



# REDCap Overview

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Background/REDCap  
Support Model

Today

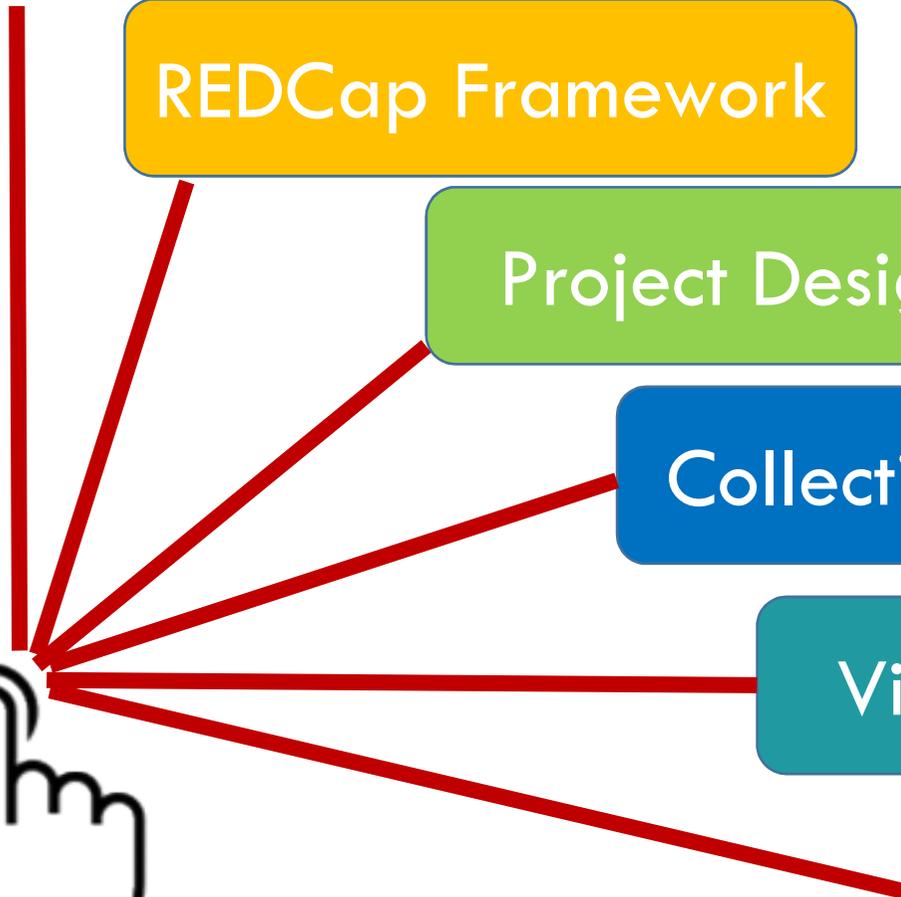
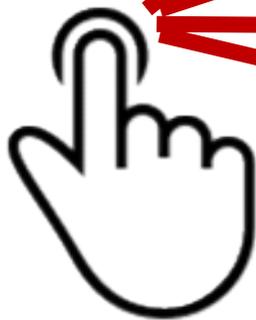
REDCap Framework

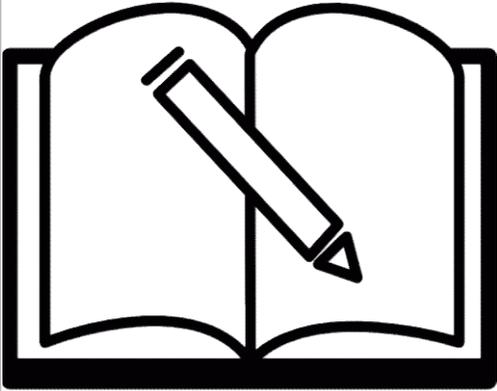
Project Design

Collecting Data

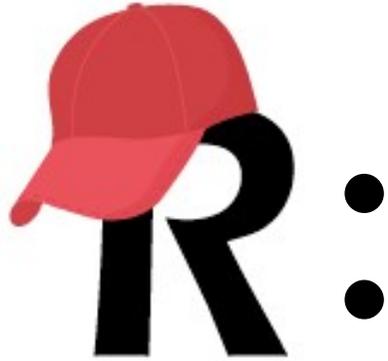
Viewing Data

Collaborating

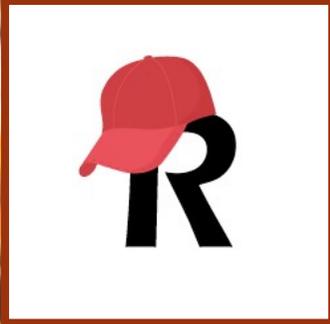




Background



*A secure web  
application for  
managing your data  
online*



Est. 2004

VANDERBILT  UNIVERSITY

- >1m end users
- >750k projects



# REDCap Support model



+

Generalized Support  
Individualized Support

# Generalized support: Instructional text



Complete!

