

INTRODUCTION



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Objectives

What is REDCap?

How do I access REDCap?

Why would I use REDCap?

What is REDCap?

REDCap is a secure, HIPAA compliant, web-based application that supports research data capture and management

REDCap was developed at Vanderbilt University and available to most institutions at no cost

REDCap is intended for data collection/management, not as a standalone data repository

REDCap stores projects as individual tables within a large database

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How do I access REDCap?



BU REDCap is available to the BU and BMC Research Community, including faculty, staff, researchers, and students

Accounts for external collaborators may be requested as well

Our REDCap has table-based authentication (i.e., local accounts are created in REDCap and NOT linked to your BU Kerberos)

You may request a REDCap account by submitting the end user agreement, <https://redcap.bumc.bu.edu/surveys/?s=RYKEW4N4RX>

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Why would I use REDCap?

- Free to use
- HIPAA compliant
 - Audit trail
- Enforces restricted data access
- Remote data collection
- No extensive programming required
- Supported by IT
 - Including backups & security enhancements

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How can I use REDCap?

REDCap may be used for...

- Research (clinical and non-clinical)
 - E-Consenting
- Education & Training
- Quality Improvement Initiatives
- Operational Support (please inquire about restrictions)
- Examples...
 - COVID-19 symptom tracking and monitoring
 - HEALing Communities Study
 - Post training session feedback

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REDCap for 21 CFR Part 11

REDCap may be used for...

- If conducting a drug or device study and using REDCap for any data collection, including e-consent, compliance with [FDA 21 CFR Part 11 requirements for electronic records and signatures](#) is required.
- Please visit <https://www.bu.edu/researchsupport/forms-policies/redcap-research-electronic-data-capture-part-11-process-training/> to learn more.
- Please contact rchelp@bu.edu to schedule a consultation.

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Data Collection Instruments & Surveys



Record Dashboard

List of existing record IDs & responses



Data Entry

Study team enters data in REDCap



Public Link

General link used for all participants



Participant List

Unique links, custom invites, tracked responses



Survey Queue

Survey to-do list for participants



ASI

Scheduled invites based on defined conditions

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Field Structure

Add New Field

Field Type: Text Box (Short Text, Number, Date/Time, ...)

Question Number (optional):

Field Label: Use the Rich Text Editor

Action Tags / Field Annotation (optional):

Variable Name (utilized in logic, calcs, and exports): Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

How to use: Smart Variables Piping

Validation? (optional): Date (M-D-Y)

Minimum:

Maximum:

-- OF --

--select ontology service--

Required? No Yes

* Prompt if field is blank

Identifier? No Yes

Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment: Right / Vertical (RV)

