

REDCAP

ADVANCED REDCap SURVEYS CLASS (304)

ITHS

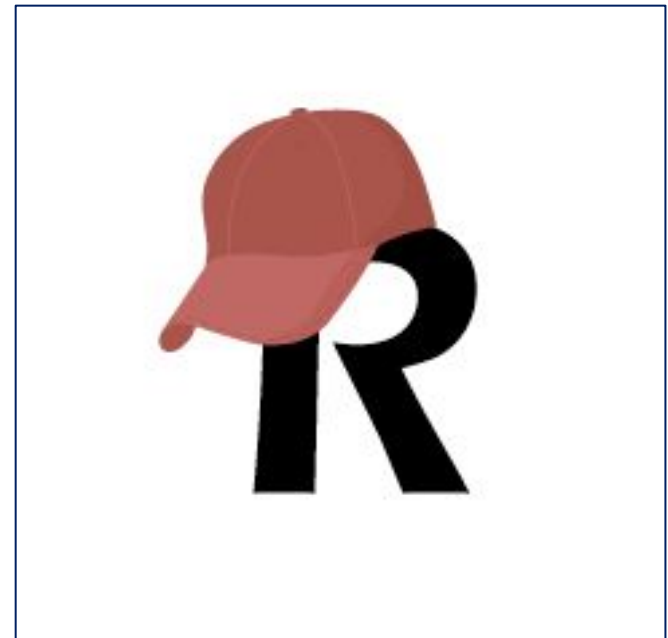
Institute of **Translational** Health Sciences

ACCELERATING RESEARCH. IMPROVING HEALTH.



Learning objectives

- Advanced survey setup
- Distribution
- Automated Survey Invitations (ASI)
- Alerts and Notifications
- Management
- Twilio (SMS)
- Action tags
- Best practices



ITHS' Focus

- Speeding science to clinical practice for the benefit of patients and communities.
- Promotes translation of scientific discovery by:
 - ❑ Fostering innovative research
 - ❑ Cultivating multi-disciplinary partnerships
 - ❑ Training the next generation of researchers
- More information: www.iths.org

Laboratory

Clinic

Community

AUTHORIZATION TO RELEASE PATIENT HEALTH INFORMATION

Patient Name: _____ Date of Birth: _____

I authorize Seattle Children's Hospital to release information to: _____ Attn: _____

Organization/Individual: _____

Address: _____ State: _____ Zip: _____

City: _____ Fax #: _____

Phone #: _____

Check this box to receive the information requested in an electronic format on Compact Disc (CD). Otherwise paper copies will be sent to the recipient. Electronic records (with the exception of Radiology images) will be password protected. To have the password emailed to you please provide your email address. If no email address is provided the password will be mailed separately to the postal address above.

E-Mail Address: _____

Requesting records: from _____ **to** _____

Discharge Summaries Operative Reports Radiology Reports Drug/Alcohol Abuse Records

Lab/Pathology Reports Clinic Notes Radiology Images Emergency Department Records

Other (please specify) _____ Other _____

Information to be Released to Organization/Individual:

Discharge Summaries Operative Reports Radiology Reports Radiology Images Drug/Alcohol Abuse Records

Lab/Pathology Reports Clinic Notes Radiology Reports Radiology Images Emergency Department Records

Other (please specify) _____ Other _____

Purpose of Release:

Transfer to another provider _____

Release specify _____

What is a survey in REDCap terms?

A different way of doing data entry in your project

General survey models

Simple single survey

(Covered in the "Intro to REDCap survey" class)

- *Quick and easy to set up*
 - *Single record per response*
 - *Great for getting started with surveys*
-

Chained surveys

(Covered in the "Intro to REDCap survey" class)

- *Link multiple surveys together*
 - *"Skip" over certain surveys*
 - *Multiple survey responses linked to a single record*
-

Longitudinal surveys

- *Longitudinal mode turned on*
- *Repeat the same survey in multiple events*
- *Multiple survey responses per event per record*
- *Takes a bit more time and testing to set up*
- *Great for longer term studies*

Longitudinal surveys

Uses

Setup

Distribution

Example Uses for longitudinal surveys

- ▶ Multiple timepoints data collection
 - ▶ Clinical studies
 - ▶ Pre and post surveys
- ▶ Registration and review surveys
- ▶ Projects with:
 - ▶ Limited FTE
 - ▶ Large participant numbers
 - ▶ Low frequency



