

# REDCap Project Design Guide

Health Informatics Core (HIC)

Harold & Muriel Block Institute for Clinical & Translational Research (ICTR) at Einstein and  
Montefiore

Email REDCap questions to [REDCap-Help@einsteinmed.edu](mailto:REDCap-Help@einsteinmed.edu)

*Last updated 03/22/2023 for REDCap v11.1.16*



Montefiore

# How do I start a new REDCap project?

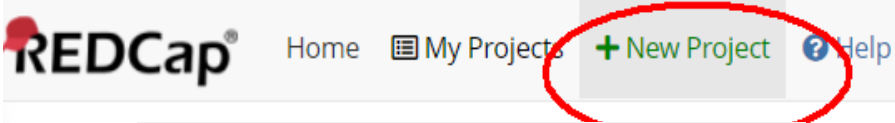
Before reaching this stage, you should have completed Steps 1-5 from the [Getting Started Checklist](#):

1. Test your [REDCap Login](#)
2. Familiarize yourself with REDCap learning resources
3. Submit the [Core Facilities Services Request Form](#)
4. Read the [REDCap Appropriate Use Policy](#)
5. Submit the required documentation [here](#):
  - REDCap Appropriate Use Policy signed by the PI
  - IRB approval letter (if your project requires IRB approval)

# Request New Project within REDCap

Once you've completed Steps 1-5, you need to request creation of the project within REDCap itself:

1. Click the "+ New Project" tab on your REDCap home screen.
  - If you don't see this tab, contact [REDCap-Help@einsteinmed.edu](mailto:REDCap-Help@einsteinmed.edu) to grant permission to request a new project
2. Complete the form with the following information:
  - Project title
  - Purpose (will be "Research" in most cases)
  - You can create an empty project or choose a template if you would like to start with some example instruments.
3. Once the REDCap administrator approves the request, you will receive an email confirmation that the project was created.



**REDCap** Home My Projects **+ New Project** ? Help

### + Create a new REDCap Project

You may begin the creation of a new REDCap project on your own by completing the form at the bottom.

**Project title:**

**Project's purpose:**  How will it be used?

**Assign project to a Project Folder?** ☐

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

**Project creation option:**

- ☒ Empty project (blank slate)
- ☐ Upload a REDCap project XML file (CDISC)
- ☐ Use a template (choose one below)

#### ★ Choose a project template

select template	Template title (sorted by title)	Template description
<input type="radio"/>	Basic Demography	Contains a single data collection instrument
<input type="radio"/>	Classic Database	Contains six data entry forms, including monthly data forms, and concludes with
<input type="radio"/>	Field Embedding Example Project	Contains a single data collection instrument
<input type="radio"/>	Human Cancer Tissue Biobank	Contains five data entry forms for collection
<input type="radio"/>	Longitudinal Database (1 arm)	Contains nine data entry forms (beginning longitudinally over eight different events)
<input type="radio"/>	Longitudinal Database (2 arms)	Contains nine data entry forms (beginning two different arms (Drug A and Drug B))

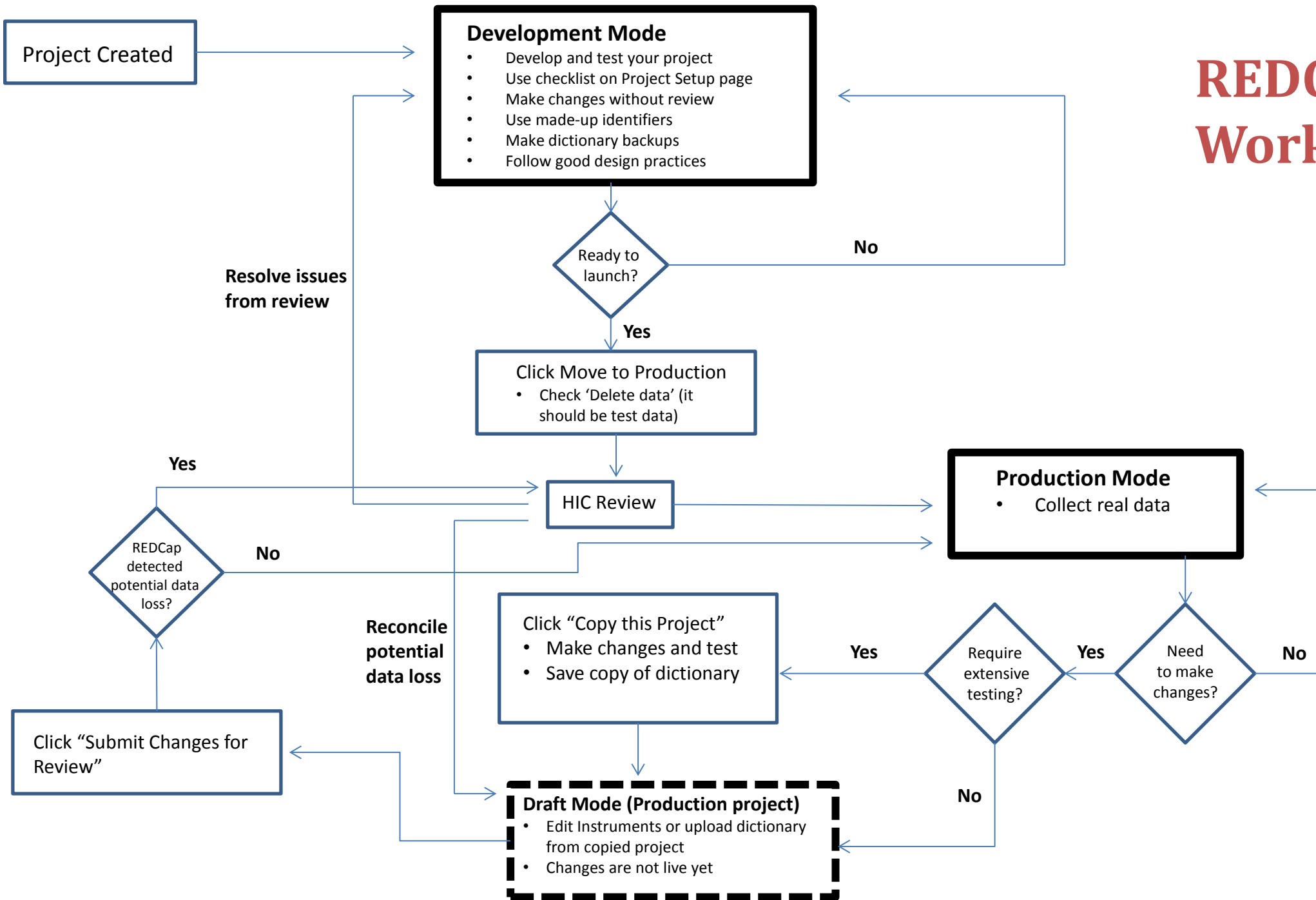
**Create Project** **Cancel**

# Good Design Practices

Before you begin creating data collection instruments, please consider the following design tips:

- Use field validation wherever possible by setting the appropriate validation type and min/max values for each variable
- Make your coding for categorical variables standard across all questions that have the same choices, Ex: 1=Yes, 0=No for all Yes/No questions
- Mark all identifier fields (Ex: names, dob, phone numbers, emails, etc...)
- Consider using the REDCap auto-numbering for records feature – the first variable on your first instrument must be a unique key!
- For longitudinal studies, make sure you have designated each instrument to the appropriate event

# REDCap Workflow



# Development Mode

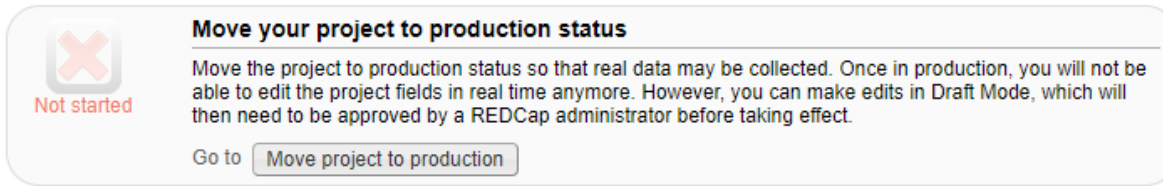
- When your project is created, you will start in Development Mode.
- In Development Mode, you should design and test your project as follows:
  - Work your way down the list of steps displayed in the Project Setup tab
  - You can create and edit data collection instruments on your own – no approval is required from a REDCap admin
  - Enter test data with made-up identifiers.
  - Test every form and pay particular attention to your branching logic.
  - Export the test data to a stats package and ask your statistician for feedback on the variable naming, data structure, etc...

# Development Mode (cont...)

- **Remember to NEVER collect real data in Development Mode**
  - When you edit your instruments in Development Mode, the changes are instantaneous without the benefit of the automated checks that warn of any potential data loss. In short, you could lose data!
  - See the [REDCap Appropriate Use Policy](#) for a more detailed discussion of these issues.
- During testing and development, contact [REDCap-Help@einsteinmed.edu](mailto:REDCap-Help@einsteinmed.edu) to ask questions or make an appointment if you get stuck.

# Moving to Production Mode

- When you are ready to start real data collection, click the “Move project to production” button from the Project Setup page:



- Remember to check the option to delete your test data
- This will prompt a REDCap admin to review your project settings and forms and offer recommendations via email
- Depending on the size and complexity of your project, the review process may take several days or even weeks of back and forth, so please allocate sufficient time for this stage.
- Once the review is complete, the REDCap admin will move your project to production and you may begin data collection



# Making Production Mode changes

If you need to make changes to your instruments in Production Mode, follow this process:

1. Click the “Enter Draft Mode” button from the Online Designer
2. Follow one of these workflow options:
  - A. If you are making major changes that require extensive testing, we recommend that you request a copy of the project and make your changes in the copy. Then, after testing, download the data dictionary from the copy, upload it to the production project in draft mode, and request “Approve changes”. Please send an email to [REDCap-Help@einsteinmed.edu](mailto:REDCap-Help@einsteinmed.edu) to let us know that you've already tested your changes in the copied project.
  - B. If your changes are minor, you can edit the instruments on the production project in Draft mode and request "Approve changes" when you are finished.
3. If the changes were minor, they will be approved automatically. If the system detects the potential for data loss, a REDCap admin will be alerted and review your changes. The admin will then offer suggestions via email.

# Avoiding Data Loss

Here are some common Production Mode changes that can potentially result in data loss – avoid these scenarios if possible:

- **Deleting a variable that you've already collected data for.** Consider hiding the variable with the @HIDDEN action tag instead of deleting it from the dictionary to preserve the previously collected data in your exports.
- **Changing the meaning of value labels.** For example, say that you wanted to change the coding of your “highest degree attained” variable from 1=High school, 2=Bachelor’s, 3=Master’s, 4=Doctorate to 1=High school, 2=Associate’s, 3=Bachelor’s, 4=Master’s, 5=Doctorate. If you made this change in the dictionary without adjusting the data you previously recorded, all participants that were recorded as having a Master’s degree would now appear in REDCap to have an Bachelor’s degree. If you absolutely require this new coding scheme, you should export the data for this variable, manually change all of the previously collected 2 values to 3, 3’s to 4 and 4’s to 5 in the CSV file and re-import it after making the dictionary change. However, the far cleaner solution in these scenarios is to insert a new code instead of changing the existing ones. For example, if you want “Associate’s” to appear as the second choice, just define the codes as follows in the Online Dictionary:

1, High school  
5, Associate’s  
2, Bachelor’s  
3, Master’s  
4, Doctorate

This way, your new answer choice appears in the desired sequence on the data entry form without conflicting with the values stored in your database.

Don’t hesitate to email REDCap-Help@einsteinmed.edu if you have any questions about making changes in Production Mode.