

BASICS ON REDCAP

A Tool for Data Collection and Management in Clinical Research

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Learning Objectives

- Introduce basic REDCap terminology, settings, and functions
- Describe best practices for REDCap setup
- Demonstrate fundamental features in REDCap to manage study data

Outline

What is REDCap

Terminology

Institutional Access to REDCap

Creating a Project in REDCap

- Project Settings
- User Rights
- Best Practices
- Different Types of Fields

Live Demonstration

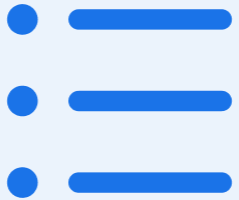
slido



Join at slido.com
#611371

ⓘ Start presenting to display the joining instructions on this slide.

slido



**How would you describe your experience
in REDCap?**

ⓘ Start presenting to display the poll results on this slide.



What is REDCap

- **Research Electronic Data Capture**
- REDCap is a secure, web-based application for building and managing online surveys and databases for research.
- REDCap provides:
 - Audit Trails to track data manipulation and User activity
 - Data Exports to Excel, PDF, and common statistical packages (SPSS, SAS, Stata, and R)
 - Numerous features for data management...we'll cover some of these in this presentation

Terminology

- **Data Collection Instrument** – A data collection tool that can be left as a form or enabled as a survey.
- **(Data Entry) Form** – An instrument in which data can only be entered or collected by a REDCap user. (viewing method)
- **Survey** – An instrument in which a research participant can enter data or answer questions without a REDCap account. Instrument is accessed through a URL. (viewing method)
- **Record** - A record contains all the information for a unique participant. One record may contain many instruments
- **Record ID** – A unique identifier for each record in a project.
- **Record Dashboard** – A table that lists all existing records and their status for every data collection instrument
- **Online Designer** – A way to build and edit instruments through a point-and-click interface.
- **Data Dictionary** – CSV file that holds the architecture of a project. An alternative to the Online Designer for building or editing projects. Mainly use to save the project for future reference or project duplication.
- **Piping** – Allows answers from previous questions to auto-populate or “pipe” into another place in a survey/form.

<https://healthinstitute.illinois.edu/research-support-translation/redcap/glossary#form>

https://www.vumc.org/nursingebp/sites/default/files/public_files/Vanderbilt%20Meharry%20REDCap%20User%20Guide%20v4.1.pdf

REDCap Access and Support



BU

- Access: <https://www.bu.edu/ctsi/tools/>
- REDCap Support: rchelp@bu.edu



FSU

- Access: <https://med.fsu.edu/ncrt/redcap-access>
- REDCap Support: redcap@med.fsu.edu



UF

- Access: <https://www.ctsi.ufl.edu/research/study-design-and-analysis/redcap/>



UVM

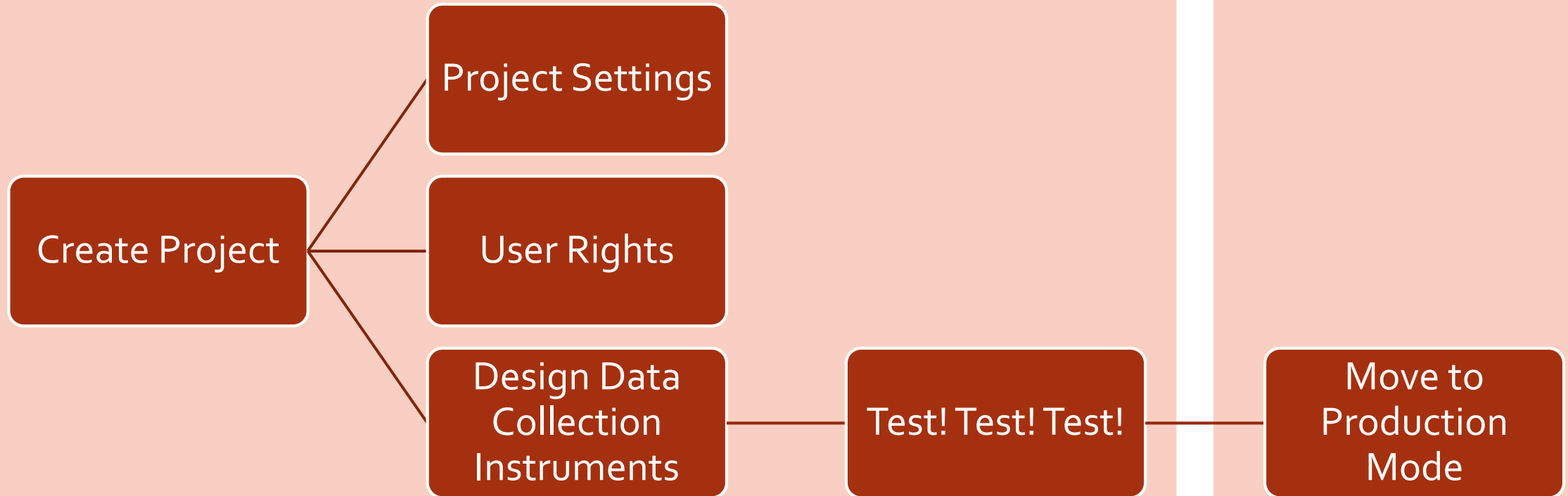
- Access: <https://www.uvm.edu/biostatistics/redcap>
- REDCap Support: redcap.administrator@med.uvm.edu



MUSC

- Access: <https://medicine.musc.edu/departments/centers/bmic/projects/redcap>
- REDCap Support: redcap@musc.edu

Development Mode



Production Mode

Create a Project

[Home](#) [My Projects](#) **[+ New Project](#)** [Help & FAQ](#) [Training Videos](#) [Send-It](#) [Messenger](#) Logged in as red_0004

+ 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:

Title to be displayed on project webpage

Purpose of this project:
How will it be used?
---- Select One ----

---- Select One ----

---- Select One ----

Practice / Just for fun

Operational Support

Research

Quality Improvement

Other

Project notes (optional):
Comments describing the project's use or purpose that are displayed on the My Projects page.

Start project from scratch or begin with a template?

