

# REDCap Data Resolution Workflow

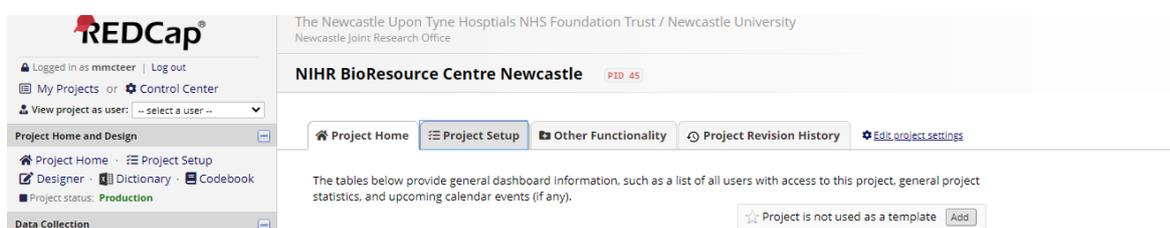
NJRO-INF-WI-008

Data Resolution Workflow is the formal process of documenting and managing data issues within REDCap. If there is an issue with a data value in a REDCap project, a “query” is raised to a designated individual who is tasked with responding and resolving this issue.

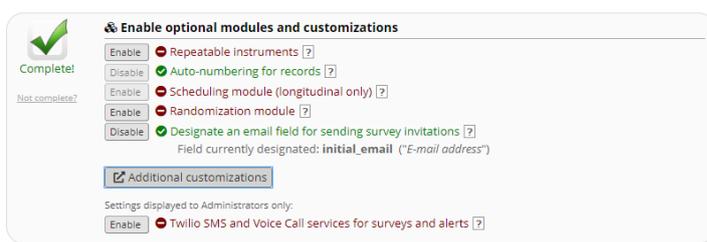
## Procedure/Method

### Enabling Data Resolution Workflow for your REDCap Project users:

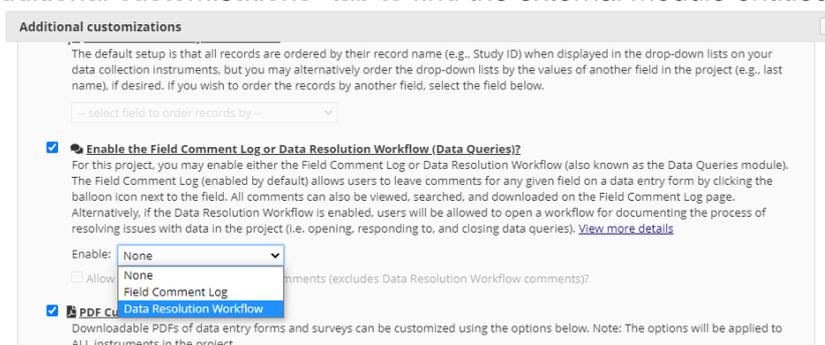
1. Once within your REDCap project, select the “Project Setup”.



2. On the “Project Setup” tab, scroll down to the “Enable optional modules and customisations” setup box and select “Additional customisations”.



3. Scroll down in the “Additional customisations” tab to find the external module entitled “Enable the Field Comment Log or Data Resolution Workflow (Data Queries)?”. From here click on the “Enable” drop down box and select “Data Resolution Workflow”.



4. The ability to raise and respond to queries is governed by the standard REDCap user roles. Please get in touch with the NJRO Informatics Team if you need additional customisation.

## Assigning Queries to Other Users

1. In each instrument of your REDCap Project, each variable inputted will have a grey balloon appear by the side of the data entry boxes. Hovering over it, it will turn yellow and by selecting this, you open the data resolution workflow.

The screenshot shows a data entry form with three fields: 'Confirm e-mail address' (s-holmes@not-real.com), 'Contact telephone number' (07927297487471987), and 'Consent Appointment Details'. A yellow balloon is positioned over the 'Consent Appointment Details' field, containing a button labeled 'View data resolution workflow'.

2. You can now open a query and assign this to a user to respond to, who can be notified of this by email if desired. Finally, a comment box is used to describe exactly what the problem with this data entry is.

