



IHR REDCAP ADVANCED TRAINING

TOPICS COVERED

- ❖ Piping
- ❖ Branching Logic
- ❖ Survey Dissemination
- ❖ Calculated Fields
- ❖ Randomization Build
- ❖ Advanced Reports
- ❖ REDCap Extensions, Plug-ins, Hooks (Auto-notify)
- ❖ Newly-Added Advanced Features



Piping

PIPING

- Piping is a feature in REDCap that allows you to place previously collected data into fields in other forms or surveys
- Piping does not need to be enabled as a “project setting”
- Information can be piped in a few different ways:
 1. Across events by inserting the original event name in front of the piped variable
 - Ex. [Baseline_data][first_name]
 2. Create customizability in survey invitations and survey completion text
 - Ex. “Thank you, [first_name] for completing the survey.”
 3. Values may be piped, but not the field labels
 - Descriptive text may be piped as a whole, but not selections of the text

WHERE CAN PIPING BE USED?

- ❑ Field Label
- ❑ Field Note
- ❑ Section Headers including matrices
- ❑ Alerts & Notifications
- ❑ Option labels for multiple choice fields
- ❑ Slider field labels
- ❑ Custom record locking text
- ❑ Survey Instructions
- ❑ Survey Completion Text
- ❑ Survey invitation emails
- ❑ Custom text displayed at top of Survey Queue
- ❑ Inside the URL for a survey's 'Redirect to a URL' setting
- ❑ You can pipe *from* all fields EXCEPT checkboxes
 - ❑ Multiple answers cannot be piped at one time

PIPING (CONT.)

1. To pipe data within the **same event**, **between forms**, or **within the same form**, put the variable name in brackets in the desired field
 - Ex. [first_name]
2. To pipe data **between events**, ensure the event name you are piping *from* precedes the variable name in the desired field
 - Ex. [enrollment_arm_1][first_name]

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 [Field Types video \(4 min\)](#).

Field Type: Descriptive Text (with optional Image/Video/...)

Field Label: Hello [enrollment_arm_1][first_name] Use the Rich Text Editor [?](#)

Variable Name (utilized in logic, calcs, and exports): first_name_morale_quest Enable auto naming of variable based upon its Field Label? ONLY letters, numbers, and underscores

How to use: Smart Variables Piping

Optional file attachment, image, audio, or video:

Embed an external video (provide video URL) [?](#)

e.g. <https://youtube.com/watch?v=E1cCuWMUpz0>,
<https://vimeo.com/62730281>,
<http://example.com/movie.mp4>

Display format of video: Inline Inside popup

- or -

Attach an image, file, or embedded audio

Upload document

Display format of attachment on page:

Link
 Inline image
 Audio file (play in embedded player on page)
[Compatibility notice for embedded audio](#)

(Images wider than 600 pixels will be downsized to fit page.)

Save Cancel

Add Field Add Matrix of Fields

Variable: pma4

How open are you to further testing?

Add Field Add Matrix of Fields

Variable: thank_you_morale_quest

Thank you for your answers [enrollment_arm_1][first_name]

Add Field Add Matrix of Fields

Branching Logic

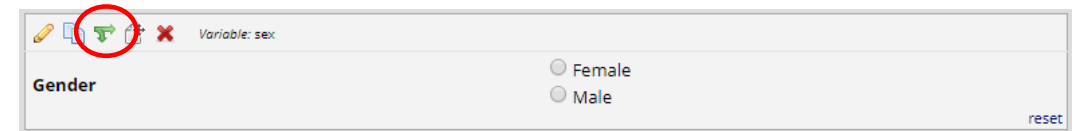
BRANCHING LOGIC

- May be used within different events/forms for longitudinal projects or single forms/surveys for classic projects
- Allows questions or fields to be hidden until certain choices are selected
- Branching must be applied to each field, it cannot be applied at the form/section level
 - E.g. You cannot branch an entire form or section, each field must have designated branching logic in place
- Branching logic can be set up using **online designer** or **data dictionary**
- Section headers will be hidden only if all fields in that section are hidden
- It is possible to branch or hide sections of a form or survey but not entire forms or surveys
 - E.g., You can hide an entire form or survey utilizing the survey queue

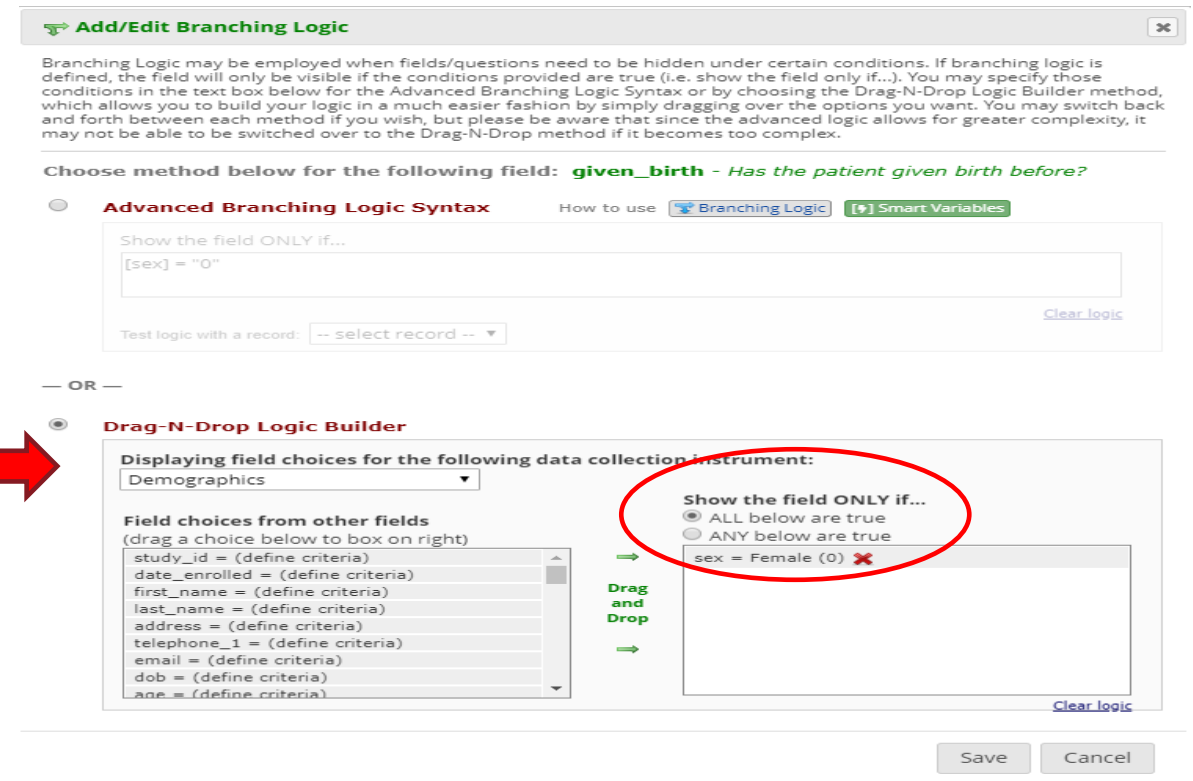
BRANCHING LOGIC (CONT.)- SIMPLE LOGIC

Set up Simple Branching Logic in Online Designer:

1. To begin, click on the green arrow at the top of the field
2. Using the Drag-N-Drop Logic Builder, simply drag the appropriate values to the “Show Field Only If” box
3. You may branch using conditional logic of “All Below Are True” or “Any Below Are True”
4. You may select branching options from any instrument in your project using the “Displaying Field Choices...” dropdown menu



Gender Female Male reset



Add/Edit Branching Logic

Branching Logic may be employed when fields/questions need to be hidden under certain conditions. If branching logic is defined, the field will only be visible if the conditions provided are true (i.e. show the field only if...). You may specify those conditions in the text box below for the Advanced Branching Logic Syntax or by choosing the Drag-N-Drop Logic Builder method, which allows you to build your logic in a much easier fashion by simply dragging over the options you want. You may switch back and forth between each method if you wish, but please be aware that since the advanced logic allows for greater complexity, it may not be able to be switched over to the Drag-N-Drop method if it becomes too complex.

Choose method below for the following field: **given_birth** - Has the patient given birth before?

Advanced Branching Logic Syntax How to use [Branching Logic](#) [Smart Variables](#)

Show the field ONLY if...
[sex] = "0"
Clear logic

Test logic with a record: -- select record --

— OR —

Drag-N-Drop Logic Builder

Displaying field choices for the following data collection instrument:
Demographics

Field choices from other fields
(drag a choice below to box on right)

- study_id = (define criteria)
- date_enrolled = (define criteria)
- first_name = (define criteria)
- last_name = (define criteria)
- address = (define criteria)
- telephone_1 = (define criteria)
- email = (define criteria)
- dob = (define criteria)
- age = (define criteria)

Drag and Drop

Show the field ONLY if...
 ALL below are true
 ANY below are true
sex = Female (0) ✘

Clear logic

Save Cancel

BRANCHING LOGIC (CONT.)- ADVANCED LOGIC

Set up Advanced Branching Logic in Online Designer:

1. Should be used when your conditions fall outside of only “All” or “Any”
2. Variable options may be selected using the “Drag-N-Drop” builder, but then must be converted to advanced logic
 1. Once converted to advanced logic and additional conditions added, cannot be converted back to simple without rebuilding in DND builder
3. Click “Advanced Branching Logic Syntax” to move your simple logic to the advanced logic box

Add/Edit Branching Logic

Branching Logic may be employed when fields/questions need to be hidden under certain conditions. If branching logic is defined, the field will only be visible if the conditions provided are true (i.e. show the field only if...). You may specify those conditions in the text box below for the Advanced Branching Logic Syntax or by choosing the Drag-N-Drop Logic Builder method, which allows you to build your logic in a much easier fashion by simply dragging over the options you want. You may switch back and forth between each method if you wish, but please be aware that since the advanced logic allows for greater complexity, it may not be able to be switched over to the Drag-N-Drop method if it becomes too complex.

Choose method below for the following field: **monthly_css_1 - Thank you for being willing to tak...**

Advanced Branching Logic Syntax How to use [Branching Logic](#) [Smart Variables](#)

Show the field ONLY if...

```
[monthly_css_q1] = '1' or [monthly_css_q2] = '0' or [monthly_css_q3] = '0' and [phq9_q1_monthly] = '1' and [phq9_q2_monthly] = '1'
```

✓ Valid [Clear logic](#)

Test logic with a record: -- select record --

BRANCHING LOGIC (CONT.)- ADVANCED LOGIC

Set up Advanced Branching Logic in Online Designer cont'd:

1. Conditional logic variables (AND/OR) and groupings must be manually entered:
 - You can use BOTH “AND/OR” conditions within the same logic
 - Example below: If medication types 1 OR 2 OR 3 OR 4 are being used AND the frequency is 3 OR 4
 - Make sure to use parenthesis to group options together ([x] OR [x] OR [x]) AND ([x] OR [x])
2. If the logic is valid, a green checkmark will appear in the lower left corner

Add/Edit Branching Logic

Branching Logic may be employed when fields/questions need to be hidden under certain conditions. If branching logic is defined, the field will only be visible if the conditions provided are true (i.e. show the field only if...). You may specify those conditions in the text box below for the Advanced Branching Logic Syntax or by choosing the Drag-N-Drop Logic Builder method, which allows you to build your logic in a much easier fashion by simply dragging over the options you want. You may switch back and forth between each method if you wish, but please be aware that since the advanced logic allows for greater complexity, it may not be able to be switched over to the Drag-N-Drop method if it becomes too complex.

Choose method below for the following field: **monthly_css_1** - Thank you for being willing to tak...

Advanced Branching Logic Syntax [How to use](#) [Branching Logic](#) [Smart Variables](#)

Show the field ONLY if...

```
[monthly_css_q1] = '1' or [monthly_css_q2] = '0' or [monthly_css_q3] = '0' and [phq9_q1_monthly] = '1' and [phq9_q2_monthly] = '1'
```

Valid [Clear logic](#)

Test logic with a record: -- select record --

BRANCHING LOGIC (CONT.)- BEST PRACTICES

- To ensure variable names are entered correctly, begin with the “Drag-N-Drop Logic Builder”, then, if needed, change to advanced logic
- Make sure you see the green check mark to ensure your branching logic is valid
- Test your logic by selecting a record as shown in the example to the right

Add/Edit Branching Logic

Branching Logic may be employed when fields/questions need to be hidden under certain conditions. If branching logic is defined, the field will only be visible if the conditions provided are true (i.e. show the field only if...). You may specify those conditions in the text box below for the Advanced Branching Logic Syntax or by choosing the Drag-N-Drop Logic Builder method, which allows you to build your logic in a much easier fashion by simply dragging over the options you want. You may switch back and forth between each method if you wish, but please be aware that since the advanced logic allows for greater complexity, it may not be able to be switched over to the Drag-N-Drop method if it becomes too complex.