## Main project settings

Disable



Use surveys in this project



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

Enable



Use longitudinal data collection with defined events



Modify project title, purpose, etc.

# Generalized support: Help & FAQ/Training Videos



Home

My Projects

+ New Project

Help & FAQ

Training Videos

Send-It

Messenger

## Welcome to REDCap!

REDCap is a mature, secure web application for building and managing online surveys and databases. Using REDCap's stream-lined process for rapidly developing projects, you may create and design projects using 1) the online method from your web browser using the Online Designer; and/or 2) the offline method by constructing a 'data dictionary' template file in Microsoft Excel, which can be later uploaded into REDCap. Both surveys and databases (or a mixture of the two) can be built using these methods.

REDCap provides automated export procedures for seamless data downloads to Excel and common statistical packages (SPSS, SAS, Stata, R), as well as a built-in project calendar, a scheduling module, ad hoc reporting tools, and advanced features, such as branching logic, file uploading, and calculated fields.

Learn more about REDCap by watching a  [brief summary video \(4 min\)](#). If you would like to view other quick video tutorials of REDCap in action and an overview of its features, please see the [Training Resources](#) page.

Please note that any publication that results from a project utilizing REDCap should cite grant support (UL1 TR000445 from NCATS/NIH).

*NOTICE:* If you are collecting data for the purposes of human subjects research, review and approval of the project is required by your Institutional Review Board.

If you require assistance or have any questions about REDCap, please contact [REDCap Administrator](#).

# Advantages ...

Accessible

Customizable

Secure

Accurate

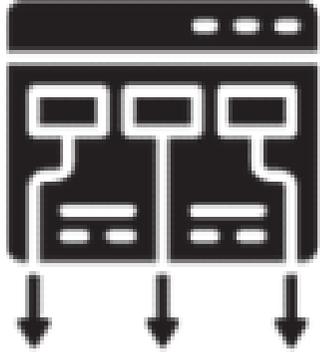
Free!

## Further advantages ...

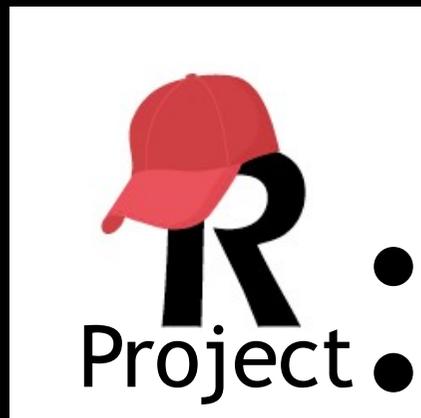
- ... storage of every data format
- ... online and offline access (REDCap App)
- ... multi-site access
- ... autonomy in adding new users and their rights
- ... automated export function for data downloads (excel, SPSS, SAS, Stata, R, ...)
- ... automated report on metadata
- ... shared library for questionnaires

## That means ...

- minimum paper-pencil assessments
  - Informed consent: paper-pencil
  - Questionnaires: direct assessment via REDCap
  - Experimental or psychophysiological data: data storage in REDCap
- SOP saved directly in REDCap project → all-time access



# REDCap Framework



- The framework into which your data will be entered
- Contains tools to manage your data
- Contains an instrument



# Instrument

## Demographics

Adding new Study ID Test2

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

?

?

?

