

Automated Survey Invitations

CCTS Biostatistics Core

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For any REDCap instrument enabled as a survey, you can schedule email invitations based on conditional logic via the Automated Survey Invitations (ASI) module.

This guide includes material adapted from the official [REDCap Help & FAQ](#), [Women's College Hospital](#), and [The Children's Mercy Hospital](#).

Overview

Automated Survey Invitations allow you to invite participants to take your surveys automatically, without manual action, based on pre-defined triggers and conditions.

For example, you might administer a screening survey to potential study participants. You can define an ASI to send an enrollment form link to all respondents who meet certain screening criteria.

Setting Up ASIs

Before You Start: Designate an Email Field

To use ASIs, you must first designate an email field to use for invitations in your project. The email field must exist on one of your instruments and have email validation enabled (Figure 1). Be sure the email address will be collected before invitations will be scheduled. In a scenario like the screening-and-enrollment example above, you might collect respondents' email addresses on the initial screening survey.

The image shows a web-based configuration interface for editing a survey field. The title is "Edit Field". The "Field Type" is set to "Text Box (Short Text, Number, Date/Time, ...)". The "Question Number" is optional and currently empty. The "Field Label" is "Participant Email". The "Variable Name" is "email". The "Validation?" dropdown menu is highlighted with a red circle and is set to "Email". Other options include "Required?*" (No selected), "Identifier?" (Yes selected), and "Custom Alignment" (Right / Vertical (RV)).

Edit Field

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

Question Number (optional):

Field Label: Participant Email

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

Validation? (optional): Email

Required?* No Yes

Identifier? No Yes

Custom Alignment: Right / Vertical (RV)

Field Note (optional):

Save Cancel

Figure 1: Enable email validation

To designate a project-wide email field, navigate to Project Setup and click **Enable** next to “Designate an email field for communications (including survey invitations and alerts).”

The screenshot shows the 'Project Setup' tab in REDCap. The project status is 'Development' and 0 of 7 steps are completed. The 'Main project settings' section includes options for 'Use surveys in this project?' (checked), 'Use longitudinal data collection with defined events?' (unchecked), and 'Use the MyCap participant-facing mobile app?' (unchecked). The 'Design your data collection instruments & enable your surveys' section provides links to the 'Online Designer' and 'Data Dictionary', and lists various features like 'Smart Variables', 'Piping', 'Action Tags', 'Field Embedding', and 'Special Functions'. The 'Enable optional modules and customizations' section lists several modules, with the option 'Designate an email field for communications (including survey invitations and alerts)' highlighted with a red box.

Figure 2: Enable 'Designate an email field for communications'

Choose the email field to use for your survey invitations and then click Save.

The screenshot shows a dialog box titled 'Designate an email field for communications (including survey invitations and alerts)'. The dialog prompts the user to 'Choose an email field to use for invitations to survey participants:'. A dropdown menu is open, showing the selected field 'Basic Demography Form email "Participant Email"'. The dialog also contains text explaining that this field will be used for automated survey invitations, survey confirmation emails, and Alerts & Notifications.

Figure 3: Select the email field

Note that you can also set survey-specific email invitation fields. This can be useful if, for example, one survey in your project should be completed by a patient's clinician rather than the patient. To designate a survey-level email field, open that survey's Survey Settings page and navigate to the Survey Customizations section.

