WCSWeb User Documentation
SCell System

Department of Health and Human Services
June 1, 2005

Table of Contents

Purpose

The purpose of this document is to familiarize the user with the functionality and features of the Sickle Cell System (hereby referred to as SCell). SCell is a subsystem of the WCSWeb web application and is available from the following links:

Production website http://wcs.ncpublichealth.com/wcsweb

Test website http://hl.ncpublichealth.info/wcsweb

Intended Audience

This document is written for authorized users of SCell only. Information disclosed here may be proprietary, sensitive, and/or confidential. Access should be granted to those that are employees of the Department of Health and Human Services (DHHS), authorized contractors of DHHS, or authorized consultants of DHHS.

Unauthorized access to this information is in violation of its intent and may be subject to prosecution under North Carolina law.

Requirements

In order to effectively use SCell, access to a computer with Internet access is required. The system will work with a dialup connection as well as a high-speed connection, however, dialup connections will be some degree slower.

A web browser is also required. The products officially supported are Microsoft Internet Explorer® version 6.x and Netscape Navigator® version 7.x. Other browsers may work but DHHS will only provide support for the previously mentioned products. Any browser used must support the http secure socket layer. This is used to provide data security via data encryption.

While navigating this web application, do not use the browser's back button to return to a previous page. Each page has a **Return** link that will return to the appropriate page. Clicking links on the page menus is also an acceptable means of navigation.

Environment

SCell is hosted by the Bioterrorism Information Technology Group of DHHS. The systems environment is protected, redundant, and secure. The data and applications are backed-up on a regular basis to minimize the opportunity for data loss and/or downtime.

General Description

SCell is a web application designed to collect data and report information about people who test positive for genotypes that indicate sickle cell disease or trait. This information can be shared with professionals that are committed to helping these people and their families.

SCell provides system features for authentication, data creation and correction, search, and information reporting. Only approved individuals have access to the system. Once a user has an account, assigned credentials define what is available with regards to features and data.

For detailed help on a specific page or field, click the **Help** link or the question mark image. Each page has a **Version Info** link. This can be used to provide information to technical support regarding the version in operation.

All data transactions are logged with audit information. This audit information includes who made the changes, when the changes were made, and what changed.

SCell follows the rules set forth by HIPAA. Data is restricted to those who have a right to see the data. By receiving an account to the system, all users agree to abide by these rules. If intentional and flagrant violations occur, loss of access will result and sanctions or prosecution could follow.

Authentication

Accounts are authorized by the manager of the sickle cell program. Once authorized, accounts are created by the WCSWeb technical support group. An account consists of a username and a password. Once logged into the system, passwords can be changed by the user.

When the SCell link (http://wcs.ncpublichealth.com/wcsweb) is accessed, the authentication or login screen will be displayed. Access is granted by entering a correct username and password combination. Error messages will be displayed on the screen if the username and/or password are incorrect for the user. Five unsuccessful attempts will cause the account to be marked as 'BLOCKED'. If an account is blocked, the user must contact technical support and have the account reset.

Passwords and accounts are assigned expiration dates. The user will be notified several days in advance that a password or account is expiring. If the user password is about to expire, the user can set a new password which resets the expiration date. If the user account is about to expire, the user should contact technical support for assistance. Notification occurs when the user logs in. A message will be displayed on the screen and the user will be taken to the ***Preferences*** page by default. The user can change the password at that point or click the **Home** link to go the ***Home Page/Client Queue***. If the password expires, the user will need to contact technical support in order to get a new password. Note, passwords are encrypted so the technical support personnel can not tell the user what the password is, they can only set a new password.

The ***Login*** page offers an opportunity to get a new password. If the user has logged in before and configured a "challenge" question and answer, clicking the **Click here if you have forgotten your password** link takes the user to the ***Password Reset*** page. If the user can correctly answer the challenge question, a new password will be generated and emailed to the user.

If the session is idle for 30 minutes, the user will automatically be logged out. Also note at the top of each page is an **If you are not <username> click here** link. This can be used for those users who share a computer. Click the link to close the other user's session.

Credentials

If a user is successful at logging into the system, that simply means they have a valid account. Access to data and features is determined by the user's core credentials, negative credentials, role, and role credentials.

Available Credentials

See Appendix B.

Core Credentials

These credentials represent the default set of access rights assigned to the user. This will represent the access privileges of the user if he/she is not assigned to a role.

Negative Credentials

These credentials represent the access rights that are to be removed from the user i.e. the access privileges the user can not have.

Roles

A user can be assigned to one or more roles. This defines how a user can behave or be perceived while using the system.

Role Credentials

Each role has a set of credentials assigned. Any user acting on behalf of a role will have all the role credentials.

Credential Calculation

A user's credentials are calculated as follows:

core credentials + (role1 credentials + … + role*N* credentials) – negative credentials

This implies that even if the role credentials provide an authority, it can be taken away at the individual user level. This provides for fine grained privilege management.

Modules Page

Once the user has successfully logged in, the user may be directed to the ***Modules*** page. This page will only appear if the user has been configured to access multiple WCSWeb applications and/or has been configured to act on behalf on multiple facilities.

In the case of multiple facilities, the user must select which facility he/she is representing during this session. This is important since certain environmental configurations depend on the facility.

If the user is permitted to access multiple applications, he/she can select which application to enter from the ***Modules*** page.

After the user makes the facility/application selection, pressing the **Continue** button will direct the user to the proper ***Home*** page.

Preferences Page

Once the user has successfully logged in, they may be directed to the ***Preferences*** page. This will be the case if the password is about to expire. Directing the user to this page is for convenience only. If the user chooses not to change his/her password, the **Home** link can be clicked and the user will be directed to the appropriate home page.