Choose method below for the following field: **follow_up_with_provider** - Based on your respon...

Advanced Branching Logic Syntax [\(How do I use the advanced syntax?\)](#)

Show the field ONLY if...

`(([medication_types] = '1' OR [medication_types] = '2' OR [medication_types] = '3' OR [medication_types] = '4') AND ([medication_frequency] = '3' OR [medication_frequency] = '4'))`

Valid [Clear logic](#)

Test logic with a record: 1 - Enrollment **True (show field)**

Survey Settings

NEW SURVEY CUSTOMIZATIONS

- Rich Text Editor
 - Forego HTML coding
 - Hyperlink
 - Formatting
 - Also available within forms/surveys in adding fields
- Survey-Specific Emails
 - Individual addresses for individual surveys
 - Previously only allowed for 1 – project settings

Basic Survey Options:

Survey Title

Title to be displayed to participants at the top of the survey page

Survey Instructions
(Displayed at top of survey after title)

Paragraph **B** *I*

Please complete the survey below.

This survey includes:

1. Questions about your health
2. Questions about your job
3. Example
4. Example

Visit the REDCap website for more information: [CLICK HERE](#)

[How to use Piping here](#)

Survey-specific email invitation field
Designate an email field for sending survey invitations for this survey only

parent_email "Email Address:"

Note: This option will override the project-level email invitation field (if enabled on the Project Setup page) and will also override any email address originally entered into the Participant List. Also, if this field has no value and the project-level email field is enabled, then the project-level email field's value will be used instead.

E-CONSENT FRAMEWORK

- In conjunction with Auto-Archiver only
- Patient confirmation of information accuracy
- Provides general framework only
 - Consent must be built in
 - Necessary fields must be built in
 - Signature process must be built in (wet or typed)
- Allows for consent versioning log

e-Consent Framework
– and –

PDF Auto-Archiver
Upon survey completion, a compact PDF copy of the survey response will be automatically stored in the project's File Repository, from which the archived PDFs can be downloaded at any time.

Disabled
 Auto-Archiver enabled
 Auto-Archiver + e-Consent Framework [What is the e-Consent Framework?](#)
(includes end-of-survey certification & archival of PDF consent form)

e-Consent Framework Options:
For e-Consent it is sometimes required to include the consenting participant's name (and date of birth in some cases) on the final consent form as extra documentation of their identity. Below you may select fields used to capture that info. You may also enter the current e-Consent version and e-Consent type for this form. The values for the fields below will be automatically inserted into the footer of the PDF consent form that the participant will review at the end of the survey, after which that PDF 'hard-copy' will be archived in the File Repository. [Read more](#)

Allow e-Consent responses to be edited by users?

e-Consent version: e.g., 4

First name field: in

Last name field: in

Note: If you are using a single field to capture whole name, you may select it for either first/last name above while leaving the other name field unselected.

Optional fields (these are not always necessary for e-Consent):

e-Consent type: e.g., Pediatric


Date of birth field: in

Force signature field(s) to be erased if participant clicks Previous Page button while on the certification page?
Select a field below that serves as a signature field in this survey. It could be a [free-form text field](#), a [signature field](#), or a [number field](#) (e.g., to collect a PIN), and it must be a [Required field](#). If any fields are selected below, then if the participant gets to the last page of the survey where it asks them to certify their responses, if they then choose to click the Previous Page button, it will erase the value of these signature fields, thus forcing them to 'sign' the field(s) again before completing the survey. If you do not want this behavior, do not select any fields below. You may use up to five signature fields.

Signature field #1:

E-CONSENT FRAMEWORK CONT.

- Participant Review
- Participant Certification
- Cannot submit w/o certification
- Allows for correction of data
- Locks/secures consents

Participant Consent Form Resize font: 

Displayed below is a read-only copy of your survey responses. Please review it and the options at the bottom.

Will you provide your consent to participate in this study? Yes


Date of Permission: 11-07-2019

First Name:
TESTY

Last Name:
TESTER

Email Address:
TESTING@KP.ORG

Phone Number:
555-555-5555

11-07-2019 12:38 Version: 1, Type: Behavioral Health projectredcap.org 

I certify that all the information in the document above is correct. I understand that clicking 'Submit' will electronically sign the form and that signing this form electronically is the equivalent of signing a physical document.

If any information above is not correct, you may click the 'Previous Page' button to go back and correct it.

<< Previous Page Submit

AUTO-ARCHIVER – PDF SURVEY ARCHIVE

- File Repository
- PDF Survey Archive
- Download includes data/signature
- Can be used outside of consenting
 - Survey storage

The screenshot shows the 'Applications' menu on the left with 'File Repository' circled in red. The main content area shows the 'PDF Auto-Archiver' settings. The 'Auto-Archiver enabled' radio button is circled in red. Below the settings are tabs for 'User Files', 'Data Export Files', 'PDF Survey Archive', and 'Upload New File'.

Displayed below are PDF files that have been automatically captured and stored by the PDF Auto-Archiver setting, which has been enabled by one or more surveys on their Survey Settings page. Only users with 'Full data set' data export privileges will be able to download the archived files. Note: The PDFs below are archived when a participant completes a survey, which means they might be different from other downloadable PDFs in the project that are generated on demand using the current data.

Show 10 entries

Search

Survey Completion Time	Record	Survey	Event	Identifier (Name, DOB)	IP Address	Version	Type	Download
11-07-2019 13:26	3	Patient Morale Questionnaire	Enrollment		162.119.3.111			
11-07-2019 12:41	13	Participant Consent Form	Enrollment	,	162.119.3.111	1	Behavioral Health	



Updated Applications

FILE REPOSITORY – DATA EXPORT FILES

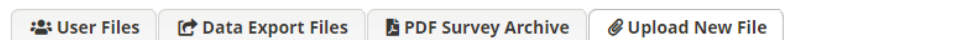
- Data Export Files

- Keeps a log and CSV of all data exports for the project
- Time/Date/User
- Filtration Options

The screenshot displays the REDCap File Repository interface. On the left, a sidebar menu titled 'Applications' lists various tools, with 'File Repository' circled in red. The main content area shows a navigation bar with tabs for 'User Files', 'Data Export Files', 'PDF Survey Archive', and 'Upload New File'. Below this, a filter dropdown is set to 'All Exports/Types' and is also circled in red. The interface displays a list of export records. The first record shows 'Time exported: 11-07-2019 13:31' and 'Exported by: c244286'. Below this, there are download icons for 'SAS', 'DATA CSV', and 'Pathway Mapper'. The second record shows 'Time exported: 11-07-2019 13:28' and 'Exported by: c244286'. Below this, there is a download icon for 'EXCEL CSV Raw', which is circled in red.

FILE REPOSITORY – UPLOADING USER FILES

- Manual File Upload
- Storage in “User Files”
 - Excellent for paper-based survey/consent/form storage
- Custom File Naming
- Downloadable
- Filtration Options



NOTE: Since Data Access Groups have been created in this project, please be aware that any files manually uploaded here (i.e. files listed under User Files) will be available to ALL project users, regardless of whether they or you have been assigned to a Data Access Group or not.

To upload a new file to the repository, in the fields below specify the file on your computer and provide a name/label for the file. Then click the "Upload File" button.

The screenshot shows the 'Adding new file' form. It has a header bar with a plus icon and the text 'Adding new file'. Below this is a 'Document' section with a 'Choose File' button and the text 'November201...sletter.pdf'. A text input field below that contains 'November IHR REDCap Newsletter'. At the bottom of the form, there is an 'Upload File' button and a '-- Cancel --' button. Red circles highlight the 'Choose File' button, the 'Upload File' button, and the text input field.

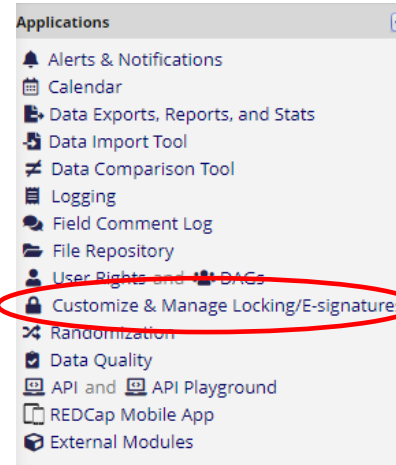


NOTE: Since Data Access Groups have been created in this project, please be aware that any files manually uploaded here (i.e. files listed under User Files) will be available to ALL project users, regardless of whether they or you have been assigned to a Data Access Group or not.

	Filter by file type: ALL ▼	Action
 November IHR REDCap Newsletter File name: November2019_REDCap_Newsletter.pdf Date uploaded: 11-07-2019 File size: 118.2 KB		 

CUSTOMIZE & MANAGE LOCKING/E-SIGNATURES



- User-right specific
- Secure forms
 - Consents
 - PHI
- E-Signature to confirm form
 - Verify Data Completion
 - Verify Data Content
 - Denotes that data has been locked & authorized





Customize and Manage the Record Locking and E-signature Functionality

Record Locking Customization E-signature and Locking Management

This module may be used for customizing the Record Locking option and E-signature option on data collection instruments. The settings below are completely optional. Only users with Lock/Unlock user privileges can access this page, and they are the only ones who can lock and unlock records for a specific form. If they have the additional privilege, they may lock all forms at once for any given record. By default, any user with Lock/Unlock privileges will be able to see the Lock option at the bottom of the data collection instrument, although other users will not see this option. Once a form is locked for a record, the form will display (for all users) the time it was locked and the user who locked it, and all fields on the form will be disabled/read-only until someone with Lock/Unlock privileges unlocks the form.

Below, you may set the Record Locking option **to be displayed** or **not be displayed** on any given form, if you wish, by checking/unchecking the checkboxes on the far left. By default, the Record Locking option will be displayed on all forms for those with appropriate rights. You may also provide custom text, if desired, to be displayed for the Lock option by entering it in the text box and clicking 'Save'. If you have set the option to display the Lock option but have not set any custom text, the following text will be displayed by default: *Lock this record for this form? If locked, no user will be able to edit this record on this form until someone with Lock/Unlock privileges unlocks it.* If custom text has been set, it can be edited  or removed  at any time by clicking the icons on the right. If nothing is changed on this page from its original settings, then the Lock option will be displayed on all forms for any user with Lock/Unlock privileges, and will display the default text listed above.

Display the Lock option for this instrument?	Data Collection Instrument	Also display E-signature option on instrument?	Lock Record Custom Text	Edit / Remove Custom Text
<input checked="" type="checkbox"/>	Participant Consent Form	<input checked="" type="checkbox"/>	Any changes made to this form must be accompanied by an acknowledgement signature by study staff.	 
<input type="checkbox"/>	Patient Morale Questionnaire	<input type="checkbox"/>	<input type="text"/>	<input type="button" value="Save"/>

CUSTOMIZE & MANAGE LOCKING/E-SIGNATURES CONT.

- Can only be unlocked by those with rights
- Username/password required as “signature”
- Will show in record by instrument
- Tracked in logging & E-Signature and Locking Management Tab

Form Status

Complete? Complete ▾

Lock Unlock form

All incoming data forms must be reviewed, locked, and an authorization signature must be supplied by the PI/PM.

Locked by c244286 (Megan Baldwin) on 11-07-2019 13:51

E-signature [\(What is this?\)](#)

Save & Exit Form Save & ... ▾

-- Cancel --

E-signature: Username/password verification ✕

Before forms can be locked using an e-signature, you must enter your REDCap username and password so that they may be validated. After three consecutive unsuccessful attempts, you will automatically be logged out of REDCap, thus ending this session.