Date/Time	User	Comments and Details
09/03/2021 12:05pm	mmcteer	Data Changes Made: initial_phone = '07927297487471987'
09/03/2021 12:11pm	mmcteer	<input type="radio"/> <b>Verified data value</b> — OR — <input checked="" type="radio"/> <b>Open query</b> Assign query to a user (optional): <input type="text" value="jbloggs (Joe Bloggs)"/> Notify this user of their assignment using: <input checked="" type="checkbox"/> Email Comment: <input type="text" value="Invalid phone number - too long"/>

## Responding to Queries

1. If the individual who opened the query ticked the notify user by email box, the responder will receive an email containing a link sending them straight to the Data Resolution Workflow to respond. The user can also find a list of queries assigned to them through the “Resolve Issues” tab on the left hand side of REDCap:

**Applications**

- File Repository
- Resolve Issues
- NJRO REDCap Further Information
- NJRO REDCap Project Administrator Guidance
- NJRO REDCap Data Security SOP
- NJRO REDCap Remote Electronic Consent SOP

**Project Bookmarks**

- NIHR BioResource Website
- NIHR BioResource NCL HSCN REDCap

rules on the Find Issues tab. The table lists the name of the record and the specific field or Data Quality rule to which the data query belongs, as well as the user assigned to the query (if applicable), the number of days the data query has been open, and a brief snippet of the query's first and last comment. The results in the table can be filtered by the query status type (e.g., open, closed), by certain fields or Data Quality rules, and also by users assigned to it. Each data query may be viewed by clicking the button to its left.

**Data Resolution Dashboard** Filters: Open / unresolved issues (1)

Export

All fields and rules

All data access groups

User assigned (all users) or not assigned

Click button to view data query	Record (Sorted by DAG)	Data Quality rule and/or Field	User Assigned	Days Open	First Update	Last Update
1 comment	38 Sherlock Holm	Field: <b>initial_phone</b> (Contact telephone number)	jbloggs	0	mmcteer (09/03/2021 12:14pm): "Invalid phone number - too long"	[same as first update]

- Now that the query has been seen, the responder can go into the records and edit the variable(s) that need fixing. Once this has been done, they can return to the comment box on the 'Resolve Issues' tab and alert the user who raised the query that this is now corrected:

Date/Time	User	Comments and Details
09/03/2021 12:05pm	mmcteer	Data Changes Made: initial_phone = '07927297487471987'
09/03/2021 12:14pm	mmcteer	Assigned to user: <b>jbloggs (Joe Bloggs)</b> Comment: "Invalid phone number - too long"
09/03/2021 12:39pm	jbloggs	Data Changes Made: initial_phone = '07123456789'
09/03/2021 12:39pm	jbloggs	<p><b>Reply with response:</b> Corrected - Typographical error</p> <p>Upload file (optional): <a href="#">Upload file</a></p> <p>Comment: Phone number now changed to a valid number.</p>

Respond to query Cancel

### Closing a Query:

- Once a query has been responded to and fixed, the individual who originally flagged the query is alerted in the 'Resolve Issues' tab in REDCap. They can then respond and close the query:

09/03/2021 2:12pm	mmcteer	<p><input checked="" type="radio"/> <b>Close the query</b></p> <p><input type="radio"/> <b>Send back for further attention</b></p> <p>Comment: Thank you.</p>
-------------------	---------	---