A

A

A

Instrument

```
graph TD; Instrument([Instrument]) --> DataEntryForm[Data entry form]; Instrument --> Survey[Survey];
```

Data entry  
form

Survey

# Data Entry Form - accessed by REDCap users

https://sfb205.zih.tu-dresden.de/redcap/redcap\_v9.3.3/DataEntry/index.php?pid=35&page=stem\_data&id=6&event\_id=120

TU Dresden  
ZIH

## TRR 265 Telephone Screening

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

### Stem Data

Invitation status: [✉](#) [Survey options](#)

[✎](#) Editing existing Screening ID 6

|   |   |
|---|---|
| <b>Screening ID</b>   | 6   |
| <b>STAMMDATEN</b>   |   |
| <b>Wie alt sind Sie?</b><br><small>* must provide value</small>                                   | <input type="text"/>  |
| <b>Geburtsdatum</b><br><small>* must provide value</small>  | <input type="text"/> <small>Today</small> D-M-Y<br><small>auf kleinen Kalender klicken, um Datum einzutragen</small>  |
| <b>Ist Deutsch Ihre Muttersprache?</b><br><small>* must provide value</small>                     | <input type="radio"/> ja<br><input type="radio"/> nein (gute deutsche Sprachkenntnisse)<br><input type="radio"/> nein (schlechte dt. Sprachkenntnisse)<br><input type="radio"/> sprachl. Verständigung unmögl./erschwert <small>reset</small> |
| <b>Geschlecht</b><br><small>* must provide value</small>  | <input type="radio"/> weiblich<br><input type="radio"/> männlich<br><input type="radio"/> divers <small>reset</small>   |
| <b>Wie sind Sie auf unsere Studie aufmerksam geworden?</b><br><small>* must provide value</small> | <input type="text"/>  |

Survey -  
completed  
by a  
participant

## Sociodemography

Survey login session is still active

AAA  
+ | -

Deutsch

Bitte füllen Sie die folgenden Fragebögen aus.

Danke!

Seite 1 von 4

Heutiges Datum

06-09-2019

D-M-Y

Geburtsmonat

Februar



Geburtsjahr

Körpergewicht (in kg)

in kg

Körpergröße (in cm)

in cm

Geschlecht

- männlich  
 weiblich  
 anderes, und zwar:

[zurücksetzen](#)

Bitte nennen Sie uns Ihren Familienstand.

- ledig  
 in Ehe/ Partnerschaft lebend  
 getrennt lebend  
 geschieden  
 verwitwet

[zurücksetzen](#)

Haben Sie eigene Kinder?

- nein



# Data entry + Surveys forms

| Instrument name               | Fields | View PDF  | Enabled as survey   | Instrument actions              | Survey-related options  |
|-------------------------------|--------|---|---|---------------------------------|---|
| Demographics                  | 20     |    | <a href="#">Enable</a>  | <a href="#">Choose action</a> ▾ |   |
| Baseline Data                 | 18     |    | <a href="#">Enable</a>  | <a href="#">Choose action</a> ▾ |   |
| Pain Management Survey - PRE  | 17     |    |    | <a href="#">Choose action</a> ▾ | <a href="#">Survey settings</a> <a href="#">+ Automated Invitations</a> |
| Intervention Data             | 19     |  | <a href="#">Enable</a>  | <a href="#">Choose action</a> ▾ |   |
| Pain Management Survey - POST | 17     |  |  | <a href="#">Choose action</a> ▾ | <a href="#">Survey settings</a> <a href="#">+ Automated Invitations</a> |
| Study Completion              | 5      |  | <a href="#">Enable</a>  | <a href="#">Choose action</a> ▾ |   |

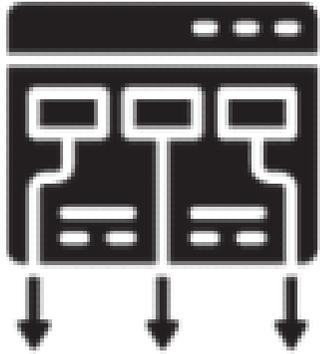


# Longitudinal Data Collection

Repeatable Over Time (Visits)

Data Collection Instruments

| Data Collection Instrument | Baseline<br>(1) | Visit<br>1<br>(2) | Visit<br>2<br>(3) | Visit<br>3<br>(4) | Final<br>Visit<br>(5) |
|----------------------------|-----------------|-------------------|-------------------|-------------------|-----------------------|
| Demographics               | ✓               |                   |                   |                   |                       |
| Baseline Data              | ✓               |                   |                   |                   |                       |
| Monthly Data               |                 | ✓                 | ✓                 | ✓                 |                       |
| Completion Data            |                 |                   |                   |                   | ✓                     |



