

Scientific Computing and Data Research Data Services

Surveys in REDCap

<https://redcap.mountsinai.org>

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Introduction – Team Members



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Please use the following acknowledgement in your publications:

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Acknowledge Scientific Computing and Data:

All publications must include the following language in the acknowledgments section:

“This work was supported in part through the REDCap resources and staff expertise provided by Scientific Computing and Data at the Icahn School of Medicine at Mount Sinai.”

Your Publications

Report publications to Scientific Computing and Data:

All publications that resulted from Scientific Computing and Data resources and services, including Leaf and ATLAS, should be reported annually.

To report your publications, submit them here: <https://redcap.link/a21haj0q>

For 20 or more publications, please email Maria Castro at mariajulia.castro@mssm.edu

REDCap at Mount Sinai

- ▶ **Research Electronic Data Capture** – It was created in 2004 at Vanderbilt University for the purpose of supporting a small group of researchers who needed a secure data collection tool
- ▶ **Data resources and integration between existing systems**
 - Import clinical data into REDCap from Epic (over 1800 mapped fields)
 - Basic Demographics
 - Conditions/Problems list
 - Medications
 - Vital signs
 - Laboratory Results (lab results where LOINC code is stored in Epic)
 - Submit requests to <https://bit.ly/3guXoag>
- ▶ **We host more than 10,000 databases, with over 18,000 active users**
- ▶ **Services for project building, data protection, support, and training**

Creating a REDCapAccount

Mount Sinai Users:

▶ Mount Sinai faculty, students and staff can log into REDCap using their regular Mount Sinai username and password here: <https://redcap.mountsinai.org>

External Users:

▶ For external collaborators without Mount Sinai credentials, the PI or their delegate must request MountSinai credentials via SailPoint: <https://sailpoint.mountsinai.org/>

Digital Concierge Service

Virtual REDCap Office Hours: Wednesdays at 3:30pm to 4:30pm

- Open to all users

- Get help with specific project questions

Every Wednesday from 3:30 p.m. – 4:30 p.m. (ET): [Click here to register and join](#)

You can also get help with other services such as: DTP Academic Technology, HPC, MSDW, Self-service Cohort Query Tools, eRAP, Data Ark Data Commons, DTP Cybersecurity, and Levy Library Resources and Services

Additionally we plan on opening an extra day once a month to accommodate users who cannot attend on Wednesdays.

Welcome!

Thank you for joining today! We are excited to present the **Surveys in REDCap** – Intermediate Level Presentation.

- The goal is to familiarize you with the many survey features in REDCap.



- If you are a new user to REDCap, you may want to check out the **Introduction to REDCap** presentation from February 2023, presented by my colleague, Priscilla Acquaye.

<https://labs.ica hn.mssm.edu/minervalab/rds/about-redcap/>

- Disclaimer: Today's presentation ***will not cover everything*** about surveys in REDCap.

Overview

- ▶ Surveys in REDCap
 - Creating surveys
 - REDCap Shared Library
 - Survey settings
 - Survey design
 - Distributing surveys
 - e-Consent Framework
 - Demo
 - Questions answered through Q&A feature



Surveys in REDCap

► Use the REDCap survey feature when collecting data from study participants or respondents. No logging into REDCap.

TIP: If your study team is entering paper survey data in REDCap, you do not need to create a survey.



Project types in REDCap	Count
Projects not containing surveys	3,868 (35%)
Projects containing surveys	7,269 (65%)

Create a survey in REDCap

REDCap® Home My Projects **+ New Project** Help & FAQ Training Videos Send-It Messenger Control Center

+ Create a new REDCap Project

You may begin the creation of a new REDCap project on your own by completing the form below and clicking the Create Project button at the bottom.

Project title:

Project's purpose: How will it be used?

Assign project to a Project Folder?