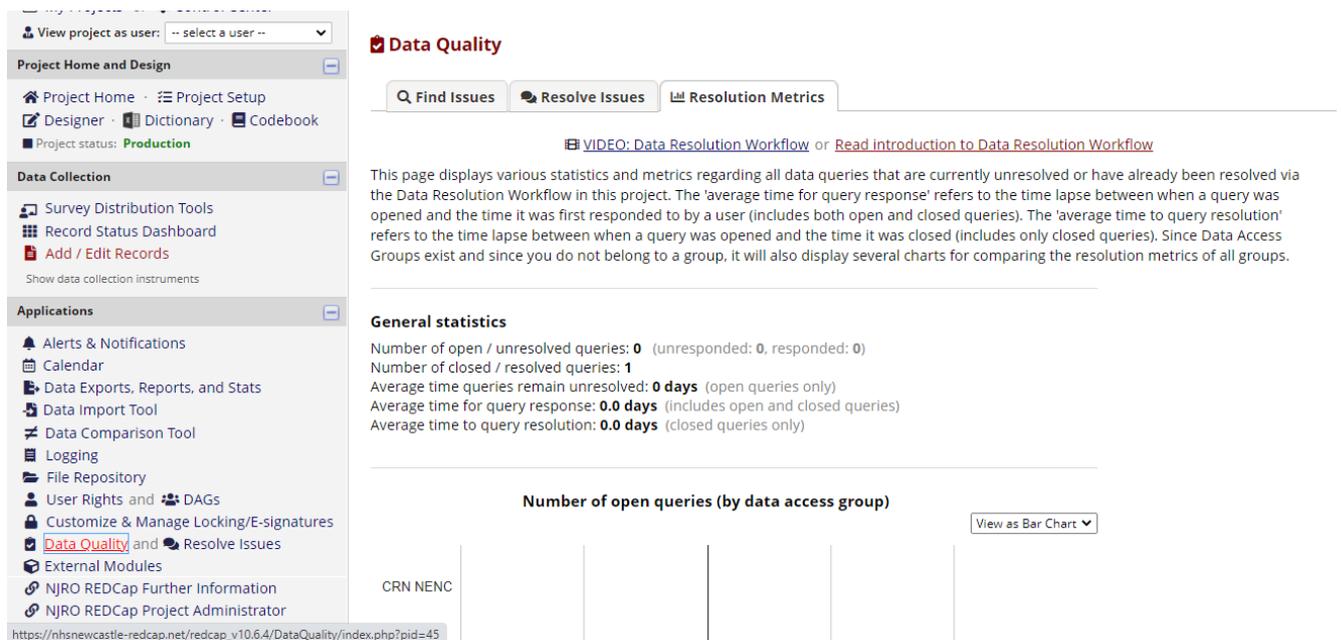
Close the query Cancel

2. This can be checked by observing the speech bubble next to the variable that has been queried being changed from an exclamation point to a green tick:



## Resolution Metrics

1. Following the opening of a query, REDCap provides helpful metrics and statistics surrounding the Data Resolution Workflow. This can be accessed through the 'Data Quality' section on REDCap and selecting the 'Resolution Metrics' tab:



**Data Quality**

Q Find Issues   Resolve Issues   **Resolution Metrics**

[VIDEO: Data Resolution Workflow](#) or [Read introduction to Data Resolution Workflow](#)

This page displays various statistics and metrics regarding all data queries that are currently unresolved or have already been resolved via the Data Resolution Workflow in this project. The 'average time for query response' refers to the time lapse between when a query was opened and the time it was first responded to by a user (includes both open and closed queries). The 'average time to query resolution' refers to the time lapse between when a query was opened and the time it was closed (includes only closed queries). Since Data Access Groups exist and since you do not belong to a group, it will also display several charts for comparing the resolution metrics of all groups.

**General statistics**

Number of open / unresolved queries: **0** (unresponded: 0, responded: 0)  
 Number of closed / resolved queries: **1**  
 Average time queries remain unresolved: **0 days** (open queries only)  
 Average time for query response: **0.0 days** (includes open and closed queries)  
 Average time to query resolution: **0.0 days** (closed queries only)

**Number of open queries (by data access group)** View as Bar Chart

Data Access Group	Number of Open Queries
CRN NENC	0

[https://nhscastle-redcap.net/redcap\\_v10.6.4/DataQuality/index.php?pid=45](https://nhscastle-redcap.net/redcap_v10.6.4/DataQuality/index.php?pid=45)

2. These statistics include the number of open/unresolved queries; number of closed/resolved queries; the average time queries remain unresolved; the average time for a query response and the average time for a query to be resolved.
3. Visualisations are also created within the 'Resolution Metrics' tab, displaying the most queried fields and queried records. The user has the choice to display this as a bar chart of a pie chart:

