BASIC TRAINING

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Objectives

- Overview
- Project Creation
- Surveys
- Data Management

Overview

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

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

REDCap is intended for data collection/management, not as a long-term storage solution

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Why REDCap?

- An EDC system designed for electronic data collection and real-time access
- Secure & encrypted data on IS&T Virtual Restricted Use server behind firewalls
- Reviewed and cleared as HIPAA compliant
- Quickly design eCRFs
- Streamline data collection and improve data quality with real-time data validation
- Query & report on data at any time, from anywhere
- User-rights management for controlling & removing user access
- Audit logs of user activity and data changes

Investigator Responsibility

REDCap security features do not exempt users from research compliance, responsibility, or Good Clinical Practice

Clearly define the project or research objective(s) and determine which data are required

Meet with a statistician/CTSI BERD to review the project and data collection instrument design

Confirm that your REDCap activity is in compliance with applicable regulations

Plan and review your data collection workflow

TEST. TEST. TEST.

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Getting Started

1

Submit end user agreement:
https://redcap.bumc.bu.edu/surveys/?s=RYKEW4N4RX

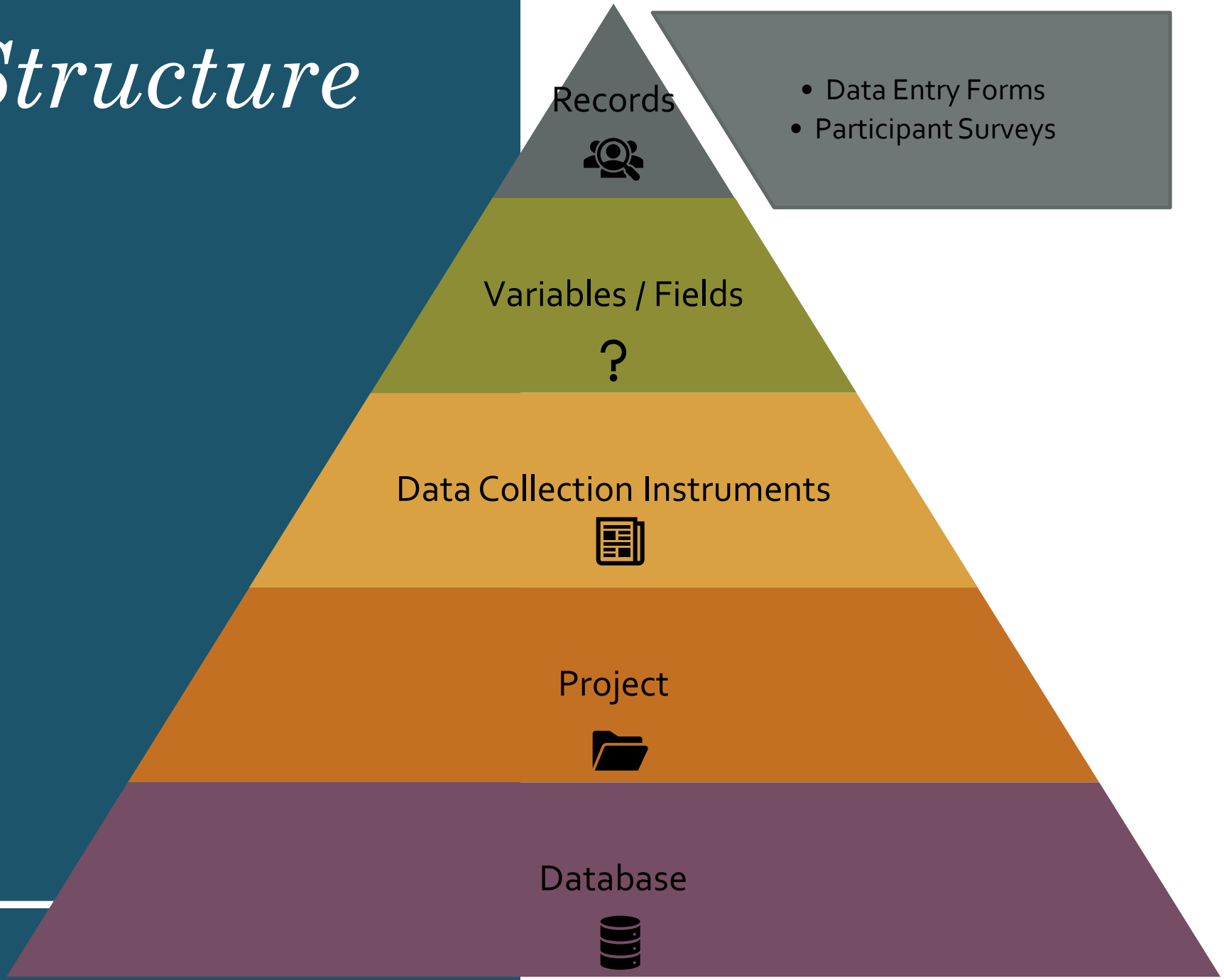
2

Review training videos & FAQ:
https://redcap.bumc.bu.edu/index.php?action=training

