

REDCap: Research Electronic Data Capture

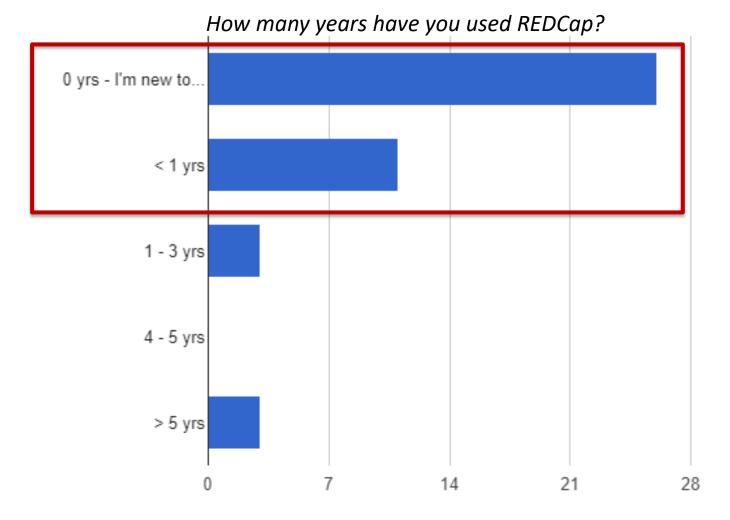
All Purpose Data Tool

Mary Geda Sui Tsang January 24, 2024

YALE UNIVERSITY SCHOOL OF

ALLOOF

Today's Audience





Introduction and Learning Objectives

- Learn about REDCap:
 - What it is
 - How to access it
 - Quality control and compliance functions
 - What steps are used to build projects
 - How you can get data into REDCap
 - Tools: reports, statistics, and exports
 - Resources to help you get started
 - [If time]: Advanced features



- Looking into moving an Access DB to Redcap and need all the info I can
- No, just trying to learn more. We are looking at converting our current database to Redcap
- Understanding what it is and how it benefits research and data collection
- I am looking to use Red Cap for a new study. Looking to understand the utilization of the resource.



- REDCap (Research Electronic Data Capture) is a secure web-based application for data capture and study management.
- Developed at Vanderbilt in 2004 by Paul A. Harris and colleagues
 - Clinical and Translational Science Award (CTSA) funding
- REDCap Consortium: >6,000 institutions in >150 countries around the world



REDCan

Empower

My Projects of My Project Home REDCap Messe Project status: P

Record Status

🍮 Add / Edit Reco

Calendar

曲 Logged in as d

Data Collection

Applications

- Direct data entry (i.e., form), survey, or data import
- Exports to Excel, CSV, SPSS, SAS, Stata and R, and CDISC ODM.

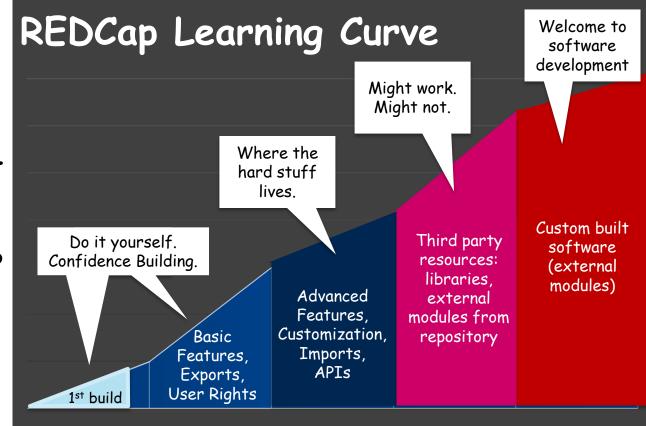
How does REDCap work?

Anyone can learn to use it

Data Exports, hep-rec, and a second	ID	-	-														Interv
🛃 Data Import Tool	ID	Screening	Baseline	Meters	Activity	ADL	Efficacy	Assessment	SF12	COG	PHQ	Behavior	Space	Kinesiophobia	SPPB	Interview	Observ
🛅 Data Comparison Tool	2	۲	۲			۲		۲		۲		۲		۲		۲	
Logging Field Comment Log	<u>12</u>	۲	۲	۲		۲	۲	۲	۲	۲	۲	۲	۲	۲		۲	۲
Field Comment Log	<u>30</u>	۲	۲	۲		۲			۲		۲					۲	۲
🚨 User Rights and 🍰 DAGs	<u>37</u>	۲	۲	۲			۲			۲			۲	۲		۲	
Record Locking Customization E-signature and Locking Mgmt	46	۲	۲		۲					۲	۲	۲		۲		۲	۲
Data Quality	<u>54</u>	۲	۲	۲	۲		۲	۲		۲	۲	۲	۲	۲	\bigcirc	۲	
API and API Playground	<u>63</u>	۲	۲			= UAI	B Life Spa	ice									
REDCap Mobile App	<u>70</u>	۲	۲	۲		🥜 Edi	ting existing	Record ID 12									
Reports / Edit reports	86	۲					ent Name: B	aseline					12				
1) Enrolled 2) Discontinued subjects	<u>87</u>	۲	۲	۲		Record UAB St		ng Life - Space As	ssessme	nt			12				0
3) Climb Flight of Stairs	<u>91</u>	۲				1a. Pa:	st 4 wks be	en to other roon	ns besid	es roor	n where	you sleep?	• Yes				
4) Intervention or Control 5) Step Counts	114												> O No				reset
6) Outpatient Visits	122					1b. Ho	w often ge	t to other rooms	?			4	Daily	۲			
Help & Information	123						l you use ai n? (other ro	ds or equipment oms)	t? Did yo	ou need	l help fr	om another	No eq	uipment or personal	assistac	e 🔻	
🛿 Help & FAQ	134							en to an area ou		ur hon	ne such		• Yes				
🗄 Video Tutorials	140					porch,	deck or pa	tio, hallway, etc	?				No				reset
C Suggest a New Feature	151					2b. Ho	w often ge	t to areas outsid	e <mark>your</mark> h	ome?			Daily	۲			
Contact REDCap administrator	155						l you use ai n? (outside	ds or equipment areas)	? Did yo	ou need	d help fr	om another	No eq	uipment or personal	assistac	e 🔻	
REDCap @ Yale	*														_	SLIDE	5

Advantages: User Friendly





Time/Effort



Advantages





Security & Compliance

1. Yale NETID credentials and multi-factor authentication

Work in progress: In**Cormon**®

- 2. Secure servers behind an enterprise firewall, encrypted with TLS
- 3. Regulatory Requirements

HIPAA, FDA 21 Part 11, GDPR

https://portal.redcap.yale.edu/resources/security-compliance



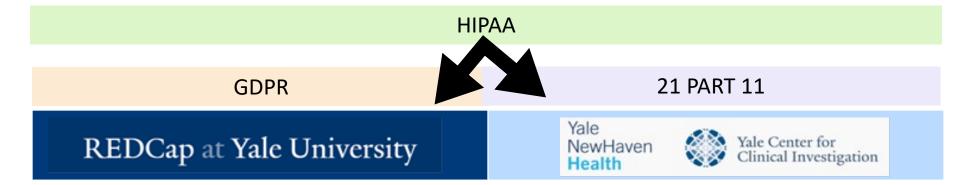




Navigating- How do I get access?



Research Project Data Triage Team (YCCI)





How do I contact data triage?

• Email:

researchproject.data.triage@yale.edu

• Website:

https://portal.redcap.yale.edu/

Yale University

Q SEARCH THIS SIT





QUESTIONS or COMMENTS?

Next: Quality Control/Compliance Functions



REDCap	
Logged in as mg689 Log out	(
My Projects or Control Center	
REDCap Messenger 🕛	
Contact REDCap administrator	-
🌡 View project as user: 🛛 select a user 💙	
Project Home and Design	
🛠 Project Home 🐳 🚝 Project Setup	
🗭 Designer 🛛 🚺 Dictionary 🖓 📃 Codebook	
Project status: Production	
Data Collection	
Survey Distribution Tools	
🗰 Record Status Dashboard	
🗎 Add / Edit Records	
Show data collection instruments	
Applications	
🕎 Project Dashboards	
Alerts & Notifications	
Multi-Language Management	
Calendar	
Data Exports, Reports, and Stats Data Import Tool	
Z Data Comparison Tool	
Ecogging and Se Email Logging	
Field Comment Log	
 File Repository User Rights and 📽 DAGs 	
Cost Rights and Reports	
Data Quality	
🖽 API and 🔛 API Playground	
🗖 REDCap Mobile App	
External Modules	
Help & Information 📃	
P Help & FAQ	
Video Tutorials	
🔄 Suggest a New Feature	

Quality Control and Compliance

- 1. Logging: Audit trails
- 2. User Rights and Access
- 3. Data Quality
- 4. Field Level Controls



REDCap 201 Spring Session

Logging: Audit trails

LANK	-		
	10	σσί	inσ
	LU	22	1112
		00	0

Export (CSV): All logging

All pages using current filters

📧 Current page

This module lists all changes made to this project, including data exports, data changes, and the creation or deletion of users.

Filter by event:	All event types (excluding p	age views)	~						
Filter by user name:	All users	~								
Filter by record:	All records 🗸									
Filter by time range from		<u> 1</u> to			31	Custom range	Past Day	Past Week	Past Month	Past Year No limit
Displaying events (by most recent):	1 - 100 (Page 1	of 3) 🗸 🗸								

Time / Date	Username	Action	List of Data Changes OR Fields Exported
10/22/2021 2:52pm		Manage/Design	Copy project as PID=2139 ("Copy of eConsent Scanned Image De mo")
09/14/2021 12:54pm		Manage/Design	Download instrument ZIP file
09/09/2021 12:11pm		Manage/Design	Download instrument ZIP file
09/09/2021 11:47am		Manage/Design	Download instrument ZIP file
07/08/2021 2:53pm		Manage/Design	Edit project field
07/08/2021 2:52pm	5	Manage/Design	Reorder project fields
05/04/2021 9:08pm	[survey responde nt]	Updated Response 224	date_signed = '2021-05-04', fname = 'aaa', Iname = 'bbb', participant_sign = '156712', participant_consent_v2_complete = '0'
05/04/2021 8:42pm	[survey responde nt]	Updated Response 225	participant_sign = '156705'
05/04/2021 8:42pm	[survey responde nt]	Updated Response 225	date_signed = '2021-05-04', fname = 'test', Iname = 'test',



User Rights & Access

Basic Privileges	
Expiration Date (if applicable)	(M-D-Y)
Highest level privileges:	
─ Project Design and Setup	
LUSER Rights	
🚢 Data Access Groups	
Other privileges:	
🗎 Calendar	
Q Add/Edit/Organize Reports Also allows user to view ALL reports (but not necessarily all data in the reports)	
📶 Stats & Charts	
-👌 Data Import Tool	
🗲 Data Comparison Tool	
E Logging	
🖕 File Repository	
Data Quality <u>What is Data Quality?</u>	Create & edit rules

Privileges for Viewing and Exporting Data

Data Viewing Rights pertain to a user's ability to view or edit data on pages in the project (e.g., data entry forms, reports). Users with 'No Access' Data Viewing Rights for a given instrument will not be able to view that instrument for any record, nor will they be able to view fields from that instrument on a report. Data Export Rights pertain to a user's ability to export data from the project, whether through the Data Exports page, API, Mobile App, or in PDFs of instruments containing record data. Note: Data Viewing Rights are completely separate and do not impact one another.

	D	ata Vie	wing Rig	nts		Data Expo	rt Rights	
	No Access (Hidden)	Read Only	View & Edit		No Access	De- Identified*	Remove All Identifier Fields	Full Data Set
Screening Form	0	0	0		0	0	0	0
Contact Information Form	۲	0	\bigcirc		۲	0	0	0
Consent Call Log	0	\bigcirc	0		۲	0	0	0
Consent Form	0	\bigcirc	0		۲	0	0	0
Interview Call Log	0	\bigcirc	\bigcirc		۲	0	0	0
Interview Start	0	۲	0		۲	0	0	0
ESAS	0	۲	0		۲	0	0	0
Physical Function: Activities Of Daily Living	0		\bigcirc		۲	0	0	0
Physical Activity: Leisure Time (Baseline)	0	۲	0		۲	0	0	0





REDCap allows you to create rules that can be used to monitor and check data quality.

Data Quality	All except A&B All custom Clear Apply to: All records T									
Rule #	Rule Name	Rule Logic (Show discrepancy only if)	Real-time execution ?	Tota Discrepa	-					
A	Missing values*	-		313	view					
В	Missing values* (required fields only)	-		0	view					
С	Field validation errors (incorrect data type)	-		0	view					
D	Field validation errors (out of range)	-		0	view					
E	Outliers for numerical fields (numbers, integers, sliders, calc fields)	-		0	view					
F	Hidden fields that contain values**	-		0	view					
G	Multiple choice fields with invalid values	-		0	view					
Н	Incorrect values for calculated fields	•		0	<u>view</u>					



Field-Level Controls

Add New Field	X
may view the 😧 Field Types video (4 min).	this page. For an overview of the different field types available, you
Field Type: Text Box (Short Text, Number, Date/Time,)	\checkmark
Field Label	Variable Name (utilized during data export) Concernment of the second s
	Validation? (optional) None
	- or -
Field Annotation (optional)	Enable searching within a biomedical ontology ?
	choose ontology to search 🗸
Explanatory notes - not displayed on any page ?	Required?* No O Yes * Prompt if field is blank
	Identifier? No Yes Does the field contain identifying information (e.g., name, SSN, address)?
REDCap 101	Custom Alignment Right / Vertical (RV)
Fall Session	Field Note (optional)
	Small reminder text displayed underneath field

Save Cancel



QUESTIONS or COMMENTS?