Username:

Password:

Save



Record Locking Customization E-signature and Locking Management

The table below displays all existing records in the project with their status as locked or e-signed for all data collection instruments. Forms that do not allow locking (if designated on the Record Locking Customization page) will not be displayed below. If a form has been designated not to display the e-signature option but still allows locking, then it will display 'N/A' for that form's e-signature status. You may use the 'Actions' links to filter the table in various ways to show or hide rows based on criteria related to its locking or e-signature status. You may click the 'View Record' link to view that record on the data collection instrument, which will open in a new window. If you would like to export the table as a file in CSV format, simply click the link below.

Export all (CSV)

Actions: [SHOW ALL ROWS](#) | [Show timestamp / user](#) | [Hide timestamp / user](#) | [Show locked](#) | [Show not locked](#) | [Show e-signed](#) | [Show not e-signed \(excludes N/A\)](#) | [Show both locked and e-signed](#) | [Show neither locked nor e-signed \(excludes N/A\)](#) | [Show locked but not e-signed \(excludes N/A\)](#)

All Records					
Record	Event Name	Form Name	Locked?	E-signed?	
1	Enrollment	Participant Consent Form	11-07-2019 14:00 c244286 (Megan Baldwin)	11-07-2019 14:00 c244286 (Megan Baldwin)	View record

Data Collection Instrument	Enrollment
Participant Consent Form (survey)	 

Complete ▾

Lock Unlock form

Locked by c244286 (Megan Baldwin) on 11-07-2019 14:00

E-signature [\(What is this?\)](#)

E-signed by c244286 (Megan Baldwin) on 11-07-2019 14:00

Survey Dissemination

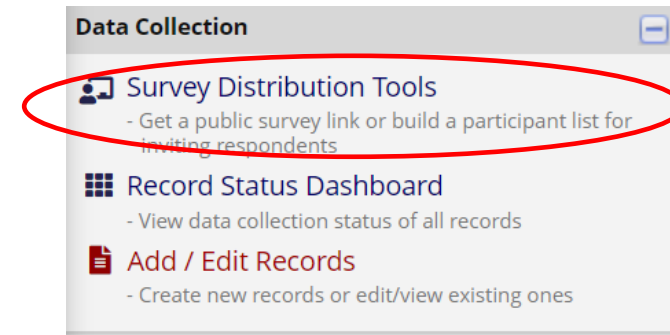
PUBLIC SURVEY LINKS

1. To collect data anonymously:

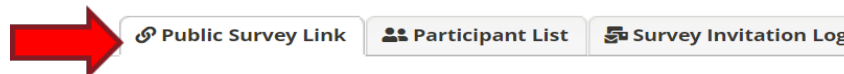
- Click on 'Survey Distribution Tools' on the left hand menu under 'Data Collection'
- Use the 'Public Survey Link' to collect anonymous survey data.
 - Must be first instrument in first event to utilize public link

2. From this page you can:

- Open the public survey link
- Send yourself an email with the public link
- Access the survey access code or QR code
- Get an embed code

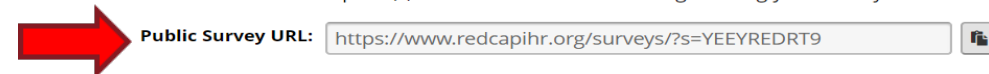


Survey Distribution Tools

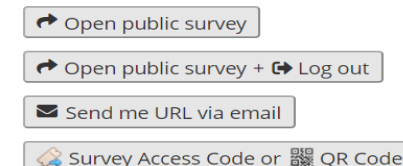


Using a public survey link is the simplest and fastest way to collect responses for your survey. You may obtain the survey link below to email it to your participants. Responses will be collected anonymously (unless the survey contains questions asking for identifying data from the participant). **NOTE:**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

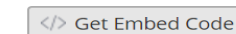
To obtain the survey link, copy the URL below and paste it into the body of an email message in your own email client. Your email recipient(s) can then click the link to begin taking your survey.



Link Actions



Link Customizations



PUBLIC SURVEY LINKS (CONT.)


1. You can also obtain an embed HTML code for your survey public link
 - The HTML in the text box can be placed within the HTML code of any webpage.
 - It will show up as a link on that webpage so that anyone can click the link to take the survey.

Survey Distribution Tools

[Public Survey Link](#) [Participant List](#) [Survey Invitation Log](#)

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

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

Public Survey URL: 

Copy the HTML in the text box below to place it within the HTML code of any webpage. It will show up as a link on that webpage so that anyone can easily click the link to begin taking your survey.

Embed HTML code < > 

Link Actions

- [Open public survey](#)
- [Open public survey + Log out](#)
- [Send me URL via email](#)
- [Survey Access Code or QR Code](#)

Link Customizations

[</> Get Embed Code](#)

SURVEY ACCESS CODES

1. You may choose to use a Survey Access Code or QR Code

- The Survey Access Code provides a simpler URL and an access code that can be used to access the survey
- QR code can be scanned easily by mobile devices
- A short code can also be generated
 - ❖ Can provide these prior to survey being sent or as needed

Survey Access Code or QR Code

Survey title: "Patient Morale Questionnaire"

A Survey Access Code and a QR Code both allow respondents to begin a survey on another computer or device without someone having to email them an invitation. This is especially useful if the respondent is currently nearby or if you will be sending the survey invitation to a physical mailing address (i.e. 'snail mail'). You may click the Print button at the bottom if you wish to print out the instructions for the respondent.

Enter the Survey Access Code

To allow a respondent to begin this survey, have them navigate to the URL below and enter the survey access code. The code is permanent and will never change. (Note: The web address is the same for all projects and surveys, so you may bookmark the address on a computer or device to quickly return to it multiple times.)

1.) Go to this web address:

2.) Then enter this code:


— OR —

Generate Short Code

Alternatively, you may generate a shorter, temporary code that will expire after only one use or after one hour has passed.

Scan the QR Code

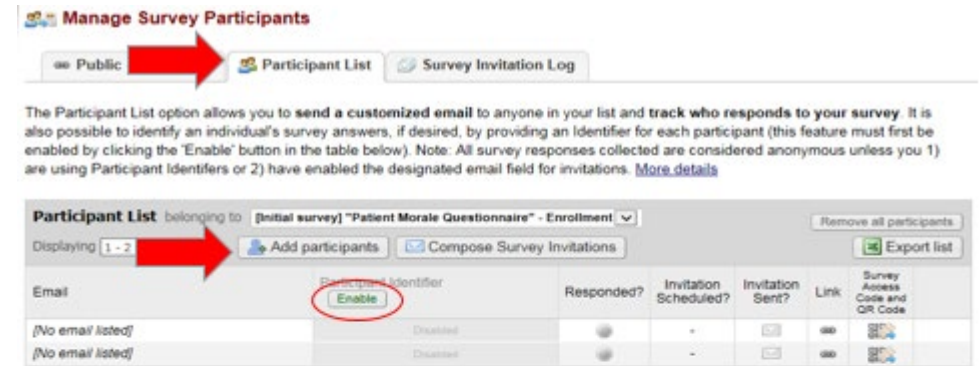
The survey link has been converted into a QR code, which can now be scanned by a device that has an app capable of reading QR codes. Once the QR code below is scanned, it should take the respondent directly to the survey in a web browser.



SURVEY PARTICIPANT LIST

‘Participant List’ allows you to send customized emails and track who responds to surveys by sending unique links to each participant:

1. Click “Add participants” to add your participants
2. You can add identifiers for each participant by enabling the ‘Participant Identifier’ column
3. After you click on “Add participants”, enter your participant emails and identifiers in the pop-up box
4. Then click “Add participants” at the bottom of the pop-up box
 - ❖ This is a manual process – cannot use with automated email list



Manage Survey Participants

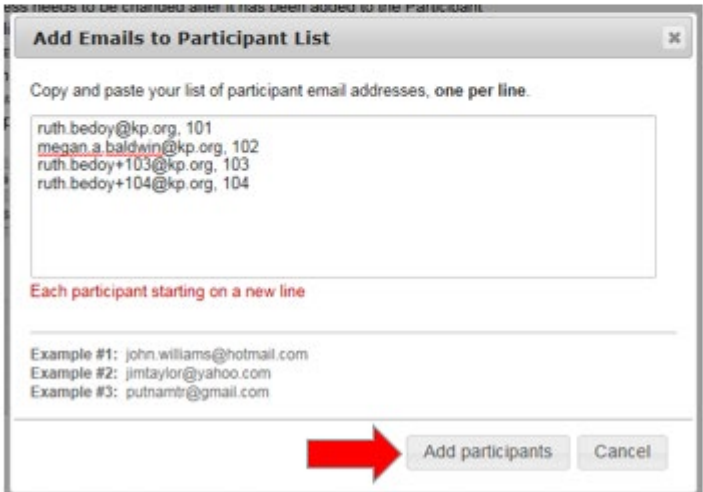
Public **Participant List** Survey Invitation Log

The Participant List option allows you to **send a customized email** to anyone in your list and **track who responds to your survey**. It is also possible to identify an individual's survey answers, if desired, by providing an Identifier for each participant (this feature must first be enabled by clicking the "Enable" button in the table below). Note: All survey responses collected are considered anonymous unless you 1) are using Participant Identifiers or 2) have enabled the designated email field for invitations. [More details](#)

Participant List belonging to [Initial survey] "Patient Morale Questionnaire" - Enrollment Remove all participants

Displaying 1 - 2 **Add participants** **Compose Survey Invitations** **Export list**

Email	Participant Identifier	Responded?	Invitation Scheduled?	Invitation Sent?	Link	Survey Access Code and QR Code
[No email listed]	Enable Disabled		-			
[No email listed]	Disabled		-			



Add Emails to Participant List

Copy and paste your list of participant email addresses, one per line.

ruth.bedoy@kp.org, 101
megan.a.baldwin@kp.org, 102
ruth.bedoy+103@kp.org, 103
ruth.bedoy+104@kp.org, 104

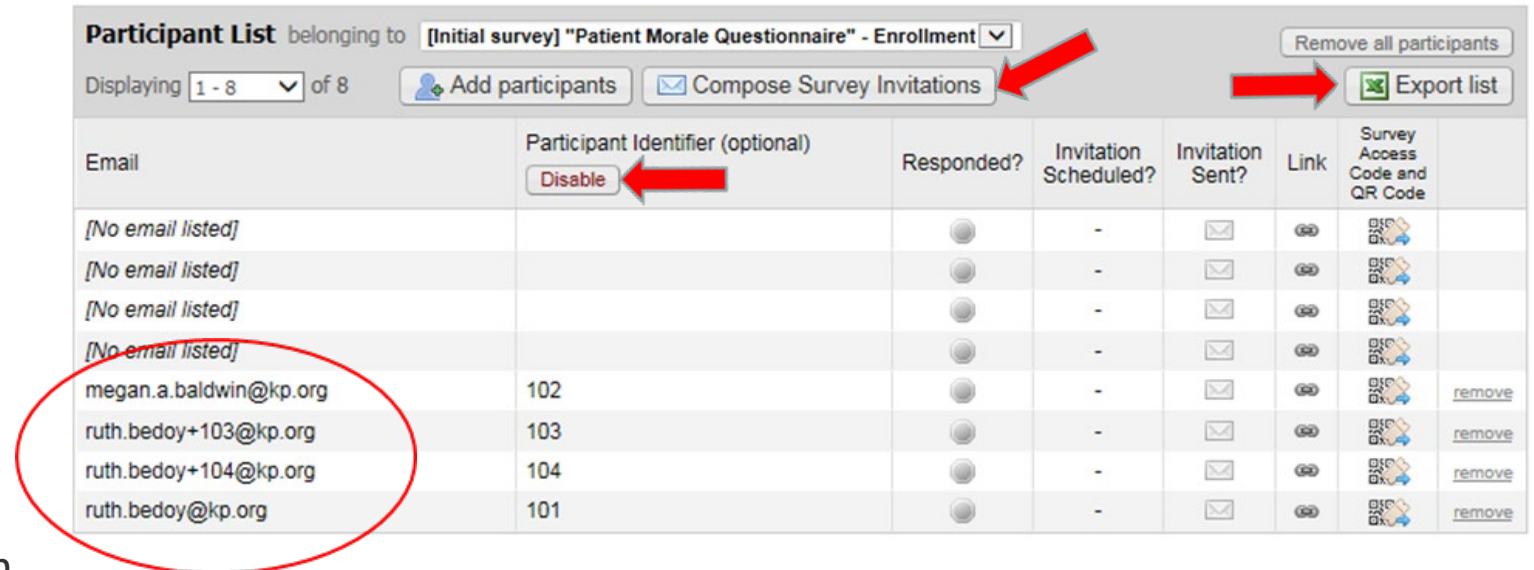
Each participant starting on a new line

Example #1: john.williams@hotmail.com
Example #2: jim.taylor@yahoo.com
Example #3: putnamr@gmail.com

Add participants **Cancel**

SURVEY PARTICIPANT LIST (CONT.)