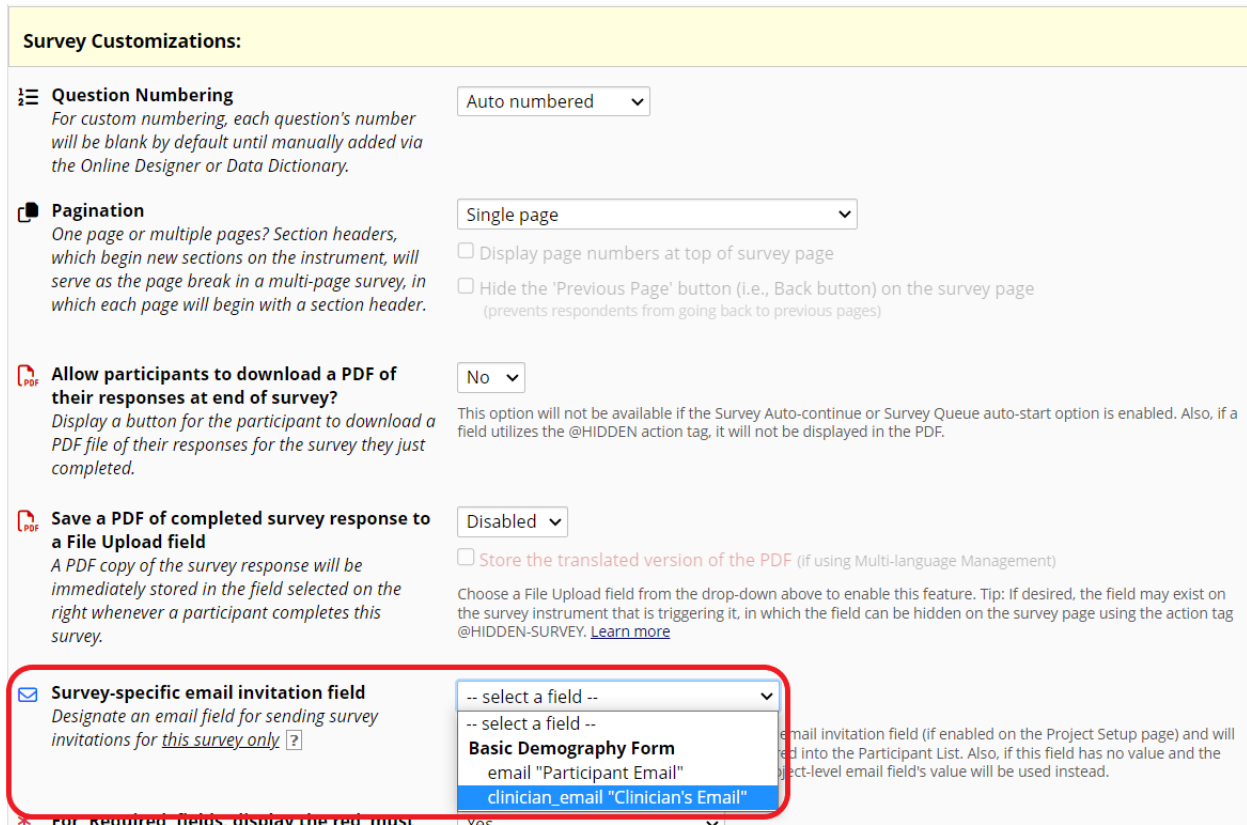


Figure 4: Designate a survey-specific email field

Step 1. Compose the Message

To set up ASIs for a particular survey, navigate to the Online Designer and click the Automated Invitations button.

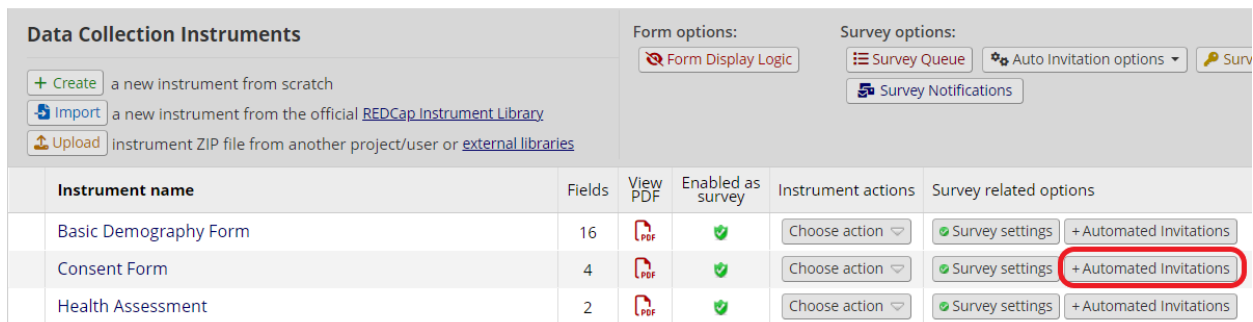


Figure 5: Open Automated Invitations from the Online Designer

Edit each of the following fields:

- **From:** Use the dropdown menu to select an email address. This may include any user with access to your project. You can optionally edit the sender's display name.
- **To:** This will automatically include all participants who meet your criteria.
- **Subject:** Enter an optional email subject line.
- **Message:** Customize the email message.

You can use HTML formatting, piping, and smart variables in your subject line and message. Be sure to retain a [survey-link] or [survey-url] smart variable in the message body. These smart variables will be replaced by individual-specific survey links when invitation emails are sent and will allow recipients to access the survey.

STEP 1: Compose message

From: redcapihp@listserv.uic.edu ▼
(select any project user to be the 'Sender')

To: **[All participants who meet the conditions defined]**

Subject:

[Send test email](#)

Paragraph ▼
—
B
I
U

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:
[survey-url]

This link is unique to you and should not be forwarded to others.

🔔 **NOTE:** You may modify or remove any text you wish in the Compose Message text box above. Make sure you include either [survey-link] or [survey-url] in the text or else the participant will not have a way to take the survey.

Figure 6: Compose your message

Step 2. Define Conditions

Use this section to define the conditions that will trigger an email invitation. You can elect to send the invitation after a preceding survey is completed, after a condition is met, or after a combination of events and conditions. Note that the ASI works by “listening” for changes in record values or survey completion status. As such, it will only work for records that meet the criteria **after** the ASI has been defined and enabled.

- To use **survey completion** as a trigger, check the box beside “When the following survey is completed” and select the trigger survey from the dropdown box.
- To use **user-defined logic**, check “When the following logic becomes true” and type your conditional logic in the logic box. Your conditional logic must be a statement that evaluates to either true or false. It can use piping, special functions, and smart variables.
- Use the dropdown menu to select “AND” (all conditions must be true) or “OR” (at least one condition must be true).

▼ 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., [age] > 30 and [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](#)

Figure 7: Define your conditions

In some cases, you may wish to cancel the invitation email if a condition changes between when the email is scheduled and when it's sent. For example, a study participant may no longer meet inclusion criteria or may withdraw before being invited to take a follow-up survey. To stop an invitation from going out when a condition changes, make sure you incorporate the inclusion criteria into the logic box and then check "Ensure logic is still true before sending invitation?"

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., [age] > 30 and [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](#)

Figure 8: Ensure logic is still true

The REDCap documentation explains:

If you have Automated Survey Invitations (ASIs) that will not be sent immediately but instead are scheduled to be sent later, it might be a good idea to consider using 'stop logic' (otherwise known as a 'kill switch') in your conditional logic in order to manually stop these scheduled invitations when needed. [...] By having the ['ensure logic is still true'] checkbox checked, it means that every time a given record is saved or has data modified, REDCap will see if there is an invitation scheduled for this record/survey, and if so, it will then double check to see if this condition/logic is still true. [...]

The 'stop logic' could be a complex set of conditional logic, or it could be as simple as a single field in the project (i.e., the kill switch). For example, if you are wanting a survey invitation to be scheduled when a participant is at least 18 years old, your logic might be '[age] >= 18'. And if you want to add the 'stop logic' to be able to manually delete a scheduled invitation, you could have '[age] >= 18 and [remove_alert] <> 1', in which the field 'remove alert' is a Yes/No field. So in this instance, if you wanted to have the scheduled invitation deleted, you could simply go to the data entry form where the 'remove alert' field is located, and set it to 'Yes'.

Step 3: Schedule the Invitation

ASIs are **scheduled** immediately when a record meets the conditions defined in Step 2. However, you can decide whether they are **sent** immediately or at a later time in Step 3.

You have the option to send ASIs:

- Immediately
- On a specific day of the upcoming week
- After a specific time lag
- At an exact day and time

🕒 STEP 3: When to send invitations AFTER conditions are met

Send immediately

Send on next at time H:M

Send the invitation days hours minutes

Send at exact date/time: M/D/Y H:M

Figure 9: Schedule the ASI

You can also elect to send up to 5 reminders after the initial invitation if a survey hasn't been completed.

🔔 OPTIONAL: Enable reminders

Re-send invitation as a reminder if participant has not responded by a specified time? (Times below refer to AFTER original invitation time.)

Send every at time H:M

Send every days hours minutes

Send at exact date/time: M/D/Y H:M

– AND –

Recurrence:

Figure 10: Schedule follow-up reminders

Step 4: Repeating Invitations (for repeating surveys only)

If the survey is enabled as a repeating instrument, you can decide whether to send invitations:

- Just one time
- A set number of times at a set interval
- An unlimited number of times at a set interval

STEP 4: How many times to send it (repeating surveys only)

Just once

Multiple times on a recurring basis:

days after initially being sent.
Tip: A monthly recurrence can be approximated as 30.44 days.

times total (including the first time sent).
Leave blank to continue triggering and sending forever.

[Learn about Data Collection Strategies for Repeating Surveys](#)

Figure 11: Repeating invitations

Activate the ASI

Set the ASI to “Active” to begin evaluating the Step 2 conditions and scheduling emails. To stop evaluating the logic and scheduling emails, set the ASI to “Not Active.”

Activate automated invitations for this survey?

Survey title: Health Assessment

"Active" must be selected in order for automated survey invitations to be triggered and sent using the conditions specified in this popup. You may make it Not Active (and vice versa) at any point in the future. [?](#)

Active Not Active

Figure 12: Activate the ASI

It's important to understand that ASI status (Active/Not Active) refers to whether invitations will be **scheduled**, not whether they will be **sent**. As the REDCap documentation explains:

Setting the ASI to 'Not Active' will not prevent any invitations from sending if they have already been scheduled, in which case they must instead be deleted manually via the Survey Invitation Log. Additionally, even if the 'Ensure logic is still true' setting is enabled, any already-scheduled invitations will not be re-evaluated while the ASI is set to 'Not Active'.