☒ Create an empty project (blank data table)

☐ Upload a REDCap project XML file

☐ Use a template (choose one below)

Choose a project template (comes pre-filled with fields, forms, surveys, and other settings)

select template	Template title (sorted by title)	Template description
	A Single Survey (demo of field	A single data collection instrument enabled as a survey. Demonstrates the most frequently-

Research Project

Research ▼

Name of P.I. (if applicable):
First name MI Last name

Email of P.I. (if applicable)

Name of P.I. as cited in publications (if applicable): (e.g., Harris PA)

VUnetID of P.I. (if applicable):

IRB number (if applicable):

Grant number (if applicable):

Please specify:

- ☐ Basic or bench research
- ☐ Clinical research study or trial
- ☐ Translational research 1 (applying discoveries to the development of trials and studies in humans)
- ☐ Translational research 2 (enhancing adoption of research findings and best practices into the community)
- ☐ Behavioral or psychosocial research study
- ☐ Epidemiology
- ☐ Repository (developing a data or specimen repository for future use by investigators)
- ☐ Other

Project Creation Options

Start project from scratch or begin with a template?

☐ Create an empty project (blank slate)

☐ Upload a REDCap project XML file (CDISC O

☒ Use a template (choose one below)

★ Choose a project template (comes pre-filled with fields, forms/surveys, and o


select template	Template title (sorted by title)	Template de
<input type="radio"/>	A. Single Survey (demo of field types)	A single p used f
<input type="radio"/>	B. Multiple Surveys	Examp study.
<input type="radio"/>	C. Demographics	A single data instrument us
<input type="radio"/>	D. Research Study	Example research collecting der results, and study completion data.

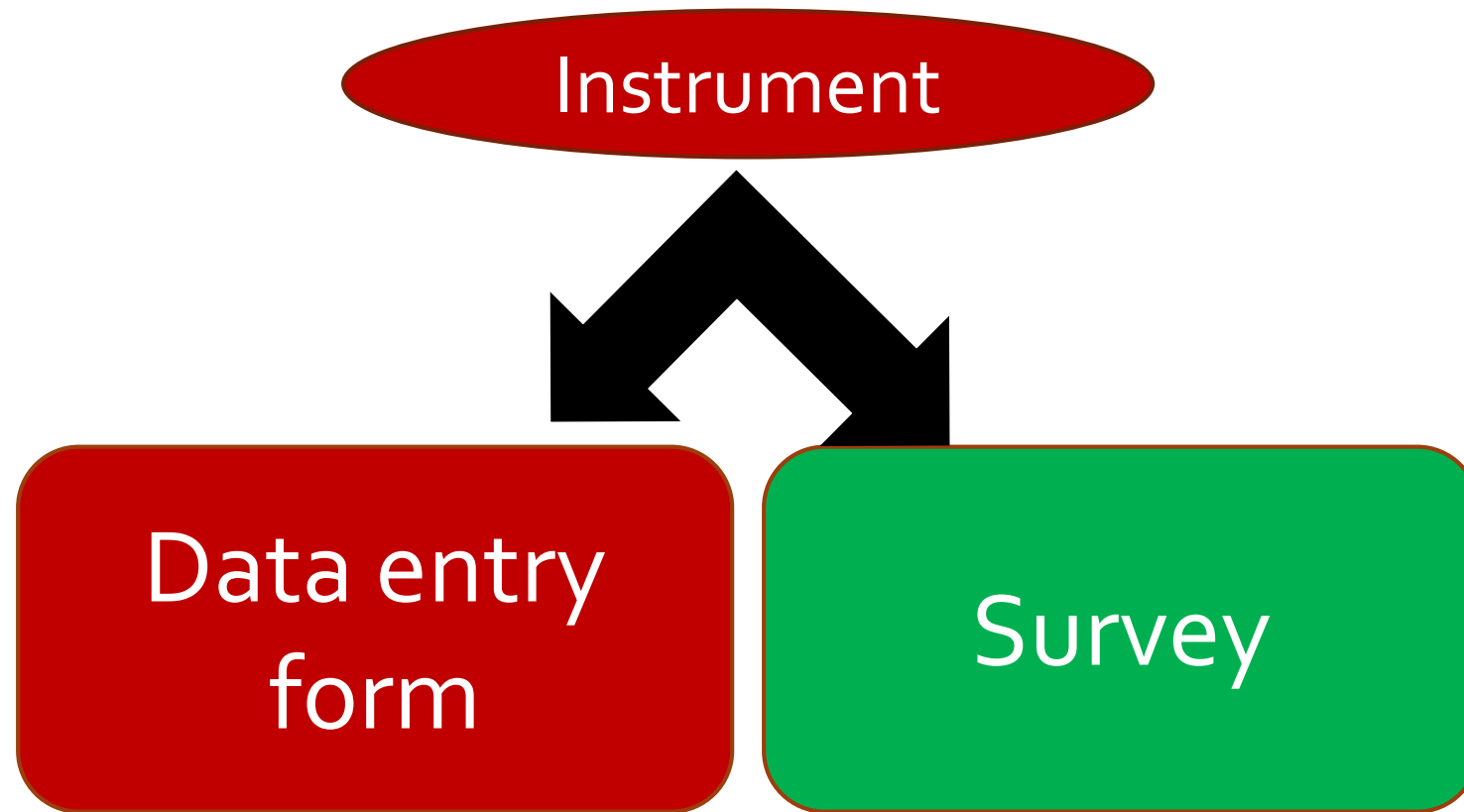
Create Project Cancel

~20 templates:
Surveys
consent forms
regulatory binders
employee training
...

Instrument

Demographics

+ Adding new Study ID Test2	
Study ID	Test2
Contact Information	
First Name	<input type="text"/>
Last Name	<input type="text"/>
Phone number	<input type="text"/> Include Area Code
E-mail	<input type="text"/>
Date of birth	<input type="text"/>  Y-M-D



Data Entry Form – accessed by REDCap Users

The screenshot displays the REDCap interface for a data entry form. On the left is a sidebar with navigation links: 'My Projects', 'REDCap Messenger', 'Project Home and Design' (containing Project Home, Project Setup, Designer, Dictionary, Codebook, and Project status: Development), 'Data Collection' (containing Survey Distribution Tools, Record Status Dashboard, and Add / Edit Records), 'Record ID 84' (with a link to 'Select other record'), 'Data Collection Instruments' (listing Demographics, Baseline Data, Pain Management Survey - PRE, Intervention Data, Pain Management Survey - POST, and Study Completion), and 'Applications' (containing Alerts & Notifications, Calendar, and Data Exports, Reports, and Stats). The main content area is titled 'Example Research Study' and includes action buttons for 'Modify Instrument' and 'Download PDF of instrument(s)', along with a video link 'VIDEO: Basic data entry'. The form itself is for 'Record ID 84' and is titled 'Demographics'. It contains several sections: 'Contact Information' with fields for First Name, Last Name, Phone number (with an 'Include Area Code' checkbox), E-mail, and Date of birth; 'Ethnicity' with radio buttons for 'Hispanic or Latino', 'NOT Hispanic or Latino', and 'Unknown / Not Reported'; 'Race' with a dropdown menu; 'Gender' with radio buttons for 'Male', 'Female', and 'non-binary'; and 'Has the patient given birth before?' with radio buttons for 'Yes' and 'No'. Each of these four sections has a 'reset' link. The bottom section is 'Screening information'. On the far right, there are three buttons: 'Save & Exit Form', 'Save & Stay', and '-- Cancel --'.

REDCap

Logged in as **rc_fund** | Log out

My Projects
REDCap Messenger

Project Home and Design

- Project Home · Project Setup
- Designer · Dictionary · Codebook
- Project status: **Development**

Data Collection

- Survey Distribution Tools
 - Get a public survey link or build a participant list for inviting respondents
- Record Status Dashboard
 - View data collection status of all records
- Add / Edit Records
 - Create new records or edit/view existing ones

Record ID 84 [Select other record](#)

Data Collection Instruments:

- Demographics**
- Baseline Data
- Pain Management Survey - PRE
- Intervention Data
- Pain Management Survey - POST
- Study Completion

Applications

- Alerts & Notifications
- Calendar
- Data Exports, Reports, and Stats

Example Research Study

Actions: [Modify Instrument](#) [Download PDF of instrument\(s\)](#) [VIDEO: Basic data entry](#)

Demographics

Adding new Record ID 84

Record ID 84

Contact Information

First Name

Last Name

Phone number Include Area Code

E-mail

Date of birth Y-M-D

Ethnicity

☐ Hispanic or Latino

☐ NOT Hispanic or Latino

☐ Unknown / Not Reported

Race reset

Gender

☐ Male

☐ Female

☐ non-binary

Has the patient given birth before?

☐ Yes

☐ No

Screening information

Save & Exit Form

Save & Stay

-- Cancel --

Survey –
completed
by a
participant

Pain Management Survey - PRE

Resize font:



Please complete the survey below.

Thank you!

Are you in pain today?

☐ Yes

☐ No

reset

What do you think about these medication features?

	1 Not important to me	2	3 Neutral	4	5 Very important to me	
Pill size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Pill form (tablet, capsule, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
How soon it takes effect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
How long the effect lasts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
How many times in a day I have to take it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset

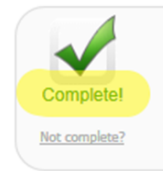
How has pain affected your life?

Expand

Submit


Save & Return Later

Project Setup Page



[Project Home](#) [Project Setup](#) [Other Functionality](#) [Project Revision History](#)

Project status: Development Completed steps 0 of 7



In progress
[I'm done!](#)

Main project settings

[Enable](#) [Use longitudinal data collection with repeating forms?](#) [?](#)

[Enable](#) [Use surveys in this project?](#) [?](#) [VIDEO: How to create and manage a survey](#)

[Modify project title, purpose, etc.](#)


In progress
[I'm done!](#)


Design your data collection instruments

Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method), in which you may use either method or both. Quick links: [Download PDF of all data collection instruments](#) OR [Download the current Data Dictionary](#)

[Go to](#) [Online Designer](#) or [Data Dictionary](#)

You may also browse for pre-built data collection instruments in the [REDCap Shared Library](#)

Have you checked the [Check For Identifiers](#) page to ensure all identifier fields have been tagged?


Optional
[I'm done!](#)

Enable optional modules and customizations


[Enable](#) [Auto-numbering for records](#) [?](#)

[Enable](#) [Scheduling module \(longitudinal only\)](#) [?](#)

[Enable](#) [Randomization module](#) [?](#)

[Enable](#) [Designate an email field to use for invitations to survey participants](#) [?](#)


[Additional customizations](#)


Optional
[I'm done!](#)

Set up project bookmarks (optional)

You may create custom bookmarks to webpages that exist inside or outside of REDCap. These bookmarks will be seen as links on the left-hand project menu and can be accessed at any time by users who are given privileges to do so. Every project bookmark has custom settings that allow one to control its appearance and behavior.


[Go to](#) [Add or edit bookmarks](#)


Optional
[I'm done!](#)

User Rights and Permissions


You may grant other users access to this project or edit the user privileges of current users on this project by navigating to the User Rights page. Additionally, if you wish to limit user access to certain records/responses for this project, you may want to use Data Access Groups, in which only users within a given Data Access Group can access records created by users within that group.

[Go to](#) [User Rights](#) or [Data Access Groups](#)


Not started
[I'm done!](#)

Test your project thoroughly

It is important to test the essential components of your project before moving it into production. Try creating a few test records and entering some data for each to ensure that your data collection instruments look and behave how you expect, especially branching logic and calculations. Then review your test data by creating reports and exporting your data to view in Excel or a statistical analysis package. If you have surveys, complete the surveys as if you were a participant by using the Public Survey Link or Participant List by sending a survey invitation to yourself. If other project modules will be used regularly, test them out a bit too. The best way to test your project is to use it as if you were entering real production data, and it is always helpful to have colleagues (especially team members) take a look at your project to get a fresh set of eyes looking at it.


Not started

Move your project to production status

Move the project to production status so that real data may be collected. Once in production, you will not be able to edit the project fields in real time anymore. However, you can make edits in Draft Mode, which will then need to be approved by a REDCap administrator before taking effect.

[Go to](#) [Move project to production](#)

Design Data Collection Instruments

[Project Home](#) [Project Setup](#) [Other Functionality](#) [Project Revision History](#)

Project status: Development Completed steps 1 of 7

Complete!
[Not complete?](#)

Main project settings

[Enable](#) Use longitudinal data collection with repeating forms? [?](#)

[Enable](#) Use surveys in this project? [?](#) [VIDEO: How to create and manage a survey](#)

[Modify project title, purpose, etc.](#)

Not started
[I'm done!](#)

Design your data collection instruments

Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method), in which you may use either method or both. [Quick links: Download PDF of all data collection instruments](#) OR [Download the current Data Dictionary](#)

Go to [Online Designer](#) or [Data Dictionary](#)

You may also browse for pre-built data collection instruments in the [REDCap Shared Library](#)



Have you checked the [Check For Identifiers](#) page to ensure all identifier fields have been tagged?

Online Designer







Current instrument: **Baseline Data**


[Preview instrument](#)

[Add Field](#) [Add Matrix of Fields](#)







  **Baseline Measurements**


[Add Field](#) [Add Matrix of Fields](#)

      *Variable: date_visit_b*







Date of baseline visit  [Today](#) Y-M-D

[Add Field](#) [Add Matrix of Fields](#)

      *Variable: date_blood_b*







Date blood was drawn  [Today](#) Y-M-D

[Add Field](#) [Add Matrix of Fields](#)

      *Variable: alb_b*







Serum Albumin (g/dL)

[Add Field](#) [Add Matrix of Fields](#)

      *Variable: prealb_b*

Serum Prealbumin (mg/dL)

[Add Field](#) [Add Matrix of Fields](#)

      *Variable: creat_b*

Creatinine (mg/dL)

[Add Field](#) [Add Matrix of Fields](#)

User Rights

- Add/remove users to your REDCap project
- Customize privileges each user can have in terms of project access:
 - Project Design
 - Record creation/deletion
 - Data entry
 - Data access
 - Data form modification

Editing existing user "jholmes"

You may set the rights for the user below by checking the boxes next to the application tools to which you wish to grant them access. You may also grant them or deny them access to individual data collection instruments, if so desired. To save your selections, click the "Save Changes" button at the bottom of the page.

Editing existing user "jholmes"

Basic Rights

📅 Expiration Date (if applicable) (M/D/Y)

Highest level privileges:

- 📁 Project Design and Setup ☒
- 👤 User Rights ☒
- 👥 Data Access Groups ☒

Privileges for data exports (including PDFs and API exports), reports, and stats:

- 📄 Data Exports
 - ☐ No Access
 - ☐ De-identified*
 - ☐ Remove all tagged Identifier fields
 - ☒ Full Data Set
- 🔍 Add/Edit/Organize Reports ☒
Also allows user to view ALL reports (but not necessarily all data in the reports)
- 📊 Stats & Charts ☒

Data Entry Rights

NOTE: The data entry rights "only" pertain to a user's ability to view or edit data on a web page in REDCap (e.g., data entry forms, reports). It has no effect on data imports or data exports.

	No Access	Read Only	View & Edit	Edit survey responses
Fundamentals in the Conduct of Clinical Research Registration (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
February 2020 Attendance - Fundamentals in the Conduct of Clinical Research	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
OLD Exam - Fundamentals Training (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
Final Exam - Fundamentals Training (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
May 2020 Attendance -				

Save Changes **Cancel** **Remove user**

Best Practices...

...To keep in mind when creating your variables/fields

- Keep your variable names short and easy to understand
- Code your answer choices with analysis in mind
- Flag fields that collect identifying information
- Utilize validation features when collecting text responses
- DO enter test data while in development mode.
- **DO NOT enter real data until you have moved your project to production.**

Record Identifier



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

 [VIDEO: How to use this page](#)

Ready to add fields

You may now begin adding fields to your data collection instrument below using the Online Designer. Alternatively, you may build your fields in the Data Dictionary (offline method) by clicking its tab above.


This module will allow you to create new data collection instruments/surveys or edit existing ones. Changes may be made by either using the **Online Designer** or **Upload Data Dictionary** (see tabs above), in which you may use either method or both. The Online Designer may help you get some initial fields/forms built quickly or to make quick edits, but using the Data Dictionary file may be more helpful if you will be adding a large number of fields for this project.

This page allows you to build and customize your data collection instruments one field at a time. You may add new fields or edit existing ones. New fields may be added by clicking the **Add Field** buttons. You can begin editing an existing field by clicking on the  **Edit** icon. If you decide that you do not want to keep a field, you can simply delete it by clicking on the  **Delete** icon. To reorder the fields, simply **drag and drop** a field to a different position within the form below. NOTE: While in development status, all field changes will take effect immediately in real time.

[Return to list of instruments](#)

Current instrument: **Demographics**

[Preview instrument](#)

 Variable: record_id

Record ID

NOTE: The field above is the record ID field and thus cannot be deleted or moved. It can only be edited.

[Add Field](#)

[Add Matrix of Fields](#)

Field Label = Your Question

Add New Field ✕

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

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

Field Label [How to use Piping](#)

Field Annotation (optional) [Learn about Action Tags](#)

Explanatory notes - not displayed on any page ?

Variable Name (utilized during data export)

ONLY letters, numbers, and underscores

☐ Enable auto naming of variable based upon its Field Label?

Validation? (optional) ---- None ---- ▼

— OR —

Enable searching within a biomedical ontology ?

-- choose ontology to search -- ▼

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

Field Note (optional)

Small reminder text displayed underneath field

Save

Cancel

Variable Name

Add New Field ✕

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

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Field Annotation (optional) [Learn about Action Tags](#)

Explanatory notes - not displayed on any page ?

Variable Name (utilized during data export)

ONLY letters, numbers, and underscores

☐ Enable auto naming of variable based upon its Field Label?

Validation? (optional) ---- None ---- ▼

— OR —

Enable searching within a biomedical ontology ?

-- choose ontology to search -- ▼

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

Field Note (optional)

Small reminder text displayed underneath field

Save **Cancel**

Electronic Database Development - Validation

Edit Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Calculated Field

Field Label ☐ Use the Rich Text Editor ?

Subject's age when signed consent form

Variable Name (utilized in logic, calcs, and exports)

age_entry ☐ Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

How to use: [Smart Variables](#) [Pinpoint](#) [Field embedding](#)

Required?* ☒ No ☐ Yes

* Prevent 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

Field Note (optional)

Small reminder text displayed underneath field

Calculation Equation [How do I format the equation?](#)


`rounddown(datediff([general_forms_arm_1][dob],[general_forms_arm_1][initial_consent_date],"y", "mdy"), 0)`

[Clear calculation](#)

Different Types of Data Entry Fields

- Use the best type of field that suits the data you are trying to collect:
- Short text or numerical answers → Text Box
- Long descriptive/comment → Notes Box
- Perform real-time calculations based on previous field entries ex. BMI → Calculated Field
- Multiple choice questions → Drop-down List or Radio Buttons
- Multiple answer options → Checkboxes
- Etc.