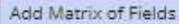
# REDCap Project Design

# Online Designer

Current instrument: **Baseline Data**

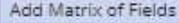
 

  **Baseline Measurements**

     *Variable: date\_visit\_b*

**Date of baseline visit**   Today Y-M-D

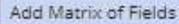
     *Variable: date\_blood\_b*

**Date blood was drawn**   Today Y-M-D

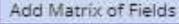
     *Variable: alb\_b*

**Serum Albumin (g/dL)**

     *Variable: prealb\_b*

**Serum Prealbumin (mg/dL)**

     *Variable: creat\_b*

**Creatinine (mg/dL)**

# Identifier

## 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)

Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

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



# Collecting Data



Sally – REDCap user



Susie – survey participant

# Data Entry Form



**REDCap™**

Logged in as **rc\_fund** | Log out

- My Projects
- Project Home or Project Setup
- REDCap Messenger

Project status: **Development**

**Data Collection** [Edit Instruments](#)

- 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

**Study ID Test1** (1, Test) [Select other record](#)

Data Collection Instruments:

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

**Applications**

- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool

## DEMO: VICTR Research Study

Actions: [Modify instrument](#) [Download PDF of instrument\(s\)](#)

[VIDEO: Basic data entry](#)

[Save & Exit Form](#)

[Save & Stay](#)

[-- Cancel --](#)

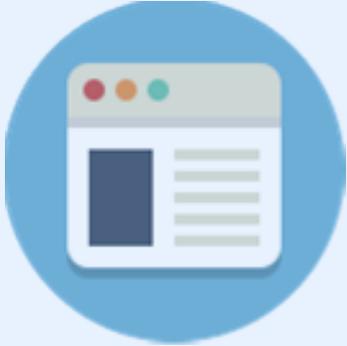
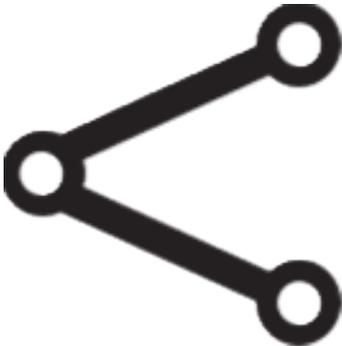
### Demographics

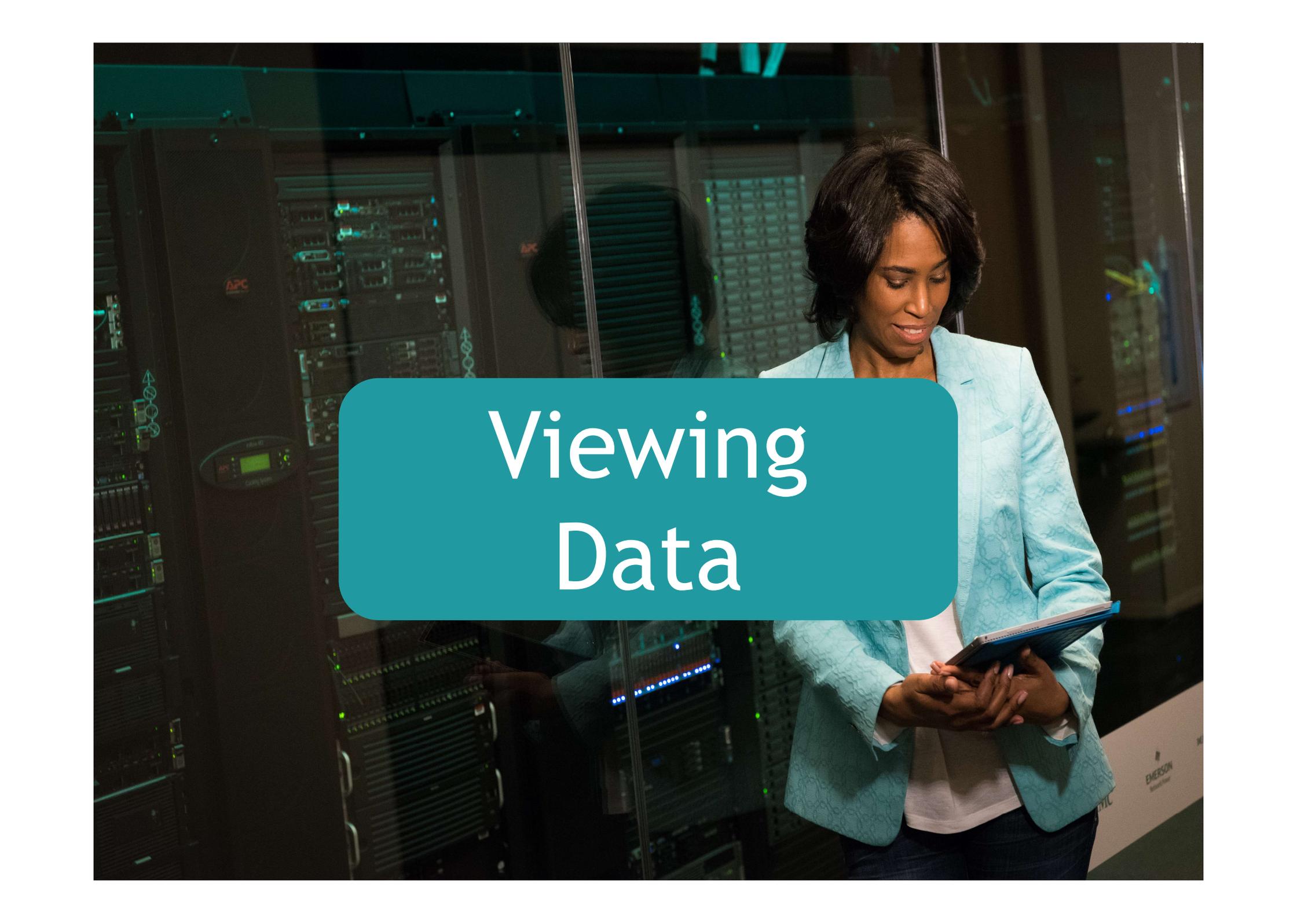
Editing existing Study ID **Test1** (1, Test)

