



**Rhode Island Hospital** *Lifespan. Delivering health with care.* 

## REDCap Features, Tips, & Tricks

Lifespan Biostatistics, Epidemiology, and Research Design Core

## Learning Objectives

I. Customize Data Entry Experience

- Piping
- Field Embedding
- Matrix of Fields
- Field Validation
- Quasi Required
   Fields
- Action Tags

II. Customize Researcher Experience

- Data Structure Wide vs Long format
- Alerts & Notifications
- Custom Record Label
- Custom Record
   Dashboard
- Reports in REDCap

III. General Advice & Suggestions

- Move to Production
- Copy Project to explore
- Prevent Abandoned
   Projects
- Delete old projects
- Disable auto-fill
- Q & A

## I. Customizing the Data Entry Experience

- Piping
- Field Embedding
- Matrix of Fields
- Field Validation
- Quasi Required Fields
- Action Tags



Piping is a way (using square brackets) to essentially take a data value and display it somewhere else, i.e., email, field label

#### + 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: Piping Demo Title to be displayed on project webpage Purpose of this project: Practice / Just for fun 💙 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. O Create an empty project (blank slate) Start project from scratch or begin with a template? Oupload a REDCap project XML file (CDISC ODM format) ? Use a template (choose one below) Contains three surveys and a data entry form. Includes a pre-screening survey followed by  $\bigcirc$ Multiple Surveys (longitudinal) two follow-up surveys, one of which is a questionnaire takenly weekly to capture participant information longitudinally over a period of ... Show more Contains a single data collection instrument enabled as a survey, which contains questions Piping Example Project to demonstrate the Piping feature. Demonstrates examples of how HTML can be incorporated into Section Headers to Progress Bars generate progress bars. Contains fifteen data entry forms dedicated to recording the attributes of and tracking and 0 Project Tracking Database progress of projects/studies. Contains seven data entry forms for collecting data for a randomized clinical trial. Incluses a  $\bigcirc$ Randomized Clinical Trial short demographics form followed by a form where randomization is performed. An example randomization model has already been set up.... Show more Create Project Cancel

Piping Example Project Template

### **Piping Demonstration**

🥖 🐚 🐨 😤 🛛 Voriob e: first_name					How to embed a field e	lsewhere
Your first name * must provide value						
	Add Field	Add Matrix of	Fields			
🥜 🛅 🐨 🚰 🗶 🛛 Voriable: last_name					<b>0</b> How to embed a field e	Isewhere
Your last name * must provide value						
	Add Field	Add Matrix of	Fields			
🥒 🕞 😴 😤 🗙 Variable: date_today					How to embed a field e	elsewhere
[first_name], please enter today's date?				Today M	-D-Y	
	Add Field	Add Matrix of	Fields			

🥖 🛅 🐨 🚰 🧰 💥 🛛 Variable: confirm_name	• How to embed a field elsewhere					
Please confirm your name	<ul> <li>○ [first_name] Harris</li> <li>○ [first_name] [last_name]</li> <li>○ [first_name] Taylor</li> <li>○ [first_name] deGrasse Tyson</li> </ul>					
	reset					
Add Field Add Matrix of Fields						

Blank Form	Piping D	Demo	Completed Form
Section 1		Section 1	
Your first name * must provide value	<i></i>	Your first name * must provide value	Jeff
Your last name * must provide value	<i></i>	Your last name * must provide value	Pichardson
, ; ease enter today's date?	Coday M-D-Y	Jeff, please enter today's date?	☐ 10-07-2021 10 Today M-D-Y
What is your favorite ice cream? * must provide value	O Chocolate O Vanilla O Strawberry	What is your favorite ice cream? * must provide value	© Vanilla Strawberry
Section 2		Section 2	
How much do you like ice cream?	Hate it Indifferent Change the slider above to set	How much do you ike Vanilla ice :ream?	Hate it Indifferent
Enter your favorite number	<i></i>	Enter your favorite number	₽ 5
Your favorite number above multiplied by 4 is:	> View equatio	Your favorite number above multiplied by 4 is:	20 View equation
Please confirm your name	○ Harris ○ ○ ○ Taylor ○ deGrasse Tyson	Please confirm your name	<ul> <li>○ Jeff Harris</li> <li>● Jeff Richardson</li> <li>○ Jeff Tarlor</li> <li>○ Jeff de Grasse Tyson</li> </ul>
Review answers		Review answers	
Review your answers below:		Review your answers below:	
Date: Name: Favorite ice cream: Favorite number multiplied by 4:		Date: 10-07-2021 Name: Jeff Richardson Favorite ice cream: Vanilla Favorite number multiplied by 4: 20	
If all your responses look correct and you did not leave any b	lank, then click the Submit button below.	If all your responses look correct and you did not	leave any blank, then click the Submit button below.

# { Field Embedding }

A feature which (using curly brackets) gives you greater control over the look & feel of your data collection instruments.

Unlike piping which deals with a data value, with field embedding, you're moving the entire field element itself, to somewhere else on the same page.

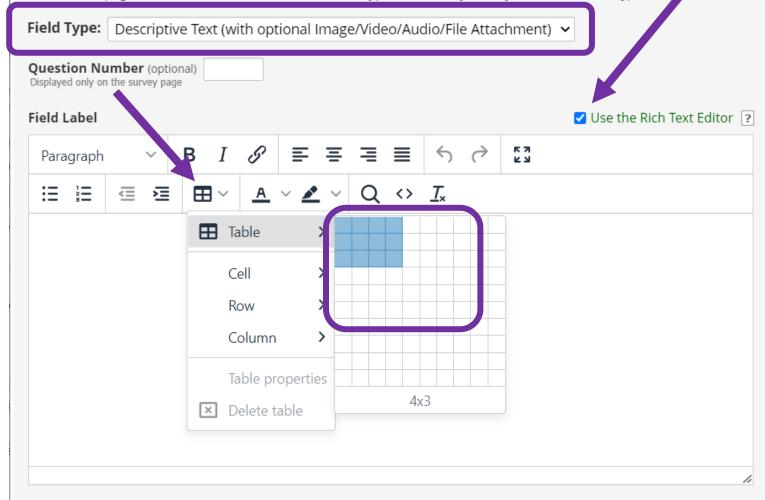
### Field Embedding Use Case #1

🥜 🛅 🐨 🚰 🗶 Vari	<i>iable:</i> fname_mom			O How to embed a field else	ewhere
Mother's First Name					
	A	Add Field Add Matrix	of Fields		
🧷 🛅 🐨 付 🗶 Vari	iable: Iname_mom			O How to embed a field else	ewhere
Mother's Last Name					
	A	Add Field Add Matrix	of Fields		
🥒 🛅 🐨 🖆 🗶 🛛 Vari	iable: email_mom			How to embed a field else	ewhere
Mother's Email					
	A	Add Field Add Matrix	of Fields		
🥜 🛅 🐨 付 🗶 Vari	iable: age_mom			• How to embed a field else	ewhere
Mother's Age					
	A	Add Field Add Matrix	of Fields		
🥒 🛅 😴 付 🗶 Vari	<i>iable:</i> fname_dad			O How to embed a field els	ewhere
Father's First Name					
	A	Add Field Add Matrix	of Fields		
🧷 🛅 🐨 🖆 🗶 🛛 Vari	iable: Iname_dad			O How to embed a field else	ewhere
Father's Last Name					
	A	Add Field Add Matrix	of Fields		
🥒 🛅 🐨 🖆 🗶 🛛 Vari	<i>iable:</i> email_dad			How to embed a field else	ewhere
Father's Email					
	A	Add Field Add Matrix	of Fields		
🧷 🛅 🐨 🖆 🗶 🛛 Vari	<i>iable:</i> age_dad			O How to embed a field else	ewhere
Father's Age					
	A	Add Field Add Matrix	of Fields		
🥒 🛅 🐨 付 🗶 🛛 Vari	<i>ioble:</i> fname_child			• How to embed a field else	ewhere
Child's First Name					
	A	Add Field Add Matrix	of Fields		
🧷 🛅 🐨 付 🗶 Vari	ioble: Iname_child			O How to embed a field else	ewhere
Child's Last Name					

Demographics	Đ	
lease complete the survey below.		
hank you!		
Mother's First Name		]
Mother's Last Name		]
Mother's Email		]
Mother's Age		]
Father's First Name		]
Father's Last Name		]
Father's Email		]
Father's Age		]
Child's First Name		]
Child's Last Name		]
Child's Email		
Child's Age		

#### Add New Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save buttor form on this page. For an overview of the different field types available, you may view the 🖽 Field Types video 4 min).



