



RESEARCH PROFESSIONALS NETWORK




WRANGLING REDCAP TO SUCCESSFULLY SUPPORT YOUR RESEARCH

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*Do not edit
How to change the
design*

 The [Slido app](https://www.slido.com) must be installed on every computer you're presenting from 

2



*Do not edit
How to change the
design*



What have you used REDCap for?


i The Slido app must be installed on every computer you're presenting from **slido**

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IMPORTANCE OF CROSSTEAM COMMUNICATION IN REDCAP BUILDS

- **Elena Nelson, MBA, CCRC** – Manager, Data Management & Network Operations, UF



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Do not edit
How to change the
design



What is your REDCap experience level?

 The [Slido app](#) must be installed on every computer you're presenting from

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MAXIMIZING REDCAP EFFICIENCY THROUGH CROSS-TEAM COMMUNICATION

- OBJECTIVES:
- How REDCap databases are built and used across teams
- Where breakdowns in communication create inefficiencies
- Practical ways to improve workflow and data quality

The University of Florida Health Cancer Institute has a Project Management Office that builds most REDCap databases that are utilized for our IIT's - other teams contribute to the finalized version including Data Management, Compliance and Study Teams



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HOW REDCAP IS BUILT AND USED ACROSS TEAMS

▪ REDCap Workflow:

- 1. Database is built by a specific team – here at UF its built by the Project Management Office
- 2. Study Activation
- 3. Patients are enrolled, source is created
- 4. Data Entry begins including validation of that data (UF SOP is 14 days within the DOV)
- 5. Query resolution occurs
- 6. Database is locked

▪ Teams Involved:

- Project Management Office
- Study Teams
- Data Management
- Compliance Office
- Regulatory Office



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WHERE COMMUNICATION GAPS BEGIN

▪ Database Build Stage

- Limited input from end users (study team, data management)
- Misalignment with workflows
- Missing or unclear CRF requirement

▪ Study Conduct

- Inconsistent source documentation
- Different interpretations of a protocol

▪ Data Entry

- Unclear what the forms are asking
- High query volume



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IMPACT OF COMMUNICATION GAPS

- Increased queries per subject
- Delays in data entry and validation
- Too much backtracking
- Rework across multiple teams
- Strain on staff time and resources

Examples:

- Collecting too much data – extra work on the front end that was not needed
- Not collecting enough – extra work on the back end
 - Editing the database after patients are enrolled can create extra work on data management when having to enter a lot of data points across all patients in the middle or towards the end of study



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PRACTICAL STRATEGIES TO IMPROVE WORKFLOW

- During the database build
 - Include ALL teams in the beginning
 - Schedule an hour meeting with all necessary teams to go over the database and confirm it aligns with end points and other data points
- Before the first patient is enrolled
 - Confirm all the required paper source forms align with the database – DON'T collect unnecessary data
- Once the first patient is enrolled
 - Track and share nuances that you see immediately
 - Track query trends with Compliance and the study teams – maybe the database should be changed to align with the influx of specific queries




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LESSONS LEARNED AND BEST PRACTICES

- REDCap is built and used across teams – when you see it not working, fix it immediately
- Communication gaps drive inefficiency – create a system that works for your study teams and consistently use it
- Alignment improves both speed and data quality





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RESEARCH PROFESSIONALS NETWORK

UTILIZING REDCAP FOR PATIENT FACING RECRUITMENT

- **Alexandra Marsden, BS** – Program Coordinator, MUSC

The slide features a dark blue background with a bright white lightning bolt striking down from the top left. The RPN logo is in the top left, and the title and speaker information are in the center. A red circular logo is in the bottom right.

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USING REDCAP TO BUILD PUBLIC INTEREST FORMS

- **Background on Department Studies**
- **How to Create an Interest Form/RSVP Page**
- **How to Translate to Another Language (Spanish Example)**



By: Alexandra Marsden, Program Coordinator
MUSC Developmental-Behavioral Pediatrics



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BACKGROUND

Developmental Behavioral Pediatrics at the Medical University of South Carolina
Clinical focused research

- **SPARK**
 - National Autism Genetic Research Study
 - Enrollment goal of 300+ individuals with autism and their families each year
 - 5+ Community events throughout SC each year
- **Spanish Parent-Child Interaction Therapy (PCIT) Study**
 - Tele-health behavioral therapy for children ages 2-6 years old for Spanish Speaking families



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NEED FOR PUBLIC INTEREST PAGES

- **SPARK – Event Sign-ups**
 - Track expected attendance
 - Collect contact information in a HIPPA compliant format
 - Expedite event reminder emails
- **Spanish PCIT – Interest form***
 - Improve referral process
 - Collect contact information in a HIPPA compliant format
 - Provide additional study details

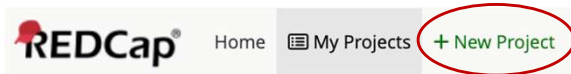
**During start up of the Spanish PCIT study, all MUSC Websites were undergoing major changes; there were no new webpage/interest forms on the MUSC site during this process.*



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REDCAP PROJECT CREATION

- Created a new project database following REDCap website instructions:



+ Create a new REDCap Project

You may begin the creation of a new REDCap project on your own by completing the form below and clicking the Create Project button at the bottom.