|  |  |
|--|--|
| <b>Study ID</b>                            | Test1<br><small>To rename the record, see the record action drop-down at top of the <a href="#">Record Home Page</a>.</small>                                    |
| <b>Contact Information</b>                 |  |
| <b>First Name</b>                          | <input type="text"/>   |
| <b>Last Name</b>                           | <input type="text"/>   |
| <b>Phone number</b>                        | <input type="text"/><br><small>Include Area Code</small>   |
| <b>E-mail</b>                              | <input type="text"/>   |
| <b>Date of birth</b>                       | <input type="text"/> <small>31</small> Y-M-D   |
| <b>Ethnicity</b>                           | <input type="radio"/> Hispanic or Latino<br><input type="radio"/> NOT Hispanic or Latino<br><input type="radio"/> Unknown / Not Reported<br><small>reset</small> |
| <b>Race</b>                                | <input type="text"/>   |
| <b>Has the patient given birth before?</b> | <input type="radio"/> Yes<br><input type="radio"/> No<br><small>reset</small>  |



# Survey Dissemination



A woman with dark hair, wearing a light blue patterned blazer over a white top, is looking down at a tablet computer she is holding with both hands. She is standing in a server room, with rows of server racks visible in the background. The server racks have various lights and labels, including 'APC' and 'EMERSON'. The room is dimly lit with a teal or blue ambient light. A large, semi-transparent teal rounded rectangle is overlaid on the image, containing the text 'Viewing Data' in white. The overall scene suggests a professional setting focused on data management and technology.

# Viewing Data

# Individual record

| Baseline Data  |  |
|--|--|
| ✎ Editing existing Study ID <b>EKG543</b> (Yellow, Yolanda)  |  |
| Study ID   | EKG543   |
| Baseline Measurements  |  |
| Date of baseline visit   | <input type="text" value="2019-01-01"/> <input type="button" value="Today"/> Y-M-D |
| Date blood was drawn   | <input type="text" value="2019-01-01"/> <input type="button" value="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"/>   |
| Collected Plasma 3?  | <input type="text"/>   |
| Collected Serum 1?   | <input type="text" value="Yes"/>   |
| Collected Serum 2?   | <input type="text"/>   |
| Collected Serum 3?   | <input type="text"/>   |
| Subject Global Assessment (score = 1-7)  | <input type="text" value="4"/>   |
| Date patient begins supplement   | <input type="text" value="2019-01-10"/> <input type="button" value="Today"/> Y-M-D |
| Form Status  |  |
| Complete?  | <input type="text" value="Complete"/>  |
| <input type="button" value="Save &amp; Exit Form"/> <input type="button" value="Save &amp; Stay"/> |  |