#### Edit 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 🖽 <u>Field Types video (4 min)</u>.

Field Type: Descriptive Text (with optional Image/Video/Audio/File Attachment) 🗸

Paragriph       ∨       B       I       ⊗'       ≡       ≡       ○       ?       23         IE       E       E       IE       ○       A       ✓       Q       <>       Ix       Image: Age       ○       Definition of the state o	uestion Number (opti splayed only on the survey pa eld La <mark>g</mark> el				Use the Rich Text Editor ?	Variable Name       (utilized in logic, calcs, and exports)         names_and_dob       Enable auto naming of variable based upon its Field Label?         ONLY letters, numbers, and underscores
Mother       {fname_mom}       {lname_mom}       {email_mom}       {age_mom}         Father       {fname_dad}       {email_dad}       {age_dad}       Display format of video: O Inline Inside popup         Child       {fname_child}       {lname_child}       {email_child}       {age_child}         Child       {fname_child}       {email_child}       {age_child}       Or -         Image: State       Image: State       Image: State       Or -         Image: State       Image: State       Image: State       Image: State         Image: State       Image: State       Image: State       I						Optional file attachment, image, audio, or video:
Mother       {fname_mom}       {lname_mom}       {age_mom}       Display format of video: O Inline Inside popup         Father       {fname_dad}       {lname_dad}       {age_dad}       - or -         Child       {fname_child}       {lname_child}       {email_child}       {age_child}       Image: Child         Child       (fname_child)       {lname_child}       {email_child}       {age_child}       Image: Child       Im		First	Last	Email Address	Age	
Child {Iname_child} {email_child} {age_child}   Child (Iname_child) </td <td>Mother</td> <td>{fname_mom}</td> <td>{Iname_mom}</td> <td>{email_mom}</td> <td>{age_mom}</td> <td>Display format of video: 〇 Inline 💿 Inside popup</td>	Mother	{fname_mom}	{Iname_mom}	{email_mom}	{age_mom}	Display format of video: 〇 Inline 💿 Inside popup
Cniid       {iname_cniid}       {email_cniid}       {age_cniid}         Image: State of the state of th	Father	{fname_dad}	{Iname_dad}	{email_dad}	{age_dad}	- or -
Display format of attachment on page: Unline image Action Tags / Field Annotation (optional)	Child	{fname_child}	{Iname_child}	{email_child}	{age_child}	
earn about @ Action Tags or <u>using Field Annotation</u>	Action Tags / Field An	notation (optional)				<ul> <li>Link</li> <li>Inline image</li> <li>Audio file (play in embedded player on page)</li> <li><u>Compatibility notice for embedded audio</u></li> </ul>
	earn about @ Action Tag	s or <u>using Field Annotation</u>	1	//		

x

🥔 🛅 🐨 🚰 🗶 🛛 Variable: fname_mom		Field is embedded elsewhere on page
Mother's First Name		
	Add Field Add Matrix of Fields	
🥜 🛅 🐨 🚰 🗶 🛛 Variable: Iname_mom		Field is embedded elsewhere on page
Mother's Last Name		
Dowoorkowskies		

Demo	Demographics							
Please complete the survey below.								
Thank you	l!							
		First	Last	Email Address	Age			
	Mother							
	Father							
	Child							
			Submit					

eld Label										Use the Rich Text Edito	or
Paragraph	~	в	I I	? ≣	≣ ≣	≣	4	$\diamond$	K 3		
			~ _	<u>a</u> ~ 🌶	~ Q	<>	<u></u> ×				
		First	t		Last			Emai	il Address	Age	
Mother		{fna	me n	nom}	{Iname	mom	}	{ema	ail_mom}	{age_mom}	
Father	D 2	Сору С		ad}	{Iname	_dad}		{ema	ail_dad}	{age_dad}	
Child	ß	Paste C	Ctrl+V	nild}	{Iname	_child}	ł	{ema	ail_child}	{age_child}	
	9	Link (	Ctrl+K		(+) 00			Ē	(C)		
	⊞	Table	>		田田	EX:	Ŧ	Æ	X		
	-	Cell	>	🖪 Ce	ll propertie	25					
		Row	>	🗄 Me	erge cells						
Action Tags /	Fi	Column	>	😥 Sp	lit cell						
	×	Delete t	able								

Cell Properties					×
<mark>General</mark> Advanced	Width				
	Height				
	Cell type Cell				~
	Scope None				~
	H Align None				~
	V Align				~
	Hone			Cancel	Savo
				Cancel	Save

Cell Properties				
General Advanced	Border width			
	Border style Hidden	~		
	Border color Background color			

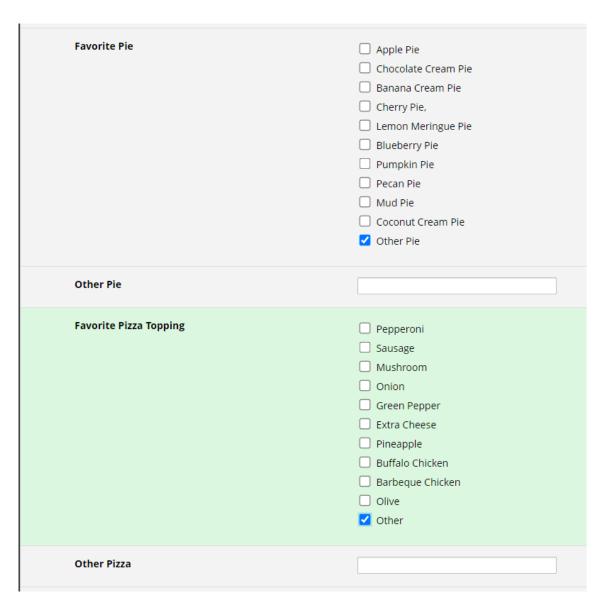
	First	Last	Email Address	Age
Mother				
Father				
Child				

Cell Properties		×
General Advanced	Border width	
	Border style Solid	~
	Background color	

	First	Last	Email Address	Age
Mother				
Father				
Child				

### Field Embedding Use Case #2

🥜 🛅 🐨 🚰 🚳 🗶 Variable: fav_pie		How to embed a field elsewhere
	Apple Pie	
	Chocolate Cream Pie	
	🗌 Banana Cream Pie	
	Cherry Pie,	
	Lemon Meringue Pie	
Favorite Pie	Blueberry Pie	
	Pumpkin Pie	
	Pecan Pie	
	Mud Pie	
	Coconut Cream Pie	
	Other Pie	
Add Field Add Matrix	of Fields	
		How to embed a field elsewhere
Variable: pie_oth Branching logic: [fav_pie(11)] = '1'		How to embed a field elsewhere
Other Pie		
	of Cialda	
Add Field Add Matrix	of Fields	
	of Fields	• How to embed a field elsewhere
Add Field Add Matrix	of Fields	• How to embed a field elsewhere
Add Field Add Matrix		How to embed a field elsewhere
Add Field Add Matrix	Pepperoni	How to embed a field elsewhere
Add Field Add Matrix	Pepperoni Sausage	How to embed a field elsewhere
Add Field Add Matrix	Pepperoni Sausage Mushroom	How to embed a field elsewhere
Add Field Add Matrix	Pepperoni Sausage Mushroom Onion	How to embed a field elsewhere
Add Field Add Matrix	Pepperoni Sausage Mushroom Onion Green Pepper	How to embed a field elsewhere
Add Field Add Matrix	Pepperoni Sausage Mushroom Onion Green Pepper Extra Cheese	How to embed a field elsewhere
Add Field Add Matrix	Pepperoni Sausage Mushroom Onion Green Pepper Extra Cheese Pineapple	• How to embed a field elsewhere
Add Field Add Matrix	Pepperoni Sausage Mushroom Onion Green Pepper Extra Cheese Pineapple Buffalo Chicken	• How to embed a field elsewhere
Add Field Add Matrix	Pepperoni Sausage Mushroom Onion Green Pepper Extra Cheese Pineapple Buffalo Chicken Barbeque Chicken	• How to embed a field elsewhere
Add Field Add Matrix	<ul> <li>Pepperoni</li> <li>Sausage</li> <li>Mushroom</li> <li>Onion</li> <li>Green Pepper</li> <li>Extra Cheese</li> <li>Pineapple</li> <li>Buffalo Chicken</li> <li>Barbeque Chicken</li> <li>Olive</li> <li>Other</li> </ul>	• How to embed a field elsewhere
Add Field Add Matrix	Pepperoni Sausage Mushroom Onion Green Pepper Extra Cheese Pineapple Buffalo Chicken Barbeque Chicken Olive Other	• How to embed a field elsewhere
Add Field Add Matrix          Add Field       Add Matrix         Image: Second	Pepperoni Sausage Mushroom Onion Green Pepper Extra Cheese Pineapple Buffalo Chicken Barbeque Chicken Olive Other	
Add Field Add Matrix	Pepperoni Sausage Mushroom Onion Green Pepper Extra Cheese Pineapple Buffalo Chicken Barbeque Chicken Olive Other	