The ***Preferences*** page will be discussed in more detail later in this document.

Password Reset Page

This page is reached if the **Click here if you have forgotten your password** link is clicked. Enter the username and press the **Submit Data** button. At this point, the challenge question will be displayed. Type in the answer to the question and press the **Submit Data** button. If the answer is correct, a new password is generated and emailed to the user; otherwise, the user is taken back to the ***Password Reset*** page.

This process works only if the user has configured a challenge question, the answer to the challenge question, and a valid email address. If the challenge question and answer have been configured but there is not a valid email, clicking this link will generate a new password but the user will not be notified. In that case, the WCSWeb technical support group will need to contacted in order to get a new password.

Home Page

If the user has only one application and one facility, a successful login will direct the user to the appropriate ***Home*** page. In the case of SCell, this page will represent the client queue.

The client queue will be discussed in more detail later in this document.

Main Menu

The main menu represents the top-level system features. Some of the main menu items will have a submenu that applies specifically to that feature. Remember not to use the browser's back button for navigation. Use the provided **Return** link or the menu links.

Menu items are displayed only if compatible with the user's credentials and/or role. In other words, *Educators* will only have menu selections relevant to their function while state employees and consultants will have access to a broader range of menu items.

Home

The **Home** link provides access to the client queue. The layout of the ***Home*** page depends on the user's role. New clients will only appear on the SCell Manager's ***Home*** page. Once the SCell Manager reviews each new client, their tracking status is set to "Reviewed". Clients with a status of "Reviewed" will appear in the queue of users whose role is State Employee / Consultant.

Clicking the client name link will direct the user to the ***Client Details*** page.

Each client queue is equipped with a **Print Clients** link. Use this if a printed list of clients is required. This page is not credential dependent; however, if the user does not have the ReadClient credential, the client names will not appear as links.

Print Clients Page

Clicking the Print Clients link will cause the Print Clients Page to appear. Use the standard browser menu items to configure and print this page. Close the window when printing is complete.

State Employee / Consultant Role

The client queue displays only clients living in the counties assigned to the user. This list is also filtered by clients that have a tracking status of "Reviewed" or "Active" with those records with status of "Reviewed" listed first.

The client queue may be filtered by any of the counties assigned to the user by selecting a value from a drop-down list of counties.

The system identifies this role as scServicer.

SCell Manager Role

This role includes all of the capabilities of the State Employee / Consultant role with additional managerial capabilities.

The SCell Manager client queue displays all records in the system with a tracking status of "New". The client queue may be filtered by any county in the state by selecting a value from a drop-down list of counties.

The SCell Manager Education page is enhanced with drop-down lists displaying Educators and Facilities. These enable the SCell Manager to filter the table of Educations accordingly.

The system identifies this role as scManager.

Educator Only Role

The Educator Only role has access limited to information related to Education services performed by the user, the ***Preferences*** page, and system help.

If the user is assigned to a CBO Facility, they have read-write access to their Education session information and read-only access to the Education sessions performed by others in their CBO Facility.

The system identifies this role as scEducator.

Preferences Page

The ***Preferences*** page is used to display current user settings, to change the user's password, and to configure other user account properties such as email, name, and challenge question/answer.

This page is not credential dependent.

Current Personal Settings

When the page is displayed, the current settings are hidden by default. This reduces the opportunity for confusion. Click the **Show** link and the properties will be displayed. Click the **Hide** link and the properties will be hidden.

Any questions regarding these settings should be directed to the system contact person and/or the technical support group.

User Authentication

This section of the page is used to validate the user. Before any changes to the user record can be made, the user must be verified. It may seem redundant to verify the username and password again, but if it did not work this way, someone could stop by the user's desk while they were out and change the password. After that, the user would not be able to log in. If the system verifies again, then it is safe to make the changes.

Password Maintenance

This section allows the user to change their password. Enter the username and password in the Authentication section. In the password field, enter the value for the new password. In the confirmation field, enter the same value. Click the **Update Password** button. If the two values match and the authentication data are correct, the password will be changed. A confirmation message will be displayed on the screen.

Passwords can not be re-used within 5 password changes.

User Maintenance

This section allows the user to change personal settings such as name, email address, challenge question, and challenge question answer. Before any changes will be made, the username and password must be entered in the authentication section. Update any of the fields and click the **Submit Data** button. A confirmation message will be displayed on the screen.

The challenge question answer is stored in an encrypted manner; therefore, technical support can not tell you the answer. If the answer can not be remembered a new value must be set.

Add Client

This is the primary way to put a new client into the system. It is a model of the state lab's New Born Screening (NBS) form. The ***Add Client*** page is designed to collect the same demographic information required by the form.

This page is also used when modifying information about an existing client and is then referred to as the ***Edit Client*** page.

This page contains many fields. The ones marked with a red asterisk (*) are required to be completed. If any of the required fields are left blank, the data will not be saved and the user will be notified with a message.

Note that some of the fields are required for newborns but not for adult clients (over 18 years of age). The system determines the requirements by evaluating the date of birth entered by the user. When the user tabs to the next field, any required fields not relevant for adults are reset so they will not require data entry.

This menu item will display if the user has the CreateClient credential.

Process

Complete all required fields along with any of the other fields. Press the **Submit Data** button to save the data. If the save is successful, the system will forward to the ***Client Details*** page. If the save is unsuccessful, the system will return to the ***Add Client*** page with an error message displayed.

Press the **Clear Fields** button to blank out all the fields and start over.

The **Return** link will forward to the appropriate page. If the user arrives at ***Add Client*** page via the main menu, the **Return** link returns them to their ***Home*** page. If the user arrived at the ***Add Client*** page from the ***Client Details*** page, they will be returned to that page. Use this link to cancel an Add / Edit operation if the data is not to be saved.

