to permanently missing. If the random selection value had NOT been calculated and the value is NOT known, use a hard copy HSRB form provided to your site by the CC to screen the HH. The completed form and a HHID Change Notification Worksheet should be submitted to the CC. Manually enter the data into the study DMS.
10. I accidentally selected the wrong HHID for screening and realized it right after I clicked "okay".	Continue in the process and open a HSRB form. Once you have opened a form, click "Cancel" to close the form. This action will "free" the HHID and return you to the MiForms start screen.
11. I accidentally selected the wrong HHID for screening and realized it right after the multi feature screen.	See #10 above.
12. I accidentally clicked "yes" to the prompt for multi unit screening when I should have clicked "no".	Continue screening the HH as you normally would and upload the data into the DMS. The original HHID will need to be entered into this record in the DMS. To change the HHID in the DMS you need to do a "Key Field Change". For instructions on using this feature, see the DMS User Guide, Section 4.6 The HHID can be removed from the main HHID file on the handheld device as outlined in the User Guide, Addendum 1: Clean up of Main HHID Pick List.
13. I accidentally clicked "no" to multi unit when I should have clicked "yes".	Continue in the process and open a HSRB form. Once you have opened a form, click "Cancel" to close the form. This action will "free" the HHID and return you to the MiForms start screen and allow you to re-select that same HHID.
14. I entered incorrect data and did not realize it in time to correct it.	Upload the record to the DMS and correct the data directly in the DMS.
15. I completed page 1 of the HSRB and realized I screened the wrong address.	1. If the respondents were invited to clinic, continue with screening and scheduling clinic visits. 2. Upon returning to the clinic, review to see if address is in the current wave. • If yes, submit a HHID Change Notification Worksheet to the CC. • If no, contact the CC to review if HH address

	is in future sample. 3. Screen the intended HH on paper using a hard copy HSRB form provided to your site by the CC. Submit the hard copy HSRB form and a HHID Change Notification Worksheet to the CC.
16. I accidentally used the MiForms controls (red X or green checkmark) to close the HSRB form.	1. If the red X was used to close the HSRB, no data are saved to the EXCEL. Whether the p and c values were calculated, use a hard copy HSRB form provided to your site by the CC to screen the HH. The completed HSRB form and a HHID Change Notification Worksheet should be submitted to the CC. Manually enter the data into the study DMS. 2. If the green checkmark was used to close the HSRB, data are written to the EXCEL file for upload regardless of what data were entered, i.e. the HHID is automatically uploaded into the file. Screening of the HH must be completed on paper using a hard copy HSRB form provided to your site by the CC. Manually enter the data from the paper form into the DMS retaining the originally assigned HHID, i.e. do NOT change the HHID in the DMS. Enter and or update all appropriate fields in the DMS.
17. The MiForms application shut down improperly in the middle of screening a HH.	Use a hard copy HSRB form provided to your site by the CC to screen the HH. The completed form and a HHID Change Notification Worksheet should be submitted to the CC. Manually enter the data into the study DMS.
18. I accidentally opened the wrong local session.	Close this record by clicking the "cancel" button on page 1 of the HSRB form. If data were entered on the roster, click the "cancel" button to remove that data. If data were entered and saved, you must correct the record manually in the DMS.
19. I meant to complete the PSE on the handheld but accidentally went back to the roster listing.	The program will not allow you to go back to the ELE and PSE once an ELE record has been saved. Complete the PSE on paper and manually enter it into the DMS.
20. There appears to be an error in one of the fields in an EXCEL data record that prevents records to be uploaded to DMS.	Notify the CC, and the CC will instruct the site on how to correct the error in the record using audit trail procedures. Once the record has been corrected, rerun the data upload procedures.
21. For some reason there appears to be duplicate records in the HSRB EXCEL data file.	Notify the CC, and the CC will instruct the site on how to proceed.
22. An error keeps popping up every time I try to open MiForms.	Notify the CC, and the CC will instruct the site on how to proceed.
23. I think there are duplicate forms	Each site has the capability to run the "Duplicate Forms

being uploaded into the DMS.	Report” in the DMS. This report should be run periodically in order to reconcile any duplicate records being uploaded to the DMS. Note duplicate records to resolve are added to the Remote DMS with Contact # 99. You will need to determine which record you want to keep, delete the appropriate record(s). This report only shows 2 duplicate records for an ID at one time. If there are more than two records, the additional records will not appear until a record has been deleted. For more information, see the DMS User Guide on the study website.
24. I accidentally clicked “Save Record for Print” and was not finished screening and rostering the HH.	Use an extra hard copy HSRB to complete screening. When you return to the field center, notify the recruitment manager. The recruitment manager will need to print a HSRB from the HSRBPRINT file and submit the appropriate documentation to the CC.