Project notes (optional): Description of the project's use or purpose (displayed on the My Projects page)

Project creation option:

- Empty project (blank slate)
- Upload a REDCap project XML file (CDISC ODM format) [?]
- Clinical Data Mart: Create a project and pull multiple medical records from Epic
- Use a template (choose one below)

<input type="radio"/> MyCap Example Project	using the MyCap app on a mobile device.
<input type="radio"/> MyCap Example Project	Various examples of MyCap tasks and active tasks for collecting data from participants using the MyCap app on a mobile device.
<input type="radio"/> Piping Example Project	Contains a single data collection instrument enabled as a survey, which contains questions to demonstrate the Piping feature.
<input type="radio"/> Project Dashboards, Smart Functions, Smart Tables, & Smart Charts	Example of Project Dashboards, Smart Functions, Smart Tables, & Smart Charts with fifty records included.
<input type="radio"/> Randomized Clinical Trial	Contains seven data entry forms for collecting data for a randomized clinical trial. Includes a short demographics form followed by a form where randomization is performed. An example randomization model has already been set up.... Show more
<input type="radio"/> Repeating Instruments	Example classic project showcasing the Repeating Instruments functionality.
<input checked="" type="radio"/> Single Survey	Contains a single data collection instrument enabled as a survey, which contains questions to demonstrate all the different field types.

Create a survey:

- Blank slate (HARDER to get started)
- Survey template in REDCap
- Copy an existing survey project
- Add a survey instrument to an existing project (from another project or from REDCap Shared Library)

Enabling instruments as surveys in a project

The two-step process:

Surveys in REDCap Training Project PID 17947

Project Home **Project Setup** Other Functionality Project Revision History [Edit project settings](#)

Project status: Development Completed steps 1 of 7

Complete!

Main project settings

Disable Use surveys in this project?

Enable Use longitudinal data collection with defined events?

Not complete? Enable Use the MyCap participant-facing mobile app? [Learn more about MyCap](#)

[VIDEO: How to create and manage a survey](#)

► Step 1

- Project Setup -> Use Surveys in the Project
- Training Video for Surveys
- Look for question marks for helpful guidance.

Enabling instruments as surveys

The two-step process:

The screenshot shows the 'Surveys in REDCap Training Project' interface. At the top, there are navigation tabs for 'Project Home', 'Project Setup', 'Online Designer', 'Data Dictionary', and 'Codebook'. Below these, there is a 'VIDEO: How to use this page' link and a 'Create snapshot of instruments' button. A text block explains that the Online Designer allows for easy modifications to fields and data collection instruments via a web browser, with a note that changes take effect immediately. The main area is divided into 'Data Collection Instruments' and 'Survey options'. The 'Data Collection Instruments' section includes 'Create', 'Import', and 'Upload' buttons. The 'Survey options' section includes 'Form Display Logic', 'Survey Queue', 'Auto Invitation options', 'Survey Login', and 'Survey Notifications'. A table lists the 'Demographics' instrument with 8 fields. The 'Enabled as survey' column for 'Demographics' is highlighted with a red box, showing a green checkmark and a pencil icon. A tooltip 'Click to modify survey settings' points to this area. Another red box highlights the 'Survey related options' column, which includes 'Survey settings' and '+ Automated Invitations'.

Data Collection Instruments

- + Create a new instrument from scratch
- Import a new instrument from the official [REDCap Instrument Library](#).
- Upload Instrument ZIP file from another project/user or [external libraries](#)

Form options:

- Form Display Logic

Survey options:

- Survey Queue
- Auto Invitation options
- Survey Login
- Survey Notifications

Click to modify survey settings

Instrument name	Fields	View PDF	Enabled as survey	Instrument actions	Survey related options
Demographics	8			Choose action	Survey settings + Automated Invitations

► Step 2

- Project Setup -> Online Designer -> Enable as survey
- Survey –related options
 - Survey Settings
 - Automated invitations

REDCap Shared Library = Amazing Resource!

The screenshot shows the 'Project Setup' page for a REDCap project. The project name is 'Surveys in REDCap Training Project' with PID 17947. The project status is 'Development' and 'Completed steps 2 of 7'. Under 'Main project settings', there are three toggle switches: 'Use surveys in this project?' (checked), 'Use longitudinal data collection with defined events?' (checked), and 'Use the MyCap participant-facing mobile app?' (unchecked). A red box highlights the link 'Design your data collection instruments & enable your surveys'. Below this, there are buttons for 'Online Designer' and 'Data Dictionary', and a red box highlights the link 'Explore the REDCap Instrument Library'. At the bottom, there are buttons for 'Smart Variables', 'Piping', 'Action Tags', 'Field Embedding', and 'Special Functions'.