3

Request a consult:
rchelp@bu.edu

Structure



- Data Entry Forms
- Participant Surveys

New Project

CREATE NEW PROJECT

EMPTY PROJECT

REDCAP XML FILE

PROJECT TEMPLATE

Project Phases

3 project phases in REDCap:

1. Development – learn, build, test
   - Real data should NOT be entered until the project has been moved to the production phase.
2. Production – collect, analyze, report
   - Draft Mode – data form updates
3. Archived – inactive, offline

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Poll

Should you collect test data while your project is in development status?

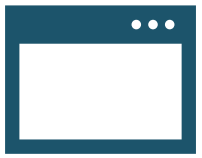
a. No, the project must be in production status to test branching logic functionality

b. No, the project must be in production status in order to send myself survey links for testing

c. Yes, I should test my entire project as if I were entering real production data

d. Yes, I can enter test data while in development status, but should delete the test data before continuing with development programming

Data Collection Format



Classic

Instruments used at one time point

Longitudinal

Instruments are repeated across defined events/visits

Repeating Instruments

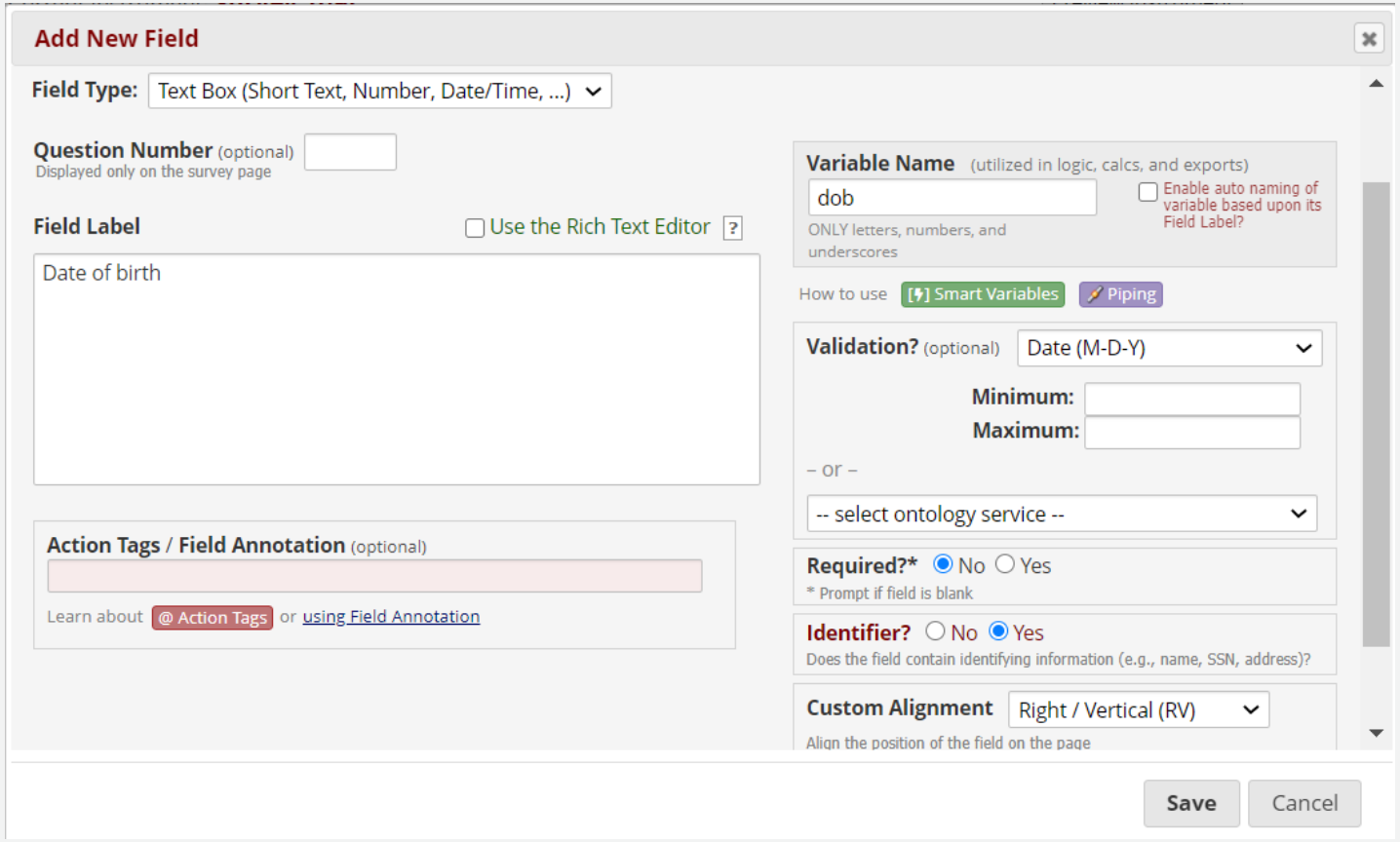
Ad hoc repetition (one-to-many) – no defined events; varies for each record

Project Build

ONLINE DESIGNER &
DATA DICTIONARY

ADD FIELDS

Field Structure



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

Project Build

BRANCHING LOGIC

ENABLE SURVEY

TEST

PRODUCTION

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Poll

You have pushed your project into production status to begin real data collection. Your PI decides to review the project and has significant revisions. What should you do?

a. Proceed with data collection and make revisions during the next phase
b. Delete the project
c. Request to have the project pushed back into development status
d. Copy the project and make revisions
e. Either c or d

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Poll

What draft change is restricted on production status projects?

a. Updating a misspelled variable name
b. Fixing the order of existing response options
c. Changing a response value code from an alphabetical to a numerical value
d. Deleting an event

Surveys

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

Poll

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Can you enable surveys AFTER your project has been moved to production status?

a. No, this setting must be enabled prior to moving project to production status
b. Yes, I can enable surveys anytime during the project lifecycle
c. Yes, I can request to have surveys enabled after I have moved my project into production status

Survey Settings

Designated Email

Participant list; survey-specific email

Design Options

Logos; themes; page display

Survey Access

Limits; expiration; save & return

Termination

Re-directs; auto-continue

e-Consent

End-of-survey certification & PDF archival

Poll

What survey feature voids another survey feature?

a. Survey access save & continue
b. Survey response notifications
c. Survey termination auto-continue setting
d. Saving completed survey PDF to a file upload field

