The Irving Institute’s REDCap® Beginner’s Guide

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As the owner of your new REDCap project, this guide is a step by step walk through of creating projects, user management and billing information. There is also information about getting started with a few of the basics in REDCap. Please note this REDCap installation (*instance*) is unaffiliated with CUMC IT and the help desk would not be able to assist with REDCap matters. For assistance contact the REDCap Administrator.

The Irving Institute’s REDCap instance is unique in that the two main functions of creating projects and user rights management are accessed on a separate website, the REDCap Administration website [https://www.sac-cu.org/REDCap](https://www.sac-cu.org/REDCap)

If you are new to REDCap, tutorial information is widely available on the web by Google searching “REDCap topic here” for example *REDCap Surveys*. There are a host of available documents to download as well as great YouTube videos that discuss popular REDCap topics. Always consult the REDCap FAQ’s as they are updated frequently.

***Training for REDCap is the user’s responsibility as help from the administrator is limited to technical assistance and minimal assistance at the project level. Any information provided by the administrator is not intended to be an instruction or in anyway a direction to follow and is purely a guide. It is always the owner’s choice to follow through with their own actions and make the best decision based on protocol.***
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Two website system

The REDCap Administration website  https://www.sac-cu.org/REDCap

- Create new projects
- Add/Edit/Remove Users
- Enter CU chart strings  (owners & payors only)
- Payment information  (owners only)
- Create User Roles
- Create Data Access Groups (DAG’s)

The REDCap Application website  https://redcap.sac-cu.org

- Design projects/forms/surveys
- Add/edit/delete records
- Data entry
- Survey distribution
- Data exports
- REDCap mobile
Creating a new REDCap account and new project

Login to the REDCap Administration website
https://www.sac-cu.org/REDCap

Restricted to CU personnel

Use your Columbia UNI credentials
Creating a new REDCap account and new project

Click the “Create a REDCap account and new REDCap project” link

Irving Institute REDCap Administration

Welcome to the Irving Institute REDCap Administration application.
You do not have a REDCap account associated with your UNI.

Create a REDCap account and new REDCap project (Note: these activities will incur charges)

New REDCap owner accounts will see this note and have no dashboard below

Must have a valid CU chart string to proceed

If you feel you are receiving this message in error, contact Chris Wilcosky (cw2815@cumc.columbia.edu).
Creating a new REDCap account and new project

Enter your user information (*your UNI will auto populate*) for the new owner account

<- You are the owner. The UNI is the username for all projects

<- As the owner, email must be a Columbia address: .cumc.columbia.edu OR columbia.edu

<- For new REDCap owner accounts, this sets your REDCap password and security question.
Creating a new REDCap account and new project

Click “Next” and the new owner account is created for REDCap

For new REDCap owner accounts, this sets your REDCap password and security question when logging in to REDCap.
Creating a new REDCap account and new project

Enter the new project information and click “Next”

<table>
<thead>
<tr>
<th>Project Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name</td>
</tr>
<tr>
<td>Project Type</td>
</tr>
<tr>
<td>IRB</td>
</tr>
<tr>
<td>Funding Source</td>
</tr>
<tr>
<td>Project Notes (optional)</td>
</tr>
</tbody>
</table>

PREVIOUS NEXT
Creating a new REDCap account and new project

Option 1 - Enter the chart string information then click “Next”

or option 2 - Delegate payment (see next page)

Please enter your payment information.

This information must be available in order to proceed and is the only payment method.

Payment Information

- I will enter the payment information (Columbia University chart string) myself.
- I will delegate the payment entry to someone else.

Current REDCap fees:
- $40.00/quarter per project
- $10.00/quarter per project user

This information updates, fees shown are subject to change each year. Check Policy information for current rates.

Fiscal year is calendar and auto populates
Creating a new REDCap account and new project

Option 2 - Delegate payment to a payor, enter the UNI and click “Next”

! The payor must be notified by you to enter the chart string, no email is sent to them from the system. Also note that a payor cannot be on a project.

! The payor is generally a finance person within your department.
Creating a new REDCap account and new project

Confirm the information then click “Create Project”

Confirm the information you provided, then click Create Project.

<table>
<thead>
<tr>
<th>Confirm Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name</td>
</tr>
<tr>
<td>Project Owner</td>
</tr>
<tr>
<td>Owner UNI</td>
</tr>
<tr>
<td>Owner Email</td>
</tr>
<tr>
<td>Payment Info</td>
</tr>
</tbody>
</table>

Clicking CREATE PROJECT -> This step creates your new REDCap project and REDCap account
Creating a new REDCap account and new project

The new account and project is created and shown in the dashboard. Note the Project Status is “Development” a default setting, your project is ready to build in REDCap.