The screenshot shows the 'Generalized Anxiety Disorder 7 Item (GAD 7) Scale' survey form. The title is 'Generalized Anxiety Disorder 7 Item (GAD 7) Scale'. The question is 'Over the last 2 weeks, how often have you been bothered by the following problems?'. There are four items listed: 1. Feeling nervous, anxious, or on edge; 2. Not being able to stop or control worrying; 3. Worrying too much about different things; 4. Trouble relaxing. Each item has five radio button options: 'not at all sure', 'several days', 'over half the days', 'nearly every day', and 'not at all sure'.

The screenshot shows the 'PROMIS SF v2.0 - Phys Function 24a (PROMIS-HAQ)' survey form. The title is 'PROMIS SF v2.0 - Phys Function 24a (PROMIS-HAQ)'. The question is 'Are you able to dress yourself, including tying shoelaces and buttoning your clothes?'. There are two items listed: PFA16r1 and PFB26. Each item has five radio button options: 'Without any difficulty', 'With a little difficulty', 'With some difficulty', 'With much difficulty', and 'Unable to do'. There are 'reset value' links next to each item.

► REDCap Shared Library

Project Setup → Design your data collection instruments & enable your surveys → REDCap Instrument Library

- **REDCap Shared Library** contains instruments submitted by REDCap Consortium members. Many validated instruments can be found, including PROMIS, GAD-7, PHQ-9 and variations of Concomitant Medications and Adverse Events.
- 3700 + instruments in multiple languages

Survey Settings

Surveys in REDCap Training Project PID 17947

[Project Home](#) [Project Setup](#) [Online Designer](#) [Data Dictionary](#) [Codebook](#)

[VIDEO: How to use this page](#) [Create snapshot of instruments](#) Last snapshot: never ?

The Online Designer will allow you to make project modifications to fields and data collection instruments very easily using only your web browser.
NOTE: While in development status, all field changes will take effect immediately in real time.

Data Collection Instruments

[+ Create](#) a new instrument from scratch
[Import](#) a new instrument from the official [REDCap Instrument Library](#)
[Upload](#) instrument ZIP file from another project/user or [external libraries](#)

Form options: [Form Display Logic](#)

Survey options: [Survey Queue](#) [Auto Invitation options](#) [Survey Login](#)
[Survey Notifications](#)

Instrument name	Fields	View PDF	Enabled as survey	Instrument actions	Survey related options
Demographics	8			Choose action	Survey settings + Automated Invitations

► Survey Settings

- Use survey settings to determine how you wish to design your survey for maximum response and highest data quality.
- Don't rely on 'default' features in REDCap
- Crucial to review each section for best survey design

Survey Designs

Surveys in REDCap Training Project PID 17947

[Project Home](#) [Project Setup](#) [Online Designer](#) [Data Dictionary](#) [Codebook](#)

[VIDEO: How to use this page](#) [Create snapshot of instruments](#) Last snapshot: never [?](#)

The Online Designer will allow you to make project modifications to fields and data collection instruments very easily using only your web browser.
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Data Collection Instruments

[+ Create](#) a new instrument from scratch
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[Upload](#) instrument ZIP file from another project/user or [external libraries](#)

Form options:
[Form Display Logic](#)

Survey options:
[Survey Queue](#) [Auto Invitation options](#) [Survey Login](#)
[Survey Notifications](#)

Click to modify survey settings

Instrument name	Fields	View PDF	Enabled as survey	Instrument actions	Survey related options
Demographics	8			Choose action	Survey settings + Automated Invitations

► When it comes to surveys – one size does not fit all!

Things to consider...

- Audience
- Anonymous
- Confidential
- Single or multiple surveys
- Different surveys for different respondents
- Survey distribution

Survey Distribution

► How will you distribute the survey?

- **Option 1: Public Survey link**
 - Pros – easy, anonymous, fast, send via Outlook, share as QR code
 - Cons – open to all, limited options, bot attacks, limited tracking ability
- **Option 2: Participant List**
 - Pros – send surveys through REDCap, reminders, tracking ability, easy interface
 - Cons – not anonymous, requires email or phone numbers, no logic to customize survey distribution
- **Option 3: Survey Queue**
 - Pros – works well for multiple surveys, allows flexibility with survey distribution, use logic to determine survey order
 - Cons – logic can be challenging, may require more upfront testing, may be easier to use survey logic Survey Settings
- **Option 4: Automated Survey Invitation (ASI)**
 - Pros – Automate your surveys, specify conditions when survey will be sent, customized to each respondent in your research project
 - Cons – Complex, may be challenging to implement, logic can be challenging, may require more upfront testing, a simpler method may be easier for team

e-Consent Framework in REDCap

- ▶ Electronic-Consent (e-Consent) is a platform for consenting research participants using a computer-based consent form.
- ▶ REDCap offers an optional e-Consent Framework in Survey Settings
 - Add a certification page at end of survey to confirm all information is correct
 - Stores a static copy of the e-consent pdf in the project's File Repository.
 - Access on computer, tablet, or mobile phone.

e-Consent Framework is located in **Survey Settings**

e-Consent Framework
- and -
PDF Auto-Archiver

Upon survey completion, a compact PDF copy of the survey response will be automatically stored in the project's File Repository, from which the archived PDFs can be downloaded at any time.

Disabled
 Auto-Archiver enabled
 Auto-Archiver + e-Consent Framework [What is the e-Consent Framework?](#)
(Includes end-of-survey certification & archival of PDF consent form)

e-Consent Framework Options:

For e-Consent it is sometimes required to include the consenting participant's name (and date of birth in some cases) on the final consent form as extra documentation of their identity. Below you may select fields used to capture that info. You may also enter the current e-Consent version and e-Consent type for this form. The values for the fields below will be automatically inserted into the footer of the PDF consent form that the participant will review at the end of the survey, after which that PDF 'hard-copy' will be archived in the File Repository. [Read more](#)

Allow e-Consent responses to be edited by users?

e-Consent version: e.g., 4

First name field: (dropdown)

Last name field: (dropdown)

Note: If you are using a single field to capture whole name, you may select it for either first/last name above while leaving the other name field unselected.

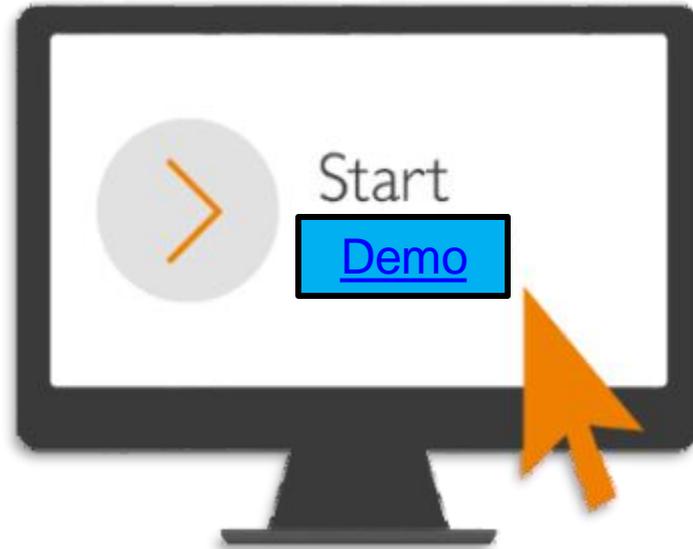
Optional fields (these are not always necessary for e-Consent):

e-Consent type: e.g., Pediatric

Date of birth field: (dropdown)

Force signature field(s) to be erased if participant clicks Previous Page button while on the certification page?
Select a field below that serves as a signature field in this survey. It could be a free-form text field, a signature field, or a number field (e.g., to collect a PIN), and it must be a Required field. If any fields are selected below, then if the participant gets to the last page of the survey where it asks them to certify their responses, if they then choose to click the Previous Page button, it will erase the value of these signature fields, thus forcing them to 'sign' the field(s) again before completing the survey. If you do not want this behavior, do not select any fields below. You may use up to five signature fields.

Signature field #1: (dropdown)



Thank You!

Thank you for your time! We hope you enjoyed this presentation.

Please take a minute to complete a short survey to provide your feedback and help improve our services:



<https://redcap.link/br58r17j>