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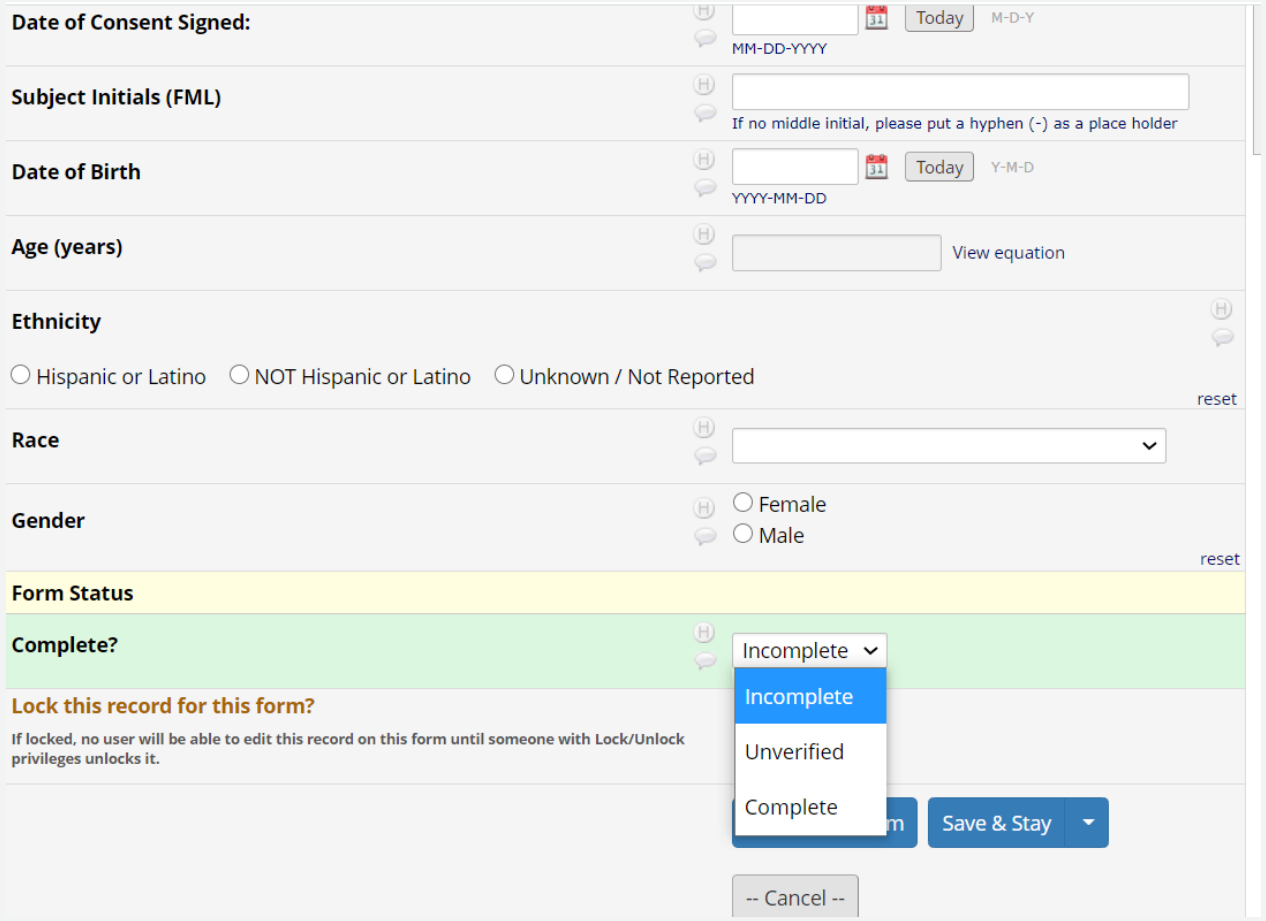
Data