1. Your participants will then appear in your “Participant List”
 - The identifiers will be listed in the “Participant Identifier” column
2. You can compose survey invitations from this page by clicking on “Compose Survey Invitations”
3. Unique survey links can also be exported by clicking on the “Export list” button if your study or project require study surveys to be sent from a different platform
 - E.g., IVR, Verification website, Outlook



Participant List belonging to [Initial survey] "Patient Morale Questionnaire" - Enrollment

Displaying 1 - 8 of 8


Add participants Compose Survey Invitations

Remove all participants Export list

Email	Participant Identifier (optional)	Responded?	Invitation Scheduled?	Invitation Sent?	Link	Survey Access Code and QR Code
[No email listed]		<input type="radio"/>	-	<input type="checkbox"/>		
[No email listed]		<input type="radio"/>	-	<input type="checkbox"/>		
[No email listed]		<input type="radio"/>	-	<input type="checkbox"/>		
[No email listed]		<input type="radio"/>	-	<input type="checkbox"/>		
megan.a.baldwin@kp.org	102	<input type="radio"/>	-	<input type="checkbox"/>		remove
ruth.bedoy+103@kp.org	103	<input type="radio"/>	-	<input type="checkbox"/>		remove
ruth.bedoy+104@kp.org	104	<input type="radio"/>	-	<input type="checkbox"/>		remove
ruth.bedoy@kp.org	101	<input type="radio"/>	-	<input type="checkbox"/>		remove

SURVEY PARTICIPANT LIST (CONT.)

1. Participant List can be populated manually
2. Enable module
3. As emails are populated into that field, they will show up on your participant list

 **Enable optional modules and customizations**

Optional

I'm done!

- Enable Repeatable instruments and events [?](#)
- Disable Auto-numbering for records [?](#)
- Enable Scheduling module (longitudinal only) [?](#)
- Disable Randomization module [?](#)
- Enable **Designate an email field for sending survey invitations** [?](#)

[Additional customizations](#)

Settings displayed to Administrators only:

- Enable Twilio SMS and Voice Call services for surveys [?](#)

Designate an email field for sending survey invitations ✕

Choose an email field to use for invitations to survey participants:

parent_email "Email Address:" ▾

You can capture email addresses for sending invitations to your survey participants by designating a field in your project. If a field is designated for that purpose, then any records in your project that have an email address captured for that particular field will have that email address show up as the participant's email address in the Participant List (unless an email address has already been entered for that participant in the Participant List directly).

Using the designated email address field can be especially valuable when your first data collection instrument is not enabled as a survey while one or more other instruments have been enabled as surveys. Since email addresses can only be entered into the Participant List directly for the first data collection instrument, the designated email field provides another opportunity to capture the email address of survey participants.

Please be aware that designating an email field means that survey responses can NEVER BE ANONYMOUS because of the fact that the participant's email address can be viewed on a data entry form, which means it is easy to identify the record/response to which the email address belongs.

NOTE: If the participant's email address has already been captured directly in the Participant List, then that email address will supersede the value of the email field here when survey invitations are sent to the participant. Also, if the email invitation field exists on multiple longitudinal events, on a repeating instrument, or on a repeating event, the field's value will be synchronized across all instances/events so that changing it in one location will change the value across all events/instances where the field appears.

Survey-specific email invitation field: While the email invitation field discussed here is a project-level setting, it is helpful to know that there also exists a survey-level email invitation field option that can be utilized for particular surveys in the project (whereas the project-level field would be applied to ALL surveys). A survey-specific email invitation field can be enabled for any given survey, in which you can designate any email field in your project to use for sending survey invitations for that particular survey. Thus, you can collect several email addresses (e.g., for a student, a parent, and a teacher) and utilize each email for a different survey in the project. Then you can send each person an invitation to their own survey, after which all the survey responses get stored as one single record in the project. See the 'Survey Settings' page in the Online Designer for this survey-level setting.

Save Cancel

COMPOSING SURVEY INVITATIONS

1. To compose a survey invitation click on “Compose Survey Invitations”
2. Choose when you would like your invitation to go out
3. Check the “Re-send invitation” box if you would like reminders to be sent out
 - Reminders are sent to participants who have not responded to the original invitation
 - You can choose specific reminder delivery times as well as amount of reminders
4. Compose your message in the “Compose message” box
 - You can select which “From” email invitations are sent from
5. Choose which participants you would like to send your invitation to by checking the corresponding checkbox

The screenshot shows the 'Participant List' interface for an initial survey titled 'Patient Morale Questionnaire - Enrollment'. At the top, there are buttons for 'Add participants', 'Compose Survey Invitations' (highlighted with a red arrow), 'Remove all participants', and 'Export list'. Below this is a modal window titled 'Send a Survey Invitation to Participants'. The modal contains several sections: 'Info' (Survey title: Patient Morale Questionnaire, Event: Enrollment), 'When should the emails be sent?' (with options for 'Immediately' and 'At specified time'), 'Enable reminders' (with a checked box for 'Re-send invitation as a reminder if participant has not responded by a specified time?'), and 'Compose message' (with a 'From' dropdown set to 'ruth.bedoy@kp.org' and a 'To' field set to '[All participants selected from Participant List]'). A table on the right shows a list of participants with checkboxes for selection. At the bottom of the modal, there are 'Compose', 'Preview', and 'Send test email' buttons, and a preview of the invitation message. At the bottom of the entire interface, there are 'Send Invitations' and 'Cancel' buttons.

Participant Identifier	Scheduled?	Sent?	Responded?
1) megan.a.baldwin@kp.org	-	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) megan.a.baldwin@kp.org	-	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1) ruth.bedoy@kp.org	-	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) ruth.bedoy@kp.org	-	<input checked="" type="checkbox"/>	<input type="checkbox"/>

COMPOSING SURVEY INVITATIONS (CONT.)

1. Once a survey is completed, the participant's response status will be changed to a green check mark
 - Once a survey is completed, that unique link will no longer be available
2. If a survey is opened but not completed, the participant's response status will be changed to an orange check mark
 - If the survey is partially completed, that unique link will still be available
 - Depending on the survey settings, the participant will be allowed to start the survey over or pick up from where they left off

Participant List belonging to [Initial survey] "Patient Morale Questionnaire" - Enrollment Remove all participants

Displaying 1 - 14 of 14 Add participants Compose Survey Invitations Export list

Email	Record	Participant Identifier (optional) Disable	Responded?	Invitation Scheduled?	Invitation Sent?	Link	Survey Access Code and QR Code
[No email listed]				-			
[No email listed]				-			
[No email listed]				-			
[No email listed]				-			
[No email listed]				-			
[No email listed]				-			
[No email listed]				-			
[No email listed]				-			
[No email listed]				-			
1) megan.a.baldwin@kp.org		101		-			remove
2) megan.a.baldwin@kp.org	11	102		-		-	-
1) ruth.bedoy@kp.org		104		-			remove
2) ruth.bedoy@kp.org	12	103		-			

SURVEY INVITATION LOG

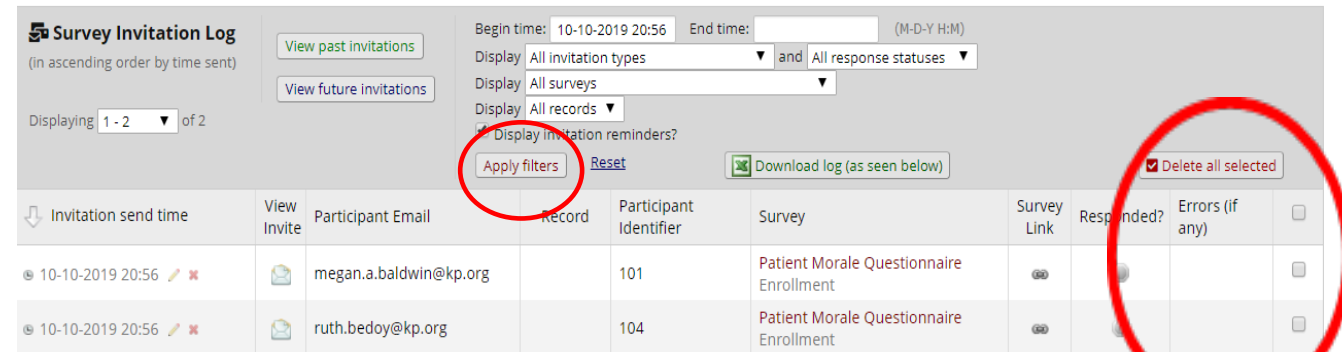
The Survey Invitation Log allows you to see past and future invitations:

1. You can filter by “all invitation types”, only “sent” invitations, only “scheduled” invitations, or only invitations that “failed to send”
2. You can filter by the exact survey you would like to view, or you may select “All Surveys”
3. To apply filters, click “Apply Filters”
4. You can also download the invitation log as a CSV file
5. You can also delete multiple invitations all at once by clicking on the boxes for select invitations and selecting the “Delete all selected” box

Survey Distribution Tools

[Public Survey Link](#) [Participant List](#) [Survey Invitation Log](#)

Listed below are the survey invitations that have already been sent or have been scheduled to be sent to survey participants in this project. For each invitation it displays the participant email, participant identifier (if exists), survey name, and the date/time in which the invitation was (or will be) sent. You may even view the invitation email itself by clicking the icon in the "View Email" column. Please note that all times below correspond to the time zone "America/Los_Angeles", in which the current time is 10-10-2019 20:56.



Survey Invitation Log
(in ascending order by time sent)

Begin time: 10-10-2019 20:56 End time: (M-D-Y H:M)

Display All invitation types and All response statuses

Display All surveys

Display All records

Display invitation reminders?

Apply filters Reset Download log (as seen below) Delete all selected

Invitation send time	View Invite	Participant Email	Record	Participant Identifier	Survey	Survey Link	Responded?	Errors (if any)	
10-10-2019 20:56		megan.a.baldwin@kp.org		101	Patient Morale Questionnaire Enrollment				
10-10-2019 20:56		ruth.bedoy@kp.org		104	Patient Morale Questionnaire Enrollment				

SURVEY QUEUE

The Survey Queue displays a list of your surveys to a participant:

1. Surveys can appear in the Survey Queue based upon certain conditions or logic
2. The participant will only see surveys they have already completed and surveys that they still need to complete in their queue
3. To use the survey queue, activate the survey you would like to include in the survey queue
4. Choose when you would like the survey to appear in the queue based on when other surveys are completed or with logic
5. You can also choose for the survey to auto-start after another survey has been completed

Instrument name	Fields	View PDF	Enabled as survey	Instrument actions	Survey-related options
Patient Morale Questionnaire	12			Choose action ▾	Survey settings + Automated Invitations
Monthly Phq9	23			Choose action ▾	Survey settings + Automated Invitations

Set up Survey Queue

The Survey Queue displays a list of your surveys to a participant all on a single page, in which the queue comprises all surveys that are to be completed (like a 'to-do' list) as well as the surveys that the participant has already completed. [Tell me more](#)

NOTE: The first instrument survey is not displayed below because it does not have a survey that comes before it for which to set conditions.