# Sub-sets of Data

## Example Research Study

### Data Exports, Reports, and Stats

 Create New Report

 My Reports

Number of results returned: **4**

Total number of records queried: 7

### Female participants

| Record ID<br>record_id | First Name<br>first_name | Last Name<br>last_name |
|------------------------|--------------------------|------------------------|
| <u>77</u>              | Yolanda                  | Yellow                 |
| <u>78</u>              | Patty                    | Purple                 |
| <u>81</u>              | Catherine                | Celery                 |
| <u>83</u>              | Ellie                    | Ecru                   |

# Statistics and Graphs/Charts

**Gender** Refresh Plot View as Bar Chart

| Total Count (N) | Missing  | Unique |
|-----------------|----------|--------|
| 30              | 0 (0.0%) | 2      |

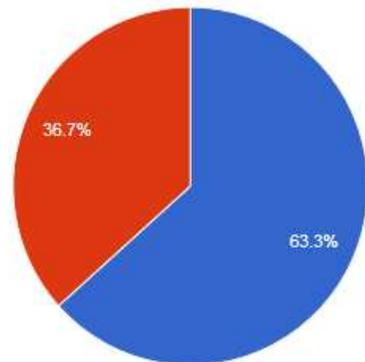
Counts/frequency: Male (19, 63.3%), Female (11, 36.7%), Other (0, 0.0%)



**Gender** Refresh Plot View as Pie Chart

| Total Count (N) | Missing  | Unique |
|-----------------|----------|--------|
| 30              | 0 (0.0%) | 2      |

Counts/frequency: Male (19, 63.3%), Female (11, 36.7%), Other (0, 0.0%)



**height < 150**

DISPLAY OPTIONS

Optional: Select a record to overlay onto the plots below

-- select record --

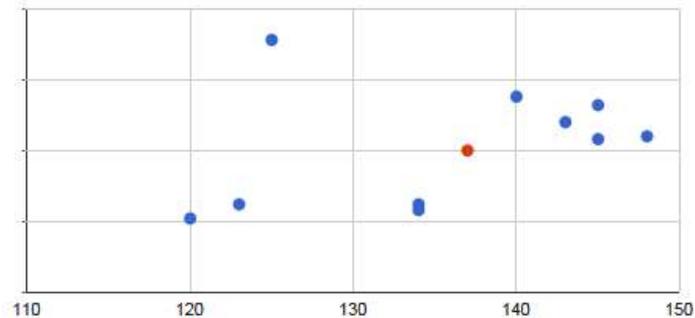
Viewing options: Show plots & stats Show plots only Show stats only

**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 options 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



# Accessing/Collaborating in REDCap

<https://redcap.zih.tu-dresden.de>

ZIH-Administratoren:

manuel.schulze@tu-dresden.de

alvaro.aguilera@tu-dresden.de

# Project Access



# Your role in a REDCap Project



## Design

- Creating Instruments
- Writing questions



Data  
entry



Viewing/  
Analyzing  
Data

# Defining Access Level

**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

Other privileges:

- Survey Distribution Tools
- Calendar
- Data Import Tool
- Data Comparison Tool
- Logging
- File Repository

**Data Entry Rights**

*The following data entry rights \*only\* pertain to a user's ability to view or edit data on a webpage 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               |
|--|----------------------------------|----------------------------------|----------------------------------|-------------------------------------|
| Demographics                           | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |                                     |
| Baseline Data                          | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            |                                     |
| Pain Management Survey - PRE (survey)  | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input checked="" type="checkbox"/> |
| Intervention Data                      | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |                                     |
| Pain Management Survey - POST (survey) | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input checked="" type="checkbox"/> |
| Study Completion                       | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |                                     |

**New User Notification**

Notify user of their project access via email?

# Communicating with your team in REDCap

The logo for RedCap Messenger, featuring the word "Messenger" in white text on a blue rectangular background. A red circular icon is positioned above the letter 'e' in "Messenger".

Messenger

- Can have group messages with users on the project
- Allows your team members to have a secure dialogue about your project

**Let's have a look at  
sample databases!**

# Project Design

A person wearing a red safety vest and a blue and white checkered shirt is sitting at a desk, working on architectural blueprints. The desk is cluttered with various items: a crumpled ball of paper, a yellow ruler, a color palette, a pen, a pencil, and a small wooden cup containing several colored pencils. The person is holding a pen and looking at the blueprints. The background is slightly blurred, showing a wooden desk and a white wall.

