For a full schedule of workshop topics: www.mc.vanderbilt.edu/crc/workshop.html

REDCap homepage: redcap.vanderbilt.edu

REDCap help at Meharry: MeRCuryHelp@mmc.edu

REDCap help at Vanderbilt: redcap@vanderbilt.edu
Participants must have a REDCap account (username and password) prior to attending a clinic.

To request a REDCap account, email: MeRCuryHelp@mmc.edu
REDCap Series I: A Beginner's Guide to Project Creation
Today’s Agenda

• Background about REDCap

• Live demonstration of project creation and development
Getting started: redcap.vanderbilt.edu

1. Background about REDCap

Welcome to REDCap!

REDCap is a secure, web-based application for building and managing online surveys and databases. Using REDCap's streamlined 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 (1 UL1 RR024975 from NCRR/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:

2. Contact information
To create a new project

1. On the ‘create’ tab

2. Choose the project title, purpose, and design

3. Create the project
Within the new project

1. Menu

2. Project title

3. Project Setup tab

DEMO: Creating a New Project

Your new REDCap project has been created and is ready to be accessed. You may now begin exploring your project and the many features available to you. Below are some instructions to help you get started.

Modify project settings or make customizations

You have created your project and are ready to begin building on it. If you would like to modify the general project settings that you set when creating the project or if you wish to make some customizations to the project (e.g., enable auto-numbering for new records), use the buttons below.

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

Have you checked the Check For Identifiers page to ensure all identifier fields have been tagged?
Building the new project

1. Use the Setup tab checklist to build your project.

2. Not all steps will apply.
Building the new project

You will spend most of your time designing the data collection instruments. Instruments are the webpages used to enter your data into REDCap. There are two methods to design instruments:

the Online Designer and the Data Dictionary
Using the Online Designer

The Online Designer is the fast, easy way to build instruments entirely online.

Customize existing instruments...and create new ones.
Designing instruments online

1. The Online Designer makes instrument creation easy.

2. Customize existing questions.

3. Add new questions.
Designing instruments online

1. Many field types are available.

2. Always enter the Field Label and Variable Name.
Using the Data Dictionary

The Data Dictionary method uses an Excel file to build instruments.

Customize the Excel file and upload it to REDCap.

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 module may be used for making changes to the project, such as adding new fields or modifying existing fields, by using an offline method called the Data Dictionary. The Data Dictionary is a specifically formatted CSV (comma delimited) file within which you may construct your project fields and afterward upload the file here to commit the changes to your project.

Click the 'Browse' or 'Choose File' button below to select the file on your computer, and upload it by clicking the 'Upload File' button. Once your file has been uploaded, changes will NOT immediately be made but will be displayed and checked for errors to ensure that all the formatting in your Data Dictionary is correct before official changes are made to the project.

Need some help?
If you wish to view an example of how your Data Dictionary may be formatted, you may download the Data Dictionary demonstration file, or you may view the Data Dictionary Tutorial Video (14 min). For help setting up your Data Dictionary, you may also see the instructions listed on the Help & FAQ.

Steps for making project changes:
1.) Download the current Data Dictionary
2.) Edit the Data Dictionary (see the Help & FAQ for help)
3.) Upload the Data Dictionary using the form below
4.) The changes will be made to the project after the Data Dictionary has been checked for errors

Upload your Data Dictionary file (CSV file format only)

[Upload File]
Designing the Data Dictionary

The Data Dictionary file captures the same information as the Online Designer.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable / Field Name</td>
<td>Form Name</td>
<td>Section Header</td>
<td>Field Type</td>
<td>Field Label</td>
<td>Choices, Calculations, OR Slider Labels</td>
</tr>
<tr>
<td>study_id</td>
<td>demographics</td>
<td>text</td>
<td>Study ID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>first_name</td>
<td>demographics</td>
<td>Demographics Information</td>
<td>text</td>
<td>First Name</td>
<td></td>
</tr>
<tr>
<td>last_name</td>
<td>demographics</td>
<td>text</td>
<td>Last Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dob</td>
<td>demographics</td>
<td>text</td>
<td>Date of Birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sex</td>
<td>demographics</td>
<td>dropdown</td>
<td>Gender</td>
<td>0, Female</td>
<td>1, Male</td>
</tr>
<tr>
<td>address</td>
<td>demographics</td>
<td>notes</td>
<td>Street, City, State, ZIP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>phone_number</td>
<td>demographics</td>
<td>text</td>
<td>Phone number</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each row in the file corresponds to a field in the project.
Building the project

Use the Setup tab checklist to track your progress.
Testing the project

Use the Data Collection section to test your instruments by entering practice data.

Often, entering practice data will lead to more revisions on the instruments themselves.
Testing the project

After doing some data entry, test some of the Applications.

The way you need the applications to function can also lead to revisions on the instruments.
Moving the project to production

1. When you are ready to begin entering real data, use the Setup tab to move the project to production mode.

2. You can delete all the practice data, so that your project will be ready for real data entry.
In production

There is no functional difference in production mode, but this mode has extra precautions to protect saved data. Moving to production isn’t required, but it is STRONGLY recommended.
Modifying instruments in production

The Online Designer and Data Dictionary can still be used to modify instruments, but the changes are not immediate.

Enter Draft mode to make and submit changes.
Today’s Agenda

• Background about REDCap

• Live demonstration of project creation and development
  • Creating a project
  • Building data collection instruments
  • Testing instruments and applications
  • Moving to production
  • Making and submitting changes in production
For help and questions:
redcap@vanderbilt.edu