Electronic Database Development - Field Type

Field Type: ---- Select a Type of Field ---- 

- Select a Type of Field ----
- Text Box (Short Text, Number, Date/Time, ...)
- Notes Box (Paragraph Text)
- Calculated Field
- Multiple Choice - Drop-down List (Single Answer)
- Multiple Choice - Radio Buttons (Single Answer)
- Checkboxes (Multiple Answers)
- Yes - No
- True - False
- Signature (draw signature with mouse or finger)
- File Upload (for users to upload files)
- Slider / Visual Analog Scale
- Descriptive Text (with optional Image/Video/Audio/File Attachment)
- Begin New Section (with optional text)

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

Field Label

Action Tags / Field Annotation (optional)

Learn about [@ Action Tags](#) or [using Field Annotation](#)

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)

---- None ----

- OR -

-- select ontology ser

Required?* ☒ No ☐ Yes

* Prompt if field is blank

Identifier? ☒ No ☐ Yes

Does the field contain identify

Custom Alignment

Align the position of the field o

Field Note (optional)

Small reminder text displayed

---- None ----

Date (D-M-Y)

Date (M-D-Y)

Date (Y-M-D)

Datetime (D-M-Y H:M)

Datetime (M-D-Y H:M)

Datetime (Y-M-D H:M)

Datetime w/ seconds (D-M-Y H:M:S)

Datetime w/ seconds (M-D-Y H:M:S)

Datetime w/ seconds (Y-M-D H:M:S)

Email

Integer

Number

Phone (North America)

Time (HH:MM)

Vanderbilt MRN

Zipcode (U.S.)

Electronic Database Development - Field Calculation

Edit Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Calculated Field

Field Label

☐ Use the Rich Text Editor ?

Subject's age when signed consent form

Calculation Equation [How do I format the equation?](#)

```
rounddown(datediff([general_forms_arm_1][dob],[general_forms_arm_1][initial_consent_date],"y", "mdy"), 0)
```

Variable Name (utilized in logic, calcs, and exports)

age_entry

☐ Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

How to use

[Smart Variables](#)

[Piping](#)

[Field embedding](#)

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


Field Note (optional)

Small reminder text displayed underneath field

[Clear calculation](#)

Multiple Choice Options

Add New Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the  [Field Types video \(4 min\)](#).

Field Type:

- Select a Type of Field ---
- Text Box (Short Text, Number, Date/Time, ...)
- Notes Box (Paragraph Text)
- Calculated Field
- Multiple Choice - Drop-down List (Single Answer)
- Multiple Choice - Radio Buttons (Single Answer)
- Checkboxes (Multiple Answers)
- Yes - No
- True - False
- Signature (draw signature with mouse or finger)
- File Upload (for users to upload files)
- Slider / Visual Analog Scale
- Descriptive Text (with optional Image/Video/Audio/File Attachment)
- Begin New Section (with optional text)

Drop-Down List: Long list of choices

With which institution are you affiliated?	<input type="radio"/> Vanderbilt University <input type="radio"/> Vanderbilt University Medical Center <input type="radio"/> Meharry Medical College	reset
With which department are you affiliated?	<div><div></div><div>Allergy Pulmonary Critical Medicine Allied Health Arts & Sciences Biomed Research Edu and Training Cardiovascular Medicine Eskind Biomedical Library Executive Health and Wellness Finance General Internal Medicine Genetic Medicine HealthIT Clin Group HealthIT VHAN Analysis Health Sceries Research Center</div></div>	reset
How do you anticipate using REDCap?		reset
Do you anticipate designing/building a REDCap project? <i>(Some people only enter data into existing projects and are not involved with the design of the project)</i>		reset
Do you anticipate entering data into a REDCap project?	<input type="radio"/> Yes <input type="radio"/> No	reset

Radio Buttons: Short list of choices

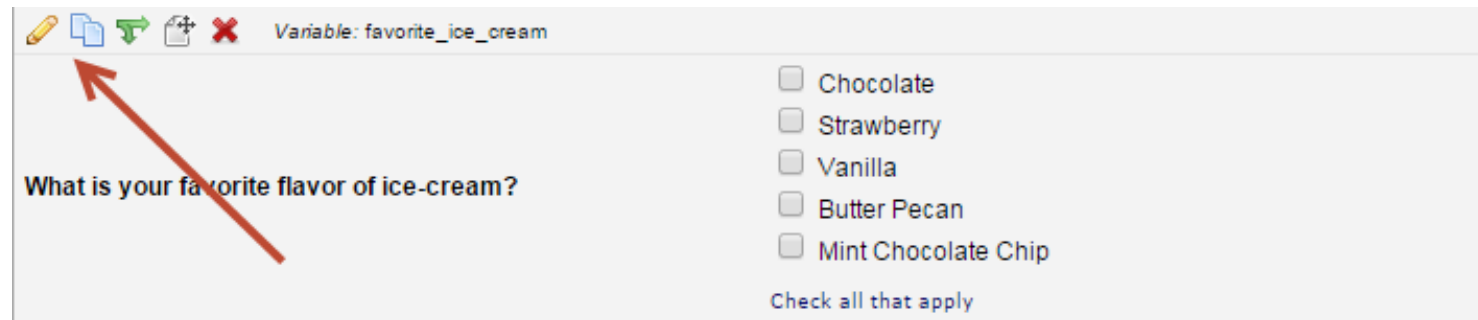
With which institution are you affiliated?	<div><input type="radio"/> Vanderbilt University <input type="radio"/> Vanderbilt University Medical Center <input type="radio"/> Meharry Medical College</div> reset
With which department are you affiliated?	<input type="text"/> ▼
How do you anticipate using REDCap?	<div><input type="radio"/> for databases <input type="radio"/> for surveys <input type="radio"/> for both surveys and databases</div> reset
Do you anticipate designing/building a REDCap project?	<div><input type="radio"/> Yes <input type="radio"/> No</div>

Checkboxes: To mark more than one choice

What REDCap topics would you like to see covered in future trainings?