Creating a project

Adding and editing fields

# 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)
- Upload a REDCap project XML
- Use a template (choose one below)

**Choose a project template** (comes pre-filled with fields, forms)

| 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 Setup Page



Project Home | Project Setup | Other Functionality | Project Revision History

Project status: Development Completed steps 0 of 7

### Main project settings

In progress

Enable Use longitudinal data collection with repeating forms? [?](#)  
 Enable Use surveys in this project? [?](#) [VIDEO: How to create and manage a survey](#)

### Design your data collection instruments

In progress

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  or

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?

### Enable optional modules and customizations

Optional

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? [?](#)

### Set up project bookmarks (optional)

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

### User Rights and Permissions

Optional

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  or

### Test your project thoroughly

Not started

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.

### Move your project to production status

Not started

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

# Design Data Collection Instruments

 **Not started**

[I'm done!](#)

**Design 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)**

# 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 (question) Types

## 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)

When possible, select a field type that will collect data in a quantitative manner

Provide a list of choices rather than asking an open-ended question

Add validation when possible to restrict the type of text entered

# Instead of open-ended (text box field type)...

     Variable: insttext

With which institution are you affiliated?

**With which institution are you affiliated?**  
inst

- Vandy
- VUMC
- VU
- Vanderbilt
- Med Ctr
- Vanderbilt University Medical Center
- Vandy
- VUMC
- Vandy
- VU
- Vanderbilt University

**With which institution are you affiliated?** (inst)

| Total Count (N) | Missing         |
|-----------------|-----------------|
| 11              | <u>1</u> (8.3%) |

# ...use close-ended (multiple-choice):

     Variable: inst

With which institution are you affiliated?

- Vanderbilt University
- Vanderbilt University Medical Center
- Meharry Medical College

reset

# Quantitative questions will yield graphical and statistical results

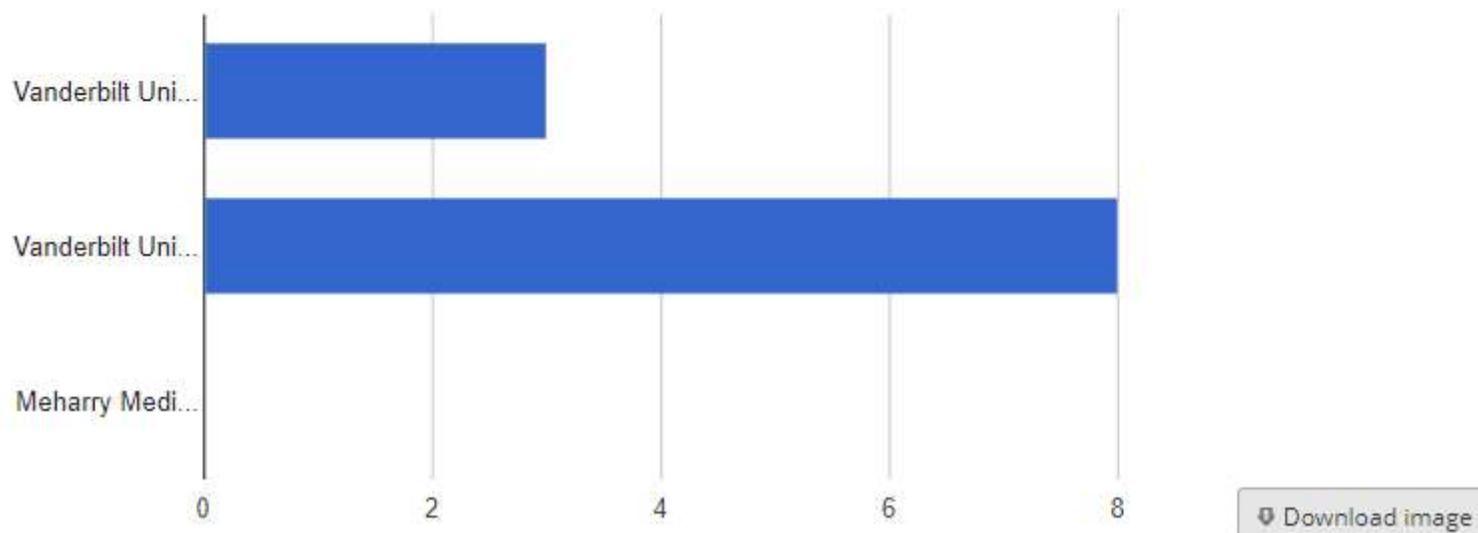
With which institution are you affiliated? (*inst*)

[Refresh Plot](#)

[View as Bar Chart](#) ▼

| Total Count (N) | Missing   | Unique |
|-----------------|-----------|--------|
| 11              | 8 (42.1%) | 2      |

Counts/frequency **Vanderbilt University (3, 27.3%)**, Vanderbilt University Medical Center (8, 72.7%), Meharry Medical College (0, 0.0%)



When collecting this type of data...