Next: Building a Project



Before You Start: Decide What Type of Project Design is Needed

- Classic Database
- Longitudinal



Before you Start: Decide How to Collect the Data

- Case Report Form/Data Collection Form
- Survey

REDCap projects can have both FORMS and SURVEYS.



Overview: How a project is built

reate	e a new REDCap	Project						
ou may l	begin the creation of a new	REDCap projec	on your	own by completing the	form below and click	ing the Create	Project button at the bo	ttom.
roject ti	itle:	Training Demo						
		Title to be displa	ed on pro	ject webpage				
	of this project: be used?	Practice / Just	for fun 🗸	•				
ssign pi	roject to a Project Folder	?□						
	otes (optional): s describing the project's use	training						
comments r purpose urposes o tart proj	s describing the project's use tor documentation only. ject from scratch		npty proje	ect (blank slate)				
comments r purpose urposes o tart proj r begin v	s describing the project's use of documentation only.	Create an er Upload a RE Use a templ	DCap pro	oject XML file (CDISC se one below)		•	Add templates (super users only	
omments r purpose urposes o tart proj r begin v	s describing the project's use for documentation only. ject from scratch with a template?	Create an er Upload a RE Use a templ (comes pre-filler)	DCap pro	oject XML file (CDISC se one below)		٠	Add templates (super users only	
tart proj r begin v	s describing the project's use for documentation only. ject from scratch with a template?	Create an er Opload a RE Ouse a templ (comes pre-filled itte) Ten	DCap pro ate (choose with field	oject XML file (CDISC se one below)	ther settings)			
tart proj r begin tart proj r begin select template	s describing the project's use for documentation only. ject from scratch with a template?	Create an er Upload a RE Use a templ (comes pre-filled ittle) Ter Cor Cor	DCap pro ate (choose with field aplate dese tains a sin tains six d	oject XML file (CDISC se one below) Is, forms/surveys, and o acciption Igle data collection instr	her settings) Iment to capture basic o g forms for demography	lemographic in		
tart proj r begin v tart proj r begin v	s describing the project's use for documentation only. ject from scratch with a template? pose a project template Template title (sorted by t Basic Demography	Create an er Upload a RE Use a templ (comes pre-filled ittle) Ter Cor Cor form	DCap pro ate (choose with field aplate des tains a sin tains six d is, and con	oject XML file (CDISC se one below) is, forms/surveys, and o accription agle data collection instr lata entry forms, includir	ther settings) iment to capture basic o g forms for demography n data form.	lemographic in and baseline	formation. data, three monthly data	
comments r purposes urposes of tart proj r begin select template	s describing the project's use e for documentation only. ject from scratch with a template? Dose a project template Template title (sorted by the Basic Demography Classic Database	Create an er Upload a RE Use a templ (comes pre-filled (comes pre-filled Cor ank Cor m) Cor	DCap pro ate (choose) with field plate des tains a sin tains six d s, and col tains five (bject XML file (CDISC se one below) is, forms/surveys, and o accription ugle data collection instr lata entry forms, includir includes with a completio data entry forms (begin data entry forms (begin	ther settings) iment to capture basic o g forms for demography n data form. ecting and tracking infor	lemographic in y and baseline mation for canc	formation. data, three monthly data	

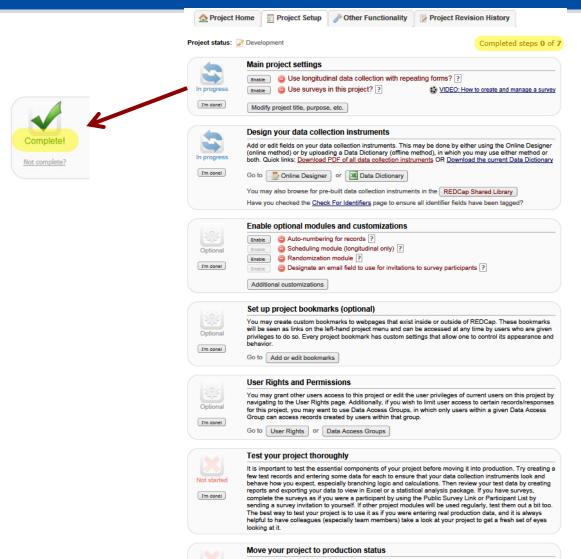


101

Fall Session



Setting up a Project: Step-by-Step



Move the project to production status so that real data may be collected. Once in production, you will not be able to edit the project fields in real time anymore. However, you can make edits in Draft Mode, which will then need to be approved by a REDCap administrator before taking effect.

Go to Move project to production

REDCap@Yale



Example of a Build: Field Bank

	Add Field Add Matrix of Fields Import from Fie	eld Bank	
mport from Field Bank		1	×
ing the Field Bank, search for fields in various catalogs below b arch, click the "Add Field" button for the field to add that field t	by selecting a catalog and entering specific keyword. When reviewin to the current data collection instrument.	g the resultsup of your	^
elect a catalog to search:	ibrary of Medicine	•	
A race			
ields found for <code>NIH/NLM Catalog</code> $ ightarrow$ <code>All Classifications</code> - Key	yword: race 🗙	1 - 20 of 61	
		+ Add Field	
ace OMB.1997	 Native Hawaiian or Other Pacific Islar American Indian or Alaska Native Asian 	ıder	
oose alternative field label ? Race OMB.1997	 Black or African American White 		c Si
ssification: NLM scription: The race of a person based on the Office of Management and Budget	(OMB), Revisions to the Standards for the Classification of Federal Data on Race and Et	hnicity (Oct. 30, 1997).	
		+ Add Field	f
	O American Indian or Alaska Native O Asian		- - - -



Example of a Build: Creating Fields

Add New Field	*
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 set Field Type: Text Box (Short Text, Number, Date/Time,) Field Label Field Label Field Label Field Annotation (optional) Learn about Action Tace Field Annotation (optional) Clearn about Action Tace Field Annotation (optional) Tace Field Annotation (optional) Field Learn about Action Tace Field Annotation (optional) Field Clearn about Action Tace Field Annotation (optional) Field Learn about Action Tace Field Annotation (optional) Field Clearn about Action Tace Field Contain Ide	

Save

Cancel



Example of a Build: Uploading Metadata

Data Dictionary

 The Data Dictionary is a formatted spreadsheet in CSV (comma separated format) containing the metadata used to construct data collection instruments and fields.

This is recommended for advanced users.