Favorite Pie			
		Favorite Pie	Apple Pie
			Chocolate Cream Pie
			<ul> <li>Banana Cream Pie</li> </ul>
			Cherry Pie,
			Lemon Meringue Pie
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Blueberry Pie
hoices (one choice per line) <u>Copy existing choices</u>			Pumpkin Pie
i, Blueberry Pie			Pecan Pie
7, Pumpkin Pie 3, Pecan Pie			
), Mud Pie			Coconut Cream Pie
10, Coconut Cream Pie	•		✓ Other Pie
11, Other Pie {pie_oth}			outric
Field Label	Use the Rich Text Editor ?	Favorite Pizza Topping	Pepperoni
Favorite Pizza Topping			Sausage
			Mushroom
			Green Pepper
			Extra Cheese
			Pineapple
			Buffalo Chicken
			Barbeque Chicken
			Olive
Choices (one choice per line) Copy existing choices			✓ Other
6, Extra Cheese 7, Pineapple			
7, Pineappie 8, Buffalo Chicken			
9, Barbeque Chicken			
10, Olive 11, Other {pizza_oth}	•		

Field Type: Descriptive Text (with optional Image/Video/Audio/File Attachment) 💙	Favorite Pie	Favorite Pizza Topping
Question Number (optional)	Apple Pie	Pepperoni
Displayed only on the survey page	Chocolate Cream Pie	Sausage
Field Label 🗸 Use the Rich Text Editor ?	📄 Banana Cream Pie	Mushroom
	Cherry Pie,	Onion
$Paragraph  \lor  \mathbf{B}  I  \mathscr{P}  \equiv  \equiv  \equiv  \equiv  \backsim  \circlearrowright  \textcircled{23}$	Lemon Meringue Pie	Green Pepper
$\exists \exists \exists \exists \exists \exists \exists \land A \lor A$	Blueberry Pie	📄 Extra Cheese
	Pumpkin Pie	Pineapple
Favorite Pie Favorite Pizza Topping	🗌 Pecan Pie	📄 Buffalo Chicken
	Mud Pie	📄 Barbeque Chicken
{fav_pie} {fav_pizza}	🗌 Coconut Cream Pie	Olive
{pie_oth} {pizza_oth}	✓ Other Pie	☑ Other

### \*\*Remember, you must first create the fields before they can be embedded elsewhere!\*\*

## Field Embedding Example

Project Template

#### + 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: Field Embedding Demo Title to be displayed on project webpage Purpose of this project: Practice / Just for fun 🗸 How will it be used? Assign project to a Project $\square$ Folder? Project notes (optional): Comments describing the project's use or purpose that are displayed on the My Projects page. O Create an empty project (blank slate) Start project from scratch Oupload a REDCap project XML file (CDISC QDM format) ? or begin with a template? Use a template (choose one below) remplate shows now text to a participant's cell phone number using the emain functionality. DEMO email to TEXT Note this technology is not specific to REDCap. A cell phone number can be texted to from Outlook using the same approach. DEMO: Participant Management Use of a call log, internal email reminders (Alerts & Notifications) for patient visits, use of $\bigcirc$ and Tracking numerous emails per record (parent and child), field embedding This is a modular template for building an E-consent process for your study. The template e-Consent template contains built-in instructions fields to understand how to use the template and how to digitally sign a document as a researcher. Field Embedding Example Project Contains a single data collection instrument to demonstrate the Field Embedding feature. 0 Human Cancer Tissue Biobank Contains five data entry forms for collecting and tracking information for cancer tissue. Contains nine data entry forms (beginning with a demography form) for collecting data 0 Longitudinal Database (1 arm) longitudinally over eight different events Create Project Cancel

## Matrix of Fields

Using a field matrix can help to prevent a user from experiencing 'Survey Fatigue', especially on lengthy instruments. It takes up less space and makes it faster and easier to answer each question

#### Gad7 No Matrix

Please complete the survey below.

Thank you!

Over the last 2 weeks, how often have you been bothered by the following problems?

1) 1. Feeling nervous, anxious, or on edge	<ul> <li>Not at all</li> <li>Several Days</li> <li>Over half the days</li> <li>Nearly every day</li> </ul>
2) 2. Not being able to stop or control worrying	<ul> <li>Not at all</li> <li>Several Days</li> <li>Over half the days</li> <li>Nearly every day</li> </ul>
3) 3. Worrying too much about different things	<ul> <li>Not at all</li> <li>Several Days</li> <li>Over half the days</li> <li>Nearly every day</li> </ul>
4) 4. Trouble relaxing	<ul> <li>Not at all</li> <li>Several Days</li> <li>Over half the days</li> <li>Nearly every day</li> </ul>

5) 5. Being so restless that it's hard to sit still	<ul> <li>Not at all</li> <li>Several Days</li> <li>Over half the days</li> <li>Nearly every day</li> </ul>
6) 6. Becoming easily annoyed or irritable	<ul> <li>Not at all</li> <li>Several Days</li> <li>Over half the days</li> <li>Nearly every day</li> </ul>
7) 7. Feeling afraid as if something awful might happen	<ul> <li>Not at all</li> <li>Several Days</li> <li>Over half the days</li> <li>Nearly every day</li> </ul>

Example survey not using matrix of fields. Requires a lot of scrolling. Can be especially burdensome when 10, 20+ questions

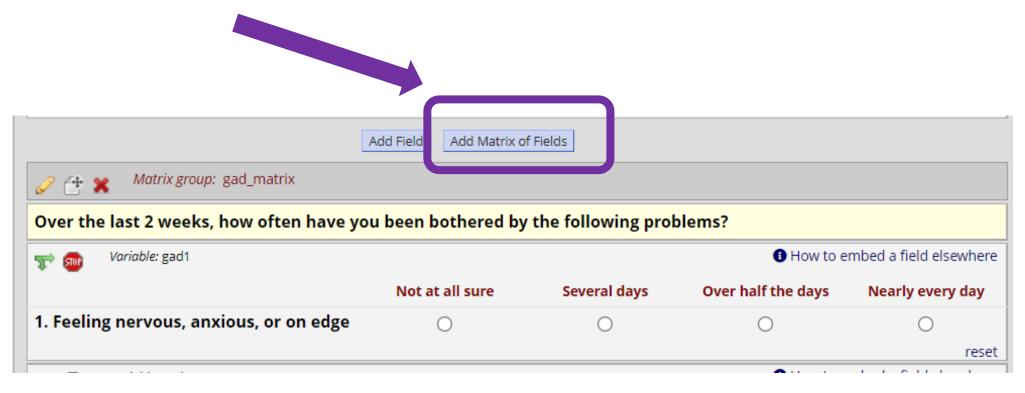
## Example: Matrix of **Fields**

Same survey as prior but takes up about 1/4<sup>th</sup> the space

Over the last 2 weeks, how often have you been bothered by the following problems?					
	Not at all sure	Several days	Over half the days	Nearly every da	ay
1. Feeling nervous, anxious, or on edge	0	0	0	0	set
2. Not being able to stop or control worrying	0	0	0	0	
3. Worrying too much about different things	0	0	0	0	set
4. Trouble relaxing	0	0	0	$\bigcirc$	set set
5. Being so restless that it's hard to sit still	0	0	0	0	
6. Becoming easily annoyed or irritable	0	0	0	0	set
7. Feeling afraid as if something awful might happen	0	0	0	0	set
				res	set
	Submit				

## Add a Matrix of Fields

• To get started, within the Online Designer, click 'Add Matrix of Fields'



#### Here you can set the

- Matrix header text (optional)
- Field Labels
- Variable Names
- Column Choices
- Other Matrix Info including Answer format
- Ranked matrix? Only 1 choice allowed per column
- Must include matrix group name

#### 📄 Edit Matrix of Fields

You may add or edit a matrix (i.e. grid) of project fields on this data collection instrument by completing the fields below. By providing all necessary info below and clicking Save, the new matrix of fields will be added to the form on this page. A Field Label and Variable name must be provide for each field in the matrix, and you must also set the Choices (i.e. matrix column headers) and answer format (Single Answer vs. Multiple Answers) for the entire matrix. <u>View a matrix example</u> or <u>Read more about matrix fields on the Help & FAQ.</u>

Matrix Header Text (optional)	
Over the last 2 weeks, how often have you been bothered	d by the following problems?
	Expand
Matrix Rows	Enable auto naming of variable based upon its Field Label?
Each row represents a different field with its own label and variable n	Variable Name
Field Label	ONLY letters, numbers, and underscores (optional) Required?*Field Annotation ?
1. Feeling nervous, anxious, or on edge	sc_gad1 🛛 🗌 🗙
2. Not being able to stop or control worrying	sc_gad2
3. Worrying too much about different things	sc_gad3
4. Trouble relaxing	sc_gad4
5. Being so restless that it's hard to sit still	sc_gad5
6. Becoming easily annoyed or irritable	sc_gad6
7. Feeling afraid as if something awful might happen	sc_gad7
Add another row	
Matrix Column Choices	Other Matrix Info
Choices (one choice per line) <u>Copy existing choices</u>	Answer Format:
0, Not at all sure	Single Answer (Radio Buttons) 🗸
1, Several days	
2, Over half the days 3, Nearly every day	Ranking: What is a ranked matrix of fields?
S, NEarly EVELY Udy	Allow only 1 choice to be selected per column (radio buttons only)
	Matrix group name: ONLY letters, numbers, and underscores
How do I manually code the choices?	gad_sc
in the manual of come and character.	

### **Field Validation**

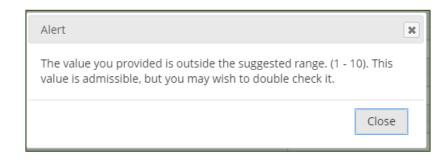
# An easy way to avoid un-necessary data collection errors is to utilize field validation whenever possible.

Field validation ensures that for certain fields, a user doesn't enter incorrect data type. If they do, an error message will pop up and ask that the mistake is corrected.

		Alert
Alert	Alert	The value you provided could not be validated because it does not
This field must be a valid email address (like joe@user.com). Please re- enter it now.	This field must be a 10 digit U.S. phone number (like 415 555 1212). Please re-enter it now.	follow the expected format. Please try again. Required format: Letters only
Close	Close	Close

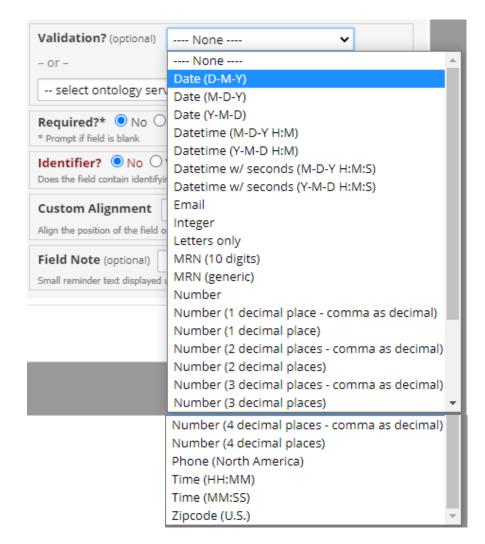
Alert	]	Alert	×
This value you provided is not a number. Please try again.		This field must be a 5 or 9 digit U.S. ZIP Code (like 94043). Please re- enter it now.	
Close		Close	

Alert	×
This value you provided is not an integer. Please try again.	
	Close



## When to validate?

- Dates & Times
- Email Address
- Numbers & Integers
- Letters Only
- MRN
- Phone Numbers
- Zip Codes



## **Quasi-Required Fields**

REDCap has the ability to make certain fields required but sometimes due to the sensitive nature of a question, it may be inappropriate to force an answer. What do you do when you have a sensitive question and **really want participants to answer** but don't want to make the field mandatory?

Quasi-Required Fields

Suppose we really want to know about alcohol abuse in the household but we're not going to make it a required field. We just want to be sure that people don't mistakenly/unintentionally skip that question

One solution is to add a new descriptive text field with branching logic set so that it only appears if the alcohol question is blank while the question that follows is not blank

Sex * must provide value				
Female O Male	reset			
Does anyone in the household abuse alcohol?	reset			
Wait!!! Did you intend to leave the prior question blank? If not, please answer. Thank you!				
Are there any pets in the house?	reset			
Submit				

### **Quasi-Required Fields**

•		Variable: Iname	How to embed a field elsewhere
		Last Name	
Variable: fname		Add Field Add Matrix of Fields	
		🥜 🗅 🐨 🔁 🚥 🗶 Variable: sex	• How to embed a field elsewhere
Add Field	Advanced Branching Logic Syntax	Sex * must provide value	
🥔 🛅 🐨 😤 🗴 Variable: Iname	Show the field ONLY if	○ Female ○ Male	reset
Last Name	[pets] <> "" and [alc] = ""	Add Field Add Matrix of Fields	
		🥜 🖺 🐨 🔁 🚥 🗙 Variable: alc	How to embed a field elsewhere
Add Field		Does anyone in the household abuse alcohol?	
🥜 🛅 🐨 🚰 🗶 Variable: sex		O Yes O No	
Sex			reset
* must provide value		Add Field Add Matrix of Fields	
○ Female ○ Male		Image:	O How to embed a field elsewhere
Add Field		Wait!!! Did you intend to leave the prior question b Thank you!	lank? If not, please answer.
🥔 🛅 🤝 🚰 💥 Variable: alc			
Does anyone in the household abuse alcohol?		Add Field Add Matrix of Fields	
○ Yes ○ No		🥜 🛅 🐨 🚰 🚳 🗶 Variable: pets	How to embed a field elsewhere
		Are there any pets in the house?	
Add Field		⊖ Yes ⊖ No	
🥔 🛅 🐨 🚰 🗶 Variable: pets			
Are there any pets in the house?			

Action Tags are an excellent way to customize the data entry experience for surveys and forms. They are special terms that begin with the '@' sign that can be placed inside a field's Field Annotation when adding or editing a field. Each action tag has a corresponding action that is performed for the field when displayed on data entry forms and survey pages.

## @ Action Tags

Action Tags / Field Annotation (optional)

Types of Action Tags

#### Auto Fill Tags - Pre-fill a variable with a value

**Cosmetic Tags -** Change the look and feel of a variable without impacting the data

Entry Limit Tags - limit what can be entered in a variable

External Module Tags - added by an external module

Mobile App Tags - only useful when using the mobile app

Concealing Tags - either outright hide a variable or make it uneditable

## Action Tags

#### Auto Fill

### Cosmetic

### Entry Limits

#### Concealing

@DEFAULT
@LATITUDE
@LONGITUDE
@NOW
@TODAY
@USERNAME

@PASSWORDMASK@PLACEHOLDER@RANDOMORDER@HIDEBUTTON

@CHARLIMIT
@WORDLIMIT
@MAXCHECKED
@NONEOFTHEABOVE
@MAXCHOICE
@HIDECHOICE

@HIDDEN
@HIDDEN-FORM
@HIDDEN-SURVEY
@READONLY
@READONLY-FORM
@READONLY-SURVEY

### Action Tag Examples

#### Edit Field

You may add a new project field to this data collection instrument form on this page. For an overview of the different field types avail

Field Type: Checkboxes (Multiple Answers)

#### Field Label

What is your favorite flavor of ice cream?

#### @MAXCHECKED

What is your favorite flavor of ice cream?

Chocolate

Coffee

Strawberry

🗹 Vanilla

Cookies & Cre Cannot select choice! The maximum number

Peanut Butter of choices has been selected.

Mint Chocolate Chip

🗌 I don't like ice cream

#### Choices (one choice per line) <u>Copy existing choices</u>

1, Chocolate

- 2, Coffee
- 3, Strawberry
- 4, Vanilla
- 5, Cookies & Cream
- 6, Peanut Butter Cup
- 7, Mint Chocolate Chip
- 8, I don't like ice cream

#### Action Tags / Field Annotation (optional)

@MAXCHECKED=4 @NONEOFTHEABOVE=8

Learn about @ Action Tags or using Field Annotation

### @NONEOFTHEABOVE

#### What is your favorite flavor of ice cream?

- Chocolate
- 🗹 Coffee
- 🗹 Strawberry

Vanilla

Cookies & Cream

Peanut Butter Cup
 Mint Chocolate Chip

I don't like ice cream

#### Incompatible checkbox selection

The option "I don't like ice cream" can only be selected by itself. Selecting this option will clear your previous selections for this checkbox field. Are you sure?