Longitudinal surveys

Uses

Setup

"To:" Email

Crafting your message

Triggering invites

Timing

Distribution



Setup steps for longitudinal surveys

- ▶ Builds on the simple survey and chained survey examples
- ▶ Define per event how you want your surveys to run
- ▶ First event works similarly to a chained survey
- ▶ The first survey in any follow up events can and will have to get distributed in different ways:
 - ▶ Manually (e.g. in-clinic)
 - ▶ Automated Survey Invitations aka ASI (via email and SMS)
 - ▶ Alerts and Notifications (via email and SMS)
- ▶ After the initial survey in each event, you can have your participant run through the surveys via auto-continue or survey queue.

Longitudinal surveys

Uses

Setup – Auto Invitations

"To:" Email

Crafting your message

Triggering invites

Timing

Distribution



Setup ASI – Crafting your message

- ▶ Select a "From" email
 - ▶ You can add up to 3 emails to your account
- ▶ Define a subject line
 - ▶ Short and to the point is the best
- ▶ Define the invitation body
 - ▶ REDCap will add the links automatically via the smart variable [survey-link]
 - ▶ HTML is allowed
 - ▶ Logo's or hyperlinks
 - ▶ Piping is allowed and encouraged
 - ▶ Try at least to add someone's name
 - ▶ Helps with the spam filters

Longitudinal surveys

Uses

Setup – Auto Invitations

"To:" Email

Crafting your message

Triggering invites

Timing

Distribution



Setup ASI – Triggering invites

▶ REDCap schedules an invite the moment the defined trigger becomes true

▶ Three main ways of triggering similar to survey queue

▶ Survey completion

▶ e.g. After consent survey is completed

▶ Branching logic

▶ e.g. After consent equals yes (`[consent]=1`)

▶ Combination of the two

▶ e.g. After the consent survey is completed and consent equals yes

▶ Bonus: Ensure logic is still true upon send

▶ Advanced feature that has some interesting applications.

Longitudinal surveys

Uses

Setup – Auto Invitations

"To:" Email

Crafting your message

Triggering invites

Timing

Distribution



Setup ASI – Timing

▶ Two points of timing:

▶ Initial survey invitation

▶ Specific date and time

▶ After a specific interval of time
(from the moment of trigger or dynamic)

▶ "On the next ..."

▶ Reminders

▶ Up to 5 reminders

▶ Set schedule (every 3 days, Mondays)

▶ Remaining reminders get deleted when
their survey is completed

▶ Pro tip: send things on Tuesday morning 7 a.m.

Longitudinal surveys

Uses

Setup – Alerts & Notifications

Triggering the Alert

Set the Alert Schedule

Message Settings

Distribution



Setup Alerts & Notifications – Triggering the Alert

- ▶ A. How will this alert be triggered?
 - ▶ Form/Survey saved
 - ▶ Conditional logic
 - ▶ Both
- ▶ B. Triggering the alert...
 - ▶ Defining when instrument is saved or when logic is true
- ▶ C. Trigger Limit
 - ▶ Flexibility in regards to repeatable instruments/events

Longitudinal surveys

Uses

Setup – Alerts & Notifications

Triggering the Alert

Set the Alert Schedule

Message Settings

Distribution



Setup Alerts & Notifications – Set the Alert Schedule

- ▶ When to send the alert
 - ▶ Static vs dynamic
- ▶ Send it how many times
 - ▶ Just once
 - ▶ Every save
 - ▶ Multiple times (sending forever...)
- ▶ Alert expiration
 - ▶ Use with send every x days forever to stop this alert after a set date (e.g. study end date)

Longitudinal surveys

Uses

Setup – Alerts & Notifications

Triggering the Alert

Set the Alert Schedule

Message Settings

Distribution



Setup Alerts & Notifications – Message Settings

- ▶ Alert Type - SMS vs. Email
- ▶ Email From, To, BCC, Errors
 - ▶ Manual entry only approved domains
- ▶ Message
 - ▶ Use smart variables
 - ▶ Piping data with identifiers needs additional action
- ▶ Attachments
 - ▶ File upload fields vs. static

Longitudinal surveys

Uses

Setup

Distribution

Fire and Forget

Fuzzy triggers

Kill switches

Interplay with repeatable forms



Distribution – Fire & Forget

- ▶ Setup your entire project to "run" itself with minimal oversight
- ▶ Great for projects with limited manpower or that run for a long time
- ▶ Build all your ASI's with survey complete and logic triggers
 - ▶ Single trigger point model
 - ▶ i.e. everything gets scheduled based on 1 trigger but with different delays
 - ▶ Cascading model
 - ▶ Each survey completed triggers another

Longitudinal surveys

Uses

Setup

Distribution

Fire and Forget

Fuzzy triggers

Kill switches

Interplay with repeatable forms



Distribution – Fuzzy triggers

▶ You want to automate things, but you don't know upfront when certain events take place

- ▶ e.g. Trigger a set of surveys after a ED visit
- ▶ e.g. Trigger surveys after a child has had a concussion in a football match

▶ Instead of survey complete trigger, you trigger things of a variable.

- ▶ Build a special form that contain those triggers
 - ▶ Checkboxes for immediate triggers
 - ▶ Date variables for fuzzy time triggers
 - ▶ e.g. Send survey 2 weeks before visit
- ▶ Filled out by study personnel
- ▶ Allows for more control

Longitudinal surveys

Uses

Setup

Distribution

Fire and Forget

Fuzzy triggers

Kill switches

Interplay with repeatable forms



Distribution – Kill Switches

▶ Flip side of a fuzzy trigger

▶ Disables scheduled surveys and reminders

▶ Build a special form (can be combined)

▶ Add branching logic to the ASI

▶ e.g. `[kill(1)]<>1`

▶ Turn on "Ensure logic is still true"

▶ Has to be managed by study personnel

▶ Secondary use:

▶ "Reset" your survey invitations

▶ Update invite text

▶ REDCap auto filters completed surveys

Longitudinal surveys

Uses

Setup

Distribution

Fire and Forget

Fuzzy triggers

Kill switches

Interplay with repeat forms



Distribution – Repeatable forms

▶ Repeatable form functionality is complicated

▶ You can't setup ASI's for repeatable events (yet) but you can use this in Alerts & Notifications

▶ You can have respondents repeat the same survey over and over

▶ Setting is located in the survey settings of a survey, but only after you made the survey repeating

▶ Use at your own risk

▶ Recommendation: Test, test and test again

Gift cards Models

Gift cards are tricky

- *Potential for scamming is high*
 - *Build in at least one manual step*
 - *Talk to us if you want more advice*
-

Setup

- *Create a "gift card" instrument*
 - *Includes read only gift card field plus instructions*
 - *Setup ASI to send out when gift card field is not empty*
-

Running a gift card model

- *Tell your respondents that you will distribute the gift cards at a set time, but not instantaneously*
- *Build a report that displays all records eligible for a gift card, but that haven't had one yet*
- *Download the report in csv raw format, plug in codes and reupload with the data import tool*

Texting & Robo-calling

Twilio

- *Send invites as text via a third party service (www.twilio.com)*
 - *Will have to create an account with Twilio*
 - *Costs money (<https://www.twilio.com/sms/pricing>)*
-

Texting / Robo calling options

- *Send survey link via text*
 - *Start survey as robo-call*
 - *Send text to invite to robo call*
(respondent calls to start survey)
 - *Send text to invite to robo call*
(service calls when respondent replies by text)
 - *Send survey as text conversation (inherently not secure)*
-

Setup

- *Found in the project setup page*

Action Tags

Useful Action tags for surveys

- **@HIDDEN-SURVEY**
 - *Handy for markup by study team*
- **@READ-ONLY**
 - *For displaying preloaded data*
- **@LATITUDE & @LONGITUDE**
 - *For capturing someone's location*
- **@NOW & @TODAY**
 - *For creating a "start" time stamp*
 - *Often combined with @HIDDEN*
- **@NONEOFTHEABOVE**
 - *To create an option in a checkbox that unchecks all other options*
- **@RANDOMORDER**
 - *To circumvent "multiple choice" bias*
- **@HIDECHOICE**
 - *To update options in an active survey*

Thank You

Questions?

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