Date

Email

Integer

Number

Phone (North America)

Time

Vanderbilt MRN

Zip code (US)

# Instead of open-ended (text box field type)...

     Variable: date

What is today's date?

**Today's date:**   
regdate

|                  |
|------------------|
| 12/6/2018        |
| December 4, 2018 |
| December 8, 2018 |
| 8/12/2018        |
| 08-12-2018       |
| December         |

# ...use a text box field type with validation

     Variable: date

What is today's date?   Today M-D-Y

**Today's date:**   
regdate

|            |
|------------|
| 12-08-2018 |
| 12-08-2018 |
| 12-08-2018 |
| 12-04-2018 |
| 12-06-2018 |

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 --

---- None ----

-- 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

Field Note (optional)

Small reminder text displayed

- 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.)

**BUT SOME FIELD TYPES ARE SIMILAR, THO...**



# Multiple Choice options

## Add New Field

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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)

# Radio buttons - short list of choices

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

# Drop-down list: Long list of choices

**With which institution are you affiliated?**

Vanderbilt University  
 Vanderbilt University Medical Center  
 Meharry Medical College

reset

**With which department are you affiliated?**

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 Services Research Center

reset

**How do you anticipate using REDCap?**

reset

**Do you anticipate designing/building a REDCap project?**

*(Some people only enter data into existing projects and are not involved with the design of the project)*

reset

**Do you anticipate entering data into a REDCap project?**

Yes  
 No

reset

**With which institution are you affiliated?**

- Vanderbilt University
- Vanderbilt University Medical Center
- Meharry Medical College

reset

**With which department are you affiliated?**

**How do you anticipate using REDCap?**

- for databases
- for surveys
- for both surveys and databases

reset

**Do you anticipate designing/building a REDCap project?**

- Yes
- No

# 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

# Group questions or provide information

## Add New Field

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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)

Screening information

*Begin New Section*

Which of the following medications is being taken? (check all that apply)

- Lexapro
- Celexa
- Prozac
- Paxil
- Zoloft
- Other
- None of the above

consult the [study\\_protocol](#) for other examples of meds we need to document!

Height (cm)

(130-215)

Weight (kilograms)

(35-200)

BMI

[View equation](#)

Is the participant currently **ACTIVE** on the study?

- Yes
- No

[reset](#)

STOP!

*Descriptive Text*

This person is no longer on the study, so you need to **cancel any remaining visits or surveys**. Check the study protocol for detailed instructions. Enter the date below when you've completely finished with all their study close-out procedures.

Attachment: [Study Protocol.docx](#) (0.01 MB)

Date removed from study

Today Y-M-D

Comments



# Text

## Add New Field

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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)

# Notes - more room

Do you have any suggestions for changes to the presentation?

This could be:

- the order in which the material was presented
- material that could have been omitted
- material that should have been presented that wasn't
- length of the session, etc.



Expand

## Compared to text box...

Do you have any suggestions for changes to the presentation?

This could be:

- the order in which the material was presented
- material that could have been omitted
- material that should have been presented that wasn't
- length of the session, etc.

# 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)

  Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

**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**

# Choices

## 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:

Question Number (optional)   
Displayed only on the survey page

Field Label

Choices (one choice per line) [Copy existing choices](#)

- 1, Vanderbilt University
- 2, Vanderbilt University Medical Center
- 3, Meharry Medical College

[How do I manually code the choices?](#)

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](#)

Required?\*  No  Yes

\* Prompt if field is blank

Identifier?  No  Yes

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

Custom Alignment

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 \(4 min\)](#).

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)

Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

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



Name

Fax number

Phone number

Email address

Account numbers

Social Security Number

Medical Record Number

Health Plan number

Certificate/license numbers

...

# Identifier

**Add** ✕

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)

Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

**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**

# 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:

# 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)
- registrationdate = (define criteria)



Drag  
and  
Drop



Show the field ONLY if...

- ALL below are true
- ANY below are true

[Clear](#)

## Field choices from other fields

(drag a choice below to box on right)

Variable  
Name

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: