Introduction to REDCap

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Introduction – Team Members

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Introduction to

REDCap at Mount Sinai

▶ **Research Electronic Data Capture** – a platform developed by Vanderbilt University as a tool for researchers to collect data

▶ 21 CFR Part 11 compliant – joint effort by Scientific Computing, IT, IRB and Privacy Offices

▶ **Data resources and integration between many existing system with more to come**

 – Import clinical data into REDCap from Epic (over 1800 mapped fields)

   – Basic Demographics

   – Conditions/Problems list

   – Medications

   – Vital signs

   – Laboratory Results (lab results where LOINC code is stored in Epic)

 – Submit requests to https://bit.ly/3guXoag

▶ **We host more than 10,000 databases, with over 18,000 users**

Overview

▶ **Creating your REDCap account**

▶ **Project Setup**

- Templates

- Project page

- Longitudinal Studies

- Online Designer

    - Surveys

    - Variables

- Obtaining Data

▶ **Data Management**

▶ **Managing Users**

▶ **Project Life Cycle**
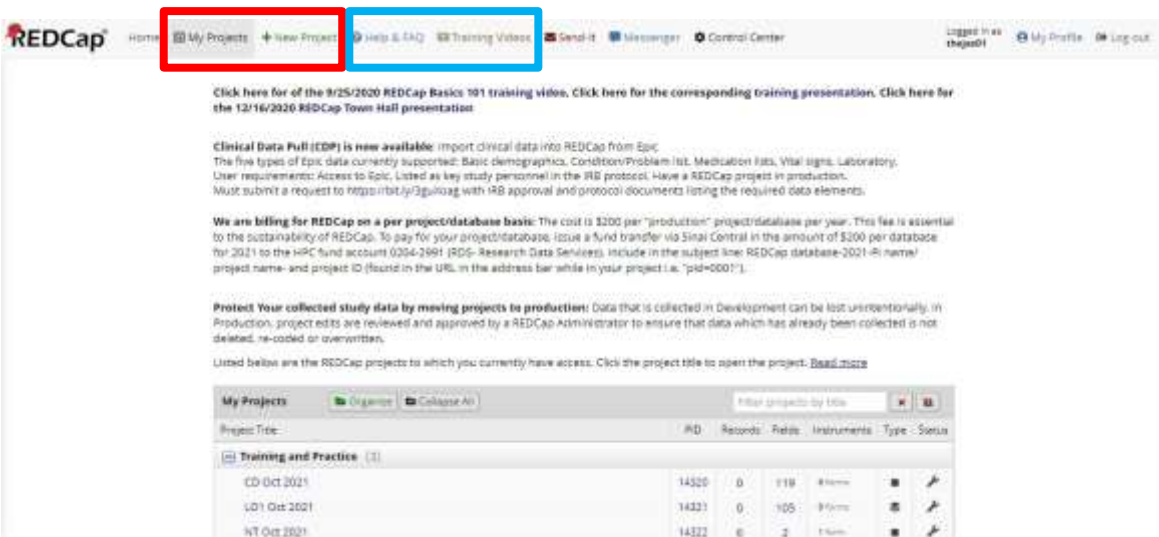
Creating A REDCap Account

Mount Sinai Users:

▶ Mount Sinai faculty, students and staff can log into REDCap using their regular Mount Sinai username and password here: https://redcap.mountsinai.org

External Users:

▶ For external collaborators without Mount Sinai credentials, the PI or their delegate must request Mount Sinai credentials via SailPoint: https://sailpoint.mountsinai.org/

Creating a New Project

▶ Users can find the projects they have access to under **My Projects** at the top of the page. These are projects they've been added to or have created.

▶ To create a project, click on the adjacent **New Project** button.

▶ Along the top bar, users will also find great resources under **Help & FAQ** as well as **Training Videos** for learning to use REDCap.

Creating a New Project Cont'd

▶ When creating a new project, users can fill out **project details** and the type of research that will be conducted

▶ On the same page are **templates** for getting started on a new project

Getting Familiar with the Project Page

- Manage a project

- Check and edit participants' records, share survey invitation links and QR code

- Import, Export, and run Reports on collected data
- Modify User Access
- Configure External Modules

- Modify project title, PI, and descriptions
- Enable Longitudinal data collection

- Access the Online Designer
- Access/download the data dictionary
- Find information on unique REDCap functions

- Define how a longitudinal study is structured

- Extended customizations and modules options

Longitudinal Studies

▶ Define each of the study **Arms** and **Events** for those Arms

▶ Designate Instruments for each Arm and Event

Online Designer – Instruments/Surveys

▶ Create, import, and manage data collection forms

▶ Enable instruments as surveys

▶ Edit data collection instruments and variables

▶ Define how participants can get automated invitations by email

Online Designer – Variables

▶ Variables allow users to define discrete data points for collection

▶ Short, simple, and identifiable names for variables are preferred

▶ Choose the field type that best fits the data point

▶ Note: Collection and maintenance of PHI in a protected and confidential manner is the responsibility of the investigators

Obtaining Data

▶ Invite participants to take a survey by sharing Public Survey URLs or QR codes

▶ Monitor follow-up surveys and previously sent invitations, manage the survey's participants list

🗐 Survey Distribution Tools

| 🔗 Public Survey Link | 👥 Participant List | 📇 Survey Invitation Log |

Using a public survey link is the simplest and fastest way to collect responses for your survey. You may obtain the survey link below to email it to your participants. Responses will be collected anonymously (unless the survey contains questions asking for identifying data from the participant). **NOTE:** Since this method uses a single survey link for all participants, it allows for the possibility of participants taking the survey multiple times, which may be necessary in some cases.

To obtain the survey link, copy the URL below and paste it into the body of an email message in your own email client. Your email recipient(s) can then click the link to begin taking your survey.

Public Survey URL: https://redcap.mountsinai.org/redcap/surveys/?s=4AEAFJTTA7

OR **Short Public Survey URL:** https://j.mp/3DV7An8

Link Actions
- ↪ Open public survey
- ↪ Open public survey + ↪ Log out
- ✉ Send me URL via email
- 🔧 Survey Access Code or 📱 QR Code

Link Customizations
- 👁 Get Short Survey Link
- 📝 Create Custom Survey Link
- </> Get Embed Code

Obtaining Data – Data Entry Form

▶ For data points that are not collected during the surveys, they can be entered in the **Record Home Page**
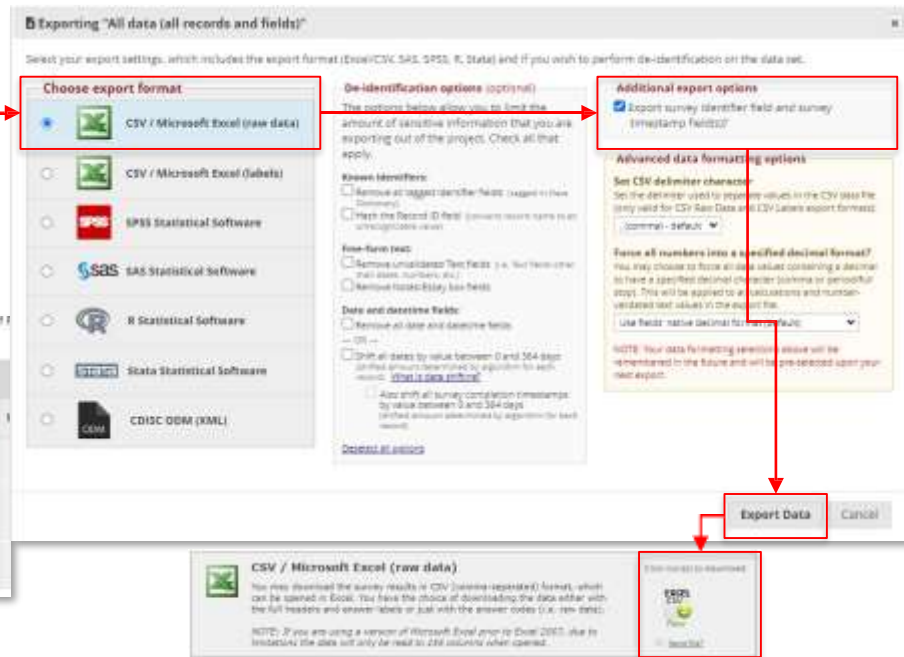
▶ Can enter new data, overwrite data, or make notes on data for the record

Data Management- Export data

▶ **Data Exports, Reports, and Stats** contain methods to export collected data in various formats

▶ Custom selections can be made to isolate data of interest from larger project databases

Data Management – Editing Data

▶ Data edits can be made on csv files in Excel

▶ Records show all data collected for a specific **Event** and **Arm**

▶ Some data will appear as entered by survey participants with free text entry, while other data is coded as discrete selections as in the case of multiple-choice selections

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	study_id	redcap_event_name	redcap_su	demograp	date_enr	patient_d	first_nam	last_name	address	telephone_1	email	dob	age	ethnicity	race	sex	given_birt
2	1	event_1_arm_1		########	########		test1	test1	Some place	(444) 444-4444		########	0	1	1	1	
3	1	event_2_arm_1															
4	2	event_1_arm_1			########		test2	test2	Somewhere	(555) 555-5555		########	0	2		0	0
5	3	event_1_arm_1		########	########		test1	test1	Some place	(444) 444-4444		########	0	1	1	1	
6	3	event_2_arm_1															
7	4	event_1_arm_1			########		test2	test2	Somewhere	(555) 555-5555		########	0	2		0	0
8	5	event_1_arm_1		########	########		test1	test1	Some place	(444) 444-4444		########	0	1	1	1	
9	5	event_2_arm_1															
10	6	event_1_arm_1			########		test2	test2	Somewhere	(555) 555-5555		########	0	2		0	0
11																	

Data Management – Importing

- ▶ **Data Import Tool** allows for users to import new data or edited data by each record

- ▶ An effective tool for importing larger blocks of data

- ▶ Don't be intimidated by errors since they are a common occurrence in data imports

- ▶ Each error will need to be resolved before a set of data can be successfully uploaded

Managing Project Users

▶ Users with accounts can be added to a project in the **User Rights** section of your project

▶ When adding or modifying existing users, a long checkbox section will appear to manage their access

▶ It is important to properly manage user rights to protect data and PHI, control project design and life cycle, and maintain accountability

Project Life Cycle

▶ **Development** phase of the project is best for creating and testing a project

▶ **Production** phase protects collected data by flagging project changes for data loss review

▶ **Analysis/Cleanup** phase for finalizing analysis and ending a study (no changes can be made to the project in this phase, only access to view data)

Project Status Management

Development (current) → Production → Analysis/Cleanup

Questions?