

Duke Clinical Research Institute
DUKE UNIVERSITY MEDICAL CENTER

STS Quality Module

User Guide

December 2008

STS Quality Module User Guide

Table of Contents

Background	2
Users and Permissions	2
Logging In.....	3
The Dashboard Page	3
Modifying Your User Profile (Site Users Only).....	3
Managing User Profiles (Site Administrators Only).....	4
Creating a New Record (Subject)	5
Completing the Data Collection Form (DCF).....	5
Managing Record (Subject) Data.....	6
Saving Records.....	6
Reviewing Data.....	7
Exporting Data	7-8
Tips for Faster Data Entry.....	8

Background

The STS Quality Module was created using the DCRI Registry System to capture specific data fields for quality measurement that are supplemental to (and will be linked to) the STS Adult Cardiac Surgery data. This module will enable the STS to quickly adapt to other quality reporting requirements that will arise in the future, as such mandates often change more frequently than the regular three-year cycle of complete database upgrades. The CMS Physician Quality Reporting Initiative (PQRI) is the only quality measurement program for which the STS Quality Module can currently be used to collect exclusion data. The STS Quality Module collects information on allowable measurement case exclusions for three of the cardiac surgery PQRI measures approved for payment in 2009:

- **Measure #43 Isolated CAB: Use of IMA Graft (v2.61 SeqNo: 1560)**
- **Measure #44 Isolated CAB: Preoperative Beta Blocker (v2.61 SeqNo: 890)**
- **Measure #45 Cardiac Procedures: Discontinuation of Prophylactic Antibiotics (v2.61 SeqNo: 1347)**

Important notes:

- 1) *Because the CMS PQRI program is only for Medicare Fee For Services (FFS) claims, the data fields in the STS Quality Module are to be completed ONLY for those records that have indicated a “Yes” to Medicare FFS (claims submitted under Medicare Part B), STS data v2.61 Custom Text Field, Sequence #3450*
- 2) *All FFS cases should be entered regardless of how variables SeqNo 1560 (IMA), 890 (Beta Blocker) and 1347 (Antibiotics) were filled out.*

If you have a question related to using the Quality Module itself, please contact your Clinical Data Specialist. Questions about how to apply the PQRI exclusions in a clinical context should be approached through the STS Adult Cardiac Surgery Database clinical support (FAQ) process.

Users and Permissions

The DCRI will set up a main user account for the Primary Data and File Contact at each Database Participant with one or more surgeons participating in PQRI. There are various levels of permissions for entering data and viewing documents as outlined below. The main user account will have Registry Site Administrator/Delete permission and can create additional users within the database participant.

- **Registry Site User:** These users can create, edit, export, view and mark as complete all records for their site. These users also will be able to access reports on all data entered for their site.
- **Registry Site User / Delete:** Same as Registry Site User but with the additional ability to delete data records.
- **Registry Site Administrator:** These users have the same permissions as Registry Site Users, with the additional ability to create, edit, and delete users, and reset passwords for all accounts associated with their site.
- **Registry Site Administrator / Delete:** Same as Registry Site Administrator but with the additional ability to delete data records.

It is recommended that sites have no more than five active user accounts at any given time. These accounts may be any site-level permissions desired (as applicable to a given project).

The DCRI team has high-level project or global administrator permissions in the Registry System. This enables DCRI to answer questions and troubleshoot issues related to your site's use of the Registry System. DCRI administrators can set up new sites or remove sites from the database, as well as make updates to your site's user and facility profiles (including personnel changes and re-setting passwords).

Note: If a Site Administrator or DCRI Administrator resets a password or changes a user's permissions to the system, there will be a slight delay before the changes take effect. Users should wait at least 30 minutes after the change before trying to access the Registry System again.

When you are set up as a user, you are associated with your STS ParticipantID as part of your user profile. Therefore, when you log in with your own User ID and password, the system will automatically log you in to your own site's data. You will never need to enter your ParticipantID, as this system will "know" which site is yours.

Logging In

The website for log-in is <https://outcomes.dcri.duke.edu/registry/>. The system can also be accessed via a link on the STS website under the Data Managers' Section. Once there, enter your User ID and password, then select Login. *Data entry should be performed using Internet Explorer 6.0. Other browsers or versions are not supported and may adversely affect a user's ability to use the system successfully.*

Note: The system is optimized for a display resolution of 1024x768 pixels. You may not be able to see the entire form without scrolling left to right if your screen is set to a smaller resolution.

The Dashboard

Once you log in, you will be brought to the dashboard page for the Registry System. You will find current announcements posted on this screen. To begin your data management session, select from one of the menu items that appear across the top left of the screen:

- **Home** - allows you to return to the announcements on the dashboard page.
- **Subjects** - allows you to create or view a record.
- **Users** - appears only for site administrators, and allows the administrator to create or edit user accounts for his/her site.
- **Documents** - allow you to view registry-specific documents (such as the Data Collection Form (DCF) and this User Guide) and site-specific documents (such as data submission reports).
- **Data** - allows you to download data you have entered into the system to your local computer in a variety of formats
- **Edit Profile** - appears only for site users, and allows users to update their Registry System account or change their password.

Modifying Your User Profile (Site Users only)





Users may modify their own profiles at any time. This includes changes to the user's name, email address, and password.

To access the profile modification screen, select **Edit Profile** from the blue menu bar at the top of the screen. This will take you to the User Details screen. Make changes as desired, then click Submit. The system will display a message above the modification panel indicating whether the user update was successful. If you do not wish to make any changes, select Cancel.

Managing User Profiles (Site Administrators Only)



In addition to modifying their own profiles, users with site administrator permissions also may create and/or modify the profiles of other users. This feature is accessed through the Users menu at the top of the screen.

Select **Users** from the blue menu bar at the top to display a search grid for locating existing site-level users. From this screen, profiles may be created, modified, or deleted.

Locate a specific user by specifying desired search criteria and clicking Search, or leave the search criteria blank and click Search to display a complete list of users. The search results may be sorted by clicking on   in the column headers. Clicking   again on the same column header reverses the sort order.

You can search for users by User Name, First and/or Last Name, or Email Address. Enter all or part of the desired search criteria, then click Search to filter the record list for accounts matching the search criteria. If partial criteria are entered, all accounts matching the criteria will be displayed (e.g., searching on user name “smith” displays accounts for dsmith, ssmith, etc.). To view all user accounts after performing a search, remove the search criteria, then click Search.

Once the desired account has been located, the following actions may be taken:

- Click  in the **Edit** column to display the user’s profile. To modify a profile, make the desired changes, then click Submit. A message above the user profile will indicate whether the changes were saved successfully. **Note:** Users should wait at least 30 minutes after changes to permissions or passwords before attempting to log into the system again.
- Click  in the **Delete** column to permanently delete a user’s profile. **Note:** *The account will be deleted immediately.* Accounts deleted in error will need to be re-created by a site or DCRI administrator.

Create User: Select this option from the menu bar at the top to display a blank user profile screen. Enter the user’s full name and email address, and create a User ID (i.e., login name) and password.

- User IDs for the STS Quality Module should consist of the user’s 5-digit STS Participant ID, the letters ‘qual’ and the first initials of the first and last names, in lowercase letters and run together (e.g., a user from the STS participant 12345 with the name Rachel Smith – **12345qualrs**).
- If the requested User ID is already assigned to another user in the Registry System, an error message will appear at the top of the screen and a different User ID must be created. If a User ID already exists, simply add consecutive numbers after the User ID. For instance, **12345qualrs01**.
- It is recommended that initial passwords be set to “changeme” so that users will recognize the need to set a permanent password for themselves upon first login.

Once a User ID has been created, permissions must be assigned to that user. You must assign *all* permissions you wish a user to possess in order for the account to function properly. **Note:** You can only assign permissions to another user that you possess yourself (e.g., data deletion permissions cannot be granted to a user if you do not have deletion permissions on your own account).

- To assign site user permissions, check the box next to **Registry-Site-User**. This user will be able to create, view, and edit all data for this **site**. This user also will be able to access reports.
- To assign site administrator permissions, check the boxes for BOTH **Registry-Site-User** and **Registry-Site-Admin**. In addition to being able to create, view, and edit all data, and access reports, this user will also be able to create, edit, and delete user accounts for this site.
- If your registry allows users to have data deletion privileges, you will need to select the “With-Delete” roles (if desired) in addition to the roles above in order to permit data deletion.

Once the desired permissions have been assigned, click Submit. A message at the top of the user profile screen will indicate whether user creation was successful. Newly created accounts are accessible immediately.

Creating a New Record (Subject)

Because the CMS PQRI program is only for Medicare FFS claims, a record should be created in the STS Quality Module for *each record in your STS data that has ‘Yes’ marked for Medicare FFS (v2.61 Sequence #3450)*. DCRI analysts will apply any further criteria for inclusion in a PQRI measure calculation. For instance, if a FFS CABG procedure is a re-do procedure it should be entered into the Quality Module even though CABG re-do procedures are excluded from the PQRI Measure #43 on IMA Graft Usage. DCRI will apply such exclusions at the data warehouse prior to calculating PQRI results.

To create a new record, select Create Subject from the blue menu bar at the top of the screen. While the next available subject ID is displayed, you will need to enter in the appropriate STS RecordID for the record you are entering. For this reason, you will need to have already created a record in STS data version 2.61 in your STS software package in order to know the appropriate RecordID to use in the Quality Module. Once you have entered the RecordID, click Submit. You will be taken to the PQRI Data Collection Form (DCF). Once the DCF has been saved (See Completing the DCF for more information), a message above the subject search panel will indicate whether subject creation was successful.

Completing the Data Collection Form

Knowing the types of data entry fields you will encounter can help the data entry process flow more smoothly. There are two types of data entry fields used in the STS Quality Module:

- **Radio buttons:** These round buttons are used for “either/or” options. You may select one option or the other (e.g., Yes/No fields). Click a circle to make a selection. Change your selection by clicking the other (empty) circle. Clear both circles by clicking on the **X** button at the bottom of the field list.
- **Date:** These fields are pre-formatted to capture dates as MM-DD-YYYY. The system automatically inserts dashes (‘-’) in the appropriate places. Change an entry by highlighting it and then typing the new entry. Remove the entire entry by highlighting it and hitting the “delete” button on your keyboard.



The STS Quality Module currently collects information on allowable case exclusions from measurement for the three adult cardiac surgery PQRI measures approved for payment in 2009: Measure #43 Isolated CAB: Use of IMA Graft, Measure #44 Isolated CAB: Preoperative Beta Blocker, and Measure #45 Cardiac Procedures: Discontinuation of Prophylactic Antibiotics. **Note:** For each of the three measures, only one reason that the measure was not met can be selected. In the case that more than one reason is applicable, the primary reason should be selected. **Note: Per CMS PQRI guidelines, any exclusion selected should have supportive documentation in the medical record.**

A data check will occur on the variable Date of Surgery at the time the DCF is being completed. Date of Surgery for the STS Quality Module cannot be prior to January 1, 2009 and cannot be in the future. If the value entered is not within this time range, a warning message will appear and you will not be able to save the form.

Throughout the form, you will notice that many of the field names are [blue and underlined](#). These are links for online help, which contain the data definition for that specific field. View the help text by clicking on any blue link throughout the form. A DCF containing the complete data definitions is also accessible through the Documents menu of the Registry System (see Reviewing Data).

Managing Record (Subject) Data

Select Records (**Subjects**) from the blue menu bar at the top to display a search grid for locating existing records. From this screen, records may be created, modified, or deleted (if applicable). *Please note that Subject ID is equivalent to RecordID in your STS data.*

Locate a specific record by specifying desired search criteria and clicking Search, or leave the search criteria blank and click Search to display a complete list of subjects. The search results may be sorted by clicking on  in the column headers. Clicking  again on the same column header reverses the sort order.



You can search for records by Subject ID (STS RecordID), by Earliest and/or Latest Entry Date, or by Status.

- **Subject ID # (STS RecordID)** allows you to search for a specific record. Enter all or part of the desired RecordID, then click Search to filter the record list for that RecordID. If a partial RecordID is entered, all RecordIDs matching the search criteria will be displayed (e.g., searching on “000” displays IDs 0001, 0002, etc.).
- **Entry Date** allows you to search based on when a patient record was first entered into the Quality Module. Enter the earliest and/or latest entry date to define the search window.
- **Status** allows you to search for complete or incomplete records. Selecting All displays all saved records.

To view all patient records after performing a search, remove the search criteria and set search by **Status** to All, then click Search.

The record list displays “pages” of 100 records at a time. Just like results from a search engine, you can flip between pages of saved records by clicking on a specific page number to jump to that page of the list.

Once the desired record has been located, the following actions may be taken:

- Click the  button in the *Edit* column to edit RecordID.
- Click the  button in the *DCF* column to create a new form or edit an existing form.

Saving Records

DCFs may be saved with a status of Incomplete or Complete. Incomplete records are ones for which you are still in the process of collecting or entering data and will not be used by the data warehouse team for any reporting or analysis. Complete records are ones for which you have entered all available data and should be included in any analyses or report.

- **Saving the DCF as Incomplete:** You can save a record as incomplete after creating a new patient or making edits to an existing patient. To save the incomplete record, ensure that the “Complete” checkbox at the end of the DCF is blank, then click on the Save button at the end of the DCF.
- **Saving the DCF as Complete:** Once all required fields have been completed, check the box next to “Complete” at the bottom of the DCF, and click on the Save button at the end of the DCF.
- **Cancel:** This feature, located at the end of the DCF, allows you to exit a record after opening it, without saving any changes. A warning message will appear asking you to confirm that you wish to exit the record without saving it. Select OK to continue and exit without saving, or select Cancel to return to the DCF.

Once you indicate a record is complete and click “Save,” a few data checks will occur. If any problems with your data are found, a dialog box will appear that alerts you to any issues that need review.

- **Required items** must be corrected before you can save the form as complete. All three of the PQRI measures must have a chosen exclusion and the date of surgery must be filled in before the form can be saved as Complete. To return to the DCF and correct the errors, click OK. Remember that you can always save the form as incomplete if you are not ready to address any of the required data fields.

After the form has been saved, you will automatically be returned to the subject’s page containing the list of subjects. A message at the top of the page indicates whether the patient was saved successfully.

Remember that using the “Back” button on your Internet browser, or clicking on the “X” in the top right corner of the screen to close the dialog box, does *not* save the record – any data entered or changes made will be lost.

Reviewing Data

Documents and data related to your project may be accessed by selecting the **Documents** option from the blue menu bar at the top of the page. A variety of documents might be available.

- **General Documents:** Contains links to project documents applicable to all participating sites. Documents might include the DCF and instructions, this STS Quality Module User Guide, and a Quick Reference sheet.
- **Site Documents:** Contains site-specific reports. These may include data submission reports, and analysis reports.

Select a document type by clicking View. A menu listing all available documents will be displayed. Click the desired document to open it in a separate window. The document may then be reviewed, printed, and/or saved to your computer or network.

Exporting Data

Data you have entered into the Quality Module can be retrieved for your own use by selecting the **Data** option from the blue menu bar at the top of the page. Then click on **Site Data Export** just below the blue menu bar.

Select the field(s) desired in the data export file. Hold the CTRL key while clicking to select multiple fields. Set the timeframe for the export, either by specific start and end dates, or by year and quarter, based on surgery date.

Select other data parameters as desired:

- **Data Format:** Select 'Text Descriptions' to download values as words. Select 'Harvest Codes' to download as numbers.
- **Field Naming Convention:** Specifies how column headers are displayed. Select 'Short Names' to select field name abbreviations.
- **Included Record Status:** Select either 'All' records (i.e., Complete and Incomplete) or 'Only Complete' records.
- **Output Format:** Select 'On Screen' to display export results as a table on the webpage. Select 'ASCII Text' to export data to a file that can be saved on your computer and then loaded or displayed using external applications.
- **Delimiter:** Required only if the Output Format is ASCII Text. Choose a comma delimiter to save or open exports in Excel with data in their respective columns. Bar- and tab-delimited exports can be opened in Excel, but will not display in columns.

Once all parameters are selected, click Submit to perform the export. If the Output Format is ASCII Text, a pop-up box will appear to confirm whether the file should be opened in Excel or saved to your computer.

Tips for Faster Data Entry

- **Tab** – will advance the cursor to the next field on the page
- **Shift + Tab** – will move the cursor back to the previous field on the page
- **Space Bar** – has the same effect as clicking the mouse
- **Right and Left Arrows** – move your selection between different options of a radio button
- **Double-click** – highlights all text in a text field
- **Drop Down Boxes** – when a drop down box is selected, type the first letter of the selection you want to choose, and the first option beginning with that letter will be highlighted.