Yes, clear other selections Cancel

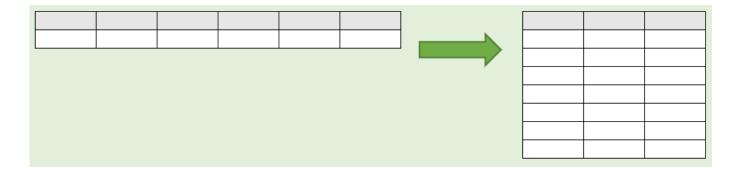
×

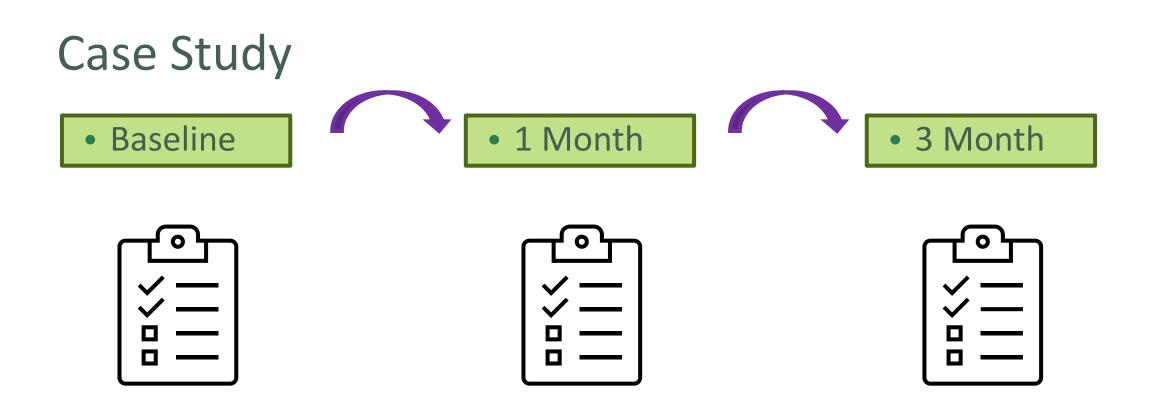
## II. Customizing the Researcher Experience

- Data Structure Wide vs Long format
- Alerts & Notifications
- Custom Record Label
- Custom Record Dashboard
- Creating Reports

Data structure – how the rows and columns of a dataset are organized to handle your specific study design.

## Wide data vs long data format





Suppose we're conducting a research project that collects some demographic data and administers a survey at baseline. We also want to administer the same survey again at 1 month & 3 months to each participant...

You might be tempted to set it up your project like this

- One instrument to collect demographic data
- 3 versions of the same survey, to be administered at each of the different timepoints baseline, 1month and 3months
- Longitudinal data collection has not been enabled.

#### Setting up your project in this manner stores your data in a wide format.

Data Collection Instruments	Survey options:         Image: Survey Queue         Image: Survey Queue<		Add new instrument:            • Create         a new instrument from scratch             • Import         a new instrument from the official <u>REDCap Shared Library</u> ?             • Upload         instrument ZIP file from another project/user or <u>external libraries</u> ?						
Instrument name		Fields	View PDF	Enabled as survey	Instrument actions	Survey-related options			
Demographics		4	ß	\$↓	Choose action 🗢	Survey settings + Automated Invitations			
GAD7 Baseline Sur	vey	8	ß	۷	Choose action 🤝	Survey settings + Automated Invitations			
GAD7 1 Month Sur	vey	8		۷	Choose action $\bigtriangledown$	Survey settings + Automated Invitations			
GAD7 3 Month Sur	vey	8	Å	۷	Choose action $\bigtriangledown$	Survey settings + Automated Invitations			

#### Main project settings

Disable 🕑 Use surveys in this project? ?	
Enable Ouse longitudinal data collection with defined events?	
Modify project title, purpose, etc.	

Record ID	Demographics	GAD7 Baseline Survey		
1	$\bigotimes$	Ø	۲	۲

### Wide Data Format

There is 1 row per participant and repeat columns are used to handle the repeated measures.

A survey with just 8 questions, administered 3x, would have 36 columns when data is exported and would reach to column AK in MS Excel.

Pros:

- Can work well with certain study designs
  - Pre-post design measuring 1 outcome before & after an intervention

Cons:

- Outcomes live in numerous columns hard to summarize
- Quickly gets clunky and difficult to manage with many outcomes over many events can be limitations to analysis

An alternative, superior way of setting up the same project is to create your demographics instruments and only include 1 copy of the survey you intend to administer. Longitudinal data collection with defined events must be enabled. Events have been defined and instruments have been designated for each event. The demographics instrument is only administered at baseline. The survey is administered during each event.

Data Collection Instruments	Survey options: I Survey Queue  Survey Login Survey Notifications Upload or download Auto Invitations	_	Add new instrument:            • Create         a new instrument from scratch             • Import         a new instrument from the official <u>REDCap Shared Library</u> ?             • Upload         instrument ZIP file from another project/user or <u>external libraries</u> ?						
Instrument nam	Instrument name			Enabled as survey	Instrument actions	Survey-related options			
Demographics	Demographics			\$↓	Choose action $\bigtriangledown$	Survey settings + Automated Invitations			
GAD7 Survey wit	GAD7 Survey with Events			۲	Choose action $\bigtriangledown$	Survey settings + Automated Invitations			



#### 🗲 Define your events and designate instruments for them

Create events for re-using data collection instruments and/or set up scheduling.

Go to Define My Events or Designate Instruments for My Events

	Event #	Event Name	Custom Event Label 😡 (optional)	Unique event name 😡 (auto-generated)
Ø 🗙	1	Baseline		baseline_arm_1
0 🗙	2	Month 1		month_1_arm_1
🧷 🗙	3	Month 3		month_3_arm_1
Add nev	v event	Descriptive name for this event	Custom Event Label (optional)	

Begin Editing Save				
Data Collection Instrument	Baseline (1)	<b>Month 1</b> (2)	<b>Month 3</b> (3)	
Demographics (survey)	Ļ			
GAD7 Survey with Events (survey)	<b>~</b>	<b>v</b>	<b>~</b>	

Desite Ballatera

### Long Data Format

Pros of Long Format:

- Just 1 column per outcome easier to summarize over time
- Adding another visit requires only adding a new row (rather than adding many new columns)
- Fast & Flexible
- In most cases is the Gold standard for data collection

All data (all records and fields)

Record ID record_ id	Event Name redcap_ event_ name	Survey Identifier redcap_ survey_ identifier	Survey Timestamp demographics_ timestamp	Name name	Primary Language lang_prim	<pre> Other Language lang_oth </pre>	Complete? demographics_ complete	Survey Timestamp gad7_ survey_ with_ events_ timestamp	Date date_ baseline1	1. Feeling nervous, anxious, or on edge gad1	Deing	3. Worrying too much about different things gad3	4. Trouble relaxing gad4	5. Being so restless that it's hard to sit still gad5	6. Becoming easily annoyed or irritable gad6	7. Feeling afraid as if something awful might happen gad7	<b>Complete?</b> gad7_ survey_ with_ events_ complete
1	Baseline		09-11-2021 16:24	Joe	English (1)		Complete (2)	09-11-2021 16:24	2021-09- 11	Not at all sure (0)	Several days (1)	Several days (1)	Over half the days (2)	Over half the days (2)	Nearly every day (3)	Several days (1)	Complete (2)
1	Month 1							09-11-2021 16:24	2021-10- 11	Not at all sure (0)	Not at all sure (0)	Several days (1)	Several days (1)	Over half the days (2)	Over half the days (2)	Nearly every day (3)	Complete (2)
1	Month 3								2021-12- 11	Several days (1)	Over half the days (2)	Several days (1)	Not at all sure (0)	Several days (1)	Over half the days (2)	Nearly every day (3)	Complete (2)

Search

Given the chance, longitudinal study design with designated events to create output in long format is ideal

Allows you to construct alerts and send customized notifications. These notifications may be sent to one or more recipients and can be triggered or scheduled when a form/survey is saved and/or based on conditional logic whenever data is saved or imported.

# 🗭 Alerts & Notifications

While similar in many respects to Automated Survey Invitations, Alerts & Notifications allow for greater complexity and have more capabilities. For example, alerts apply to both data entry forms and surveys, and they also allow for more options regarding who can be the recipient of a notification (project users, survey participants, etc.).

### **Create New Alert**

Step 1

#### Applications

#### Alerts & Notifications

- 🛱 Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Z Data Comparison Tool
- Logging
- Field Comment Log
- File Repository
- Loser Rights and Loser DAGs
- Customize & Manage Locking/E-signatures
- Data Quality
- 😐 API and 😐 API Playground
- REDCap Mobile App
- External Modules
- Lifespan REDCap Portal
- Lifespan REDCap Problem Form

#### Alerts & Notifications

The Alerts & Notifications feature allows you to construct a and can be triggered or scheduled when a form/survey is s an alert, you will need to 1) set how the alert gets triggered recipient, sender, message text, and other settings for the field variables (including Smart Variables), and uploading n

🜲 My Alerts	Notification Log	
+ Add New Alert		

#### • Triggering the Alert

#### Create new alert

You may define the settings for your alert in Steps 1-3 below. After clicking the Save button at the bottom, your alert will immediately become active and may be triggered at any time thereafter. If you would like to remove or stop using an alert, it may be deactivated at any time. You may modify an existing alert at any time, even after some notifications have already been sent or scheduled.

(excludes data imports)

Title of this alert: add optional title

#### **STEP 1: Triggering the Alert**

A) How will this alert be triggered?	<ul> <li>When a record is saved on a specific form/survey*</li> <li>When a record is saved on a specific form/survey with conditional logic*</li> <li>Using conditional logic during a data import or data entry</li> </ul>
B) Trigger the alert	

#### B) Trigger the alert...



C) Trigger Limit: Trigger the alert... only once per record (i.e., never re-trigger)

(The trigger limit determines where and to what extent within a record that the alert will be triggered.)

\* The alert will not be re-triggered if the form/survey is saved again, unless it is set to send Every time in Step 2 below.

#### () STEP 2: Set the Alert Schedule

Step 2	When to send the alert?	Send immediately
		◯ Send on next Day 🗸 at time 🛛 🖸 H:M
<ul> <li>Set up alert schedule</li> </ul>		○ Send the alert     days     hours     minutes       after     ✓     the alert has been triggered     ✓       ○ Send at exact date/time:     MM/DD/YYYY HH:MM
	Send it how many times?	<ul> <li>Just once</li> <li>Every time the form/survey in Step 1B is saved</li> <li>(excludes data imports)</li> </ul>
		<ul> <li>Multiple times on a recurring basis:</li> <li>C Send every 0 days v after initially being sent.</li> <li>Send up to times total (including the first time sent). Leave blank to continue sending forever.</li> </ul>
	Alert expiration: (optional)	MM/DD/YYYY HH:MM This alert will be auto-deactivated at the specified date/time above. Note: This will cause any already-scheduled notifications not to be sent after the expiration time.

### Step 3

• Message settings

Email From: * must provide value	Display name (optional) redcapsupport@lifespan.org								
Email To:	Select recipients								
* must provide value + <u>Show more options</u>	Or manually enter emails: jane@example.com; john@mysite.org								
Subject:									
* must provide value									
Message: * must provide value	Paragraph $\vee$ <b>B</b> $I \mathscr{P} \equiv \equiv \equiv \equiv \Leftrightarrow \overleftrightarrow$								
<ul> <li>must provide value</li> </ul>									
Prevent piping of data for Identifier fields ?									

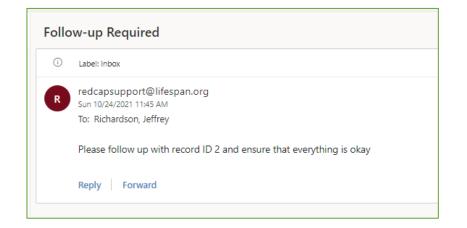
### **Example Alert**

#### Resize font: ÷ | = **Postpartum Depression Scale** Please complete the survey below. Thank you! Over the past two weeks, how often have you Some the Never Rarely Often All of the time time 1) Had trouble sleeping? $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ 0 reset $\bigcirc$ 2) Had trouble staying awake? $\bigcirc$ $\bigcirc$ $\bigcirc$ reset $\bigcirc$ $\bigcirc$ 3) Felt hopeless? $\bigcirc$ $\bigcirc$ reset $\bigcirc$ $\bigcirc$ 4) Felt confident? $\bigcirc$ $\bigcirc$ C 5) Felt suicidal? $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ 0 rese Submit

Alerts 🗄 Not	ification Loរ្	g					
Notification Log (in ascending order by time sent)       View past notifications       Begin time:       End time:       10/24/2021 19:13       (M/D/Y H:M)         View future notifications       View future notifications       Display All alerts        Display All alerts          Displaying 1-1        of 1       Apply filters       Reset							
🕂 Notification send time	Alert	View Notification	Record	Recipient	Subject		
© 10/24/2021 11:45am	#1		2	⊠ jrichardson7@lifespan.org	Follow-up Required		

B) Trigg	ger the alert
whe	n "Postpartum Depression Scale"
whil	e the following logic is true:
	[pp_suic] = "5"

×[staff_email] "	Staff Em	nail"					
Or manually enter	emails:	jane@ex	ample.co	om; john@n	nysite.org		
Follow-up Requi	red						
Paragraph	~	B I	9	≣ ≡	⊒ ≣	$\varsigma \diamond$	к <b>у</b>
:= <u>}</u> = <u>=</u>	ž	$\blacksquare$ $\sim$	<u>A</u>	~ 👱 ~	Q	<u></u> ×	,
Please follow	/ up wi	th recor	d ID [re	ecord_id]	and ensur	e that every	rthing is okay



# **Custom Record Label**

Append other data and/or static text next to any record name. Allows you to view additional information from within the record status dashboard.

### Create a Custom Record Label

+ Add new	record			+ Add new record	8
		101	line and customizations	Displaying: Instru	ument st
Displaying:	Instrument status only		Enable   Repeatable instruments ?	Displaying. Instru	Jinene su
Record ID	Survey	Optional	Disable 🖉 Auto-numbering for records ?	Record ID	Survey
1		I'm done!	Enable 🗢 Scheduling module (longitudinal only) ?	1 Group C, Female	۲
2			Enable Randomization module ?	2 Group B, Female	۲
- <u>3</u>			Enable Designate an email field for sending survey invitations ?	3 Group A, Male	۲
4			Additional customizations	4 Group B, Male	۲
i				5 Group C, Male	۲
i				<u>6</u> Group A, Male	۲
		Ac	dditional customizations	7 Group C, Male	۲
	۲			8 Group C, Male	۲
2		You	u may use the options below to make customizations to the project. When done, click Save to s	9 Group C, Female	۲
0	۲			10 Group B, Female	۲
1			Set a Custom Record Label You may append other data and/or static text to any record name (e.g., Study ID) as the	11 Group A, Male	۲
2	۲		instruments, such as inside the drop-down lists when choosing a record and at the top	12 Group B, Female	۲
3			the text you wish to display below, and place any variable names inside square brackets variables for that record will replace the variable in the text.	13 Group A, Female	۲
4	۲			14 Group B, Female	۲
5			Custom Record Label: [grp], [sex]	15 Group C, Female	۲
<u>6</u>			Example: if ([last_name], [first_name]) where entered, then for record '102' it would display '102 (Doe, Jon)'.	16 Group A, Male	۲
7				17 Group C, Male	۲
18	۲			18 Group B, Male	۲
				19 Group B, Male	

#### Record Status Dashboard (all records) Displayed below is a table listing all existing records/responses and their status for every data collection instrument (and if longitudinal, for every event). You may click any of the colored buttons in the table to open a new tab/window in your browser to view that record on that particular data collect form-level user privileges are restricted for ce

view that record on that particular data collection instrument. Please note that if your form-level user privileges are restricted for certain data collection instruments, you will only be able to view those instruments, and if you belong to a Data Access Group, you will only be able to view records that belong to your group.	Unverified     OPart     Opart
Dashboard displayed: [Default dashboard]	Create custom dashboard
Displaying record Page 1 of 1: "1" through "19" 🗸 of <b>19</b> records	ALL (19) 🗸 records per page

Legend for status icons:

Incomplete

Inco

# Custom Record Dashboard

- Include/exclude specific instruments
- Filter the records displayed based on conditional logic
- Sort the records by the value of a specific field

# **Custom Record Dashboard**

Dashboard display	red: [Default dashboard] 🗸		🖋 Create c	ustom dashboard
Displaying record	Page 1 of 1: "1" through "19" 🗸	of <b>19</b> records	ALL (19) 🗸	records per page

#### Custom Record Dashboard

You may create your own custom version of the Record Status Dashboard by setting up the configuration options below. Only users with Project Setup/Design privileges will be able to create custom dashboards. Once a custom dashboard has been created, it will be viewable to all users in the project.

Dashboard title:	Group C Females over 50
Description / instructions: (Optional) Displayed near top of page	
Header orientation:	Horizontal (default) Vuse 'Vertical' to transpose headers for a more compact disp
Select instruments: (Optional) Include/exclude specific instruments (to display less columns)	/
Filter logic: (Optional) Filter the records displayed based on conditional logic	[sex] = '2' and [grp] = '3' and [age] >= 50 (e.g., [age] > 30 and [sex] = "1")
Sort by: Sort the records by the value of a specific field in either ascending or descending order	record_id "Record ID" <ul> <li>in</li> <li>Descending order</li> </ul>
	Save dashboard <u>Cancel</u>

#### III Group C Females over 50

Dashboard display	ed:	Group C Females over 50	~	Modify
Displaying record	Pag	ge 1 of 1: "15" through "1" 🗸		of <b>3</b> records

#### + Add new record

Displaying: Instrument status only | Lock status only | All status types



lav

#### III Group C Females over 50

	Group C Females over 50 🗸	Modify
Displaying record	[Default dashboard] Group C Females over 50	of <b>3</b> records
Bispidying record Pa	Group C Females over 50	

# **REDCap Reports**

# Create Reports in REDCap



This module allows you to easily view reports of your data, inspect pitots and descriptive statistics of your data, as well as export your 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 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.

Му	Rep	orts & Exports			
		Report name	View/Export Options	Management Options	Report ID 🔞 (auto-generated)
	A	All data (all records and fields)	Q View Report Export Data		
	в	Selected instruments (all records)	Make custom selections		
		+ Create New Report			

# 4 Step Process

#### Step 1: User Access

### Step 2: Choose Fields

### Step 3: Choose Filters

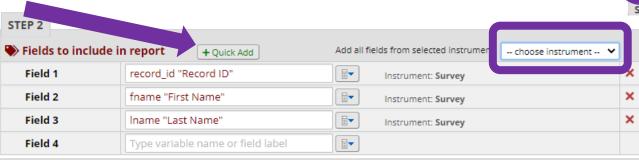
### Step 4: Order the Results

### Create Reports in REDCap

### Step 1: User Access

STEP 1	
💄+ User Acce	ess: Choose who can edit and view this report
	ess: Choose who sees this report on their left-hand project menu ? - OR - OCustom user access (Choose specific users, roles, or data access groups who will have access)
_	<ul> <li>- OR - OCustom user access (Choose specific users, roles, or data access groups who will have access)</li> </ul>

### Step 2: Choose Fields



### Additional Report Options

Field 1 Field 2	record_id "Record ID"		Instrument: Survey	
			Instrument: Survey	
Field 3	Iname "Last Name"		Instrument: Survey	
Field 4	flavor "What is your favorite flavor of ic	ce i 🗐 🔻	Instrument: Visit Data	
Field 5	Type variable name or field label		lastrumati	
Include the su	<b>port options</b> (optional) vey identifier field and survey timestamp field( kbox options into single column of only the che	· · · ·	tions (will be formatted as a text field when e	exporte
<ul> <li>Include the sur</li> <li>Combine chec</li> <li>to stats package</li> </ul>	vey identifier field and survey timestamp field kbox options into single column of only the che	ecked-off op		
<ul> <li>Include the sur</li> <li>Combine chec</li> <li>to stats package</li> </ul>	vey identifier field and survey timestamp field kbox options into single column of only the che ges)	ecked-off op		
<ul> <li>Include the sur</li> <li>Combine chec</li> <li>to stats package</li> </ul>	vey identifier field and survey timestamp field kbox options into single column of only the che ges)	ecked-off op		

### **Combine Checkbox Options**

#### Additional report options (optional)

Include the survey identifier field and survey timestamp field(s)?

- Combine checkbox options into single column of only the checked-off options (will be formatted as a text field when exported to stats packages)
- Zemove line breaks/carriage returns from all text data values (only applicable for CSV Raw and CSV Label data exports)

First Name	Last Name	What is your f	avorite flavor o	of ice cream?					
fname Iname		Chocolate flavor1	Coffee flavor2	Strawberry 🖣	Vanilla flavor4	Cookies & Cream flavor5	Peanut Butter Cup flavor6	Mint Chocolate Chip flavor7	I don't like ice cream flavor8
Marie	Curie	Checked (1)	Checked (1)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Checked (1)
Carolyn	Porco	Checked (1)	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	Checked (1)	Checked (1)	Unchecked (0)
Richard	Feynman	Checked (1)	Unchecked (0)	Checked (1)	Checked (1)	Unchecked (0)	Unchecked (0)	Checked (1)	Unchecked (0)
Louis	Debroglie	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)
George	Gamow	Unchecked (0)	Checked (1)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)	Unchecked (0)

#### Additional report options (optional)

Include the survey identifier field and survey timestamp field(s)?

- Combine checkbox options into single column of only the checked-off options (will be formatted as a text field when exported to stats packages)
- Zemove line breaks/carriage returns from all text data values (only applicable for CSV Raw and CSV Label data exports)

First Name fname	Last Name 🔶 Iname	What is your favorite flavor of ice cream?			
Marie Curie Chocolate, Coffee, I don't like ice cream (1, 2, 8)					
Carolyn Porco		Chocolate, Strawberry, Peanut Butter Cup, Mint Chocolate Chip (1, 3, 6, 7)			
Richard	Feynman	Chocolate, Strawberry, Vanilla, Mint Chocolate Chip (1, 3, 4, 7)			
Louis	Debroglie	Coffee (2)			
George	Gamow	Coffee (2)			

# **REDCap Reports**

### Create Reports in REDCap

### Step 3: Choose Filters

STEP 3				
			How to use filters	and AND/OR logic
<b>T</b> Filters (optional)			Operator / Value	
Filter 1	select a field	✓ ■	✓	
Switch format: Use	advanced logic			

Unclude the survey identifier field and survey timestamp field(s)?

Combine checkbox options into single column of only the checked-off options (will be formatted as a text field when exported to stats packages)

Remove line breaks/carriage returns from all text data values (only applicable for CSV Raw and CSV Label data exports)

Filters (optional)		o	How to use filter perator / Value	3 dilo ratorona
Filter 1	select a field		~	
₽ Switch format: Use		<u>k</u>		
Live Filters (option			r dynamically filtering data in rea	
Live Filters (option	exception of the Reco		oice fields can be used as Live Fil	
Live Filters (option	exception of the Reco	rd ID field, only multiple ch	oice fields can be used as Live Fil	
	exception of the Reco Events, if longitudinal	rd ID field, only multiple ch , and Data Access Groups, it	oice fields can be used as Live Fil	

STEP 4

A Order the Desults (antional)

### Step 4: Order the Results

STEP 4		
↓ <sup>4</sup> Order the R	esults (optional)	
First by	age "Age"	Descending order 🗸
Then by	Type variable name or field label	Ascending order 🗸
Then by	Type variable name or field label	Ascending order 🗸

#### Your report has been saved!

The report named "Group C Females Over 50" has been successfully saved.



×

#### **Group C Females Over 50**

Record ID record_id	First Name	Last Name Iname	Age age	Sex 🔶	Group 🔶 grp
15 Group C, Female	Vera	Rubin	77	Female (2)	Group C (3)
1 Group C, Female	Marie	Curie	55	Female (2)	Group C (3)
9 Group C, Female	Lisa	Randall	51	Female (2)	Group C (3)

# III. General Advice & Suggestions

- Move to Production
- Copy project prior to making changes
- Prevent abandoned projects
- Delete old projects
- Disable auto-fill settings
- Q & A

Moving your project to Production once you start collecting study data ensures you're maintaining data accuracy and integrity. The post-production change control process provides an additional check to ensure that data which has already been collected is not deleted, re-coded or overwritten unintentionally.

# Move your project into production

To prevent yourself from making any catastrophic changes, move your project into production once you have completed setting everything up and are ready for data collection to begin

### Production vs Development



#### Move your project to production status

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 be auto-approved or else might need to be approved by a REDCap administrator before taking effect.

You can still move your project to production, even if data collection has already begun as REDCap will give you the option to keep the existing data or delete it:

×

Move Project To Production Status?							
PRODUCTION status so that real data may be	ENT stage? If you proceed, the project will be moved to collected. If you select the 'Delete ALL data' option nts, and uploaded documents will be deleted, otherwise red to production.						
Have you checked the <u>Check For Identifiers</u>	page to ensure all identifier fields have been tagged?						
<ul> <li>Keep existing data or delete?</li> <li>Keep ALL data saved so far. (1 records)</li> <li>Delete ALL data, calendar events, documents uploaded for records/responses, survey responses (if applicable), and any logging events pertaining to data collection.</li> </ul>							
	t the project fields in real time anymore. However, you to-approved or else might need to be approved by a						
	YES, Move to Production Status Cancel						

### Quiz... Is the following statement True or False?

• If I move my project into production, I will no longer be able to make changes to it....

Changes can be made to your project once in Production by going to the Online Designer and entering Draft Mode.

FALSF!

