



HEALTH SCIENCES LIBRARY
& INFORMATICS CENTER



lsloane@salud.unm.edu

RESEARCH ELECTRONIC DATA CAPTURE

Lori Sloane

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RDAP Webinar – Clinical Data

What is REDCap?

Features

- Auto-validation
- Audit trails
- Alerts and notifications
- Scheduling & Calendar
- Shared library of data collection instruments
- Automated export procedures
- Missing Data Codes
- Available in multiple languages
- Multi-site access
- Mobile app for iOS and Android

REDCap is a tool for building online surveys and databases.

No technical knowledge or prior experience is needed.

Welcome to REDCap!

REDCap is a secure web platform for building and managing online databases and surveys. REDCap's streamlined process for rapidly creating and designing projects offers a vast array of tools that can be tailored to virtually any data collection strategy.

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, filters, and conditional fields.

Learn more about REDCap by clicking on the links below. If you would like to view other quickstart guides or need a more detailed overview of its features, please contact your administrator.

Please note that any publications resulting from REDCap data should cite grant support (Duke University, National Institutes of Health, etc.).

NOTICE: If you are collecting data for research purposes, you must obtain review and approval of the project by the Institutional Review Board (IRB) before data collection begins.

If you require assistance or have any questions, please contact your administrator.

REDCap Features

Build online surveys and databases quickly and securely - Create and design your project rapidly using secure web authentication from your browser. No extra software is required.

Fast and flexible - Conception to production-level survey/database in less than one day.

Analysis

Export data to Microsoft Excel, CSV, or PDF.

Run SQL queries for data analysis.

Export data to CSV, PDF, or SurveyMonkey.

Survey

Survey link -

REDCap projects are webpages, used for data entry. The software can capture almost any type of data, for any purpose.

Listed below are the REDCap projects to which you currently have access. Click the project title to open the project. [Read more](#) To review which users still have access to your projects, visit the [User Access Dashboard](#).

Project Title	Records	Fields	Instrument	Type	Status
Unorganized Projects (1)					
Surgeon Response to Patient Loss	0	32	1 form 1 survey	■	
16-048 SEAC (Morley) (5)					
Sample survey with a variety of question types	1	23	1 survey	≡	
Example survey with linking survey	11	5	1 survey	■	
MILQ survey 1	5	4	1 survey	■	
Free stuff	5	4	1 survey	■	
Coffee Card Drawing	7	4	1 survey	■	
Project Echo (11)					

+ 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?

Assign project to a Project Folder?

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 slate)
 Upload a REDCap project XML file (CDISC ODM format) [?](#)
 Use a template (choose one below)

★ **Choose a project template** (comes pre-filled with fields, forms/surveys, and other settings)

select template	Template title (sorted by title)	Template description
<input type="radio"/>	Basic Demography	Contains a single data collection instrument to capture basic demographic information.
<input type="radio"/>	Classic Database	Contains six data entry forms, including forms for demography and baseline data, three monthly data forms, and concludes with a completion data form.
<input type="radio"/>	Human Cancer Tissue Biobank	Contains five data entry forms for collecting and tracking information for cancer tissue.
<input type="radio"/>	Longitudinal Database (1 arm)	Contains nine data entry forms (beginning with a demography form) for collecting data longitudinally over eight different events.
<input type="radio"/>		Contains nine data entry forms (beginning with a demography form) for collecting data on

Create Project




Cancel

Practice/just for fun
Operational Support
Research
Quality Improvement
Other

REDCap Training Videos

Just Getting Started?

Explore these overviews of fundamental concepts and features.

Title	Description	Watch Video
Brief Overview	A quick summary of what REDCap is and what it can do.	 4 minutes
Detailed Overview	This video provides an overview of basic functions and features within a REDCap project. It will serve as a starting point for learning about the basic concepts of REDCap, what REDCap projects are, how to create them, and how to use them.	 14 minutes
Data Entry Overview	A focused exploration of basic data entry workflow. Suitable for training data entry staff.	 19 minutes

From:

To:
(recipient emails)

Separate email addresses with commas, semi-colons, or line breaks

Email subject:
(optional)

Email message:
(optional)

Expiration: Specify the time after which the file will no longer be accessible for download

Select a file: No file chosen **(Max file size: 300 MB)**

Receive confirmation?
Get an email notification informing you when your file has been downloaded by each recipient.

Messenger

[Notifications](#)[Conversations](#)

Create new conversation



Users List

Users across all my projects: (select all)

DMurray (Dorrie Murray)

jelim (Jennifer Lim)

KiSummers (Kimberly Summers)

LFriesen (Linda Friesen)

Isloane (Lori Sloane) ✓

MLSedillo (Miranda Sedillo)

nabanks (Nathan Banks)

SaHernandez (Saul Hernandez)

ScSmith (Scott Smith)

Selected users

Isloane ✖

Conversation Title (required)

Type a title...

Initial Message (optional)

Type a message...

Link Conversation to Project (optional) ?

No project selected

Create

Close

Search Users

Search for user by username, name, or email



Create new conversatio



Sample survey with a variety of question types



- [Project Home](#)
- [Project Setup](#)
- [Other Functionality](#)
- [Project Revision History](#)

Project status: [Development](#)

Completed steps **2** of **8**

Complete!

Main project settings

Use surveys in this project? [?](#) [VIDEO: How to create and manage a survey](#)

Use longitudinal data collection with defined events? [?](#)

[Not complete?](#)

Complete!

Design your data collection instruments & enable your surveys

Add or edit fields on your data collection instruments (survey and forms). This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method). You may then enable your instruments to be used as surveys in the Online Designer. Quick links: [Download PDF of all instruments](#) OR [Download the current Data Dictionary](#).

Go to or Explore the

Have you checked the [Check For Identifiers](#) page to ensure all identifier fields have been tagged?

Learn how to use

- Project Home and Design**
 - [Project Home](#) · [Project Setup](#)
 - [Designer](#) · [Dictionary](#) · [Codebook](#)
 - Project status: **Development**
- Data Collection**
 - [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
 - [Show data collection instruments](#)
- Applications**
 - [Alerts & Notifications](#)
 - [Calendar](#)
 - [Data Exports, Reports, and Stats](#)
 - [Data Import Tool](#)
 - [Data Comparison Tool](#)
 - [Logging](#)
 - [Field Comment Log](#)
 - [File Repository](#)
 - [User Rights and DAGs](#)

Keyw

The table below displays the data collection instrument as it would appear when viewed in REDCap.

___ FOR TESTING AND DEMONSTRATION PURPOSES ONLY - Nacho Craving Index Survey

Editing existing record

Have you ever eaten nachos?

* must provide value

- Yes
- No

reset value

I use nachos to treat a medical condition (other than hunger).

- True
- False

reset value

What is the primary problem that nachos are treating?

- Asthma
- Cancer
- Other

reset value

What other condition?

When did you last eat nachos?

Have you traveled somewhere specifically to get nachos?

- Yes
- No

reset value

Found 2527

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Demographics

Variable Name	Field Label	Identifier?
study_id	Study ID	<input type="checkbox"/>
date_enrolled	Date subject signed consent	<input type="checkbox"/>
first_name	First Name	<input checked="" type="checkbox"/>
last_name	Last Name	<input checked="" type="checkbox"/>
address	Street, City, State, ZIP	<input checked="" type="checkbox"/>
telephone_1	Phone number	<input checked="" type="checkbox"/>
email	E-mail	<input checked="" type="checkbox"/>
dob	Date of birth	<input checked="" type="checkbox"/>
age	Age (years)	<input type="checkbox"/>
ethnicity	Ethnicity	<input type="checkbox"/>
drink	Drink (Alcoholic Beverages)	<input type="checkbox"/>

Baseline Data

Variable Name	Field Label	Identifier?
date_visit_b	Date of baseline visit	<input type="checkbox"/>
date_blood_b	Date blood was drawn	<input type="checkbox"/>
date_supplement_dispensed	Date patient begins supplement	<input type="checkbox"/>

Demographics

Editing existing Study ID 1

Study ID 1

Consent Information

Date subject signed consent 2020-01-04

YYYY-MM-DD

Upload the patient's consent form

Upload file

Contact Information

First Name

Last Name







Street, City, State, ZIP















Phone number

E-mail

Invitation status

Legend for status icons:

-  Incomplete
-  Incomplete (no data saved) ?
-  Unverified
-  Partial Survey Response
-  Complete
-  Completed Survey Response

Study ID	Demographics	Baseline Data	Month 1 Data	Month 2 Data	Month 3 Data	Completion Data	__ FOR TESTING AND DEMONSTRATION PURPOSES ONLY - Nacho Craving Index Survey
1							
2							

Basic Rights

Role name:

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

* De-identified means that all free-form text fields will be removed, as well as any date/time fields and Identifier fields.
- Add/Edit/Organize Reports

Also allows user to view ALL reports (but not necessarily all data in the reports)
- Stats & Charts

Data Entry Rights

*NOTE: The data entry rights *only* pertain to a user's ability to view or edit data on a web page 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 (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
Baseline Data (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
Month 1 Data (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
Month 2 Data (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
Month 3 Data (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
Completion Data (survey)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
___ FOR TESTING AND DEMONSTRATION PURPOSES ONLY - Nacho Craving Index Survey (survey)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="checkbox"/>

Data Quality Rules

✔ **Processing Complete!**
 Execute rules:

Apply to:








	Rule #	Rule Name	Rule Logic (Show discrepancy only if...)	Real-time execution <input type="checkbox"/>	Total Discrepancies	Clinic Staff	Delete rule?
	A	Blank values*	-		35 view	0	
	B	Blank values* (required fields only)	-		0 view	0	
	C	Field validation errors (incorrect data type)	-		0 view	0	
	D	Field validation errors (out of range)	-		0 view	0	
	E	Outliers for numerical fields (numbers, integers, sliders, calc fields)**	-		0 view	0	
	F	Hidden fields that contain values***	-		0 view	0	
	G	Multiple choice fields with invalid values	-		0 view	0	
	H	Incorrect values for calculated fields	-		0 view	0	
	I	Fields containing "missing data codes"	-		0 view	0	
	<input type="button" value="Add"/>	<input type="text"/> Enter descriptive name for new rule (e.g., Participants below age 18)	<input type="text"/> Enter logic for new rule (e.g., [age] < 18) How do I use special functions?	<input type="checkbox"/> Execute in real time on data entry forms <input type="checkbox"/>			

Exporting "All data (all records and fields)"



Select your export settings, which includes the export format (Excel/CSV, SAS, SPSS, R, Stata) and if you wish 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
-  CDISC ODM (XML)

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?](#)
 - Also shift all survey completion timestamps by value between 0 and 364 days (shifted amount determined by algorithm for each record)

[Deselect all options](#)

Additional export options

- Export Data Access Group name for each record (if record is in a group)?
- Export survey identifier field and survey timestamp field(s)?

Advanced data formatting options

Set CSV delimiter character

Set the delimiter used to separate values in the CSV data file (only valid for CSV Raw Data and CSV Labels export formats):

, (comma) - default

Force all numbers into a specified decimal format?

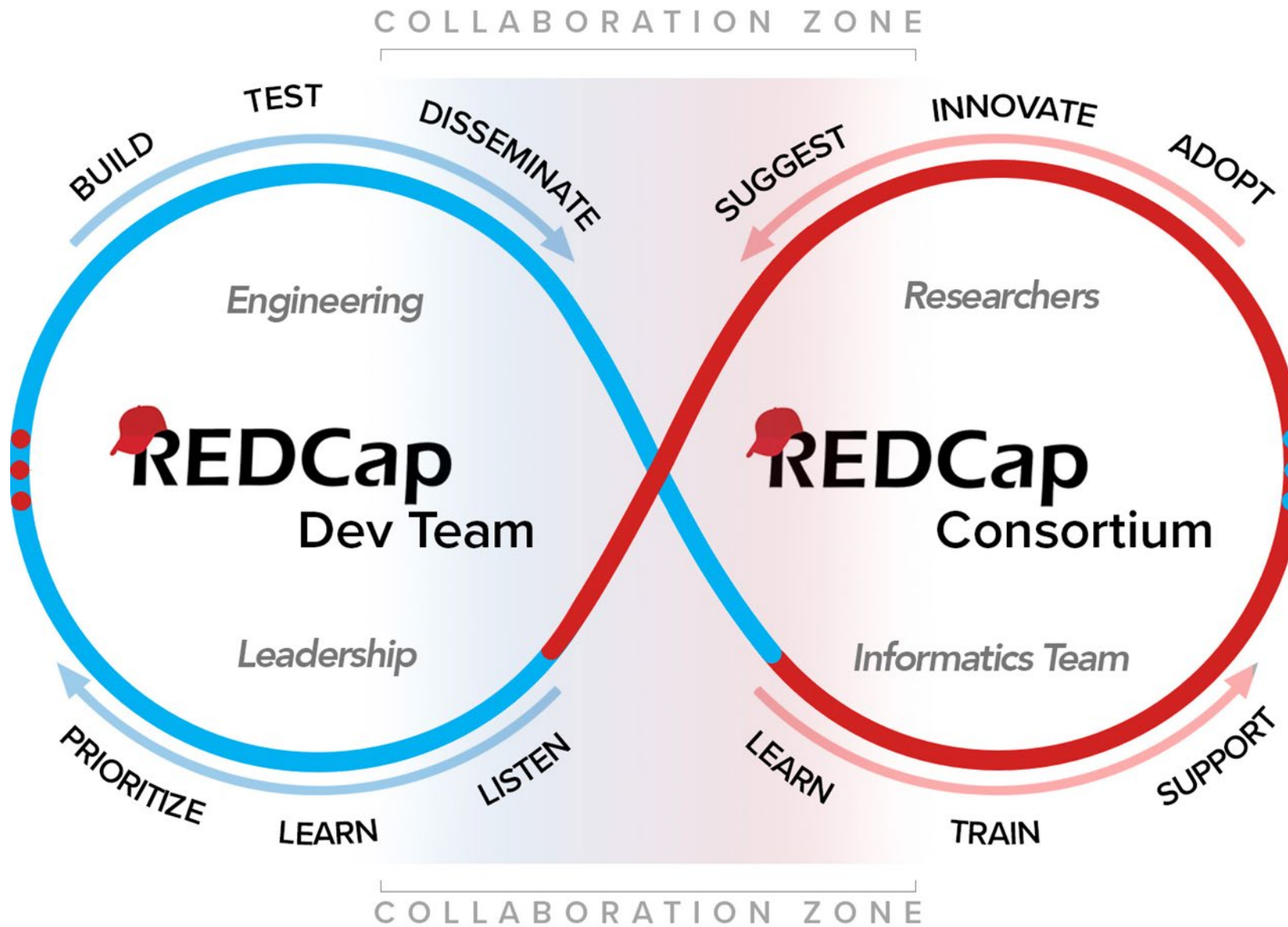
You may choose to force all data values containing a decimal to have a specified decimal character (comma or period/full stop). This will be applied to all calculations and number-validated text values in the export file.

Use fields' native decimal format (default)

NOTE: Your data formatting selections above will be remembered in the future and will be pre-selected upon your next export.

Export Data

Cancel



<https://doi.org/10.1016/j.jbi.2019.103208>

References

¹PA Harris, R Taylor, R Thielke, J Payne, N Gonzalez, JG. Conde, Research electronic data capture (REDCap) – A metadata-driven methodology and workflow process for providing translational research informatics support, J Biomed Inform. 2009 Apr;42(2):377-81.

²PA Harris, R Taylor, BL Minor, V Elliott, M Fernandez, L O’Neal, L McLeod, G Delacqua, F Delacqua, J Kirby, SN Duda, REDCap Consortium, The REDCap consortium: Building an international community of software partners, J Biomed Inform. 2019 May 9 [doi: 10.1016/j.jbi.2019.103208]

<https://www.project-redcap.org/>