- ☐ Action tags
- ☐ Piping
- ☐ Surveys
- ☐ Data Dictionary - when to use
- ☐ Using the Data Import Tool
- ☐ Optional Modules and Customizations
- ☐ Other

Edit/Copy/Move/Delete Fields



Variable: favorite_ice_cream

What is your favorite flavor of ice-cream?

- ☐ Chocolate
- ☐ Strawberry
- ☐ Vanilla
- ☐ Butter Pecan
- ☐ Mint Chocolate Chip

[Check all that apply](#)

Branching Logic

What is your favorite flavor ice cream?

- ☐ Chocolate
- ☐ Strawberry
- ☐ Vanilla
- ☒ Other

Please specify:

Apply Branching Logic to the Follow-Up Question



A screenshot of a survey tool interface. At the top, there is a toolbar with icons for editing (pencil), cloning (two overlapping squares), branching (a green arrow pointing right, which is highlighted with a red square), adding a new question (plus sign in a square), and deleting (red X). To the right of the toolbar, the text "Variable: othericecream" is displayed. Below the toolbar, the text "Please specify:" is followed by a text input field.

Variable: othericecream

Please specify:

Branching Logic Builder

Add/Edit Branching Logic

Branching Logic may be employed when fields/questions need to be hidden under certain conditions. If branching logic is defined, the field will only be visible if the conditions provided are true (i.e. show the field only if...). You may specify those conditions in the text box below for the Advanced Branching Logic Syntax or by choosing the Drag-N-Drop Logic Builder method, which allows you to build your logic in a much easier fashion by simply dragging over the options you want. You may switch back and forth between each method if you wish, but please be aware that since the advanced logic allows for greater complexity, it may not be able to be switched over to the Drag-N-Drop method if it becomes too complex.

Choose method below for the following field: **otherflavor** - *Please specify:*

☐ **Advanced Branching Logic Syntax**

How to use

 Branching Logic

 Smart Variables

Show the field ONLY if...

[Clear](#)

Test logic with a record: -- select record -- ▾

— OR —

☒ **Drag-N-Drop Logic Builder**

Field choices from other fields

(drag a choice below to box on right)

- participant_id = (define criteria)
- name = (define criteria)
- flavor = Chocolate (1)
- flavor = Strawberry (2)
- flavor = Vanilla (3)
- flavor = Other (4)
- title = (define criteria)
- registrationdate = (define criteria)
- unsubscribing = (define criteria)

Show the field ONLY if...

☒ ALL below are true

☐ ANY below are true



Drag
and
Drop



[Clear](#)

Variable
Name

Field choices from other fields

(drag a choice below to box on right)

participant_id = (define criteria)

name = (define criteria)

flavor = Chocolate (1)

flavor = Strawberry (2)

flavor = Vanilla (3)

flavor = Other (4)

Raw
value



Variable: othericecream

Branching logic: [flavor] = '4'

Please specify:

Electronic Database Development – Logic

Have you traveled outside your state of residence in the last 14 days for non-essential travel?

☒ Yes
☐ No

[Link to answers for travel questions and definitions of essential travel](#)

* must provide value

According to the Vermont Department of Health (VDH) website does the county you traveled from require quarantining at this time?

☐ Yes
☐ No

[Map of quarantine and non-quarantine counties throughout the Northeast](#)

* must provide value

Have you traveled outside your state of residence in the last 14 days for non-essential travel?

☐ Yes
☒ No

[Link to answers for travel questions and definitions of essential travel](#)

* must provide value

Please check the appropriate box (yes or no) to the following question: Have you had COVID-19 symptoms that cannot be attributed to a pre-existing condition?






Have you had a fever (100.4°F/38°C or higher) in the last 14 days?

☐ Yes
☐ No

* must provide value

Electronic Database Development - Piping

Add FieldAdd Matrix of FieldsImport from Field Bank






Variable: flavor

What is your favorite Ice Cream Flavor?

☐ Vanilla
☐ Chocolate
☐ Strawberry
☐ Other

reset

Add FieldAdd Matrix of FieldsImport from Field Bank

Variable: toppings

What toppings do you like with your [flavor] ice cream?

☐ Sprinkles
☐ Hot Fudge
☐ Whipped Cream
☐ Peanuts
☐ Strawberries
☐ A cherry on top

Add FieldAdd Matrix of FieldsImport from Field Bank

Add/Edit Records

Logged in as **rc_fund** | Log out

My Projects
REDCap Messenger

Project Home and Design

Project Home · Project Setup
Designer · Dictionary · Codebook
Project status: **Development**

Data Collection

Survey Distribution Tools
- Get a public survey link or build a participant list for inviting respondents

Record Status Dashboard
- View data collection status of all records

Add / Edit Records
- Create new records or edit/view existing ones

Show data collection instruments

Applications

Reports Search Organize Edit

Help & Information

Help & FAQ
Video Tutorials
Suggest a New Feature

Contact REDCap administrator

Add / Edit Records

You may view an existing record/response by selecting it from the drop-down lists below. To create a new record, click the button below.

NOTICE: This project is currently in Development status. **Real data should NOT be entered** until the project has been moved to Production status.

Total records: **7**

Choose an existing Record ID

-- select record --

+ Add new record

Data Search

Choose a field to search

(excludes multiple choice fields)

All fields


Search query

Begin typing to search the project data, then click an item in the list to navigate to that record.








Record Home Page

Record Home Page

The grid below displays the form-by-form progress of data entered for the currently selected record. You may click on the colored status icons to access that form/event.

 Choose action for record ▼

Study ID **EKG543** (Yellow, Yolanda)

 Data Collection Instrument	Status
Demographics	
Baseline Data	
Pain Management Survey - PRE (survey)	
Intervention Data	
Pain Management Survey - POST (survey)	
Study Completion	



Record Status Dashboard

Logged in as **rc_fund** | Log out

My Projects

REDCap Messenger

Project Home and Design

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Project status: **Development**

Data Collection

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Search

Organize

Edit

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Video Tutorials

Suggest a New Feature

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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.

Dashboard displayed: [Default dashboard] ▼

Create cu

Displaying record Page 1 of 1: "77" through "83" ▼ of 7 records

ALL (7) ▼





+ Add new record

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

Record ID	Demographics	Baseline Data	Pain Management Survey - PRE	Intervention Data	Pain Management Survey - POST	Study Completion
77 Yellow						
78 Purple						
79 Red						
80 Blue						
81 Celery						
82 Azure						
83 Ecrú						

Individual Record

Baseline Data

 Editing existing Study ID EKG543 (Yellow, Yolanda)	
Study ID	EKG543
Baseline Measurements	
Date of baseline visit	<input type="text" value="2019-01-01"/>  Today Y-M-D
Date blood was drawn	<input type="text" value="2019-01-01"/>  Today Y-M-D
Serum Albumin (g/dL)	<input type="text" value="3"/>
Serum Prealbumin (mg/dL)	<input type="text" value="15"/>
Creatinine (mg/dL)	<input type="text" value="1"/>
Normalized Protein Catabolic Rate (g/kg/d)	<input type="text" value="1"/>
Cholesterol (mg/dL)	<input type="text" value="120"/>
Transferrin (mg/dL)	<input type="text" value="110"/>
Kt/V	<input type="text" value="2"/>
Dry weight (kilograms)	<input type="text" value="110"/>
Collected Plasma 1?	<input type="text" value="Yes"/>
Collected Plasma 2?	<input type="text" value=""/>
Collected Plasma 3?	<input type="text" value=""/>
Collected Serum 1?	<input type="text" value="Yes"/>
Collected Serum 2?	<input type="text" value=""/>
Collected Serum 3?	<input type="text" value=""/>
Subject Global Assessment (score = 1-7)	<input type="text" value="4"/>
Date patient begins supplement	<input type="text" value="2019-01-10"/>  Today Y-M-D
Form Status	
Complete?	<input type="text" value="Complete"/>
<div>Save & Exit Form Save & Stay</div>	

Viewing Multiple Records

Logged in as **rc_fund** | Log out

- My Projects
- REDCap Messenger
- Project Home and Design
- Data Collection
- Applications
 - Alerts & Notifications
 - Data Exports, Reports, and Stats**
 - Data Comparison Tool
 - Logging
 - File Repository
 - User Rights and DAGs
 - Data Quality
 - External Modules
- Reports

Search Organize Edit

Data Exports, Reports, and Stats





 [VIDEO: How to use Data Exports, Reports, and Stats](#)

 Create New Report

 My Reports & Exports

 Other Export Options


This module allows you to easily view reports of your data, inspect plots and descriptive statistics of your data, as well as export your data to Microsoft Excel, SAS, Stata, R, or SPSS for analysis (if you have such privileges). If you wish to export your **entire** data set or view it as a report, then Report A is the best and quickest way. However, if you want to view or export data from only specific instruments (or events) on the fly, then Report B is the best choice. You may also create your own custom reports below (if you have such privileges) in which you can filter the report to specific fields, records, or events using a vast array of filtering tools to make sure you get the exact data you want. Once you have created a report, you may view it as a webpage, export it out of REDCap in a specified format (Excel, SAS, Stata, SPSS, R), or view the plots and descriptive statistics for that report.

My Reports & Exports			
	Report name	View/Export Options	Management Options
A	All data (all records and fields)	 View Report  Export Data  Stats & Charts	
B	Selected instruments (all records)	 Make custom selections	

Aggregate Data (all data)

Number of results returned: 11

Total number of records queried: 11

 Stats & Charts

Export Report

 Print Page

All data (all records and fields)

[illegible]

Subsets of Data

Example Research Study

Data Exports, Reports, and Stats

+ Create New Report

My Repo

Number of results returned: 4

Total number of records queried: 7

Female participants

Record ID record_id	First Name first_name	Last Name last_name
81 Celery	Catherine	Celery
83 Ecrú	Ellie	Ecrú
78 Purple	Patty	Purple
77 Yellow	Yolanda	Yellow

Live REDCap Building

1. Demographics – using a template
2. Informed Consent Checklist – upload from another project
3. Eligibility Criteria Checklist – interactive build from scratch

Create a custom report

Name of Report:	Female participants		
Description (optional): <small>Displayed on page below report name</small>	<div>HTML may be used in order to add links or to add style to text.</div> <div>Expand</div>		

STEP 1

User Access: Choose who can edit and view this report

View Access: Choose who sees this report on their left-hand project menu

All users

– OR –

Custom user access (Choose specific users, roles, or data access groups who will have access)

Edit Access: Choose who can edit, copy, or delete this report (requires user to have 'Add/Edit/Organize Reports' privileges)

All users

– OR –

Custom user access (Choose specific users, roles, or data access groups who will have access)

STEP 2

Fields to include in report

Quick Add

Add all fields from selected instrument: -- choose instrument --

Field 1	record_id "Record ID"		Instrument: Demographics	×
Field 2	first_name "First Name"		Instrument: Demographics	×
Field 3	last_name "Last Name"		Instrument: Demographics	×
Field 4	Type variable name or field label		Instrument:	

Additional report options (optional)

☐ Include the survey identifier field and survey timestamp field(s)?

☐ Combine checkbox options into single column of only the checked-off options (will be formatted as a text field when exported to stats packages)

STEP 3

Filters (optional)

Operator / Value

Filter 1	gender "Gender"	=	Female	×
Filter 2	Type variable name or field label	=		

Switch format: [Use advanced logic](#)

Live Filters (optional)

Live Filters can be selected on the report page for dynamically filtering data in real time. With the exception of the Record ID field, only multiple choice fields can be used as Live Filters (as well as Events, if longitudinal, and Data Access Groups, if any exist).