If you feel there is any error in this list, contact Chris Wilcosky (cw2615@columbia.edu).

You can create new projects and add users to your projects (Note: these activities will incur charges). You can also alter the status of a project, remove users from a project, and change the access an existing user has for a project. To delete or change the status of a project, use REDCap (redcap.sac-cu.org).

Welcome to the Irving Institute REDCap Administration application. Below are the projects for which you are owner/manager.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Project Type</th>
<th>Owner Name</th>
<th>Number of Users</th>
<th>Date Created</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enter Project Title Here</strong></td>
<td>Research: Basic research/lab</td>
<td>Linda Hamilton</td>
<td>1</td>
<td>09/11/2020</td>
<td>Development</td>
</tr>
</tbody>
</table>
Creating a new REDCap account and new project

The new account and project is created. For project information, click the project title link.

Welcome to the Irving Institute REDCap Administration application. Below are the projects for which you are owner/manager.

If you feel there is any error in this list, contact Chris Wilcosky (cw2615@columbia.edu).

You can create new projects and add users to your projects (Note: these activities will incur charges). You can also alter the status of a project, remove users from a project, and change the access an existing user has for a project. To delete or change the status of a project, use REDCap (redcap.sac-cu.org).

Create New Project

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Project Type</th>
<th>Owner Name</th>
<th>Number of Users</th>
<th>Date Created</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Research: Basic research/lab</td>
<td>Linda Hamilton</td>
<td>1</td>
<td>09/11/2020</td>
<td>Development</td>
</tr>
</tbody>
</table>
Creating a new REDCap account and new project

Adding users (both new and existing Irving Institute REDCap users) Click the “Add User” link

Add a user, not a User Role. Note that user roles are for limiting user rights to a group of users who need similar data entry access. See the REDCap FAQ’s for more information.
Creating a new REDCap account and new project

Enter the user information. Usernames must be a UNI for all CU users, otherwise first initial and last name like LHamilton@mail.edu – users can be from anywhere with a valid email

lh2023@cumc.columbia.edu
Creating a new REDCap account and new project

Enter user information and click “Add User”
Creating a new REDCap account and new project

If a user already exists in REDCap, click “YES”. If they do not exist, they will receive an email with a REDCap password setup link from “redcap_irving@cumc.Columbia.edu”

Note if the user does not receive the email, have them check their spam folder.
Creating a new REDCap account and new project

The user is added to the project. Next, modify the “User Rights” by clicking on the pencil-like icon to the right of the username. All added users are “data entry” by default and can be given additional user rights. Note the Project Role (owner, manager, or user).

Note the Project Role is defaulted to “user” and is very limited in access. User Rights are everything in REDCap. If something is not working, always check the User Rights to make sure the settings are enabled.
Creating a new REDCap account and new project

The Project Role is set to “User” by default. Select “Manager” and click “Project Design and Setup” to allow project design rights. “User” only have data entry rights. Scroll down to the panel to continue to add more rights as needed. **Note:** Manager’s have the same User Rights as an owner except access to payment information. Users on a project cannot be “payors”.

User rights are everything in REDCap.
Creating a new REDCap account and new project

Click “Save Changes” and repeat the process for each user additional user.
Creating a new REDCap account and new project

To remove a user from a project, click the “Delete” icon to the right of the user name.

<table>
<thead>
<tr>
<th>Role</th>
<th>Username</th>
<th>First Name</th>
<th>Last Name</th>
<th>Email</th>
<th>Assign Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>lh2023</td>
<td>Linda</td>
<td>Hamilton</td>
<td><a href="mailto:lh2023@cumc.columbia.edu">lh2023@cumc.columbia.edu</a></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>cw2615</td>
<td>Chris</td>
<td>Wilcosky</td>
<td><a href="mailto:cw2615@cumc.columbia.edu">cw2615@cumc.columbia.edu</a></td>
<td>9/14/2020</td>
</tr>
</tbody>
</table>

(Copy and paste the table as is into your text document.)
Now that the project is created and users have been added, login to the REDCap Application here [https://redcap.sac-cu.org](https://redcap.sac-cu.org) using the credentials created in the administration website.

Please note that logins from other REDCap instances (other sites) do not transfer.
Click the “My Projects” link and to access a project click on the project link.

If you are new to REDCap you can watch the training videos for a brief overview. Other tutorials are available on YouTube and various informational documents on the web. Training for REDCap is the user's responsibility and only limited support is available from the administrator.