General Field Relationships

The fields in the ***Specimen Information*** section are not required; however, if you specify a **Date & Time of Collection**, a **NBS Barcode Number** must be specified as well as a **Specimen Status**. The only exception to this rule is if the New Born Screening form is being sent to the lab because of an infant transfer, the **NBS Barcode Number** is specified and the **Specimen Status** is marked as 'None Drawn'. The **Date & Time of Collection** is not required.

The values displayed in the **Physician/Practice Name** list are dependent on the value selected in the **Facility** list. This implies that each facility has its own list of providers. The only exception occurs when an infant is transferred. The infant's current provider is added to the list of providers for the infant's new facility. If the **Physician/Practice Name** field is modified, the provider from the previous facility is removed from the provider list of the current facility.

If the provider is not found in the **Physician/Practice Name** list, it can be added by setting the value to 'Select a Provider' and entering the name of the new physician or practice in the **New Physician/Practice field**. This new provider will be added with a name only. The remaining details can be added later.

The address collected is for the mother and the infant. **If a change is made on this page, it changes both people and makes the values the same.** Directions for making changes that are independent will be provided later in this document.

When a client is saved, a mother record is always created; however, a father record is not created unless one of the name fields in the ***Father's Information*** section has a value.

The **same as client** link appears twice on the page and is for convenience. If the mother's and/or father's last name is the same as the infant's, click the link and it will be copied into the field.

The **copy to assignee** link appears immediately after the Physician / Practice Name drop-down. Click this link to copy the value displayed in the Physician / Practice Name drop-down box to the Assignee of Antibiotic field.

Field Descriptions

Field Label	Required	Description
NBS Barcode Number	No	Barcode number that appears on NBS form.
Specimen Status	No	Status of the specimen being sent to the lab.
Date & Time of Collection	No	Date and time the specimen was collected.
Medical Record Number	No	Facility/Hospital medical record number.
Tracking Status	No	Status of the client as they move through the system.
Client's Last Name	Yes	Last name of client/infant.
Client's First Name	No	First name of client/infant.
Client's Middle Name	No	Middle name of client/infant.
Client's Name Modifier	No	Name modifier such as Jr., II, Sr., etc.
Date of Birth	Yes	Date of birth.
Time of Birth	Yes*	Time of birth.
Birth Weight in Grams	No	Birth weight in grams.
Multiple Birth	Yes*	If multiple birth, choose yes and provide a letter.
Sex	No	Sex of client/infant.
Race	Yes	Race of client/infant. Multiple values accepted.
Hispanic or Latino Origin	No	Choose yes if client/infant is of Hispanic origin.
Physician/Practice Name	No	Name of provider.
Attention	No	Name of attending doctor from provider.
New Physician/Practice	No	Specify a new provider. Used if provider is not in list.
Facility	Yes	Name of current facility or specimen submitter.
Type of Feeding	Yes*	Type of feeding. Multiple values accepted.
Date & Time of First RBC Transfusion	No	Date and time of transfusion.
NICU	No	If checked, the infant is in the NICU.
Discharge Date	No	Date the infant left the hospital.
Gestational Age	No	Gestational age in weeks.
Comment	No	General comments (700 characters).
Insurance Source	No	Name of insurer of client.
Date Started	No	Date client began antibiotic.
Reason for no Antibiotic	No	Explanation why client is not taking antibiotic.
Client Genotype	No	Genotype of Client.
Initial Lab Result	No	Genotype of first lab result of client.
Initial Results Date	No	Date of first lab result of client.
Follow-up Lab Result	No	Genotype of an additional lab result.
Follow-up Result Date	No	Date of an additional lab result.
Assignee of Antibiotic	No	Name of physician or facility that prescribed antibiotic.
Mother's First Name	Yes*	First name of mother.
Mother's Last Name	Yes*	Last name of mother.
Mother's Maiden Name	No	Maiden name of mother.
Mother's Social Security Number	No	Mother's social security number.
Mother's Medicaid Number	No	Mother's Medicaid number.
Mailing Address Line1	Yes	Home street address.
Mailing Address Line2	No	Second address line if needed.
City	Yes	Home city.
State	Yes	Home state.
Zipcode & Zip+4	Yes	Home zipcode. Format ddddd or ddddd-dddd.

Field Descriptions (continued

Field Label	Required	Description
County	Yes	Home county.
Home Phone Number	No	Home phone number
Father's First Name	No	First name of father.
Father's Last Name	No	Last name of father.

* Optional if client is over 18 years of age.

Educations

The ***Education*** page displays a summary of education sessions performed according to the role of the user.

The education sessions are listed and the user may edit their own educations by clicking on the hand icon or they may view educations performed by others within their facility.

A submenu displays a **New Education** link that enables the user to create a new education session record. This link takes the user to the ***Education*** page and is designed to collect information that describes the user's education session.

The fields marked with a red asterisk (*) are required to be completed. If any of the required fields are left blank, the data will not be saved and the user will be notified with a message.

This menu item will display if the user has the CreateEducation credential.

Process

Click on the **New Education** link. Complete all required fields along with any of the other fields. Press the **Submit Data** button to save the data. If the save is successful, the system will forward to the ***Educations Summary*** page. If the save is unsuccessful, the system will return to the ***Add Education*** page with an error message displayed.

Press the **Clear Fields** button to blank out all the fields and start over.

The **Return** link will forward to the ***Educations Summary*** page. Use this link if the data is not to be saved.

General Field Relationships

Education sessions are associated with a user. A user may create a new education session record for each education session they perform.

Field Descriptions

Field Label	Required	Description
Date Time	Yes	The date and time the education session was performed.
Performed By	Yes	A drop-down list containing the users who may perform the session.
County	Yes	The county in which the education was performed.
Name of Event/Group/Family	Yes	Free text description of the Event/Group/Family.
Number in Attendance	Yes	Number of people attending the session.
Time Spent in Session	Yes	Hours and minutes of session duration.
Group Description	Yes	A drop-down list of options to describe the nature of the session.
Target Audience	Yes	A drop-down list of options to describe the target audience.
Race	Yes	A set of check boxes to describe the race of the audience.
Hispanic Origin	Yes	A drop-down list of options to describe Hispanic Origin.
Comment	No	General comments (700 characters).

Reports

This page provides a list of pre-defined reports. The matrix below shows the report names and the filters and criteria available for each report.

This menu item will display if the user has the Report credential.

Process

Choose the desired report and complete required report input fields. Press the **Go** button to execute the report. The results of the report will be displayed in a separate page. This page will not have the application colors and formatting. The User can print the page by using the browser's formatting and print controls.

The **Return** link will return to the ***Home*** page.

Report List

Report	Options	Role
Monthly Services By Region	1	A, B
Monthly Services By County	1	A, B
Staff Caseload By Region		A, B
Staff Caseload By County		A, B
Client Demographics By Region	2, 3	A, B, C
Client Demographics By County	2, 3	A, B, C
Prophylactic Antibiotic	1, 2, 4	A, B
Visit Reminders List	2, 3, 5, 6	A, B
Client History	1, 2, 3	A, B
Primary Providers	6	A, B
Client List	2, 3, 7, 8	A, B
Demographics (Client Information) By Region	9	A, B
Demographics (Client Information) By County	9	A, B
Trait Counseling By Region	1	A, B
Trait Counseling By County	1	A, B
Trait Counseling By All Regions	1	A, B
Education Session - Statistics	1	A, B, C
Education Session - Target Audience	1	A, B, C
Education Session - County Information	1	A, B, C
Education Session - Groups	1	A, B, C

Options

1. Date Range
2. Tracking Status
3. Trait Counseling
4. Sort Criteria
5. Birth Month
6. Geography (Region / County)
7. Age Range
8. Mailing Labels (Avery 5160, 5161)
9. Demographic Criteria

Roles

A. State Employee / Consultant
B. SCell Manager
C. Educator Only

Search Client

This page is used to search for clients. There is a clear distinction between persons and clients. A mother, father, guardian, other contact, and client are all persons; however, only a client is a client. This page is designed specifically for clients.

Text fields will always have a wild card appended to the values entered. This implies that each field search is a 'begins with' search. For example, if 'John' is entered into the **Client's Last Name** field, all clients are returned where their last name begins with 'John'. Values are not case sensitive, e.g. 'John' = 'john' = 'JoHn', etc.

Search results will be limited to 200 records. If the search exceeds this value, a message will be displayed. Restrict the query by adding more fields to the search or be more specific with values already provided.

This menu item will display if the user has the Search credential.

Process

Complete all fields needed for the search. Press the **Search Now** button to begin the search. If the search is successful, the system will forward to the ***Search Results*** page. If the search is unsuccessful, the system will return to the ***Search*** page with an error message displayed.

Press the **Clear Fields** button to blank out all the fields and start over.

There is no page to go back to, so there is no **Return** link on this page. Choose a new feature from the main menu bar.

Roles

Users with a *CBO Facility* role can only search for clients in his/her own facility.

HIPAA Search Link

Clicking this link will forward to the ***HIPAA Search for Clients*** page. This page allows a client search according to the HIPAA rules. For more details, refer to the ***HIPAA Search for Clients*** section of this document.

Historical vs. Standard

In some cases, a client name and/or address may have changed. Selecting the **Search Historical Names & Addresses** check box performs the search on current as well as historical data values.

Search Results

This page displays the results of the client search. The format and layout is the same as the ***Home*** page. Clicking the link around the client name will forward to the ***Client Details*** page.

The number of results is limited to 200 records. If this value is exceeded, a message will appear notifying the user. If necessary, return to the ***Search Client*** page and restrict the search criteria.

The **Return** link will return to the ***Search Client*** page.

HIPAA Search for Clients

This page works much the same as the ***Search Client*** page. The primary difference is that a wild card is not appended to the text field values. This removes the automatic 'begins with' assumption.

HIPAA rules dictate that only people required to have access to client information should have access to client information. SCell implements this rule by limiting the standard searching process to clients in the user's facility. Access to clients in other facilities is not permitted.

The purpose of the HIPAA search is to allow facilities to locate a client record when under normal circumstances, the user would not have access because of a role constraint. The rule is that if the user knows the exact values for the following fields, it is assumed the user has a valid reason to access the client record.

Client's Last Name

Client's Date of Birth

Mother's Last Name

Mother's First Name

The results page should have only one record matching the four exact match criteria entered into the data fields. The client name will be surrounded by a link. Clicking this link will forward to the ***Client Details*** page.

The **Return** link will return to the ***HIPAA Search for Clients*** page.

Search Person

This page is used to search for persons. There is a clear distinction between persons and clients. A mother, father, guardian, other contact, and client are all persons; however, only a client is a client. This page is designed specifically for persons. This is the only way to find a mother, father, guardian, and other contact.

If the person is a client, then the client must be in the user's facility.

Text fields will always have a wild card appended to the values entered. This implies that each field search is a 'begins with' search. For example, if 'John' is entered into the **Person's Last Name** field, all persons are returned where their last name begins with 'John'. Values are not case sensitive, e.g. 'John' = 'john' = 'JoHn', etc.

Search results will be limited to 200 records. If the search exceeds this value, a message will be displayed. Restrict the query by adding more fields to the search or be more specific with values already provided.