[Add custom text to display at top of survey queue](#)

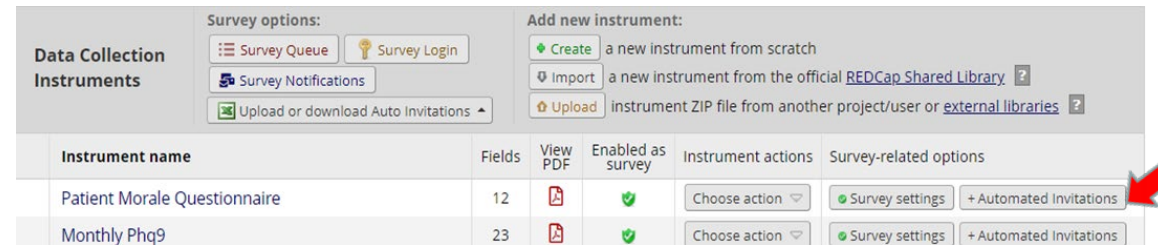
Activated?	Survey Title	Display survey in the Survey Queue when...	Auto start?
	"Monthly Phq9" - Enrollment	<input checked="" type="checkbox"/> When the following survey is completed: "Patient Morale Questionnaire" - Enrollment AND <input type="checkbox"/> When the following logic becomes true: How to use this (e.g., [enrollment_arm_1][age] > 30 and [enrollment_arm_1][gender] = "1") Test logic with a record: -- select record --	<input type="checkbox"/>

[Deactivate](#) [Save](#) [Cancel](#)

SURVEY INVITATION AUTOMATION

Automated Invitations are another option to distribute surveys:

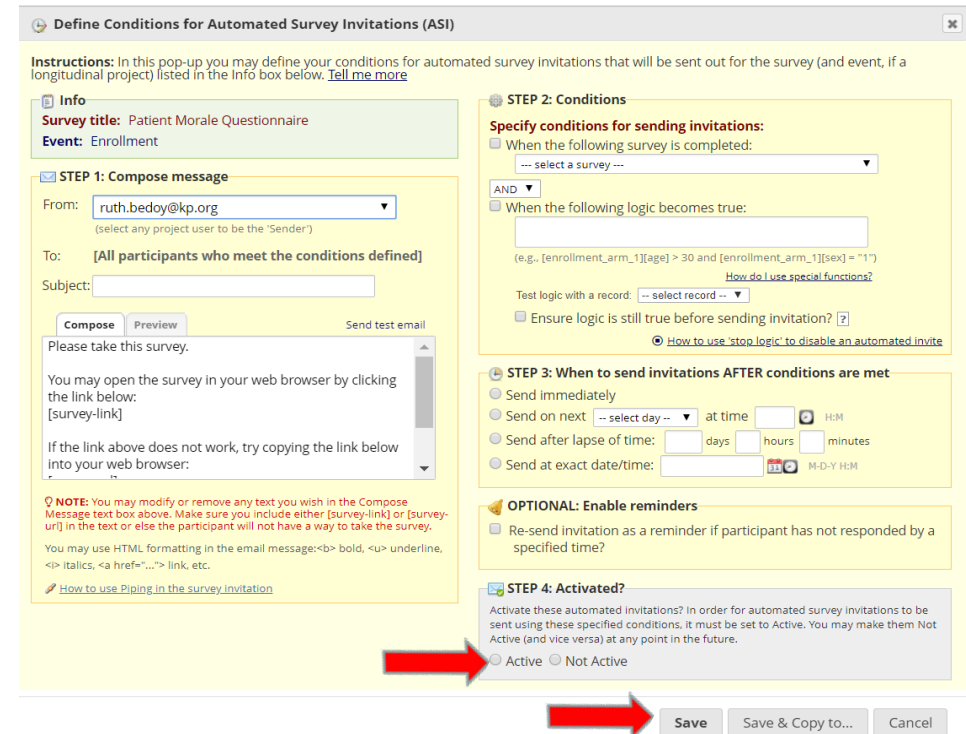
1. Click “Automated Invitations” on the survey you would like to send out
2. Then click “Set up” in pop up box
3. You can compose invitations like in the participant list and can also set conditions for who the survey is sent to with conditions like those in the survey queue
4. Once you compose your invitation, set the conditions, and reminders if needed, choose “Active”
5. Then click “Save”
 - ❖ Changes to automation will ONLY apply to NEW records – recommend no changes in production



Survey options: Survey Queue, Survey Login, Survey Notifications, Upload or download Auto Invitations

Add new instrument: Create (new instrument from scratch), Import (new instrument from the official REDCap Shared Library), Upload (instrument ZIP file from another project/user or external libraries)

Instrument name	Fields	View PDF	Enabled as survey	Instrument actions	Survey-related options
Patient Morale Questionnaire	12			Choose action	Survey settings, + Automated Invitations
Monthly Phq9	23			Choose action	Survey settings, + Automated Invitations



Define Conditions for Automated Survey Invitations (ASI)

Instructions: In this pop-up you may define your conditions for automated survey invitations that will be sent out for the survey (and event, if a longitudinal project) listed in the Info box below. [Tell me more](#)

Info
Survey title: Patient Morale Questionnaire
Event: Enrollment

STEP 1: Compose message
From: ruth.bedoy@kp.org
To: [All participants who meet the conditions defined]
Subject: [Empty field]

Compose | Preview | Send test email

Please take this survey.
You may open the survey in your web browser by clicking the link below:
[survey-link]
If the link above does not work, try copying the link below into your web browser:

STEP 2: Conditions
Specify conditions for sending invitations:
 When the following survey is completed:
-- select a survey --
AND
 When the following logic becomes true:
(e.g., [enrollment_arm_1][age] > 30 and [enrollment_arm_1][sex] = "1")
[How do I use special functions?](#)
Test logic with a record: -- select record --
 Ensure logic is still true before sending invitation? [How to use "stop logic" to disable an automated invite](#)

STEP 3: When to send invitations AFTER conditions are met
 Send immediately
 Send on next -- select day -- at time [] H:M
 Send after lapse of time: [] days [] hours [] minutes
 Send at exact date/time: [] M-D-Y H:M

OPTIONAL: Enable reminders
 Re-send invitation as a reminder if participant has not responded by a specified time?

STEP 4: Activated?
Activate these automated invitations? In order for automated survey invitations to be sent using these specified conditions, it must be set to Active. You may make them Not Active (and vice versa) at any point in the future.
 Active Not Active

Save | Save & Copy to... | Cancel

SURVEY BEST PRACTICES

1. Remember, if you use the public survey link, the public survey link has to link to the first form of your project and that form has to be a survey
2. Depending on your project and the surveys required, test which distribution method would be best for you
3. If sending automated invitations, make sure to test the logic to ensure invitations are sent out correctly
4. Test that your survey queue works by answering your survey in multiple ways
5. Test your survey and invitations using different browsers and applications
 - ❖ **Reminder: You can also send surveys to a specific email address from the survey settings dropdown “Survey-specific email invitation field”**

Calculated Fields

CALCULATED FIELDS

Calculate values within data forms or surveys:

1. Select the appropriate equation from the “How do I format the equation?” prompt
 - Note: Calculations can ONLY yield numeric results, not text
2. For this example, I wanted to calculate the total score of a PHQ9 survey
3. Enter the appropriate variables into the equation
4. You may test the calculation by test-completing a survey/record, and selecting that record for testing
5. If REDCap deems the logic valid, a green checkmark will appear
6. If the logic is not valid, a “Error in Syntax” alert will appear

The screenshot shows the 'Edit Field' form in REDCap. The 'Field Type' dropdown is set to 'Calculated Field' and is circled in red. The 'Field Label' is 'Monthly CSS Total Score'. The 'Calculation Equation' field contains the formula: $\text{sum}([\text{monthly_css_q1}], [\text{monthly_css_q2}], [\text{monthly_css_q3}], [\text{monthly_css_q4}], [\text{monthly_css_q5}])$. A red arrow points to the 'Calculation Equation' field. The 'Variable Name' is 'monthly_css_total_score'. The 'Required?' field is set to 'No'. The 'Identifier?' field is set to 'No'. The 'Custom Alignment' is set to 'Right / Vertical (RV)'. The 'Field Note' is empty. The 'Action Tags / Field Annotation' field contains '@HIDDEN-SURVEY'. The 'Save' and 'Cancel' buttons are at the bottom right.

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 [Field Types video \(4 min\)](#).

Field Type: Calculated Field

Question Number (optional)
Displayed only on the survey page

Field Label Use the Rich Text Editor ?
Monthly CSS Total Score

Calculation Equation [How do I format the equation?](#)
 $\text{sum}([\text{monthly_css_q1}], [\text{monthly_css_q2}], [\text{monthly_css_q3}], [\text{monthly_css_q4}], [\text{monthly_css_q5}])$
[Clear calculation](#)

Test calculation with a record: -- select record --

Action Tags / Field Annotation (optional)
@HIDDEN-SURVEY
[Learn about @ Action Tags](#) or [using Field Annotation](#)

Variable Name (utilized in logic, calcs, and exports)
monthly_css_total_score Enable auto naming of variable based upon its Field Label?
ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#)

Required?* No Yes
* Prompt if field is blank

Identifier? No Yes
Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment Right / Vertical (RV)
Align the position of the field on the page

Field Note (optional)
Small reminder text displayed underneath field

Save **Cancel**

CALCULATED FIELDS BEST PRACTICES

- **Great for real-time calculations**
 - Scheduling appointments – Am I within the window?
 - Quick calcs – What was the total score?
- **Great for use in one-time calculations**
 - Total score
 - Total weight
 - Total visits
- **Can be used across events/forms**
 - If longitudinal, specify [event_name]
- **Should never be used in automation logic**
 - Calculated fields within forms are only updated using Data Quality rules (Rule H) or by entering into that form
- **Should never be used in fluid reports**
 - Reports that you want to show updated information will show only the LAST calculated value

Randomization

RANDOMIZATION BUILD

1. Create an instrument in your longitudinal project for “Randomization”
2. Create a “Text Box” field for the date of randomization
3. Insert the necessary fields
 - Field Label
 - Variable Name
 - Validation (M-D-Y)
 - Action Tag/Field Annotation
 - Important to automate the date to the date of randomization
 - @TODAY will allow today’s date to be automatically inserted and will not allow the end-user to change the date during data entry

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 [Field Types video \(4 min\)](#).

Field Type: Text Box (Short Text, Number, Date/Time, ...)

Field Label Use the Rich Text Editor ?
Date of Randomization

Variable Name (utilized in logic, calcs, and exports)
randomization_date Enable auto naming of variable based upon its Field Label?
ONLY letters, numbers, and underscores

How to use: [Smart Variables](#) [Piping](#)

Validation? (optional) Date (M-D-Y)
Minimum:
Maximum:

-- OR --
-- select ontology service --

Required?* No Yes
* Prompt if field is blank

Identifier? No Yes
Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment Right / Vertical (RV)
Align the position of the field on the page

Field Note (optional)
Small reminder text displayed underneath field

Learn about [@ Action Tags](#) or [using Field Annotation](#)

Action Tags / Field Annotation (optional)
@TODAY @READONLY

Save **Cancel**

RANDOMIZATION BUILD (CONT.)

1. Create a “Multiple Choice – Radio Button” field for the treatment arms
2. Insert the necessary fields
 - Field Label
 - Variable Name
 - Choices
 - Generally Usual Care & Intervention
 - Important to collaborate with PM/PI on intervention arms
 - For “Blinded” studies, use numeric values instead of text values
 - This would mean having an allocation table where only the biostatistician is aware of the numeric/text value correlation

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 [Field Types video \(4 min\)](#).

Field Type: Multiple Choice - Radio Buttons (Single Answ ▾)

Field Label Use the Rich Text Editor ?

Randomized Treatment Arm

Choices (one choice per line) [Copy existing choices](#)

1, Usual Care
2, Intervention

[How do I manually code the choices?](#)

Action Tags / Field Annotation (optional)

Learn about [@ Action Tags](#) or [using Field Annotation](#)

Variable Name (utilized in logic, calcs, and exports)

randomized_treatment_arm Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#)

Required?* No Yes
* Prompt if field is blank

Identifier? No Yes
Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment Right / Vertical (RV) ▾
Align the position of the field on the page

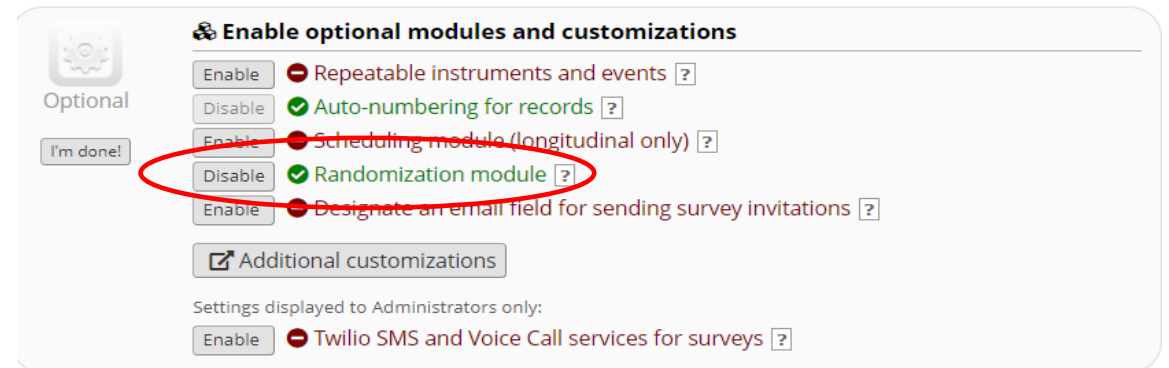
Field Note (optional)

Small reminder text displayed underneath field

Save **Cancel**

RANDOMIZATION BUILD (CONT.)