Entry | Management | Export

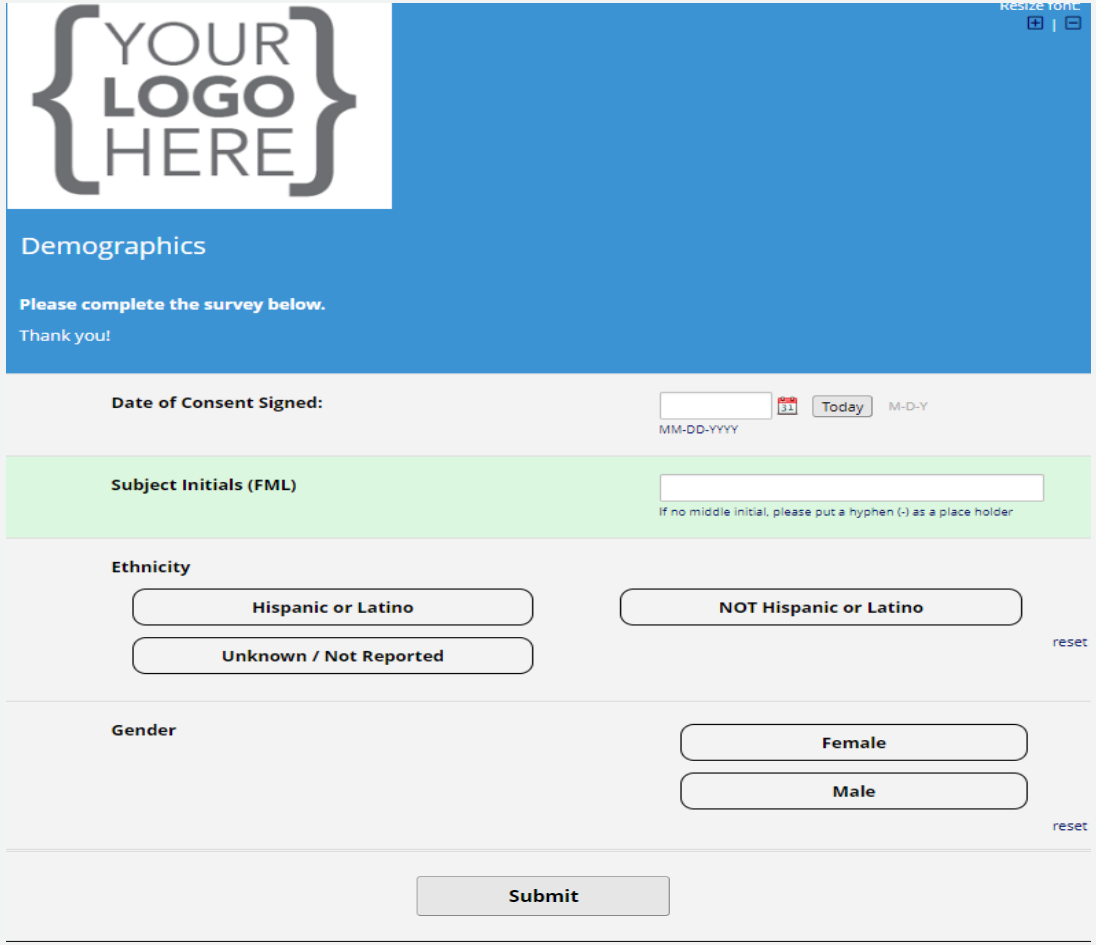
ADD NEW RECORDS

ADMINISTER SURVEYS

Data Entry View



Survey View



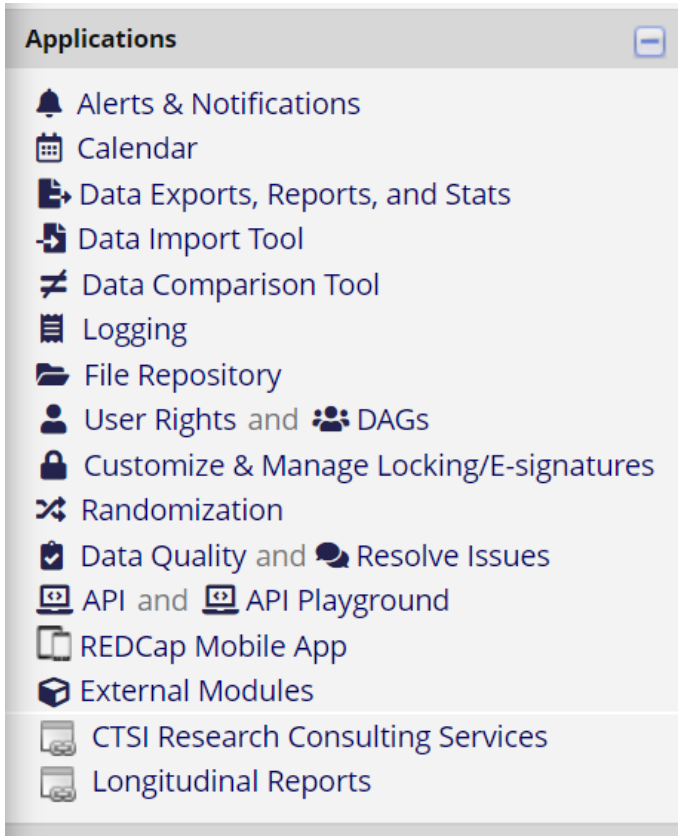
Data

Entry | Management | Export

RECORD STATUS DASHBOARD

REPORTS

DATA EXPORTS



Data Management

- User Access
- Data Resolution Workflow
- Require reason for data changes
- Longitudinal Report Plugin

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How can I avoid deleting data from my project once it's in production?

a. Take a survey offline to stop unnecessary data submission
b. Use Form Render Skip Logic to hide an instrument
c. Hide or retire fields and/or response options with action tags
d. Manually stop future alerts with a 'kill switch' switch for ASI or Alerts & Notifications
e. Do not grant the right to delete records
f. All of the above

Tips

Separate projects for public surveys	Designate an email field to link record ID in Participant List	Survey Dashboard	Survey Login page
Protect public survey with the Google reCAPTCHA feature	ASI is not ideal for Repeating Instruments	Check out Alerts & Notifications for additional customized emails	External Modules
Action Tags	Sponsor Dashboard	User Rights, Roles, and DAGs	Upcoming Release…

Poll

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What do you think is an anticipated upcoming feature in our next release?

a. Field embedding
b. Select and modify multiple fields together on the Online Designer
c. Record-level locking feature
d. Missing Data Codes to note why a value is blank
e. Twilio SMS for Alerts & Notifications

Questions?

Best Practices

- Meet with a statistician to develop CRFs
- Use field validation whenever possible
- Do not change variable names or values of response options once you begin collecting real data
- Perform data export prior to making changes in Production
- Manage User Rights
- Enable DUO for 2FA login

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

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