This menu item will display if the user has the Search credential.

Process

Complete all fields needed for the search. Press the **Search Now** button to begin the search. If the search is successful, the system will forward to the ***Search Results*** page. If the search is unsuccessful, the system will return to the ***Search*** page with an error message displayed.

Press the **Clear Fields** button to blank out all the fields and start over.

There is no where to go back to, so there is no **Return** link on this page. Choose a new feature from the main menu bar.

Search Person Results

This page is different than the other result pages discussed so far. It is similar in that a list of data is returned with the names displayed as links. Click the link and the ***Person Details*** page is displayed. There are however two differences. First: a submenu is displayed containing two menu items. Secondly, there are check boxes next to each name.

Submenu

Merge	This operation allows multiple persons to be merged or combined into a primary person. Only persons of the same type can be merged, i.e. clients to clients, mothers to mothers, etc.
Return	Clicking this link will return to the ***Search Person*** page.

Merge

The check boxes that appear beside each name are used by the **Merge** operation. The purpose of merge is to combine multiple records into one single record. If this feature is used appropriately, it increases the integrity of the data. Merge is useful in the following ways:

Each new client creates a mother record. In the case of a multiple birth, the same mother is created multiple times. Use merge to combine these mother records into one single existence.

The same client is entered by different users. Another user catches the mistake and combines the records.

A father, guardian, and/or other contact have multiple existences. Merge can be used to clean up the multiple records.

The merge operation should only be performed when it is absolutely certain that the persons being merged are the same. Also, remember that other modules share this data. Make sure that combining records will not have a negative impact on the other modules.

This is an administrative function and requires the ApplicationAdministrator credential.

Merge is a complex operation. It will merge ALL records from the persons checked as ‘merge’ into the person marked as ‘primary’. The demographic record for the person marked as ‘primary’ will be the demographic record for all. Records that have been merged are still in the system; however, their status is changed to ‘Merged’. Merged records can be viewed (demographics) but not modified.

The merge process begins with a **Search Person**. From the ***Search Person Results*** page, determine which record will be ‘merged into’. Mark this record as ‘primary’ (click the checkbox in the primary column next to the name). There can be only one primary. Next, mark each record that is to be merged into this primary record as ‘merge’ (click the checkbox in the merge column next to the name). After all selections have been made, click the **Merge** link.

The next page that appears is the ***Merge Verification*** page. This page displays the selections made from the ***Search Person Results*** page. Information about each record is displayed including its type and associated records such as referrals and sickle cell tests. If all types match, i.e. mothers, fathers, clients, guardians, or other contacts, the **Continue** button is available. Clicking the **Cancel** button any time will abort the merge process. Click the **Continue** button and the records will be merged. If successful, the ***Search Person Results*** page will be displayed. If unsuccessful, the ***Search Person Results*** page will be displayed with a notification of error.

There is an **Unmerge** process. It will be discussed later in this document.

Merged Persons

This page displays a list of persons that have been merged. Each element in the list has an **UnMerge** link. Click this link if the "merge" process needs to be backed out. The names of the 'Merged From' and 'Merged To' also have links. Click the link and a read-only page will be displayed which includes a limited set of demographic data.

There is no where to go back to, so there is no **Return** link on this page. Choose a new feature from the main menu bar.

This menu item will display if the user has the Search credential.

Unmerge

This page displays the demographic information for the person about to be "unmerged". If this person has been part of a multi-merge operation, a merge tree will be displayed at the bottom of the page. This provides the user with information that needs to be analyzed before the "unmerge" is executed, i.e. if the person is part of a multi-merge, what is the impact of this action.

Multi-Merge

There may be cases where the same person has been entered into the system multiple times. These persons should be merged into a single record. There is no limit to the number of times records can be merged; however, be careful and research each case before merging. The best way to explain this is with an example.

Example

In this example, there are two users (User1, User2) and three persons (J. Smith, Jane Smith, and Mom Smith).

User1 recognizes that J. Smith and Jane Smith is the same person. She is the mother of twins born recently at General Hospital. User1 goes through the merge process and identifies Jane Smith as the primary record and J. Smith as the merge record. At this point, J. Smith is marked as merge and will show up on the ***Merged Persons*** page.

User2 later recognizes that Jane Smith and Mom Smith is the same person. Mom Smith is the mother of a baby born two years ago. Remember that Jane Smith recently gave birth to twins so she now has three children in the system.

User2 goes through the merge process and identifies Mom Smith as the primary record and Jane Smith as the merge record. Jane Smith is now marked as merged and will show up on the ***Merged Persons*** page along with J. Smith. At this point J. Smith and Jane Smith are eligible for 'unmerge'.

Choosing J. Smith to unmerge will display the following merge tree:

J. Smith -> Jane Smith -> Mom Smith

Unmerging J. Smith will actually remove her records from Mom Smith since Jane Smith was merged into Mom Smith.

Unmerging Jane Smith will not display a merge tree since the merge of Jane to Mom is only a single merge. Unmerging Jane Smith will remove her records from Mom Smith. J. Smith will still be part of Jane Smith.

Process

The demographic information is displayed regarding the 'merged from' and 'merged to' persons. If an 'unmerge' is warranted, press the **Continue** button and the records will be separated. If the process is successful, the system will forward to the ***Merged Persons*** page. If the process is unsuccessful, the system will return to the ***Unmerge Verification*** page with an error message displayed.

Press the **Cancel** button to abort the process and return to the ***Merged Persons*** page.

Log Out

Clicking the **Log Out** link will close the user's session and return to the ***Login*** page. Any work in progress will be lost.

Help

The **Help** link displays a new window with page context help. Use this for detailed information on how to use a given page. Note that each Help page contains a User Guide link that displays this document as a PDF file in a separate window.

Client Details

The ***Client Details*** page is read only and displays a subset of the client's data. This page can be arrived at from the ***Add Client*** page (after a successful save), the ***Home*** page, as well as some result pages. This is an important page regarding client operations.

Page Layout

The layout of the Client Details page is dependent on user roles and credentials. Each feature will be discussed here but all users may not have access to all features. Page navigation and activity is controlled by submenus and links.

A client may have a 'primary contact' person. This is represented by '(pc)' beside the name of the person. It may be the mother, father, guardian, or other contact. This value can be changed on the ***Person Edit*** page.

Submenus

The page has four submenus. The **main submenu** contains operations specific to the client overall. The **demographic submenu** is specific to the client's demographics. The **medical submenu** contains information regarding the client medical information. And the **healthcare submenu** is specific to the client's provider.

Main Submenu

This menu appears just below the main menu and may have several links (depending on the user's credentials). Choosing any of these operations will cause some action to be performed on the selected client.

Operation	Credential Required	Description
New Service	CreateService	Add a new service for selected client.
Services Summary	ReadService	Display all services for selected client.
New Lab Result	CreateLabResult	Add a new lab result for selected client.
Lab Result Summary	ReadLabResult	Display all lab results for selected client.

Demographic Information Submenu

Operation	Credential Required	Description
Names History	ReadPerson	Displays all historical and current names for client.
Address History	ReadPerson	Displays all historical and current address for client.
Print	ReadClient	Print the current client information.
Edit (hand icon)	ReadClient	Forwards to the Add / Edit Client page.
Help (question mark icon)	ReadHelp	Displays help.

Medical Information Submenu

Operation	Credential Required	Description
Edit (hand icon)	CreatePatient	Forwards to the Medical edit page.
Help (question mark icon)	CreateHelp	Displays help.

Healthcare Information Submenu

Operation	Credential Required	Description
Edit (hand icon)	CreatePatient	Forwards to the New Born Screening form edit page.
Help (question mark icon)	CreateHelp	Displays help.

Links

Some of the labels or data elements are actually links. Clicking the link will perform some action but not necessarily on the client directly.

If the link is on the label, it implies that there is no data for that element. Click the link for data creation. If the link is on the data value, it implies a value exists and clicking the link will allow an edit on the value.

Person

Person links provide a mechanism to modify demographic information for a particular person. This includes the client, mother, father, guardian, and other contact. The pages displayed by these links will expose more demographic data fields than the ***Add Client*** page. Use these links to define the person in more detail.

Client

This link allows the client demographics to be edited independently of the mother. The New Born Screening form has a relationship between the mother and client (infant). If the mother changes, so does the client. Modifying the client with this link will make changes to the client only; however, if a change is made later via the ***Edit Client*** page it will be applied to the client as well as the mother.

Mother

Each client has exactly one mother. This link allows the demographics for the mother to be changed independently of the client. The ***Add Client*** page has some of the client and mother demographics associated. Changing one applies to the other. This link provides a screen for the mother only.

<u>Father</u>

Each client may or may not have a father defined. If the father was defined on the ***Add Client*** page, there will be a value and the link will be around the value. If the father record does not exist, the link will be around the label. Click the link to create the father record.

<u>Guardian</u>

If a client needs a guardian record, it is created with this link. There is no provision to create this type of person on the ***Add Client*** page.

<u>Other Contact</u>

If a client needs an 'other contact' record, it is created with this link. There is no provision to create this type of person on the ***Add Client*** page. Other contact implies a person with some relation to the client.

<u>Medical Record</u>

This link provides access to the medical information for this client.

Operation Details

The following sections will discuss each of the operations available from the ***Client Details*** page.

Main Submenu

New Service

This page allows for the creation of a client service record. This type of record identifies the elements of a ***Service*** that have been provided for a client. Any number of services can be created for a given client.

This menu item will display if the user has the CreateService credential.

Process

Complete all required fields along with any of the other fields. Press the **Submit Data** button to save the data. If the save is successful, the system will forward to the ***Client Details*** page. If the save is unsuccessful, the system will return to the ***New Service*** page with an error message displayed.

Press the **Clear Fields** button to blank out all the fields and start over.

The **<u>Return</u>** link will forward to the ***Client Details*** page. Use this link if the data is not to be saved.

Field Descriptions

Field Label	Required	Description
Service Date	Yes	Date the service was performed.
Service Type	Yes	A drop-down list of types of services.
Service Code	Yes	A drop-down list of service codes for the service provided.
Relatives Counseled	Yes	A drop-down list of options used to answer the question.
Appointment Status	Yes	A drop-down list of status options.
Child Service Coordination	No	Number of children.
Trait Counseling Date	No	Date counseling was performed. Note: this field is used by the system to identify Trait clients.
Genetic (Number Counseled):	No	Number of individuals counseled about SCell Disease.
Comments	No	General comments (700 characters).

Services Summary

Clicking this link will display a page with all the SCell Services for the client. The list is sorted with the most recent at the top.

This menu item will display if the user has the ReadServices credential.

If the user has the ModifyService credential, the edit icon (hand with pencil) will appear to the right of each line. Click the edit icon to access the ***Modify Services*** page.

The **Return** link will forward to the ***Client Details*** page.

New Lab Result

This page allows for the creation of a client lab result record. This type of record identifies the elements of a ***Lab Result*** that has been provided for a client. Any number of lab results can be created for a given client.

This menu item will display if the user has the CreateLabResult credential.

Process

Complete all required fields along with any of the other fields. Press the **Submit Data** button to save the data. If the save is successful, the system will forward to the ***Client Details*** page. If the save is unsuccessful, the system will return to the ***New Lab Result*** page with an error message displayed.