Align the position of the field on the page

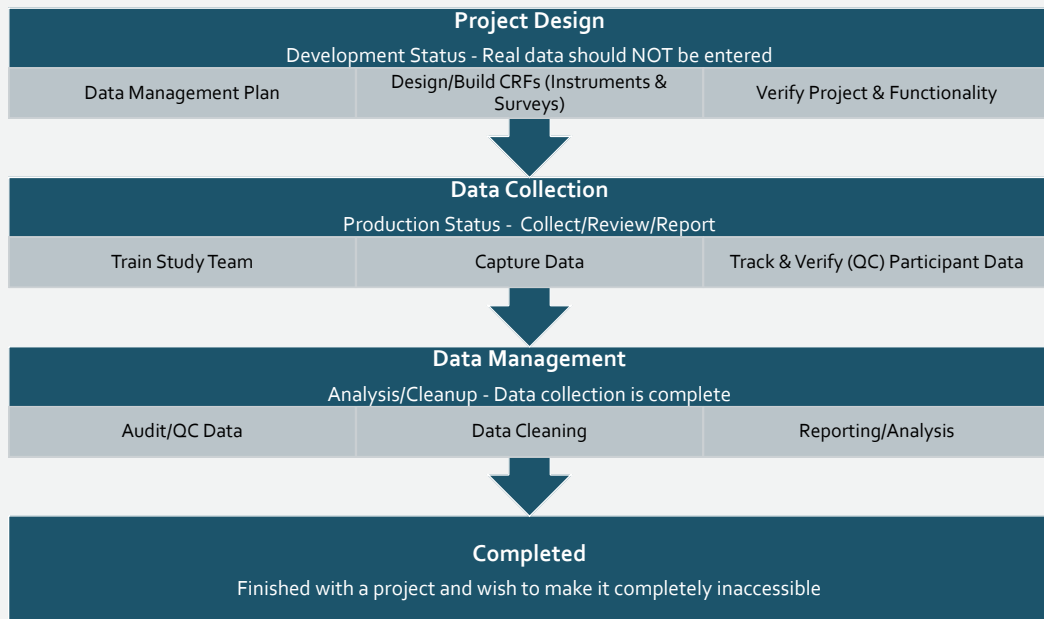
Save Cancel

- Field Type
- Label
- Variable Name
- Validation
- Required
- Identifier
- Action Tags

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Project Phases



Project Design Checklist

- | Main Settings | Optional Modules and Customizations | Applications | Administration & Data Collection |
|---|---|--|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Classic or Longitudinal (Events) | <input type="checkbox"/> Repeating Instances | <input type="checkbox"/> Alerts & Notifications | <input type="checkbox"/> User Rights |
| <input type="checkbox"/> Surveys | <input type="checkbox"/> Record Numbering | <input type="checkbox"/> Multi-Language Management | <input type="checkbox"/> Data Entry Forms |
| <input type="checkbox"/> Instruments | <input type="checkbox"/> Data Resolution Workflow | <input type="checkbox"/> Mobile App | <input type="checkbox"/> Survey Distribution Tools |
| <input type="checkbox"/> Fields Types | <input type="checkbox"/> Tracking Data Changes | | <input type="checkbox"/> Scheduling |
| <input type="checkbox"/> Variable Names | <input type="checkbox"/> Twilio | | <input type="checkbox"/> Reports |
| <input type="checkbox"/> Conditional Logic | <input type="checkbox"/> Randomization | | |

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Dashboard

Sample Longitudinal PID 11055

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 (no data saved) ?
- Unverified Partial Survey Response
- Complete Completed Survey Response

Dashboard displayed: [Default dashboard] Create custom dashboard

Displaying record Page 1 of 1: "1" through "5" of **5** records ALL (5) records per page

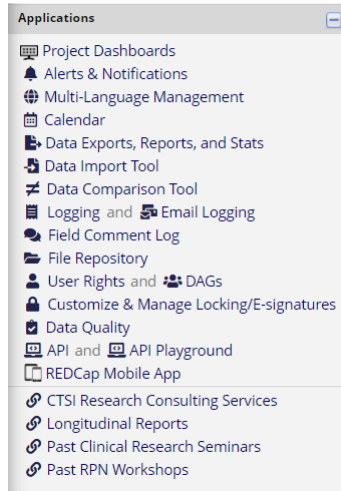
+ Add new record

Displaying: [Instrument status only](#) | [Lock status only](#) | [All status types](#)

Participant ID	Initial Data		Week 1	Week 2	Week 3	Week 4	Final Data <small>Completion Data (to be entered by study personnel only)</small>
	Pre-Screening Survey	Participant Info Survey	Participant Morale Questionnaire	Participant Morale Questionnaire	Participant Morale Questionnaire	Participant Morale Questionnaire	
1 ID:1001	✔	✔	●	●	●	●	●
2 ID:1002	✔	●	●	●	●	●	●
3 ID:1003	✔	●	●	●	●	●	●
4 ID:1004	✔	●	●	●	●	●	●
5 ID:1005	✔	●	●	●	●	●	●

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Data Management



User Rights

Project Access & Privileges



Data Quality

Data Resolution Workflow



Reports

View & Export Data



Project Dashboards

Custom Dynamic Charts



Best Practices

- Meet with a statistician to review CRFs
- Use field validation whenever possible
- Move your project into Production
- Do not change variable names or coded values for response options once you begin collecting real data
- Perform a data export prior to making changes in Production
- Manage User Rights

BUMC REDCap: <https://redcap.bumc.bu.edu/>
Help: rchelp@bu.edu

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