1. On the “Project Setup” page, ensure the “Randomization Module” is enabled
2. After enabling, edit the REDCap Project Manager’s rights to include Randomization “setup” privileges
 - If this is not enabled, you will not be able to proceed with randomization setup
 - “Dashboard” and “Randomize” privileges are end-user functions, and these should be discussed with the PM/PI
3. Return to the project setting page and select “Set Up Randomization”



Enable optional modules and customizations

Optional

I'm done!

Enable Repeatable instruments and events [?](#)

Disable Auto-numbering for records [?](#)

Enable Scheduling module (longitudinal only) [?](#)

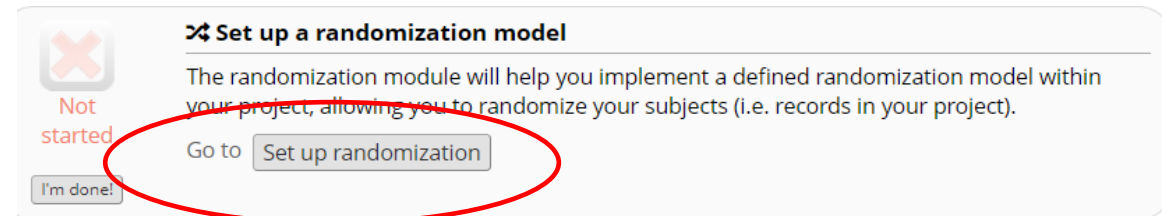
Disable Randomization module [?](#)

Enable Designate an email field for sending survey invitations [?](#)

[Additional customizations](#)

Settings displayed to Administrators only:

Enable Twilio SMS and Voice Call services for surveys [?](#)

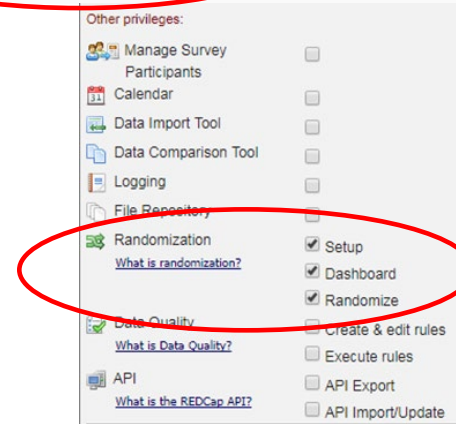


Set up a randomization model

The randomization module will help you implement a defined randomization model within your project, allowing you to randomize your subjects (i.e. records in your project).

Go to [Set up randomization](#)

I'm done!



Other privileges:

<input type="checkbox"/> Manage Survey	<input type="checkbox"/>
<input type="checkbox"/> Participants	<input type="checkbox"/>
<input type="checkbox"/> Calendar	<input type="checkbox"/>
<input type="checkbox"/> Data Import Tool	<input type="checkbox"/>
<input type="checkbox"/> Data Comparison Tool	<input type="checkbox"/>
<input type="checkbox"/> Logging	<input type="checkbox"/>
<input type="checkbox"/> File Repository	<input type="checkbox"/>
<input checked="" type="checkbox"/> Randomization	<input checked="" type="checkbox"/> Setup
What is randomization?	<input checked="" type="checkbox"/> Dashboard
<input checked="" type="checkbox"/> Data Quality	<input checked="" type="checkbox"/> Randomize
What is Data Quality?	<input type="checkbox"/> Create & edit rules
<input type="checkbox"/> API	<input type="checkbox"/> Execute rules
What is the REDCap API?	<input type="checkbox"/> API Export
	<input type="checkbox"/> API Import/Update

RANDOMIZATION BUILD (CONT.)

1. You will be redirected to the Randomization Setup page
2. Make the appropriate selections based on discussion with your PM/PI for stratified randomization or randomization by group/site
3. Select the dropdown on the left for “Choose Your Randomization Field”
4. Select the “Field Name” designated in your randomization instrument, in the field for treatment arm designation
5. Select the dropdown menu on the right under “Choose Your Randomization Field”
6. Select the appropriate event where randomization instrument is categorized
7. Select “Save Randomization Model”

Randomization

Randomization is a process that assigns participants/subjects by chance (rather than by choice) into specific groups, typically for clinical research and clinical trials. The randomization module in REDCap will help you implement a defined randomization model within your project, allowing you to randomize your subjects (i.e. records in your project). In this module, you first define the randomization model with various parameters. Based on the defined parameters, the module creates a template allocation table, which you can use to structure the randomization table you will import. The module also monitors the overall allocation progress and assignment of randomized subjects. Note: It is recommended that only people with experience in randomization set up the Randomization module. [More details](#)

Setup Dashboard

STEP 1: Define your randomization model

This step will allow you to define the randomization model you will be implementing and all its parameters, which includes defining strata (if applicable) and optionally randomizing subjects per group/site (if a multi-site study).

A) Use stratified randomization?

It is often necessary to ensure equal treatment among a number of factors. Stratified randomization is the solution to achieve balance within one or more subgroups, such as gender, race, diabetics/non-diabetics, etc. By choosing strata (multiple choice criteria fields), you may then be able to ensure balance within those subgroups. [Tell me more](#)

B) Randomize by group/site?

If this is a multi-center/multi-site project (or something similar), you may want to stratify the randomization by each group/site. You can select an existing multiple choice field that represents the groups/sites, OR you can use Data Access Groups to stratify by group/site.

C) Choose your randomization field

This is the field where the allocated randomization (treatment) group will be saved and stored, and is where the Randomize button will appear on your data collection form.

- select a field - for Enrollment

- select a field -

ethnicity (Ethnicity)

race (Race)

sex (Gender)

given_birth (Has the patient given birth before?)...

ST dialysis_unit_phone (Confirmed?)

subject_comments (Confirmed?)

randomized_treatment_arm (Randomized Treatment Arm)

pmq1 (On average, how many pills did you take each day last week?)...

tee pmq2 (Using the handout, which level of dependence do you feel you are currently at?)...

CRF pmq3 (Would you be willing to discuss your experiences with a psychiatrist?)...

loc pmq4 (How open are you to further testing?)...

sh vbw6 (Blood draw shift?)

be vbw7 (Blood draw by)

vbw8 (Level of patient anxiety)

E vbw9 (Patient scheduled for future draws?)

vob1 (nervous?)

vob2 (worried?)

ST vob3 (scared?)

RANDOMIZATION BUILD (CONT.)

1. Step 2 allows you to download a sample allocation table
 - However, this should be used only for practice/testing
 - Your project biostatistician should provide you with an official allocation table
2. In Step 3, click “Choose File” to locate an official or practice allocation table
 - Note: A project should NOT be moved into production with a practice allocation table in place
3. Once the appropriate file is selected, click “Upload File”
4. Once your file is successfully uploaded, you will see a green checkmark appear
5. You may delete your allocation table by selecting “Delete Allocation Table?”
6. You may download and view your allocation table by selecting “Download Table”
7. To start the process over, select “Erase Randomization Model” in Step 1

STEP 2: Download template allocation tables (as Excel/CSV files)

Below are some example files that you may download to get a general idea for how you may structure your own randomization table. You do not have to use any of these. In fact, **we recommend that you NOT use these exact templates** but instead recommend that you merely use them as an example or baseline to start from in order to create your own custom allocation file. After uploading your allocation table in Step 3 below, it will then be used as a lookup table to perform assignments when subjects are being randomized. **NOTE:** Record names (e.g., study ID) should NOT be included as a column in your allocation table, but only the fields listed in the example files below. [More details](#)

[Example #1 \(basic\)](#) [Example #2 \(all possible combos\)](#) [Example #3 \(5x all possible combos\)](#)

STEP 3: Upload your allocation table (CSV file)

Once you have created your custom allocation table as a CSV file and made sure that you kept the format prescribed in the template files from Step 2 above, you may now upload the file below. It will be checked for any possible errors first before it is accepted and stored in REDCap. Please note that you will need to create two different allocation tables: one to be used for testing while your project is in development status and the other for use when in production status. Below are some important reminders before you begin uploading your allocation tables.

Reminders:

- Once your project is in production status, the allocation tables will become locked and unmodifiable.
- Be sure to include more assignments in your allocation table than you think you will need (to accommodate possible drop-out and drop-in of subjects).
- Record names (e.g., study ID) should NOT be included as a column in your allocation table, but only the fields listed in the example files from Step 2 above.

The screenshot shows two sections for uploading allocation tables. The top section is for 'DEVELOPMENT status' and shows a green checkmark icon with the text 'Already uploaded' circled in red. Below it are buttons for 'Delete allocation table?' and 'Download table'. The bottom section is for 'PRODUCTION status' and shows a red 'X' icon with the text 'Not uploaded yet'. Below it are buttons for 'Choose File' and 'Upload File', with both buttons circled in red.

RANDOMIZATION BUILD (CONT.)

1. Add a record to test your randomization instrument
2. You will now see a “Randomize” button on the form
3. Click “Randomize”
4. A pop-up box will appear, to proceed with randomization, click “Randomize”
5. An additional pop-up box will appear indicating a successful randomization and displaying the assigned treatment arm for that participant
6. Steps 2-5 should be used by End-Users when randomizing
 - Note: When moving your project into production, all test randomizations will be erased

Randomization Instrument

Adding new Study ID 1

Event Name: Enrollment

Study ID: 1

Date of Randomization: 11-10-2017 (Today) M-D-Y

Randomized Treatment Arm: **Randomize**

Form Status

Complete?: Incomplete

Lock this record for this form? Lock

Save & Exit Form Save & ...

-- Cancel --

Randomizing Study ID "1"

Below you may perform randomization for Study ID "1" on the field **Randomized Treatment Arm** (*randomized_treatment_arm*).

REMINDER: This project is still in development status, so you should NOT be randomizing real subjects yet. You should only be randomizing real subjects after moving the project into in production status.

Randomize Cancel

Randomizing Study ID "1"

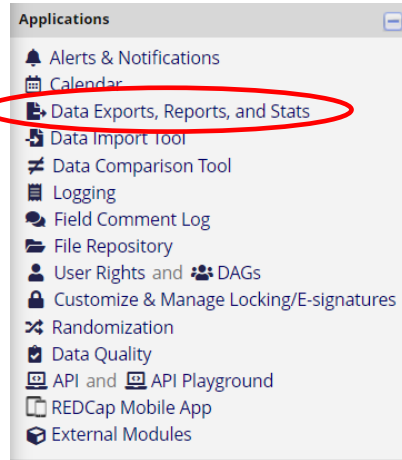
Study ID "1" was randomized for the field "**Randomized Treatment Arm**" and assigned the value "**Intervention**" (2).

Close

Reports

BASIC REPORT OVERVIEW

1. To build a basic report, click on “Data Exports, Reports, and Stats”
2. Click “Create New Report”



Data Exports, Reports, and Stats

[VIDEO: How!](#)

[+ Create New Report](#) [My Reports & Exports](#) [Other Export Options](#)

This module allows you to easily view reports of your data, inspect plots and descriptive data to Microsoft Excel, SAS, Stata, R, or SPSS for analysis (if you have such privileges). If view it as a report, then Report A is the best and quickest way. However, if you want to view instruments (or events) on the fly, then Report B is the best choice. You may also create such privileges in which you can filter the report to specific fields, records, or events use you get the exact data you want. Once you have created a report, you may view it as a w format (Excel, SAS, Stata, SPSS, R), or view the plots and descriptive statistics for that rep

My Reports & Exports		
	Report name	View/Export Options
A	All data (all records and fields)	View Report Export Data

My Reports & Exports				
	Report name	View/Export Options	Management Options	Report ID (auto-generated)
A	All data (all records and fields)	View Report Export Data Stats & Charts		
B	Selected instruments and/or events (all records)	Make custom selections		
1	Medication Use of 5-10 Pills- Moderate Dependence	View Report Export Data Stats & Charts	Edit Copy Delete	678
2	Outreach #2 Due- Ruth	View Report Export Data Stats & Charts	Edit Copy Delete	679
	+ Create New Report			

BASIC REPORT OVERVIEW

1. Insert the name of the report and the variables you would like the report to display
2. Filter results by selecting “Filters” and assign required values
3. Tailor User Access to ONLY those that should view this data
4. For simple viewing, recommend combining checkbox options!

The screenshot shows a multi-step report configuration interface. Key elements are highlighted with red circles and a red arrow:

- Name of Report:** A text input field containing "1st Survey Complete".
- STEP 1:** User Access configuration. It includes sections for "User Access", "View Access", and "Edit Access", each with radio buttons for "All users" and "Custom user access".
- STEP 2:** Fields to include in report. A table lists selected fields:

Field	Field Name	Instrument
Field 1	study_id "Study ID"	Patient Morale Questionnaire
Field 2	demographics_complete "Complete?"	Demographics
Field 3	-- select a field --	
- Additional report options:** A section with three unchecked checkboxes: "Include the Data Access Group name for each record...", "Include the survey identifier field and survey timestamp field(s)", and "Combine checkbox options into single column...". A red arrow points to this section.
- STEP 3:** Filter configuration. A checkbox "Show data for all events for each record returned" is checked and circled. Below it, a filter is defined:

Filter	Field	Operator	Value
Filter 1	demographics_complete "Complete"	=	Complete

BASIC REPORT OVERVIEW (CONT.)

1. You may filter further by selecting an event name
 - Live filters are useful for longitudinal projects & randomized arms
 - Filter in real time
2. Results can be organized in an ascending or descending fashion by variable name
3. Make sure to click “Save Report” before exiting the page
4. Next, you will see a pop-up box allowing you to view your report, continue editing your other reports, or continue editing the report you just completed

The screenshot displays the report configuration interface with several sections:

- Filters (optional):** Contains two filter rows. Filter 1 is set to 'demographics_complete "Complete?"' with an operator of '=' and a value of 'Complete'. Filter 2 is currently empty. A 'Switch format: Use advanced logic' option is visible.
- Additional Filters (optional):** A dropdown menu for 'Filter by event (s):' is open, showing options: 'Demographics', '1st Survey', '2nd Survey', and '3rd Survey'. A note states: '(Records belonging only to ALL selections below will appear in the report)'. Below this are three 'Live Filter' rows, each with a '-- select a field --' dropdown.
- STEP 4 Order the Results (optional):** A table for ordering results:

Order	Field	Operator	Order
First by	study_id "Study ID"	=	Ascending order
Then by	Type variable name or field label		Ascending order
Then by	Type variable name or field label		Ascending order
- Buttons:** 'Save Report' and 'Cancel' buttons are located at the bottom right.

Red arrows point to the 'Filters (optional)' section, the 'Additional Filters (optional)' section, the 'STEP 4' section, and the 'Save Report' button.

The screenshot shows a confirmation pop-up box with the following content:

- Header:** A green checkmark icon followed by the text 'Your report has been saved!'.
- Message:** 'The report named "1st Survey Complete" has been successfully saved.'
- Buttons:** Three buttons at the bottom: 'View report', 'Return to My Reports & Exports', and 'Continue editing report'.

BASIC REPORT OVERVIEW (CONT.)

When viewing your report, you will see several options along the top including Stats & Charts, Export Report, Print Page, and Edit Report:

1. To Export your report, click “Export Report”
2. You can export your report in whatever fashion your data analyst would like to review data, for the purposes of basic training, we will review exportation into a CSV file
3. Select “CSV/Microsoft Excel” Labels or Raw Data
4. Click the “Export Data” button

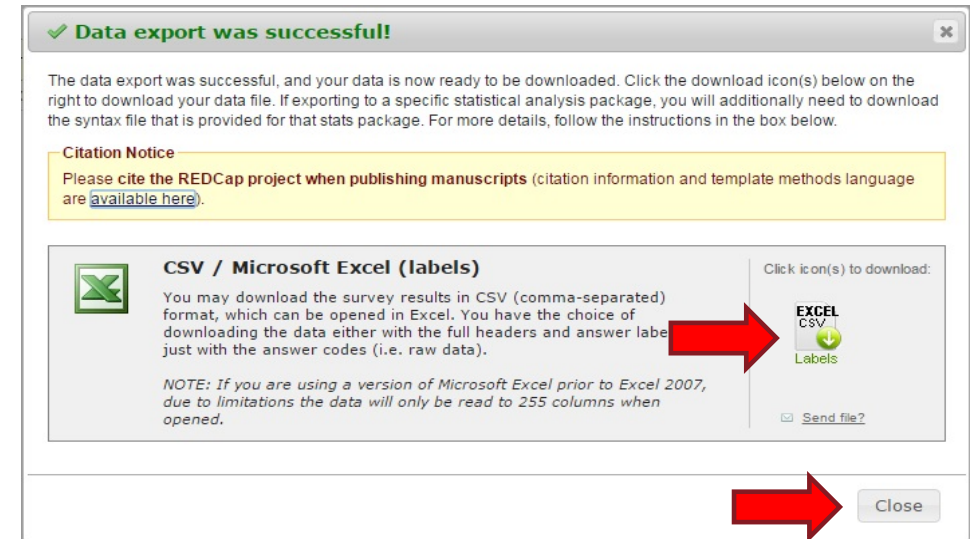
The screenshot shows the 'TEST Project' report interface. At the top, there are navigation buttons: 'Create New Report', 'My Reports & Exports', 'Other Export Options', and 'View Report: 1st Survey Complete'. Below these, a summary box displays 'Number of results returned: 1' and 'Total number of records queried: 1'. A red arrow points to the 'Export Report' button in the top navigation bar. Below the summary, a table shows the data for the '1st Survey Complete' event.

Study ID	Event Name	Complete?
study_id	rollback_event_name	demographics_complete
1	Demographics	Complete (2)

Below the table, an 'Exporting' dialog box is open, titled 'Exporting "Pending Recruitment Mailing"'. It allows users to select an export format (CSV/Microsoft Excel, SPSS, SAS, R, Stata) and choose de-identification options. A red arrow points to the 'Export Data' button at the bottom right of the dialog.

BASIC REPORT OVERVIEW (CONT.)


1. Click the Excel CSV icon and the report will begin to download
2. Click on the download to open
3. Save the report as necessary to your device
4. Click “Close” when finished
5. To access/edit existing reports, click on the desired report under the “Reports” header on the left side of the screen



✓ Data export was successful!


The data export was successful, and your data is now ready to be downloaded. Click the download icon(s) below on the right to download your data file. If exporting to a specific statistical analysis package, you will additionally need to download the syntax file that is provided for that stats package. For more details, follow the instructions in the box below.

Citation Notice
Please cite the REDCap project when publishing manuscripts (citation information and template methods language are [available here](#)).

 **CSV / Microsoft Excel (labels)** Click icon(s) to download:

You may download the survey results in CSV (comma-separated) format, which can be opened in Excel. You have the choice of downloading the data either with the full headers and answer labels just with the answer codes (i.e. raw data).

NOTE: If you are using a version of Microsoft Excel prior to Excel 2007, due to limitations the data will only be read to 255 columns when opened.

 **EXCEL CSV Labels**

Send file?

Close



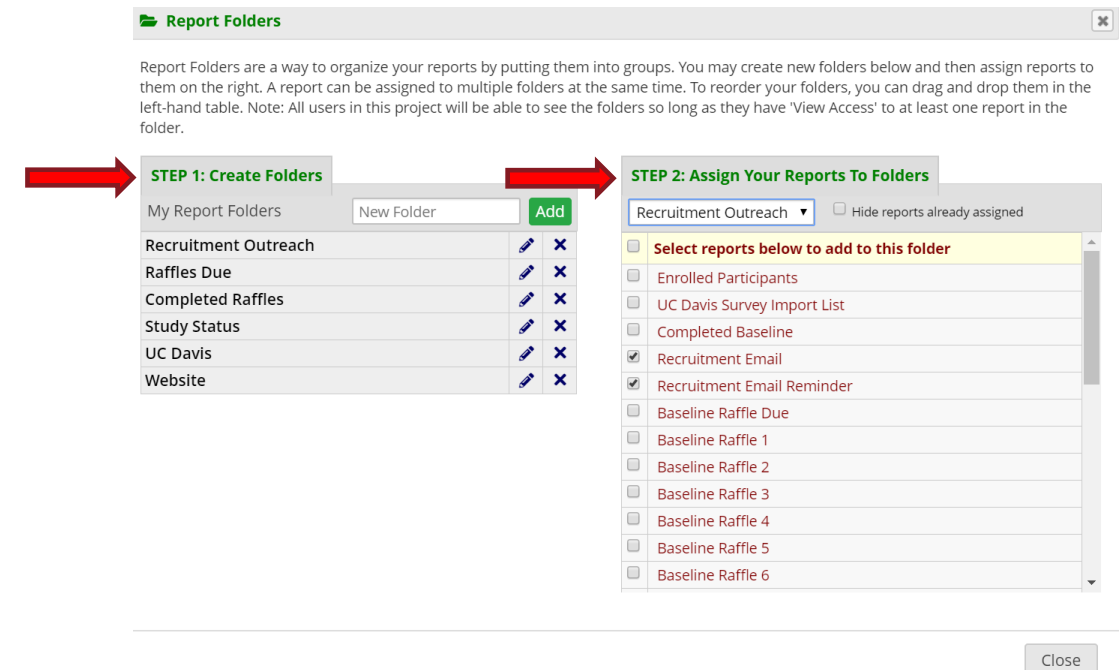
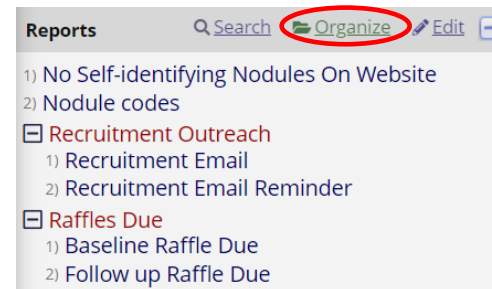
Reports ✎ Edit reports

- 1) Pending Recruitment Mailing
- 2) Outreach Call Attempt #1 Due
- 3) Outreach Call Attempt #2 Due
- 4) Outreach Call Attempt #3 Due
- 5) Pending Baseline Visit

BASIC REPORT OVERVIEW (CONT.)

Reports can be organized into folders

1. In the left hand column, click on “Organize” next to “Reports”
2. Step 1: Create folders you need
3. Step 2: Assign reports to the folders you created
4. Click “Close” to finish



ADVANCED REPORTS

Additional filtering using Advanced Logic may be used for more complex reporting requirements:

1. To begin using advanced logic, you can either enter filters into each row or go straight to using advanced logic
2. Click “Use Advanced Logic”
 - Note: Filters may not be changed back from advanced to simple logic
3. After previewing your logic, click “Convert” to proceed
4. To return to simple logic, click “Use Simple Logic”
 - Note: This will erase your advanced logic
5. Additional information regarding filters and logic may be found by clicking “How to Use Filters AND/OR Logic”

STEP 3

Show data for all events for each record returned ? [How to use filters and AND/OR logic](#)

Filters (optional)

Filter 1 in All events Operator / Value =

Switch format: [Use advanced logic](#)

Additional Filters (optional) (Records belonging only to ALL selections below will appear in the report)

Filter by event(s): Enrollment, Dose 1, Visit 1, Dose 2, Visit 2, Dose 3

Convert filters to advanced logic format?

If you convert your existing report filters to the advanced logic format, please note that they CANNOT BE CONVERTED BACK TO THEIR ORIGINAL FORMAT afterward as separate fields. Do you still wish to convert to advanced logic format?

Preview of logic after conversion:
[[pmq1] = "1") AND ([[pmq2] = "3")

[Convert](#) [Cancel](#)

Erase advanced filter logic?

If you switch back to using the simple logic format, please note that since the advanced filter logic cannot be converted into simple format, YOU WILL LOSE YOUR ADVANCED LOGIC. Do you still wish to switch back to simple logic format?

[Erase logic and switch to simple format](#) [Cancel](#)

ADVANCED REPORTS (CONT.)