Press the **Clear Fields** button to blank out all the fields and start over.

The **Return** link will forward to the ***Client Details*** page. Use this link if the data is not to be saved.

Field Descriptions

Field Label	Required	Description
LIMS Lab Code	No	Lab code.
LIMS Lab ID Number	No	ID number of the lab result.
Result Date	Yes	Date of the lab result.
Result Time	No	Hours and minutes of lab result.
Result	Yes	Genotype indicating the result.

Lab Results Summary

Clicking this link will display a page with all the lab results for the client. The list is sorted with the most recent at the top.

This menu item will display if the user has the ReadLabResult credential.

If the user has the ModifyLabResult credential, the edit icon (hand with pencil) will appear to the right of each line. Click the edit icon to access the ***Modify Lab Results*** page.

The **Return** link will forward to the ***Client Details*** page.

Client Detail Links

There are several links in the client demographic data. These links allow data to be edited, created, and/or viewed. Access will depend on user credentials. If the user does not have the createPerson credential, the links around the **Father**, **Guardian**, and **Other Contact** will not appear. If the user does not have the modifyPerson credential, links around the field value (if it exists) will not appear. If the user does not have the modifyClient credential, the link around the client's name will not appear.

Person Field Descriptions

A client, mother, father, guardian, and other contact are all considered a person and share a common set of fields. The list below documents the person fields.

Field Label	Required	Description
Last Name	Yes	Person's last name.
First Name	No	Person's first name.
Middle Name	No	Person's middle name.
Name Modifier	No	Person's name modifier such as Jr., Sr., II, etc.
Mailing Address Line 1	Yes	Line one of the person's mailing address.
Mailing Address Line 2	No	Line two of the person's mailing address. May not be required.
City	Yes	Mailing address city.
State	Yes	Mailing address state.
Zipcode & Zip + 4	Yes	Mailing address zip code plus an additional four digits if required.
County	Yes	Mailing address county.
Home Phone Number	No	Person's home phone number.
Sex	No	Person's sex.
Social Security Number	No	Person's social security number.
Race	Yes	Person's race. Multiple values are allowed.
Hispanic Origin	No	Yes if person is of Hispanic origin.
Genotype	No	Person's genotype. This may be set by test results.
Family Income	No	Income range.
Years of Education	No	Number of years of education.

Client

Clicking the link that is the **Client Name** field value (displayed only if the user has the modifyClient credential) will display the ***Edit Client Details*** page. All demographic fields for the client are displayed. There is no relationship to the mother or other primary contact, i.e. modifications to this page will have no impact on any other record including the mother record.

Set the value of each field as necessary and press the **Submit Data** button to save the data. To exit without saving, click the **Return** link which will forward the page to the ***Client Details*** page. Click the **Clear Fields** button to blank all fields and start from scratch.

Mother

Clicking the link that is the **Mother Name** field value (displayed only if the user has the modifyPerson credential) will display the ***Edit Mother Details*** page. All demographic fields for the mother are displayed. There is no relationship to the client, i.e. modifications to this page will have no impact on any other record including the client record.

Set the value of each field as necessary and press the **Submit Data** button to save the data. To exit without saving, click the **Return** link which will forward the page to the ***Client Details*** page. Click the **Clear Fields** button to blank all fields and start from scratch.

If the mother is the primary contact for the client, check the **Primary Contact** field. This implies that the client can be located via the mother.

Father

The link will appear either as the **Father Name** label or the **Father Name** field value. If no father has been defined for the client, it will appear as the label. If the father has already been created, the link appears as the father's name. Clicking the link (displayed only if the user has the modifyPerson credential) will display the ***Edit Father Details*** page. All demographic fields for the father are displayed. There is no relationship to the client, i.e. modifications to this page will have no impact on any other record including the client record.

Set the value of each field as necessary and press the **Submit Data** button to save the data. To exit without saving, click the **Return** link which will forward the page to the ***Client Details*** page. Click the **Clear Fields** button to blank all fields and start from scratch.

If the father is the primary contact for the client, check the **Primary Contact** field. This implies that the client can be located via the father.

Guardian

The link will appear either as the **Guardian** label or the **Guardian** field value. If no guardian has been defined for the client, it will appear as the label. If the guardian has already been created, the link appears as the guardian's name. Clicking the link (displayed only if the user has the modifyPerson credential) will display the ***Edit Guardian Details*** page. All demographic fields for the guardian are displayed. There is no relationship to the client, i.e. modifications to this page will have no impact on any other record including the client record.

Set the value of each field as necessary and press the **Submit Data** button to save the data. To exit without saving, click the **Return** link which will forward the page to the ***Client Details*** page. Click the **Clear Fields** button to blank all fields and start from scratch.

If the guardian is the primary contact for the client, check the **Primary Contact** field. This implies that the client can be located via the guardian.

Other Contact

The link will appear either around the **Other Contact** label or the **Other Contact** field value. If no other contact has been defined for the client, it will appear around the label. If the other contact has already been created, the link appears around the other contact's name. Clicking the link (displayed only if the user has the modifyPerson credential) will display the ***Edit Other Contact Details*** page. All demographic fields for the other contact are displayed. There is no relationship to the client, i.e. modifications to this page will have no impact on any other record including the client record.

The relationship of the other contact to the client can be defined on this screen.

Set the value of each field as necessary and press the **Submit Data** button to save the data. To exit without saving, click the **Return** link which will forward the page to the ***Client Details*** page. Click the **Clear Fields** button to blank all fields and start from scratch.

If the other contact is the primary contact for the client, check the **Primary Contact** field. This implies that the client can be located via the other contact.

Medical Record

Clicking this link will display the ***Edit Medical Details*** page for the client.

Set the value of each field as necessary and press the **Submit Data** button to save the data. To exit without saving, click the **Return** link which will forward the page to the ***Client Details*** page. Click the **Clear Fields** button to blank all fields and start from scratch.

The **copy to assignee** link appears immediately after the Physician / Practice Name drop-down box. Click on the link to copy the value displayed in the Physician / Practice Name drop-down box to the Assignee of Antibiotic field.

Medical Record Field Descriptions

Field Label	Required	Description
Medical Record Number	No	Client's medical record number. This may change if transferred.
Medicaid Number	No	Client's Medicaid number.
Tracking Status	No	Current tracking status. This is rule based but changeable.
Date of Birth	Yes	Date of birth.
Time of Birth	Yes*	Time of birth.
Birth Weight in Grams	No	Weight at birth in grams.
Multiple Birth	Yes*	Choose yes or no. If yes, provide a letter code.
Physician/Practice Name	No	Name of the health provider.
Attention	No	Attending physician.
New Physician/Practice	No	If the health provider is not in the list, enter a new name here.
Facility	Yes	Name of the facility in which the client is located.
Feeding Type	Yes*	Type of feeding. Multiple values are allowed.
Insurance Source	No	Type of insurance.
Date Started	No	Date antibiotic begun.
Reason for no Antibiotic	No	Reason why client is not on antibiotic.
Client Genotype	No	Genotype of patient.
Assignee of Antibiotic	No	Name of physician or facility that prescribed antibiotic.

* Optional if client is over 18 years of age.

Data Modification

Edit screens provide access to data already entered into the system. Access to the edit screens start at the ***Client Details*** page. From this page the user can access the demographic edit icon to display the ***Modify Client*** page (New Born Screening Specimen Form data), the health provider edit icon to display the ***Modify Provider*** page, and links around the medical record, Client, mother, father, guardian, and other contact to display the modify page for each type.

Access to other data is available from the summary screens. If the user has appropriate credentials, the edit icon will appear next to each row. Click the edit icon to display the edit page.

Edits follow the same validation process as new data entry. Required fields for new data are still required for modifications.

Services

Click the **Services Summary** link to display all service records for a Client. If the user has the modifyService credential, the edit icon will be displayed next to each row.

Clicking the edit icon will take the user to the ***Edit Service*** page.

The process is the same as creating a new record. Make the necessary changes and press the **Submit Data** button to save the changes. Click the **Return** link to exit without saving.

Lab Results

Click the **Lab Results Summary** link to display all lab results for a client. If the user has the modifyLabResult credential, the edit icon will be displayed next to each row.

Clicking the edit icon will take the user to the ***Lab Results*** page.

The process is the same as creating a new record. Make the necessary changes and press the **Submit Data** button to save the changes. Click the **Return** link to exit without saving.

Read Only Screens

In some cases, users will not have edit rights to data. In this case, a read-only screen will be made available. This type of access will be most notable from the summary screens. The edit icon will not show up but links will be provided that when clicked, will show a read-only version of the data.

This type of action will also be available from the links on the ***Client Details*** page.

Appendices

Appendix A – Definitions

Authentication	**The process of verifying a username/password combination.**
Authority	**See Credential.**
Core Credential	**Default or base credential for a user.**
Credential	**Item of application privilege. Determines data and feature access.**
DHHS	**The Department of Health and Human Services.**
HIPAA	**Health Insurance Portability and Accountability Act**
Home Page	**See Client Queue. The default page displayed after complete authentication has occurred.**
Login Page	**The initial screen displayed for WCSWeb.**
Negative Credential	**A credential that is to be removed from the user.**
Password	**Encrypted secret word used to validate a user.**
Password Reset Page	**The page provided as a password self-service process.**
Client Queue	**See Home Page. Displays a list of clients for the given user and role.**
Person	**A generalized representation of a mother, father, guardian, other contact, and client.**
Preferences Page	**The page provided to the user for environment configuration (including password).**
Privilege	**See Credential.**
Receive	**The act of receiving a client from another facility.**
Role	**A behavior that is assigned to the user.**
Role Credential	**Credential assigned to a role and applies to any user assigned this role.**
Submenu	**Operations that are specific to the page on which they are contained.**
Transfer	**The act of moving a client from one facility to another.**
Username	**The official name used to access WCSWeb.**
WCS	**Women and Children Services. A branch of DHHS.**
WCSWeb	**Name of the web application.**

Appendix B – Available Credentials

Credential Name	Core	Required	Description
CreateClient	No	No	Allows creation of a client. Requires CreatePerson.
CreatePerson	No	No	Allows creation of a person record.
CreateUser	No	No	Allows creation of a user. This should be an administration credential.
DeleteClient	No	No	Allows deletion of a client record. This should be an administration credential only. Requires DeletePerson.
DeletePerson	No	No	Allows deletion of a person record. This should be an administration credential only.
DeleteUser	No	No	Allows deletion of a user record. This should be an administration credential only.
Merge	No	No	Allow multiple records to be merged into a primary record. This should be an administration credential.
ModifyClient	No	No	Allow client records to be modified. Requires ModifyPerson.
ModifyPerson	No	No	Allow person records to be modified.
ModifyUser	Yes	Yes	Allow user records to be modified.
ReadFacility	Yes	Yes	Allow facility records to be read.
ReadClient	No	No	Allow client records to be read. Requies ReadPerson.
ReadPerson	No	No	Allow person records to be read.
ReadRole	Yes	Yes	Allow role records to be read.
ReadUser	Yes	Yes	Allow user records to be read.
Report	No	No	Allow reports to be executed.
Search	No	No	Allow searching.

Index