Please note the PID number, this the project id.
The “Project Setup” page is displayed. The default project settings are the “current settings”.

Enable settings as needed. It is recommended to follow a project set up plan. Read all notes and information provided.

Only “Auto-numbering for records” is enabled by default.

Randomization settings require administrator assistance.

Note the project status is in Development.

User Rights are disabled in REDCap.

Use the REDCap administration website: https://www.sac-cu.org/REDCap
To create a new survey, first enable the project to use surveys.

<- Click “Enable” to use surveys and longitudinal studies if necessary
Next, click the “Designer” link to see the instrument queue.

The difference between a form and a survey is how data is entered. For a form, data is entered via the REDCap application and only REDCap users can access it. The Survey is sent out or delivered for data entry for users without REDCap access.

Change the instrument name by clicking “Choose action” and “Rename”. Enter “Baseline Survey” and click “Save” (for example purposes).
Next, click on the newly named instrument to add new fields by clicking “Add Field”.

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/trials 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 button. 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. Are you using Action Tags yet? If not, learn about Action Tags here.

Current Instrument: Baseline Survey

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 under Field Edge. Field Type: ___________ Select a Type of Field _____

-! The Record ID is a default field and always must be the first field on the first instrument in the project.

<- Take a moment to read through the information
Select the field type, in this case a text box to capture the first name.

This step allows multiple settings on the field. Click “Save” when completed.

Click “Add Field” to continue adding fields. Click “Save” when completed.
When all the fields are created, return to the list and click on the “Project Setup” tab.
Click “Online Designer” and “Enable” the form under “Enabled as Survey”.

Enable the instrument as a survey. The first instrument in the queue will have the record id. Also note that if using a public link, the first survey in the queue will be sent.
Click “Save Changes” to **set** the survey, then click “**Survey Settings**” to **edit** the survey.

**Survey Status:**
- Active or Offline

**Survey Design Options:**
- Logo
- Survey instructions
- Can use “piping”

**Survey Customizations include:**
- Question numbering
- All on one page / one section per page using “Section Headers”
- Required Fields – option to display *must provide value*
- Aggregate Results
- Text-to-speech
- Limit survey responses

**Survey Access:**
- Expiration date and time
- Save and Return Later
  - Also, ability to return and modify a completed response

**Survey Termination Options:**
- Auto-continue on to next survey – link surveys together
- Redirect to URL or Survey completion text
- Confirmation email
Click “Save Changes” to save the survey.

[Image of REDCap Application - Surveys interface]

- **Survey Completion Text**: Text displayed after survey completion.
  - **Paragraph** tools for formatting.
  - "Thank you for taking the survey. Have a nice day!"

- **e-Consent Framework**:
  - Disabled
  - Auto-archiver enabled
  - Auto-archiver + e-Consent Framework

- **PDF Auto-Archer**: Upon survey completion, a compact PDF copy of the survey response will be automatically stored in the project's file repository, from which the archived PDFs can be downloaded at any time.

- **Send confirmation email (optional)**: No

- **Save Changes** button

- **Delete Survey Settings**: Please note that deleting the survey settings will NOT delete any data collected using the survey. Also, deleting the survey settings will NOT delete the data collection instrument, but instead the instrument will revert to how it was before it was enabled as a survey, in which data can only be collected by authenticated users on the data entry form.
To display the survey from the participant view, select “Survey Distribution Tools” from the left menu under “Data Collection”. Under “Link Actions” click on “Open public survey”. The first survey in the queue will be sent.
The display from the participant’s view

**Baseline Survey**

Please complete the survey below.

Thank you!

1) **First name**
   * must provide value

2) **Last Name**
   * must provide value

**Submit**

Enter data and click “Submit”

**Baseline Survey**

Please complete the survey below.

Thank you!

1) **First name**
   * must provide value

2) **Last Name**
   * must provide value

**Submit**

Close the survey

Thank you for taking the survey.

Have a nice day!
Distributing the survey by “Participant List” - Select “Survey Distribution Tools” from the left menu under “Data Collection” (not shown). Click the tab “Participant List”.

- Sends customized email to participants in list
- Participant can complete survey one time
- Configurable reminders
- Tracks responses
- Option to identify responses
- Use “Survey Invitation Log” to view invitations that have been sent or are scheduled to be sent
Distributing the survey by “Participant List” – Survey Invitation to Participants

**Participant List** belonging to (Initial survey) "Baseline Survey"

- Add participants
- Compose Survey Invitations
- Remove all participants

**Send a Survey Invitation to Participants**

**Info**

- **Survey title:** Baseline Survey

**When should the emails be sent?**

- At specified time: [ ]
- [ ] Immediately

- [ ] Enable reminders

**Compose message**

- From: studycoordinator@cumc.columbia.edu
- To: [All participants selected from Participant List]
- Subject: 

Please take this survey.