Special functions may be used to perform tasks such as date calculations, value summation, and conditional values:

1. Click “How Do I Use Special Functions” to access additional information for these advanced logic equations
2. Advanced logic must be entered manually
 - Note: For longitudinal projects, event names must precede variable names

Advanced filter logic: (e.g., [age] > 30 and [gender] = "1") [How do I use special functions?](#)

[[pmq1] = "1") AND ([pmq2] = "3")

Expand

Switch format: [Use simple logic \(choose fields from list\)](#)

STEP 3

✓ Show data for all events for each record returned ?

Filters (optional)

Advanced filter logic:

[[enrollment_arm_1][pmq1] = "1") AND ([pmq2] = "3")

Valid

Switch format: [Use simple logic \(choose fields from list\)](#)

Alert

One or more fields are not referenced by event. Since this is a longitudinal project, you must specify the unique event name when referencing a field in the logic. For example, instead of using [age], you must use [enrollment_arm1][age], assuming that enrollment_arm1 is a valid unique event name in your project. You can find a list of all your project's unique event names on the Define My Events page.

Close

ADVANCED REPORTS (CONT.)

Live filters allow you to filter report results in real time on the “View Report” page:

1. Select the dropdown menu of the variable you would like to search and select the desired search value
 - ❖ Hint – Especially useful when:
 - ❖ Randomized arms
 - ❖ Longitudinal/multiple events

Live Filters (optional) Live Filters can be selected on the report page for dynamically filtering data in real time. Only multiple choice fields can be used as Live Filters (as well as Events, if longitudinal, and Data Access Groups, if any exist).

Live Filter 1	pmq2 "Using the handout, which level o" ▾
Live Filter 2	pmq1 "On average, how many pills did y" ▾
Live Filter 3	patient_morale_questionnaire_complete ▾

Number of results returned: 2
Total number of records queried: 6
[Records] = total available data across all designated events

[Stats & Charts](#) [Export Report](#) [Print Page](#) [Edit Report](#)

Live filters: [Using the handout, w ▾] [On average, how ma ▾] [Complete? ▾]

Medication Use of 5-10 Pills- Moderate Dependence

Study ID	Event Name	On average, how many pills did you take each day last week?	Using the handout, which level of dependence do you feel you are currently at?
study_id	redcap_event_name	pmq1	pmq2
1	Enrollment	5-10 (1)	3 (3)
2	Enrollment	5-10 (1)	3 (3)

ADVANCED REPORTS (CONT.) – DATE DIFFERENTIALS

Date Differentials are a popular “special function” in reporting:

- Date differentials are useful when calculating the due date or timeframe for an event
1. Using the Advanced Filter Logic, enter the template for date differential calculations
 - `datediff ([date1], [date2], "units", returnSignedValue)`
 - In a longitudinal project, make sure to designate an event name before the variable name “enrollment_arm_1”
 2. In this example, we are building a report to query participants due for their 2nd outreach attempt by a specific study member
 - We would first filter by the study coordinator “assigned_sc_1” = “2”
 - Secondly, we would filter by the date the second outreach is due, in this case, 14 days (≥ 14) after the first outreach attempt “call_date_1”
 3. When logic is deemed “valid” by REDCap, a green checkmark and “Valid” will appear



STEP 3

Show data for all events for each record returned ?

 Filters (optional)

Advanced filter logic: (e.g., [age] > 30 and [gender] = "1") [How do I use special functions?](#)

`([enrollment_arm_1][assigned_sc_1] = "2") AND datediff([enrollment_arm_1][call_date_1], "today", "d", "mdy") >= 14`

Valid

Switch format: [Use simple logic \(choose fields from list\)](#)

ADVANCED REPORTS (CONT.) – DATE DIFFERENTIALS

Date Differentials Explored...

- Calculating Days/Months BEFORE an Event
 - Example – we want to send out a survey at least 90 days BEFORE a patient gives birth
 - “today” should precede event/variable names
 - `Datediff(“today”, [patient_inform_arm_1][estimated_due_date], “d”, “true”) > 89`
- Calculating Days/Months AFTER an Event
 - Example – we want to send out a baseline survey 2 days AFTER a patient has consented
 - “today” should follow event/variable names
 - `Datediff([consent_inform][date_of_consent], “today”, “d”, “true”) > 1`
- Notice that dates are >89 and >2 – because >89 = 90 and >1 = 2
- Recommend that for surveys w/ reminders – use >, not =
- “True” gives an *actual value, not an absolute value* - *absolute value will always be positive number*

Additional Helpful Features

PLUG IN - AUTONOTIFY

1. Under “Project Setup”, add a project bookmark
2. Enter a label for your link
 1. Ex. PHQ9 Scores
3. Enter the appropriate “Link URL/Destination”
 1. External REDCap: <https://www.kpredcapihr.org/plugins/autonotify/>
 2. Internal REDCap: <http://kpc-ihr-4/redcap/plugins/autonotify/>
 3. DMZ REDCap: TBD
4. Select the link type of “Simple Link”
5. Designate user access
6. For email notifications of a specific event, select “Opens in New Window”
7. To include record or project ID information to the end of the URL, check the boxes
8. Click “Add” when finished or ready to add another bookmark

AUTONOTIFY (CONT.)

1. Click your new bookmark under “Project Bookmarks” on the left side of your home screen
2. The screen to the right will appear
3. Enter the title of your trigger
4. Enter the conditional logic
 1. Note: This is advanced logic that must be entered manually
 2. Note: Logic can be set up for each survey in the project WITHOUT using preceding event names
5. To add additional triggers, click “Add Another Trigger”
6. To test your logic, create a test record matching the trigger conditions and click “Test”
7. If the logic is correct, a green checkmark will appear
8. Configure the email that will be sent out in the event of a trigger
 1. Email subject lines should NOT contain PHI; these are not secure emails
9. Click “Save Configuration”

AUTONOTIFY (CONT.)

- The “REDCap AutoNotification Alert” email will automatically include:
 - Project Name
 - Event Name
 - Instrument Name
 - Record ID
 - Date/Time of survey completion

REDCap AutoNotification Alert

Title PHQ-9 Score >=15
Project 4
Event 3month_followup_pp_arm_2
Instrument alma_participant_3month_followup_survey
Record 13
Date/Time 2019-10-11 15:14:10
Message Please see information above to determine follow-up, if needed.

View Record

To view this record, visit this link:

https://www.kpredcapihr.org/redcap_v8.1.4/DataEntry/record_home.php?pid=461&id=13

SMART VARIABLES

- Smart Variables allow you to reference information other than data fields.
- Smart Variables are context-aware and thus adapt to many different situations in which they can know who the current user is, what event is currently being viewed, whether or not an instrument is being viewed as a survey or data entry form, etc.
- Smart Variables are dynamic because they adapt to the current context in which they are used.
- Smart Variables are easily distinguishable from field variable names because Smart Variables will have dashes and colons whereas field variable names cannot.
- Smart Variables can be used:
 - On their own - e.g., *[record-dag-name]*
 - In conjunction with field variables - e.g., *[previous-event-name][weight_measurement]*
 - In conjunction with other Smart Variables - e.g., *[previous-event-name][survey-url:prescreening_survey]*

SMART VARIABLES (CONT.)

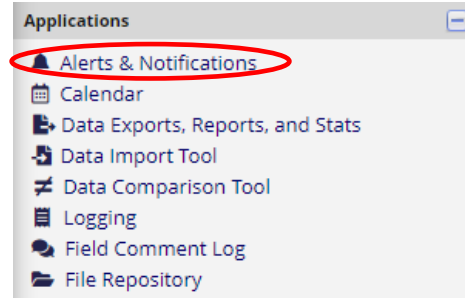
- Smart variables can be used in many places throughout REDCap.
- For classic projects, a variable can be used on its own, it will simply be [variable]
- For longitudinal projects, you need to specify that field variable for a specific event (for longitudinal projects), you must prepend the unique event name - e.g., [event][variable].
- If you are referencing a specific repeating instance of the field, you append (not prepend) the repeat instance number in brackets - e.g., [variable][2], in which the format is the same for both repeating instruments and repeating events. If you are referencing the second instance of a repeating event, for example, you would use the format [event][variable][2]. If you are wanting to determine if a certain option for a checkbox field is checked or not, you may include the checkbox option value inside parentheses which follow the variable name inside the brackets - e.g., [my_checkbox(4)]. All these components can be used together, if needed, such as if you want to reference checkbox option 3 that exists on the fifth instance of a repeating instrument on 'Event 1' - e.g., [event_1_arm_1][my_checkbox(3)][5]. Field notation and Smart Variables can be used for...Calculated fields - using mathematical operations to calculate a numerical result

SMART VARIABLES (CONT.)

- Conditional logic - includes branching logic, advanced filters for reports, and logic for Survey Queue, Data Quality rules, Custom Record Status Dashboards, and Automated Survey Invitations
- Piping - using field notation to insert values into labels on a survey/form or inside a survey invitation
- NOTE: While Smart Variables can be utilized in Data Quality rule logic, in many cases they will cause Data Quality rules to take much longer to complete.
- ADMINISTRATOR NOTE: Since you are a REDCap administrator, please be advised that you may also use Smart Variables inside the query of a dynamic SQL Field that is displayed on a survey or data entry form. You may see the SQL Field instructional popup in the Online Designer for tips on how to do this.

ALERTS & NOTIFICATIONS

- Triggering Events
 - Form save status
 - Conditional logic
 - Both
- Alert Schedule
 - Customizable
 - Multiple firings
- Message Settings
 - CC/BCC
 - Piping – PHI
 - Attachments
 - Send error notification
- Alert Expiration



🔔 Alerts & Notifications

The Alerts & Notifications feature allows you to construct alerts and send customized email 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. When adding/editing an alert, you will need to 1) set how the alert gets triggered, 2) define when the notification should be sent (including how many times), and 3) specify the recipient, sender, message text, and other settings for the notification. For the message, you may utilize customized options such as rich text, the piping of field variables (including Smart Variables), and uploading multiple file attachments. [Learn more](#)

🔔 My Alerts

📅 Notification Log

+ Add New Alert

Show deactivated alerts

Search

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.

Title of this alert:

ALERTS & NOTIFICATIONS CONT.

- Pipe in Record/Study ID
 - Does not take you straight to record
- Alerts to Participants
 - Reminder
 - Invitation
- Alerts to Staff
 - High Scores
 - Reminders
 - Grant Submission Form
- Recipients
 - Email field vs. specific address
 - Multiple Addresses

STEP 1: Triggering the Alert

- How will this alert be triggered?
- When a record is saved on a specific form/survey*
 - When a record is saved on a specific form/survey with conditional logic*
 - Using conditional logic during a data import or data entry

Trigger the alert...

when the following logic becomes true:

[monthly_phq9_total] > 15

(e.g., [enrollment_arm_1][age] > 30 and [enrollment_arm_1][sex] = "1")

[How to use 'stop logic' to disable a scheduled alert](#)

Ensure logic is still true before sending notification? [?](#)

* 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: Set the Alert Schedule

When to send the alert?

- Send immediately
- Send on next at time
- Send after lapse of time: days hou
- Send at exact date/time:

Send it how many times?

- Just once (once per event)
- Multiple times: Send every

STEP 3: Message Settings

Email From:

lock2live@kp.org

* must provide value

Email To:

* Survey Participant

* must provide value

Or manually enter emails:

Email CC:

* [enrollment_arm_1][parent_email] "Email Address:" (Enrollment)

Or manually enter emails:

Email BCC:

* megan.a.baldwin@kp.org

Or manually enter emails:

Email to send email-failure errors:

lock2live@kp.org

Subject:

* must provide value

Elevated PHQ9 Score

Message:

* must provide value

Prevent piping of data for Identifier fields [?](#)

Paragraph **B** *I* [Link](#) [List](#) [List](#) [List](#) [List](#) [Undo](#) [Redo](#) [Fullscreen](#)
[Table](#) [Text](#) [Text](#) [Code](#) [Link](#)

KPCO Study ID: [information_arm_1][study_id], assigned to [information_arm_1][assigned_staff_member], submitted a survey with a PHQ9 item 9 score >0. Please outreach per the safety protocol.

In the subject or message, you may use [Piping](#) and [Smart Variables](#)

Example: Hi [first_name]! Please complete this survey: [survey-link:followup_survey]

[Add attachments](#)



Questions?