

GlobalSurg REDCap Guide

Part 3: Checking Data in REDCap

This section will show you how to check data in REDCap.

1. Log in to REDCap and go to the GlobalSurg study homepage, as shown below (Figure 1). See part 1 of the REDCap guide to remind yourself how to do this.

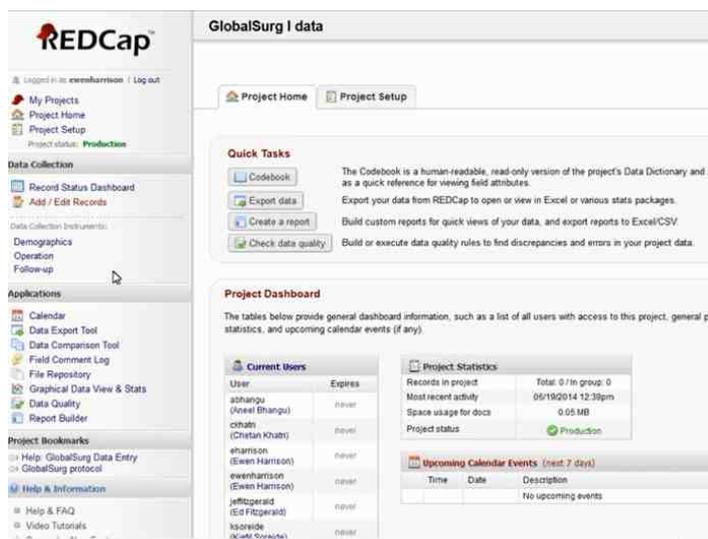


Figure 1

2. Select the "Record Status Dashboard", as shown below (Figure 2). This uses a colour coded system to demonstrate how complete each patient's data is. Another very useful application in REDCap is the "Data Quality" application. This will show all fields which have missing values.

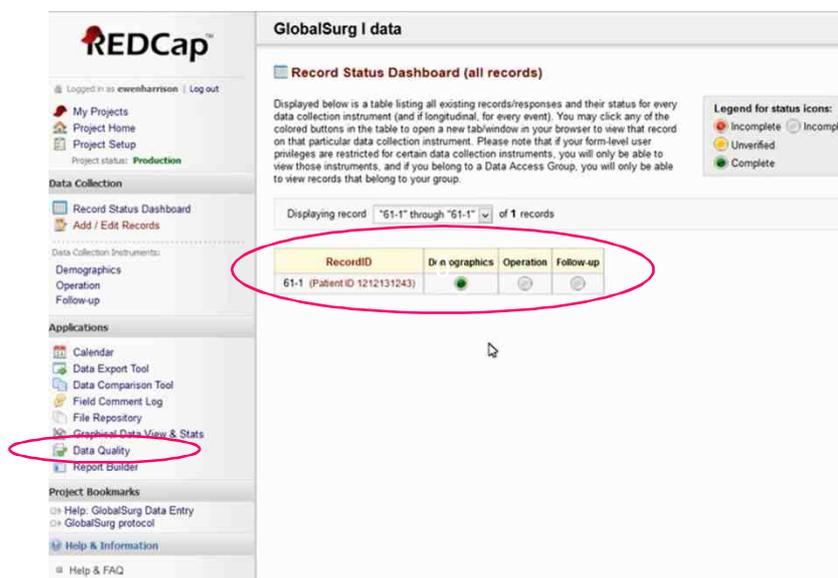


Figure 2

- To identify missing values, click the "Execute" button next to the "Missing Values* (required fields only)" OR "Missing Values*". As shown below, this will tell you the total number of discrepancies (Figure 3). Clicking "View" will display this in more detail (Figure 4).

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Data Quality

This module will allow you to execute data quality rules upon your project data to check for discrepancies in your data. Listed below are some pre-defined data rules that you may utilize and run. You may also create your own rules or edit, delete, or reorder the rules you have already created. To find discrepancies for a given rule, simply click the Execute button next to it, or click the Execute All Rules button to fire all the rules at once. It will provide you with a total number of discrepancies found for each rule and will allow you to view the details of those discrepancies by clicking the View link next to each. [Read more detailed instructions.](#)

Data Quality Rules Processing Complete Execute rules: All All except A&B All custom Clear

Rule #	Rule Name	Rule Logic (Show discrepancy only if...)	Real-time execution ?	Total Discrepancies	View
A	Missing values*	-		Execute	
B	Missing values* (required fields only)	-		65	View
C	Field validation errors (incorrect data type)	-		Execute	
D	Field validation errors (out of range)	-		Execute	
E	Outliers for numerical fields (numbers, integers, sliders, calc fields)	-		Execute	
F	Hidden fields that contain values**	-		Execute	
G	Multiple choice fields with invalid values	-		Execute	

* The Missing Values rules above automatically exclude fields hidden by branching logic when searching for missing values. If a field is hidden by branching logic on a data entry form or survey, then it is expected that such a field would not have a value. Thus for these cases, the values for those hidden fields will not be classified as missing. Additionally, checkbox fields are also excluded since an unchecked

Figure 3

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Rule: Missing values* (required fields only)

Discrepancies found: 65

Record (Sorted by DAG)	Discrepant fields with their values	Status	Exclude
61-2 (Patient ID 1223345667 (RIE_Edinburgh_UK))	abscess = [no data]	Missing value	exclude
61-2 (Patient ID 1223345667 (RIE_Edinburgh_UK))	comp_major = [no data]	Missing value	exclude
61-2 (Patient ID 1223345667 (RIE_Edinburgh_UK))	comp_minor = [no data]	Missing value	exclude
61-2 (Patient ID 1223345667 (RIE_Edinburgh_UK))	leak = [no data]	Missing value	exclude
61-2 (Patient ID 1223345667 (RIE_Edinburgh_UK))	los = [no data]	Missing value	exclude
61-2 (Patient ID 1223345667 (RIE_Edinburgh_UK))	mort24 = [no data]	Missing value	exclude
61-2 (Patient ID 1223345667 (RIE_Edinburgh_UK))	mort30 = [no data]	Missing value	exclude
61-2 (Patient ID 1223345667 (RIE_Edinburgh_UK))	reintervention = [no data]	Missing value	exclude
61-2 (Patient ID 1223345667 (RIE_Edinburgh_UK))	woundinfection = [no data]	Missing value	exclude
61-3 (Patient ID 2334455667 (RIE_Edinburgh_UK))	abscess = [no data]	Missing value	exclude
61-3 (Patient ID 2334455667 (RIE_Edinburgh_UK))	abx = [no data]	Missing value	exclude
61-3 (Patient ID 2334455667 (RIE_Edinburgh_UK))	anaesthetic_type = [no data]	Missing value	exclude
61-3 (Patient ID 2334455667 (RIE_Edinburgh_UK))	anaesthetist = [no data]	Missing value	exclude
61-3 (Patient ID 2334455667 (RIE_Edinburgh_UK))	anaesthetist_experience = [no data]	Missing value	exclude

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Figure 4

Locking Data

Once all the forms are completed, the lead GlobalSurg investigator at your site will then review the collected data to ensure it is accurate. Locking the data will indicate to the GlobalSurg analysis team that the data is correct. This needs to happen for each patient included in the study.

1. To lock a record, go to the "Record Status Dashboard". Select a record which has three green circles within the fields for every form (Figure 5).

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Record Status Dashboard (all records)

Displayed below is a table listing all existing records/responses and their status for every data collection instrument (and if longitudinal, for every event). You may click any of the colored buttons in the table to open a new tab/window in your browser to view that record on that particular data collection instrument. Please note that if your form-level user privileges are restricted for certain data collection instruments, you will only be able to view those instruments, and if you belong to a Data Access Group, you will only be able to view records that belong to your group.

Legend for status icons:
● Incomplete ● Incomplete
● Unverified
● Complete

Displaying record "61-1" through "61-4" of 4 records

RecordID	Demographics	Operation	Follow-up
61-1 (Patient ID 1212131243)	●	●	●
61-2 (Patient ID 1223439987)	●	●	●
61-3 (Patient ID 2334455667)	●	●	●
61-4 (Patient ID 4353638353)	●	●	●

Figure 5

2. Once the record is selected, you will see an option to "Lock all forms". Once you have clicked on this, a dialogue box will appear on the screen. To lock the patient select "OK".

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Actions: Download PDF of instrument(s) Share instrument VIDEO_Basic_data

Demographics Re-assign this record to another Data Access Group? RIE_Edinburgh_1

Editing existing RecordID 61-1 (Patient ID 1212131243)

RecordID 61-1 (To rename this record, modify the value immediately below.)

RecordID 61-1 Automatically generated, do not change.

Patient ID 1212131243 Patient identifier from your hospital unique to this patient * must provide value

Age in completed years 1 Age at time of surgery. Put '0' for less than 12 months. * must provide value

If less than 2 years, age in completed months 18 Put '0' for 0-29 days old * must provide value

Male

1

ASA American Society of Anaesthesiologists score: 1. Healthy person, 2. Mild systemic disease, 3. Severe systemic disease, 4. Severe systemic disease that is a constant threat to life, 5. A moribund person who is not expected to survive without operation.

History of diabetes No * must provide value

Smoking status No, never * must provide value

Emergency computed tomography (CT) scan performed? Yes No * must provide value

Select the Lock all forms text box

Figure 6

Note: it is possible to unlock the form again by clicking “Unlock all forms”, which appears in the place of the “Lock all forms” button. This creates a note in your site log file, so is not recommended.

Watch the video tutorials or read the guides at www.globalsurg.org/data-entry . The GlobalSurg protocol is also a source of useful information <http://globalsurg.org/protocol/> .

If you have any questions or if we could make something clearer, please contact enquiry@globalsurg.org