	Α	В	C	D	E	F	G	Н		J	K	L	М	N	0	Р	Q	R	S
1	Variable /	Form Nam	Section He	Field Type	Field Label	Choices, C	Field Note	Text Valida	Text Valida	Text Valida	Identifier?	Branching	Required F	Custom Al	Question I	Matrix Gro	Matrix Rar	Field Annot	tation
2	id	screening_	enrollment	text	Participant	ID code		number											
3	screendat	screening	enrollment	text	Date of sc	reening		date_mdy					у						
4	version_so	screening	enrollment	text	Version								У						
5	intid_scr	screening_	enrollment	text	Interviewe	r ID							У						
6	participate	screening	enrollment	dropdown	Have you p	1, Yes 2,	No 8, Dor	n't know				[version_s	у						
7	name_pric	screening	enrollment	dropdown	Is the subje	1, Yes - U1	9 - Eligible	for IMAGIN	2, Yes -	MAGIN - El	igible for U	[version_s	у						
8	name_pric	screening	enrollment	dropdown	Is the subj	1, Yes - NO	OT Eligible	2, No - Elig	jible			[version_s	у						
9	age	screening	_enrollment	text	How old w	ere you or	your last b	number	16	100			У						

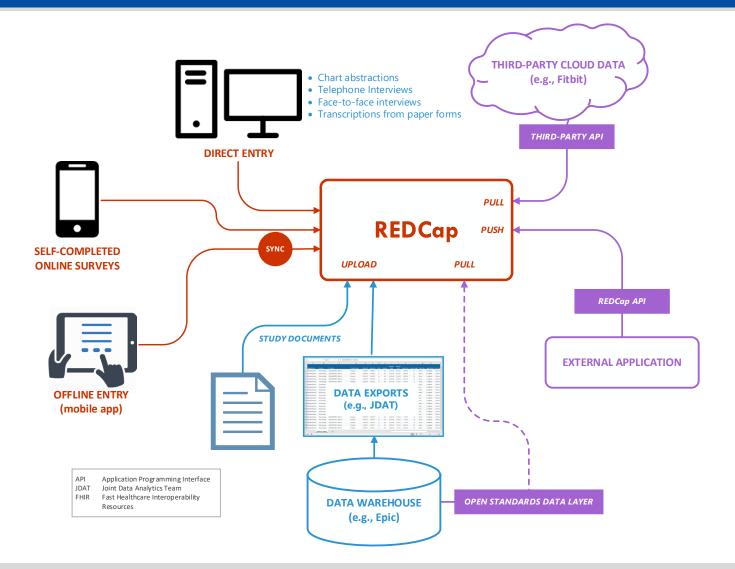


QUESTIONS or COMMENTS?

Next: Collecting Data



Collecting Data: How Data is Captured





Example of Case Report Form Data Collection Form

Data Entry Form – completed by study staff

🔁 Download PDF of instrument(s) 🗟

REDCap

▲ Logged in as i Log out My Projects Project Home or E Project Setup REDCap Messenger Project status: Development Data Collection 🖋 Edit instruments 🛛 🖃 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 E Study ID Test1 (1, Test) Select other record Data Collection Instruments: Demographics Baseline Data Pain Management Survey - PRE Intervention Data Pain Management Survey - POST Study Completion Applications 📅 Calendar 🛺 Data Exports, Reports, and Stats

Data Import Tool

REDCap@Yale

Demographics Editing existing Study ID Test1 (1, Test) Test1 Study ID To rename the record, see the record action drop-down at top of the Record Home Page **Contact Information** First Name Last Name Phone number Include Area Code E-mail Date of birth 31 Y-M-D Hispanic or Latino 🛞 🔍 NOT Hispanic or Latino Ethnicity Unknown / Not Reported reset Race ٠ Yes Has the patient given birth before? H O NO reset

Actions:

Nodify instrument

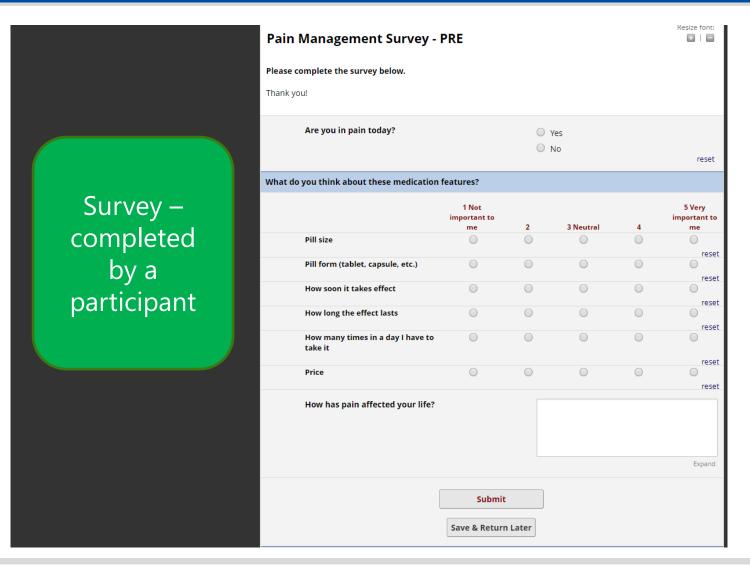
Save & Exit Form

Save & Stay

-- Cancel --

VIDEO: Basic data entry

Example of Data Collection Form: Surveys



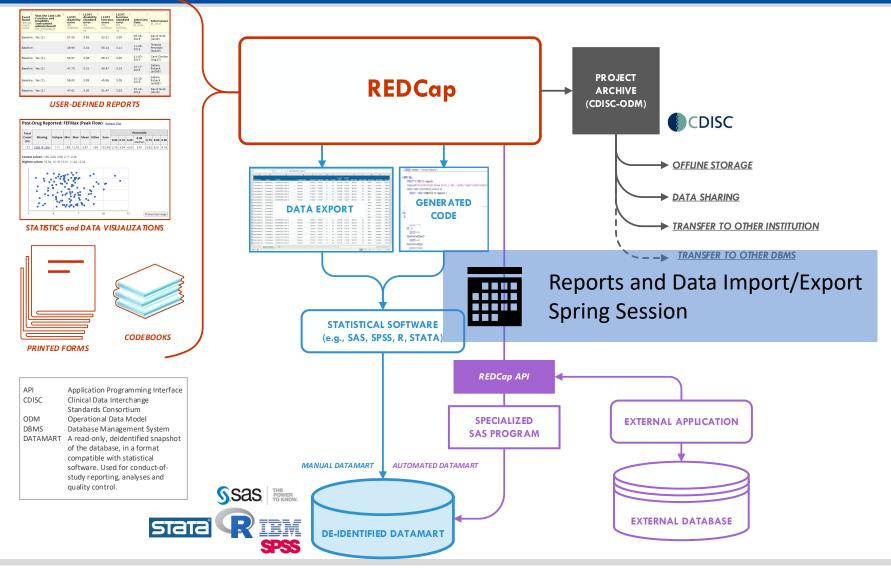


QUESTIONS or COMMENTS?

Next: Data Management Tools



Advanced Overview: Data Management





Data Management Tools: Reporting

Reports can be used to facilitate data management, interim results and analysis

 Logged in as rc_fund Log out My Projects 	Data Ex	ports, Reports,	<u>use Data Exports, Repo</u>	orts, and Stats								
REDCap Messenger	🛉 Cre	ate New Report	📑 My Reports & Exports	📑 Other E	xport Options							
Project Home and Design			1									
Data Collection 🛨	This module allows you to easily view reports of your data, inspect plots and descriptive statistics of your data, as well as export your											
Applications 📃	data to Microsoft Excel, SAS, Stata, R, or SPSS for analysis (if you have such privileges). If you wish to export your *entire* data set or											
 Alerts & Notifications Calendar Data Exports, Reports, and Stats Data Import Tool Data Comparison Tool 	view it as a report, then Report A is the best and quickest way. However, if you want to view or export data from only specific instruments (or events) on the fly, then Report B is the best choice. You may also create your own custom reports below (if you have such privileges) in which you can filter the report to specific fields, records, or events using a vast array of filtering tools to make sure you get the exact data you want. Once you have created a report, you may view it as a webpage, export it out of REDCap in a specified format (Excel, SAS, Stata, SPSS, R), or view the plots and descriptive statistics for that report.											
Logging File Repository	My Reports & Exports											
a User Rights and 🝰 DAGs	Report name		Vi	ew/Export Optior		Management Options						
🛃 Data Quality 💫 External Modules	A	All data (all recor	ds and fields)	View Report	🖶 Export Data	Stats & Charts						
Reports Q. Search © Organize Image: Edit 1) All active participants	В	Selected instrum	nents (all records)	A Make custom s	elections							
2) Only >200 cm height 3) Female participants	1	All active participar	nts	View Report	🖶 Export Data	📊 Stats & Charts	/ Edit 🗍 Copy	🗙 Delete				
	2	Only >200 cm heigh	nt	View Report	🖶 Export Data	📊 Stats & Charts	/ Edit 🖸 Copy	🗶 Delete				
Help & Information	3	Female participant	5	View Report	🖶 Export Data	📊 Stats & Charts	/ Edit 🗍 Copy	🗙 Delete				
 ✔ Help & FAQ ₱ Video Tutorials ✔ Suggest a New Feature 		+ Create New Re	port									



Data Management Tools: Statistics and Graphs/Charts

Gender Refresh Plot View as Bar Chart V	neig	jht < 15													
Total Count Missing Unique (N)	DISP		ONS												
30 0 (0.0%) 2	Optio	nal: Select	a record t	o overla	iy onto th	e plots b	elow					select re	cord	•	
Counts/frequency: Male (19, 63.3%), Female (11, 36.7%), Other (0, 0.0%)	View	ing option	s: Show	w plots	& stats	Show	v plots o	only	now stat	s only					
		Height Refresh Plot													
Male	неір														
	Total	t Missing	Unique	Min	Max	Mean	StDev	Sum				Percentile			
Female	(N)								0.05	0.10	0.25	0.50 Median	0.75	0.90	0
	10	0 (0.0%)	8	120.00	148.00	135.70	10.13	1,357.00	121.35	122.70	127.25	137.00	144.50	145.30	14
Lowest values: 120, 123, 125, 134, 134 Highest values: 140, 143, 145, 145, 148															
Gender Refresh Plot View as Pie Chart V	Т														
Total					•										
Count Missing Unique								•		•					
30 0 (0.0%) 2								•	•	• •	•				
Counts/frequency: Male (19, 63.3%), Female (11, 36.7%), Other (0, 0.0%)				•											
	-		-												
	110)	12	20		130		14	0		150				
36.7%															
63.3%															

Data Management Tools: Exports

V Exporting "Test"

Choose export format De-identification options (optional) The options below allow you to limit the amount of sensitive information that you are CSV / Microsoft Excel (raw data) exporting out of the project. Check all that apply. Known Identifiers: Remove all tagged Identifier fields (tagged in Data Dictionary) CSV / Microsoft Excel (labels) 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.) **SPSS Statistical Software** Remove Notes/Essay box fields Date and datetime fields: Sas SAS Statistical Software 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? **R** Statistical Software Deselect all options stata Stata Statistical Software CDISC ODM (XML) ODM

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.

Export Data Cancel

×



Data Management Tools: Data Dictionary Codebook

• The Data Dictionary Codebook is a 'human' readable, read-only version of the project data dictionary.

📇 Print page

🛄 Data Dictionary Codebook

#	Variable / Field Name	Field Label Field Note	Field Attributes (Field Type, Validation, Choices, Calculations, etc.)
Instr	ument: Demographics (demo	graphics)	
1	subjid	Subject ID	text (integer, Min: 8000, Max: 8999), Required
2	demo_date	Date Completed Demographics Form	text (date_mdy), Required
3	demo_init	Staff Initial	text, Required
4	age	Section Header: Demographics Form	text (integer, Min: 40), Required
		Age	
5	sex	Gender	radio, Required 1 Male 0 Female
6	ethnic	Ethnicity	radio, Required 1 Hispanic or Latino 2 Not Hispanic or Latino 3 Unknown 4 Declined to answer
7	race	Race	radio, Required 1 American Indian or Alaskan Native 2 Asian 3 Black or African American 4 Native Hawaiian or Pacific Islander 5 White 6 Mixed race 7 Unknown



QUESTIONS or COMMENTS?

Next: Resources to help you get started



REDCap Support

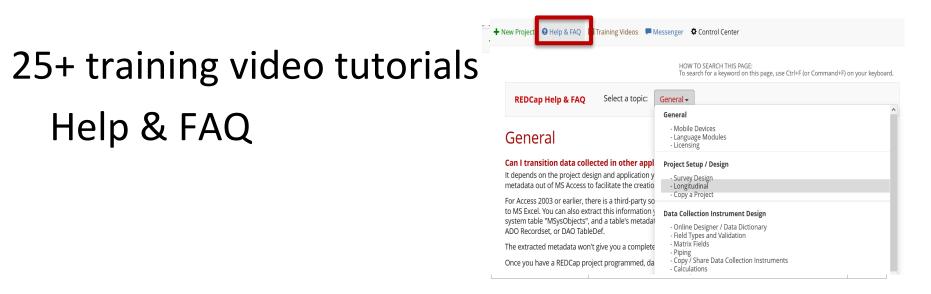


Training Sessions Consultations



REDCap's Do-It-Yourself Resources

https://projectredcap.org/resources/videos/



Embedded text and videos throughout. For example, in the online designer:



Yale's Do-It-Yourself Resources

https://portal.redcap.yale.edu/resources/

FAQ Library: Step-by-step instructions



Frequently Asked Question (FAQ) Library

How do I build an eConsent?

[Copy & Paste or Type Content]

There are two ways to build an electronic consent document (eConsent) using REDCap. These instructions explain how to copy and paste (or type) content into REDCap. To build an eConsent by scanning an image of the consent form, please refer to FAQ: Build an eConsent [Scanned Image].







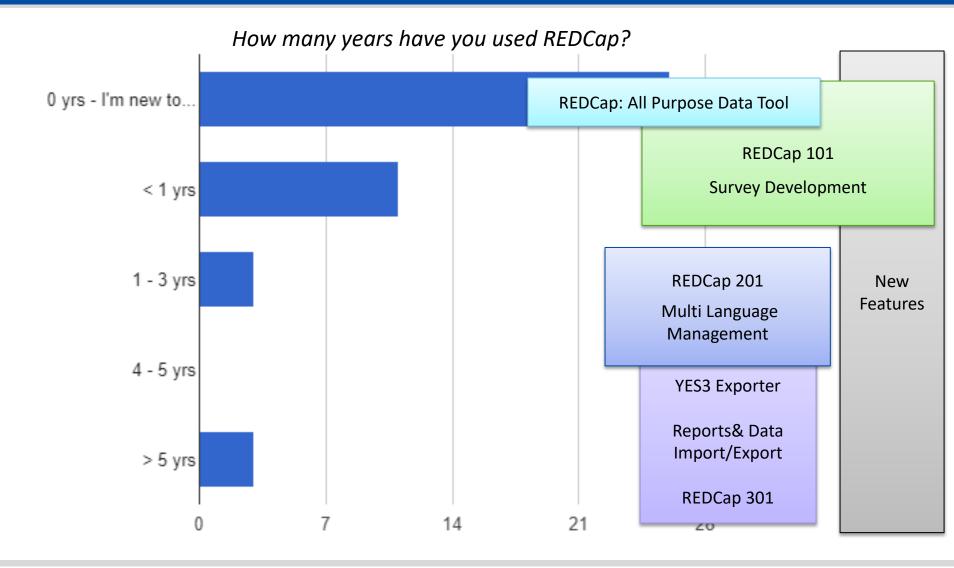
Upcoming Spring Trainings

- Managing Data in REDCap: Reports, Import, Export
- REDCap 201
- Survey Development
- REDCap 301
- Yale Study Support Suite (YES3): Exporter

<u>Fall Training:</u> REDCap 101, Survey Development, New Features, Multi Language Management



Trainings & Audience https://portal.redcap.yale.edu/resources/training





Consultations and Services



QUESTIONS or COMMENTS?

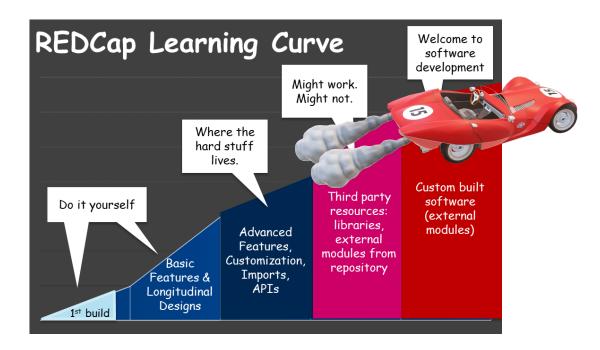






EXTRA CONTENT

Next: Advanced Data Management Tools





Advanced Data Management Tools: External Modules (EMs)

Individual packages of software that extend REDCap's functionality.

REDCap Repo

Repository of External Modules

The REDCap Repo is a centralized repository of curated External Modules that can be downloaded and installed in REDCap by a REDCap administrator. External Modules are add-on packages of software that can extend REDCap's current functionality, as well as provide customizations and enhancements for REDCap's existing behavior and appearance, either at the system level or project level. The modules provided here were created and submitted by software developers at various REDCap institutions around the world.

If you have created a module and wish to submit it to be listed in the REDCap Repo, please complete the <u>Module Submission Survey</u>. Updated versions must also be submitted via the survey. To learn more about the REDCap Repo module review process, you may download the <u>Module Review Guidelines (PDF</u>).

You may search below for available modules. If you got to this site directly, you will be able to view information about each module, but you will not be able to download modules from this page unless you arrived here from the REDCap application and are a REDCap administrator. If you have questions or are experiencing issues, please contact <u>redcap@vumc.org</u>.

Disclaimer: The modules listed in the REDCap Repo have gone through a process of testing, validation, and curation by the Vanderbilt REDCap Team with help from trusted individuals in the REDCap Consortium. It should not be assumed that all modules are bug-free or perfect, so please be aware that the entire risk as to the quality and performance of the module as it is used in your REDCap installation is borne by the REDCap administators who download and install the modules.

Show	10	✓ entries				!	Search		
Мо	dule	title and description		rst ubmitted	Most Recent Update	Down (Installs Exclude:		÷	\$
<u>View</u> Desc inte	<u>v on Git</u> cription gratior	orter (yes3_exporter_v1.0.2) Hub View Stats : Specialized data export module for datamart is and data sharing er Charpentier ()		2022-08-24	2022-08-24		5		You must be a REDCap administrator logged in to REDCap to download modules.
(ydc <u>View</u> Deso	clib_sec <u>/ on Git</u> cription	nd Language extension ond.language_v1.1.2) Hub View Stats : Basic multilanguage support for REDCap forms er Charpentier (Yale University)	:	2020-10-06	2021-10-21		82		You must be a REDCap administrator logged in to REDCap to download modules.



External Modules (EMs)

- Commonly used external modules
 - Form Render Skip Logic
 - Show and hide forms based on branching logics
 - Image Map
 - User can click on image regions to select field options, e.g. pain map
 - Cross-project piping
 - Pipe data from one project to another project
 - Auto Complete Form Status Based on Required Fields

*Contact us for suitability

of external modules for your project



YES3 External Modules

HOME > NEWS > REDCAP@YALE TEAM SECURES NIH FUNDING TO SUPPORT REDCAP EXTERNAL MODULES

REDCap@Yale team secures NIH funding to support REDCap External Modules



October 5, 2021

Coming Soon!

Powerful REDCap software tools to support your research.

We are happy to announce that the REDCap@Yale team has secured funding through a <u>NIH NOSI award</u> along with two Development Projects under the Yale OAIC Pepper Center to make components of the Yale Study Support Suite (YES3), a Dashboard EM and a Study Portal EM, widely available.

As part of our 2021-2022 NIH award for the Yale Study Support Suite (YES3), we are sponsoring two internships.

Click the link below for more information.

External link: https://medicine.yale.edu/news-article/yale-program-on-agence-program





First Release: The YES3 Exporter

AVAILABLE NOW

YES3 Exp	porteri		dcare outcom	nes v 🔲 new expo	ort 🕂 🚼 건 🕹 🖹 🔅 🐐 Ϋ 🛃		
EXPORT SETTIN	NGS				display: O Export Items O Export Settings		
Export name:			dcare outcomes		Here's some help 🛛 🗙		
Export layout:							
Options for sel	lecting record:	s to export ?			Access to YES3 Export Editor features is through clicking on 'action icons'. Each action icon is listed below, along with the feature it invokes.		
Include:			⊖ All records ● S	elected records	realure it myokes.		
Selection crite	rion: field		trk_enrolled		Add a new export specification.		
Selection crite			screen_arm_1	~	 Open the bulk insertion tool, which will allow you to insert or append one or more form or field items. 		
Selection criter	rion: value(s)		1		Save the export specification (no unsaved changes).		
Options for dat	ta compliance	(de-identifie	ed and coded datase	ts)	Save the export specification (unsaved changes detected).		
Remove tag	ged identifier	s 🗹 Rem	ove all freetext field	s 🗹 Coded (shifted) dates	Restore the export specification to a prior version.		
Remove dat			ove note/paragraph		bownload the data dictionary and/or data spreadsheet.		
Options for cor	nditioning exp	orted values			Export data dictionary and data spreadsheet to the file system (if configured; requires super user and IT support).		
🗹 Sanitize exp	oorted text val	ues by remo	ving unprintable cha	aracters and HTML tags.	Pipelay a Help panel (like this one).		
Maximum field	d label length:		100		Switch to dark theme.		
Maximum text	t value length:		255		🔅 Switch to light theme.		
Timestamp: 20					Need more help? Click <u>here</u> for the Yes3 Exporter documentation.		
User: palooka Export Logid: 1 Export UUID: c 11 item(s), app		Export	ter Main	dcare outcomes	-> ■ new export + 🛽 り 🛓	🖹 ? 🕸	∳ ³ YES
Tritterin(s), upp		ND FIELDS T	O EXPORT (click [2 t	o edit)	display: ● Export Items	O Export S	ettings
ri iteritoj, app		ND FIELDS TO	O EXPORT (click 🖉 t Screen event	o edit) recruit_scrn_date - Screen date	display: • Export Items	○ Export S	ettings Îli
Threen(s), app	FORMS A		_			⊖Export S	
Tricen(3), app	FORMS A	🗹 field	Screen event Baseline event	recruit_scrn_date - Screen date		C Export S	Û
Tricency, app	1 2	중 field중 field	Screen event Baseline event all events	recruit_scrn_date - Screen date bsl_review_enrollment_date - Enroll			
n reen(s); upp	1 2 3	Image: Constraint of the second secon	Screen event Baseline event all events all events	recruit_scrn_date - Screen date bsl_review_enrollment_date - Enroll NPI-Q	ment date		
	1 2 3 4	Image: Constraint of the second secon	Screen event Baseline event all events all events all events	recruit.scrn_date - Screen date bsl_review_enrollment_date - Enroll NPI-Q Modified Caregiver Strain Index (MC	ment date 53) Q-3)		0
r recij, op	FORMS A 1 2 3 4 5	Image: Second system field Image: Second system form Image: Second system form	Screen event Baseline event all events all events all events all events all events	recruit, scrn. date - Screen date bsl.review_enrolliment_date - Enroll NPI-Q Modified Caregiver Strain Index (MC Caregiver Health Questionnaire (PH	ment date SI) Q-3) ire (FAQ)	YES	
n (cu ²) app	FORMS A 1 2 3 4 5 6	Image: Constraint of the second se	Screen event Baseline event all events all events all events all events all events all events	recruit, scrn, date - Screen date bsl.review_enrollment, date - Enroll NPI-Q Modified Caregiver Strain Index (MC Caregiver Health Questionnaire (PH Functional Assessment Questionna	ment date SI) Q-3) ire (FAQ)	YES	• • • •
т (сл <i>.р.</i> фр	FORMS A 1 2 3 4 5 6 7	Image: Constraint of the second secon	Screen event Baseline event all events all events all events all events all events all events all events	recruit, scrn, date - Screen date bsl.review_enrollment, date - Enroll NPI-Q Modified Caregiver Strain Index (MC Caregiver Health Questionnaire (PH Functional Assessment Questionna Montreal Cognitive Assessment (MC	ment date (5) (Q-8) (Q-8) (CA)	YES	a a 3 Exp t an expo
n (cu ²) app	FORMS A 1 2 3 4 5 6 7 8	Image: Constraint of the second se	Screen event Baseline event all events all events all events all events all events all events all events all events	recruit, scrn. date - Screen date bst. review, enrollment, date - Enroll NPI-Q Modified Caregiver Strain Index (MC Caregiver Health Questionnaire (PL Functional Assessment Questionnaire Montreal Cognitive Assessment (MC Caregiver Rating of Self-Efficacy	ment date	YES selec	t an expo
n (cu ²) app	FORMS A 1 2 3 4 5 6 7 8 9	Image: Constraint of the second state field Image: Constraint of the second state form	Screen event Baseline event all events all events all events all events all events all events all events all events	recruit, scrn, date - Screen date bst, review, enrollment, date - Enroll NPL-Q Modified Caregiver Strain Index (MC Caregiver Health Questionnaire (PH Functional Assessment Questionnai Montreal Cognitive Assessment (MC Caregiver Rating of Self-Efficacy Positive Aspects of Family Caregivin	ment date	YES selec @	Bank States Stat
	FORMS A	Image: Constraint of the constr	Screen event Baseline event all events all events all events all events all events all events all events all events all events	recruit, scrn, date - Screen date bsl.review, enrollment, date - Enroll NPI-Q Modified Caregiver Strain Index (MC Caregiver Health Questionnaire (PH Functional Assessment Questionnai Montreal Cognitive Assessment (MC Caregiver Rating of Self-Efficacy Positive Assess of Family Caregivin Caregiver Satisfaction With Dement	ment date	YES selec @ @	
	FORMS A 1 2 3 4 5 6 7 8 9 10 11 ADD SINGI	Image: Constraint of the second se	Screen event Baseline event all events all events	recruit, scrn, date - Screen date bal, review, enrollment, date - Enroll NPI-Q Modified Caregiver Strain Index (MM Caregiver Health Questionnaire (PM Functional Assessment Questionnaire Montreal Cognitive Assessment (MM Caregiver Rating of Self-Efficacy Positive Aspects of Family Caregivin Caregiver Satisfaction With Dement COVID Questionnaire	ment date St) Q a) res(AQ) DCA) % a Care p add single item	YES selec © © ©	Bank States Stat
	FORMS A 1 2 3 4 5 6 7 8 9 10 11 ADD SINGI	Image: Constraint of the second se	Screen event Baseline event all events all events	recruit, scrn, date - Screen date bst, review, enrollment, date - Enroll NPI-Q Modified Caregiver Strain Index (MC Caregiver Health Questionnaire (PH Functional Assessment Questionnai Montreal Cognitive Assessment (MC Caregiver Rating of Self-Efficacy Positive Aspects of Family Caregivin Caregiver Satisfaction With Dement COVID Questionnaire	ment date St) Q a) res(AQ) DCA) % a Care p add single item	YES selec @ @	
	Forms A 1 2 3 4 5 6 7 8 9 10 11 ADD SINGE	Image: Second system Image: Second system Image: Second	Screen event Baseline event all events all e	recruit, scrn, date - Screen date bal, review, enrollment, date - Enroll NPI-Q Modified Caregiver Strain Index (MM Caregiver Health Questionnaire (PM Functional Assessment Questionnaire Montreal Cognitive Assessment (MM Caregiver Rating of Self-Efficacy Positive Aspects of Family Caregivin Caregiver Satisfaction With Dement COVID Questionnaire	ment date Si) Q-8) ire (FAQ) SCA) % ia Care add single kem ins and events	YES selec © © ©	Dig id Dig id 1132 1133 1615
	FORMS A	Image: Second	Screen event Baseline event all events all e	recruit, scrn, date - Screen date bal, review, enrollment, date - Enroll NPI-Q Modified Caregiver Strain Index (MM Caregiver Health Questionnaire (PM Functional Assessment Questionnaire Montreal Cognitive Assessment (MM Caregiver Rating of Self-Efficacy Positive Aspects of Family Caregivin Caregiver Satisfaction With Dement COVID Questionnaire	ment date St) Q a) res(AQ) DCA) % a Care p add single item	YES selec © © © ©	Image: Control Image: Control Image: Contro
	FORMS A 1 2 3 4 5 6 7 8 9 10 11 ADD SINGI BULK ADD Timestan User, pail	citizet field citizet form	Screen event Baseline event all events all e	recruit, scrn, date - Screen date bal, review, enrollment, date - Enroll NPI-Q Modified Caregiver Strain Index (MM Caregiver Health Questionnaire (PM Functional Assessment Questionnaire Montreal Cognitive Assessment (MM Caregiver Rating of Self-Efficacy Positive Aspects of Family Caregivin Caregiver Satisfaction With Dement COVID Questionnaire	ment date Si) Q-8) ire (FAQ) SCA) % ia Care add single kem ins and events	YES selec © © © ©	Image: Control of the second
	FORMS A 1 2 3 4 5 6 7 8 9 10 11 ADD SINGI BULK ADD Timestan User, pail	Image: Second	Screen event Baseline event all events all e	recruit, scrn, date - Screen date bal, review, enrollment, date - Enroll NPI-Q Modified Caregiver Strain Index (MM Caregiver Health Questionnaire (PM Functional Assessment Questionnaire Montreal Cognitive Assessment (MM Caregiver Rating of Self-Efficacy Positive Aspects of Family Caregivin Caregiver Satisfaction With Dement COVID Questionnaire	ment date Si) Q-8) ire (FAQ) SCA) % ia Care add single kem ins and events	YES selec © © © © ©	3 Exp 103 Exp 1132 1133 1615 1616 1750 1751

FEATURES

- A "horizontal" layout for longitudinal studies.
- Optimized for datamart integrations.
- Speed good performance on large exports.
- Can write directly to host file system
- Daily activity summary emails
- Audit logs

form all events	NPI-Q		Û								
form all events	Modified Caregiver Strain Index (MCSI)		250 Q								а
form all events	Caregiver Health Questionnaire (PHQ-8)	YES3 Exporter Logs YES3 Exporter Log Record > select an export all users Project ID 588 Project ID 588 Export Nume Emoli dutients 0 log id timestamp user Project ID 588 0 log id timestamp user Project ID 588 0 1132 2022.05.06 09:40:55 palooka Project ID 98.34 fro-259.45f 99a6-5.8458.bbc3dc 0 1132 2022.05.06 09:40:55 palooka Palooka Destination Imestang 2022.46.94 1438.36 User Palooka Destination Imestang 2022.46.94 1438.36 User Palooka Destination Imestang Palooka Destination Imestang Palooka Destination/clouds/enrolled_patients_dd.cv Palooka Dits Dictionury filemame /met/validation/clouds/enrolled_patients_dd.cv Palooka Palooka		ĸ	₹ 5	🍄 💡	ES				
form all events	Functional Assessment Questionnaire (FAQ)										
form all events	Montreal Cognitive Assessment (MOCA)	sele	t an export	∽ all	lusers						records
form all events	Caregiver Rating of Self-Efficacy										
	Positive Aspects of Family Caregiving	a	logid	timestamn	lisor			at	ion		
form all events	Caregiver Satisfaction With Dementia Care					Time Stamp					
form all events	COVID Questionnaire	۲	1132	2022-05-06 09:40:55	palooka			08			_1
			1133		palooka			loa			
DRM OR FIELD: form ~ all	events v start typing or spacebar for add single item	۲	1615	2022-06-03 14:47:48	palooka	Destination	filesystem	loa			
Add one or more forms or fie	elds to the export OR: add all forms and events	۲	1616	2022-06-03 14:47:49	palooka		yes3-export-log /mnt/validation/clouds/enrolled_patients_data.csr	v loa			
		- o	1750	2022-07-11 10:59:41	palooka			loa			
2022-07-30 09:26:13 a		0	1751	2022-07-11 10:59:41	palooka			loa			
: 1819		0	1821	2022-07-30 12:00:25	palooka			ste			
		0	1928	2022-08-09 14:30:05	palooka			ste			
	<u>-</u>	0	1929	2022-08-09 14:31:26	palooka		mapeee	ste			
YES3 E	Exporter Training	۲	1930	2022-08-09 14:38:36	palooka	export files writ	ten file	esyste			
	•				macana -	and the second					
Spring	Session										
Shink	5 26221011										



QUESTIONS from the audience

How do users choose between REDCap and Qualtrics?



REDCap versus Qualtrics

	Qualtrics	REDCap
Expense/Cost	None	None
Learning Curve	Easy	Moderate
Classic or Longitudinal Design	Classic	Both
Randomization	Yes (limited)	Yes
Instrument type (survey, direct data entry)	Survey	Both
Editable look-and-feel (graphic customization)	Yes	Yes (limited)
Data Quality Checks	Yes	Yes
File uploads- scans, images, documents	Yes	Yes
API integration	Yes	Yes
Data Dictionary format	None (.qsf/JSON file)	Excel/CSV
Ability to import datasets	No	Yes
Automated survey invitations and email alerts	Yes	Yes
Data Export Types	SPSS, CSV, <mark>TSV,</mark> Excel, <mark>XML</mark>	SPSS, Stata, R, SAS, Excel, CSV, CDISC-ODM



REDCap Advantages Features not available in Qualtrics

- Export to SAS, STATA, R, SPSS, .csv
- Data quality rules
- Longitudinal or repeated measures
- Audit trails in logins
- Automated Survey Invitation and email alert options
- Ability to use a survey as both a survey and a case report form
- eConsent frameworks in Survey Settings

Source: https://ccts.uic.edu/wp-content/uploads/sites/569/2021/03/Qualtrics-to-REDCap_v2021.pdf



Qualtrics Advantages: Features not available in REDCap

- Export to .tsv
- Flexibility to graphically customize survey forms, web browser format (e.g., page at a time), and mobile device format (e.g., one question at a time)
- Nice library of pre-built surveys, blocks, and questions
- Survey flow features not available in REDCap: Question Randomizer, Web Service, authenticator, embedded data, table of contents
- Additional survey question types: Side by Side, Constant Sum, Hot Spot, Drill down, Gap Analysis, Timing, Pick Group Rank, Heat Map, Graphic Slider, record browser information
 - Some of these additional field types may be supported by REDCap external modules
- Additional survey applications: Survey Scoring

Source: <u>https://ccts.uic.edu/wp-content/uploads/sites/569/2021/03/Qualtrics-to-REDCap_v2021.pdf</u>