Live Filter 1	-- select a field --
Live Filter 2	-- select a field --
Live Filter 3	-- select a field --

STEP 4






Order the Results (optional)

First by	last_name "Last Name"	Ascending order
Then by	Type variable name or field label	Ascending order
Then by	Type variable name or field label	Ascending order

Save Report

Cancel

Electronic Database Development – Reports

My Reports & Exports					
		Report name	View/Export Options	Management Options	Report ID  (auto-generated)
A		All data (all records and fields)	 View Report  Export Data  Stats & Charts		
B		Selected instruments and/or events (all records)	 Make custom selections		

Reports are bookmarked on the navigation bar

Logged in as rc_fund | Log out

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Calendar

Data Exports, Reports, and Stats

Data Import Tool

Data Comparison Tool

Logging

File Repository

User Rights and DAGs

Data Quality

External Modules

1) All active participants

2) Only >200 cm height

3) Female participants

Help & FAQ

Video Tutorials

Suggest a New Feature

Data Exports, Reports, and Stats

VIDEO: How to use Data Exports, Reports, and Stats

Create New Report

My Reports & Exports

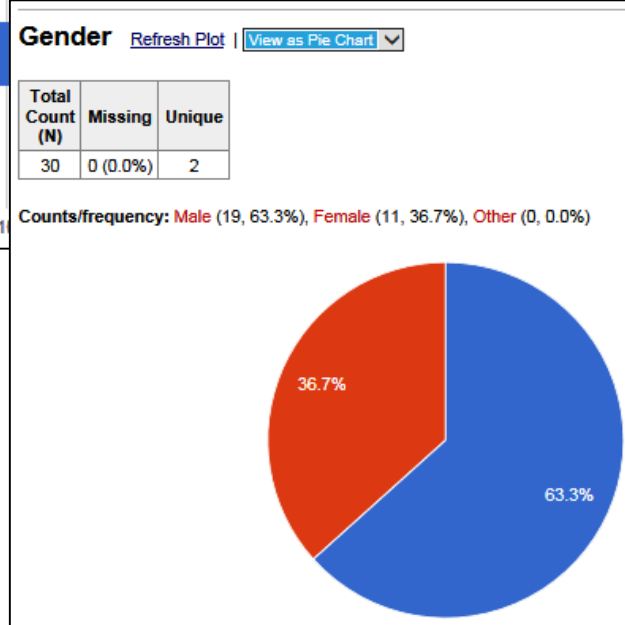
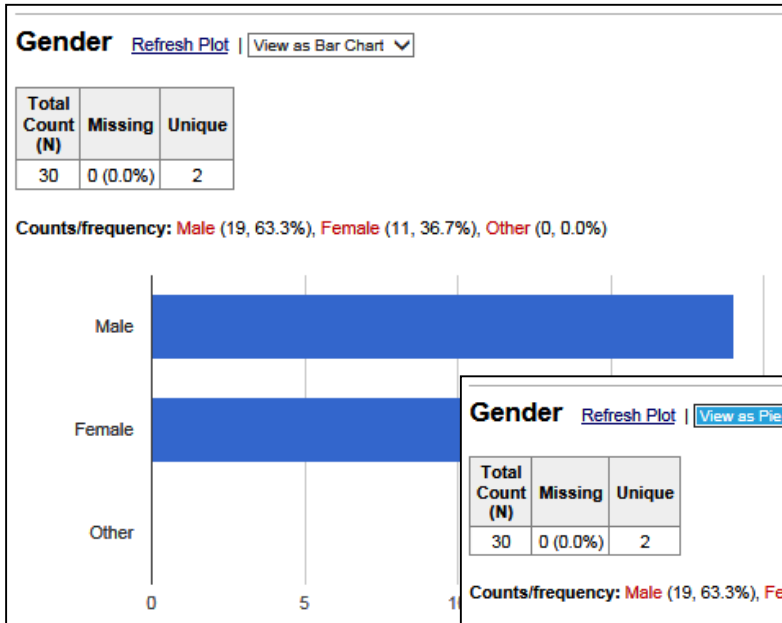
Other Export Options

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My Reports & Exports

	Report name	View/Export Options	Management Options
A	All data (all records and fields)	View Report Export Data Stats & Charts	
B	Selected instruments (all records)	Make custom selections	
1	All active participants	View Report Export Data Stats & Charts	Edit Copy Delete
2	Only >200 cm height	View Report Export Data Stats & Charts	Edit Copy Delete
3	Female participants	View Report Export Data Stats & Charts	Edit Copy Delete
	+ Create New Report		

Statistics and Graphs/Charts



height < 150

DISPLAY OPTIONS

Optional: Select a record to overlay onto the plots below

-- select record --

Viewing options:

Show plots & stats

Show plots only

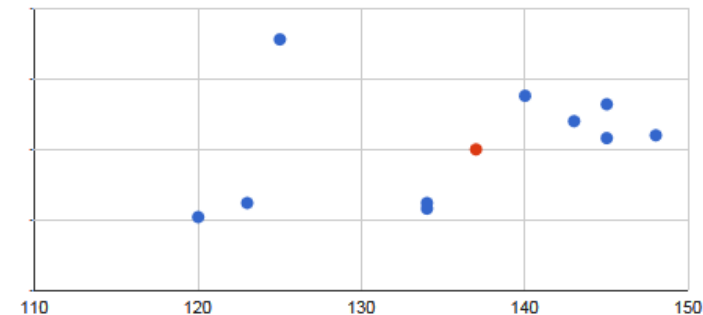
Show stats only

Height [Refresh Plot](#)

Total Count (N)	Missing	Unique	Min	Max	Mean	StDev	Sum	Percentile						
								0.05	0.10	0.25	0.50 Median	0.75	0.90	0.95
10	0 (0.0%)	8	120.00	148.00	135.70	10.13	1,357.00	121.35	122.70	127.25	137.00	144.50	145.30	146.65

Lowest values: 120, 123, 125, 134, 134

Highest values: 140, 143, 145, 145, 148



Export

Exporting "All data (all records and fields)"

Select your export settings, which includes the export format (Excel/CSV, SAS, SPSS, R, Stata) and whether or not to perform de-identification on the data set.

Choose export format

☒ CSV / Microsoft Excel (raw data)

☐ CSV / Microsoft Excel (labels)

☐ SPSS Statistical Software

☐ SAS Statistical Software

☐ R Statistical Software

☐ STATA Statistical Software

De-identification options (optional)

The optional below allow you to limit the amount of sensitive information that you are exporting out of the project. Check all that apply.

Known Identifiers:

☐ Remove all tagged Identifier fields (tagged in Data Dictionary)

☐ Hash the Record ID field (converts record name to an unrecognizable value)

Free-form text:

☐ Remove unvalidated Text fields (i.e. Text fields other than dates, numbers, etc.)

☐ Remove Notes/Essay box fields

Date and datetime fields:

☐ Remove all date and datetime fields

— OR —

☐ Shift all dates by value between 0 and 364 days (shifted amount determined by algorithm for each record)

[What is date shifting?](#)

[Deselect all options](#)

Export Data

Cancel