Once in Draft Mode, you can make whatever changes you need. Once submitted, if the changes won't affect any existing data, they'll be approved automatically. If the changes may affect your existing data in any way, they'll be routed to the REDCap Admin team for review and approval.

**NOTE:** The project is currently in PRODUCTION status, and thus changes cannot be made in real time to the project as when in Development status. However, changes to the project may be drafted in DRAFT MODE, after which such changes will be reviewed and approved by a REDCap administrator. Once those changes are approved, you will then receive an email confirmation informing you that those changes have taken effect on your production project.

Would you like to enter DRAFT MODE to begin drafting changes to the project?

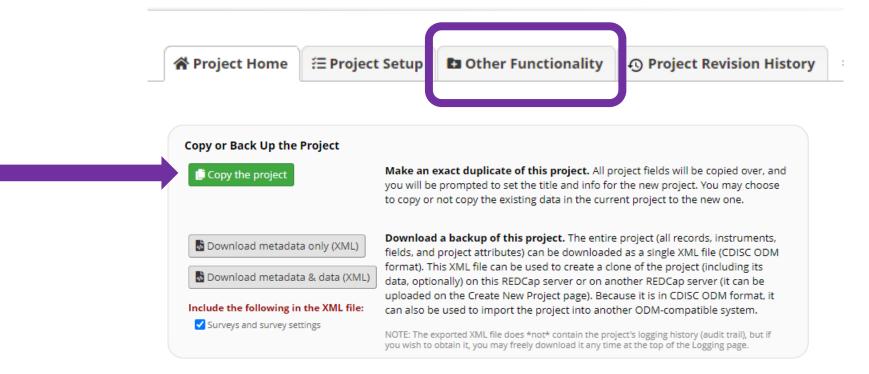
Enter Draft Mode

# Copy project prior to making changes

Suppose we want to make a change to our project but we're not sure if there will be any unforeseen consequences. We can make a copy of our project to experiment in while leaving our original project untouched.

### Dilemma

• Will the changes I want to make alter the data I've already collected?



#### 🗅 Make a Copy of the Project

To make an exact duplicate of the current project ("**Events vs Instruments Wide**"), set the details below for the new project you are creating, and click the button at the bottom. This will copy over all project forms and their fields, and optionally, you may also copy the current users and any reports that have been created.

Project title:	Copy of Events vs Instruments Wide
	Title to be displayed on project webpage
Purpose of this project: How will it be used?	Practice / Just for fun 🗸
Project notes (optional): Comments describing the project's use or purpose that are displayed on the My Projects page.	

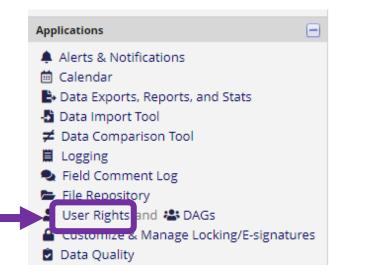
Also copy the following: (optional)	<ul> <li>All records/responses (19 records total)</li> <li>All users and user rights</li> <li>All users roles</li> <li>All reports</li> <li>All report folders</li> <li>All data quality rules</li> <li>All Project Folders</li> <li>All settings for Survey Queue and Automated Survey Invitations Note: Automated Invitations will all be set to 'Not Active' status in the new project.</li> <li>All project bookmarks</li> <li>All custom record status dashboards</li> <li>All settings for External Modules (modules will be disabled by default)</li> <li>All alorts 9 aptifications</li> </ul>
	<ul> <li>All settings for External Modules (modules will be disabled by default)</li> <li>All alerts &amp; notifications</li> <li>Note: Alerts &amp; Notifications will all be set to 'Deactivated' status in the new project.</li> </ul>
	Select All   Deselect All
	Copy project Cancel

# Prevent Abandoned Projects

Frequently people request access to a project but the PI has moved on to another institution and no other users were added, or they're gone as well.

### **Best Practice:**

• Always *at least* 2 people with setup & design rights



Add new users: Give them custom user rig	ghts or assign them to a role.						
🔈 Add new user	Add with custom rights						
— OR —							
Assign new user	Assign to role 🗢						
Create new roles: Add new user roles to which users may be assigned.							
Enter new role name	Create role						
(e.g., Project Manager, Data Entry Person)							

Role name (click role name to edit role)	<b>Username</b> or users assigned to a role (click username to edit or assign to role)	Expiration (click expiration to edit)	Project Design and Setup	User Rights	Data Access Groups
_	jrichardson7 (Jeffrey Richardson)	never	<b>v</b>	<b>~</b>	<b>~</b>

Highest level privileges:	
⅔ Project Design and Setup	
💄 User Rights	
🚢 Data Access Groups	

#### Add Users to your project

	Adding new user "jseanrich"								
В	Basic Rights			Data Entry Rights					
Expiration Date (M/D/Y) (if applicable)			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.						
-	st level privileges:	_			No Access	Read Only	View & Edit	Edit survey responses	
?≣ Pro	oject Design and Setup		D	emographics (survey)	0	0			
	er Rights ata Access Groups			AD7 Baseline Survey (survey)	0	0	۲		
	ges for data exports (includi is, and stats:	ng PDFs and API exports),		AD7 1 Month Survey	0	0	۲		
* D	ata Exports e-identified means that all ee-form text fields will be	<ul> <li>No Access</li> <li>De-Identified*</li> <li>Remove all tagged</li> </ul>		AD7 3 Month Survey	0	0	۲		
da fie Ad Als re da	moved, as well as any ate/time fields and Identifier elds. dd/Edit/Organize Reports so allows user to view ALL ports (but not necessarily all ata in the reports) tats & Charts privileges:	Identifier fields	External Modules: Configuration Permission Privileges may be defined regarding whether the us or modify the configuration of an External Module t been enabled on this project. Below are the current modules. NOTE: Only administrators may modify th configuration permissions here.					iser can set that has htly enabled he module	
🛃 Su	rvey Distribution Tools								
🛱 Ca	lendar			New User Notificatio	on				
👌 Da	ata Import Tool			🖂 Notify user of th	eir proje	t acce	ss via e	mail? 🗹	
<b>≠</b> Da	ata Comparison Tool								
🗒 Lo	ogging								
► Fil	le Repository								
	ta Quality	Create & edit rules							
	nat is Data Quality?	Execute rules							
😐 AF	PI	API Export							

Add user Cancel

# Delete Old Unused Projects

In order to increase space on the server and to reduce the frequency of unanticipated downtime relating to shortage of disk space, please review and DELETE any old or unused projects. Deleting unused projects should be performed routinely.

### Delete Old Unused Projects

A Project Home 🗄 Project	Setup Sta Other Functionality S Project Revision History
Project Status Management	
Development (current)	t Production $\rightarrow$ O Analysis/Cleanup
Mark project as Completed	If you are finished with a project and wish to make it completely inaccessible, you may mark the project as 'Completed'. Doing so will take it offline and remove it from everyone's project list, after which it can only be seen again by clicking the <i>Show Completed Projects</i> link at the bottom of the <i>My Projects</i> page. <u>Read more</u>
Data Management	
× Delete the project	You may completely remove this project, in which all its data will be permanently deleted also.
< Erase all data	You may erase all currently collected data in the project, which includes all calendar events, documents uploaded for records/responses, survey responses (if applicable), and any logging events pertaining to data collection.
Clear the Record List Cache	(Administrators only) If there appear to be records missing from the project (in reports, record status dashboards, or elsewhere), then the Record List Cache (a secondary list of all record names) might be out of sync and thus might need to be cleared. Clearing the cache will cause the Record List Cache to regenerate and bring back records that appear to be orphaned/missing in the project. (NOTE: This is normally not needed.)

Multiple compliance issues have been reported recently relating to the inadvertent disclosure of PHI caused by enabled autofill, auto sign-in, and password save web browser settings. Specifically, when research participants were entering data into REDCap survey fields, identifying information belonging to other research participants were populating. This issue is not a REDCap issue, rather an issue caused by having enabled settings on your web browser.

# Turn off Auto-fill, Saved Passwords, and Auto Sign-In Settings

Survey		
Adding new Record ID 20		
Record ID	20	
First Name		
Last Name	J	
Age	Heather	
Sex	Carolyn	
○ Male ○ Female	Richard	
Group	Louis	

# Action required per Lifespan Office of Research and Lifespan Compliance!

- Ensure autofill, saved passwords, and auto sign-in settings are all disabled.
- Consider using an alternate web-browser for participant surveys, again please first ensure the features described above are disabled.
- It is strongly encouraged to have specific research devices when administering participant surveys.



# Thank you!

Lifespan Biostatistics, Epidemiology, and Research Design Core

redcapsupport@lifespan.org www.lifespanberd.com