You may open the survey in your web browser by clicking the link below:

[survey-link]

If the link above does not work, try copying the link below into your web browser:

[ ]

**NOTE:** You may modify or remove any text you wish in the Compose Message text box above. Make sure you include either [survey-url] or [survey-url] in the text or else the participant will not have a way to take the survey.

You may use HTML formatting in the email message: <b>bold</b>, <u>underline</u>, <i>italics</i>, <a href="">link</a>, etc. Use to use Access Code or the survey invitation.

- Select a previously sent email to load it in the Compose box – [ ]
The survey invite is sent automatically when either:

- A earlier survey is completed, or-
- An expression is satisfied (i.e., the value of one or more fields on data forms/surveys satisfies the entered expression)
Surveys in Longitudinal Projects. The project may have a mixture of surveys and/or data entry forms.

If the first instrument is a data entry form (Screener), create a text field with validation = email in the first instrument to enter the email address of participants.

In project setup, designate the mail field to use invitations to survey participants.
Survey Queue. Used for sending one invitation for multiple surveys. Participants see a “to-do” list of surveys they need to complete. A very handy tool.

Surveys will appear in the Survey Queue if:
1. Certain conditions are met
2. The participant has completed a particular survey, and/or

Click “Survey Queue” and activate the surveys to appear in the queue.
Survey Queue participant view.

Click “Survey Queue” for the record to see the participant view (if conditions are met)
Survey Queue participant view - completed.

- For long surveys – consider multiple surveys and group into a survey queue, with the auto-start option: **surveys will appear to participants as one survey only.**
  - Advantages: data will be saved at the completion of each survey
  - There will be less chance to lose data in case of poor internet connection

- Survey queues may also be used as “branching logic” at a survey level. For example, if there is a set of questions that are specific to a given gender, instead of adding a branching logic to each question, create a survey with this set of questions only and specify the condition in the survey queue e.g. \[ \text{[gender]} = 1 \]
Use Case – classic project mix of surveys and data entry forms.

<table>
<thead>
<tr>
<th>Instrument Name</th>
<th>Type</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td>Data form</td>
<td>Contains email type field to capture participant’s email address</td>
</tr>
<tr>
<td>Screening</td>
<td>Survey</td>
<td>Triggered when email is entered on Demographics form</td>
</tr>
<tr>
<td>Consent</td>
<td>Survey</td>
<td>Survey Queue – displayed when screening is complete and if eligibility criteria are met</td>
</tr>
<tr>
<td>Initial Data</td>
<td>Survey</td>
<td>Survey Queue – displayed if consent is completed and participant has provided consent</td>
</tr>
<tr>
<td>Randomization</td>
<td>Data Form</td>
<td></td>
</tr>
<tr>
<td>Follow Up</td>
<td>Survey</td>
<td>Automated Invite sent 6 months after Initial Data is completed and if subject is randomized</td>
</tr>
</tbody>
</table>
How do I request user access?
Owners and managers can add users to their projects at will and do not need to requested.

Do you offer any training on REDCap?
No and yes there is a learning curve. Training is the users responsibility, but watch the REDCap Training videos first while in REDCap. Then a simple Google search like “REDCap Surveys” will provide vast online information regarding REDCap topics. As well there are useful videos on YouTube. The REDCap Administrator can offer a link to a reference however that is not a substitute for available information. You must decide how to use the provided information as it relates to your project.

My survey settings are not showing, what do I do?
Check to make sure that surveys are enabled in project setup and that the instrument is enabled as a survey in the online designer.

What is the difference between Development and Production status?
These are the two main states in the project evolution. Development is for designing and testing only. Once the project is setup and ready to go live and collect data the project should be moved into Production. Production mode locks down the majority of the project and prevents potential data corruption. We are not responsible for data loss or corruption if your project remains in development mode and you collect real data. Should this occur it is your problem to resolve.

My project is not showing up on the REDCap Admin site dashboard?
Check the chart string especially if you have delegated to a payor, otherwise contact the administrator.

How to ask for help if get an error message?
When contacting the administrator provide the project name or (PID), then if possible send a screen shot of the error.

Can I make changes to a project already in Production mode?
Yes, certain changes can be made to the project by selecting “Draft Mode”. This is a temporary state of the project that allows data collection to continue while you make changes to the project. Once changes are completed, submit the changes for approval. REDCap will check to make sure data corruption will not occur as well as other invalid settings. The administrator will approve the changes and the project will then go live with those changes and the project is returned to normal status.

Can users be from outside of CU?
Yes, users can be from anywhere as long as they have a valid email address. However, only CU personnel can be project owners. As well, managers will not have access to the administration website since they do not have a CU UNI.

Is Twilio available?
Yes, we now offer Twilio (you must ask to have it enabled for your project). You must set up your own account and are responsible for ALL communications between you and Twilio. We only enable it for use but do not support it unless there is a technical issue with REDCap.
FAQ cont’d

Is the REDCap API offered?
On a limited basis. Due to security concerns and our limited resources we cannot allow API imports into REDCap. However upon request we will allow API exports from REDCap.

Does REDCap Mobile have Multi Language Module (MLM) support?
No. There is no support for the MLM. There is a GUI translation for the window but no project level support.

I have a project that will is multi site and will have users needing access. Are users from other institutions allowed access?
Yes, users can be from anywhere as long as they have a valid email address. Foreign users cannot be managers or owners and cannot access the REDCap Administration website.

Can I copy a project?
No. Projects are “a la carte” and you must create a new project and pay the associated fees. You can import a data dictionary from the source project as a workaround to avoid recreating your instruments or project structure.

Is MyCap offered?
Not yet. MyCap will be available in version 13.4 when it becomes fully stable. Probably sometime in late 2023.

How do I delete a project?
Owners/managers can delete their projects at will. Go to the “Other Functionality” tab and click Delete. It is recommended that you first download back up files (Data Export, Data Dictionary, XML with metadata) prior to deleting. If there is a need to bring the project back online, these files will return the project back to the state it was in at the time of the download.

My project data entry period is over and the study is complete. Do I still have to pay for REDCap?
Yes. We do not follow any study’s progress or have any idea what your study protocols are. It is the owner’s responsibility to take the necessary actions when the study evolution changes. The project will be charged regardless of the status as long as it remains on our server. We do not store or archive projects.

Can I use one REDCap account for multiple users (password sharing)?
No. It is a RSAM policy violation as well as an IRB violation. If an account is suspected of password sharing the owner and all users will be permanently suspended and the project will be removed from this instance. The owner will also be reported to the IRB as well as CUMC IT.

I just added a new instrument to my project but no one can see it, what is going on?
If the project status is in production, all new instruments view is hidden by default. You must go to User Rights in the REDCap Administration website and provide access to the new instrument to each user under Data Viewing.
<table>
<thead>
<tr>
<th><strong>Best Practices</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Be consistent in coding your variables</strong></td>
</tr>
<tr>
<td>Avoid yes/no and true/false fields, which tend to cause problems if you need to add a third option later—stick to radio buttons and drop-downs.</td>
</tr>
<tr>
<td>Don’t recode variables once you’ve started collecting data—this will corrupt your data. Just add the next number. The numbers do not have to be in order in the list.</td>
</tr>
<tr>
<td>Code “unknowns” as a high number that stands out, like 999.</td>
</tr>
<tr>
<td>If you have multiple questions that will use the same answer choices, code them all the same.</td>
</tr>
<tr>
<td>Variable names should be short, alphanumeric, easy to type, and ideally have some level of meaning—these are the labels that REDCap will use to locate your data, and these are what you will be typing over and over when you are doing your analysis.</td>
</tr>
<tr>
<td>Variable name should not be changed once data collection has begun.</td>
</tr>
<tr>
<td>If you change a variable name, you will also have to change all piping, calculations, and branching logic associated with it.</td>
</tr>
<tr>
<td>Minimize the use of free response fields.</td>
</tr>
<tr>
<td>The data dictionary is an alternate way to build your project (as opposed to the online design).</td>
</tr>
<tr>
<td>As a rule of thumb, use calculations in REDCap if you need to see that calculation for the data collection process—otherwise, save calculations for back-end analysis.</td>
</tr>
<tr>
<td>Variable names should be short, alphanumeric, easy to type, and ideally have some level of meaning—these are the labels that REDCap will use to locate your data, and these are what you will be typing over and over when you are doing your analysis.</td>
</tr>
<tr>
<td>Use field notes to help the data enterers enter information correctly.</td>
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<tr>
<td>Group similar variables together.</td>
</tr>
<tr>
<td>Wherever possible, use a multiple choice selection instead of asking data enterers to type out the information to minimize non-uniform answers and typos.</td>
</tr>
</tbody>
</table>