Project title: SPARK Touch-a-Truck Event In Summerville 4.9.24

Project's purpose: Research
How will it be used?

Name of P.I. (if applicable): [First name] [MI] [Last name]

Email of P.I. (if applicable): [Email address]

Name of P.I. as cited in publications (if applicable): [Name] (e.g., Harris PA)

IRB number (if applicable): [IRB number]

Please specify:

- Basic or bench research
- Clinical research study or trial
- Translational research 1 (applying discoveries to the development of trials and studies in humans)
- Translational research 2 (enhancing adoption of research findings and best practices into the community)
- Behavioral or psychosocial research study
- Epidemiology
- Repository (developing a data or specimen repository for future use by investigators)
- Other

Assign project to a Project Folder?

Project notes (optional):
Description of the project's use or purpose (displayed on the My Projects page)

Project creation option:

- Empty project (blank slate)
- Upload a REDCap project XML file (CDISC ODM format) [?]
- Use a template (choose one below)

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REDCAP PROJECT SET-UP (1/7)

- Main Project Settings:
 - Modify Project Title and Purpose

Modify Project Settings

Project title: SPARK Touch-a-Truck Event in Summerville 4.9.24

Project's purpose: Operational Support

Project notes (optional): Event information and registration form

Save Cancel

Main project settings

- Disable Use surveys in this project?
- Enable Use longitudinal data collection with defined events?
- Enable Use the MyCap participant-facing mobile app?
- Modify project title, purpose, etc.

Design your data collection instruments & enable your surveys

Enable optional modules and customizations

Set up project bookmarks (optional)

User Rights and Permissions

Test your project thoroughly

Move your project to production status

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REDCAP PROJECT SET-UP (2/7)

Data Collection Instruments

Event Registration Form

Add Field

Add New Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the form on this page.

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

Main project settings

- Disable Use surveys in this project?
- Enable Use longitudinal data collection with defined events?
- Enable Use the MyCap participant-facing mobile app?
- Modify project title, purpose, etc.

Design your data collection instruments & enable your surveys

Enable optional modules and customizations

Set up project bookmarks (optional)

User Rights and Permissions

Test your project thoroughly

Move your project to production status

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REDCAP PROJECT SET-UP (2/7)

- Design set-up:
 - Add questions, headers, & study information

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REDCAP PROJECT SET-UP (2/7)

- Design set-up:
 - Imbed images or videos



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REDCAP PROJECT SET-UP (2/7)

- Survey Settings:
 - Modify how the survey appears online

Data Collection Instruments

Form options: PDF Snapshots, Form Display Logic, PDF (all instruments), Descriptive Popups

Survey options: e Consent, Survey Queue, Auto Invitation options, Survey Login, Survey Notifications

Instrument name	Fields	PDF	Enabled as survey	Instrument actions	Survey related options
Event Registration Form	15			Choose action	Survey settings, Automated Invitations

- Customize survey theme

Custom survey theme options:

General: Page Background Color, Button Text Color

Survey title and instructions: Text Color, Background Color

Section headers: Text Color, Background Color

Survey questions: Text Color, Background Color

Save custom theme, Manage saved themes

Survey design preview (sample survey):

This is the survey title

This is a section header to divide the survey page into sections.

What is your first name?

Project status: Development

Completed steps 6 of 7

Main project settings

- Use surveys in this project?
- Use longitudinal data collection with defined events?
- Use the MyCap participant-facing mobile app?

Design your data collection instruments & enable your surveys

- Online Designer
- Data Dictionary

Enable optional modules and customizations

- Repeating instruments?
- Auto-numbering for records?
- Scheduling module (longitudinal only)?
- Randomization module?
- Designate an email field for communications (including survey invitations and alerts)?
- Twilio SMS and Voice Call services for surveys and alerts?

Set up project bookmarks (optional)

User Rights and Permissions

Test your project thoroughly

Move your project to production status

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REDCAP PROJECT SET-UP (2/7)

- Survey Settings:
 - Adjust completion message and email

Save Changes

Survey Completion Text

Thank you for registering for the Touch-a-Truck event with MUSC SPARK!

If you have any questions or need to reschedule your appointment, please contact us at sparkautism@muscu.edu or 843-714-1352.

Send confirmation email?

From: Display name (optional) sparkautism@muscu.edu

Subject: SPARK Touch-a-Truck Event Confirmation (4/20/24)

Hello,

Thank you for registering for the SPARK Touch-a-Truck event! Please see your appointment details below.

When: Saturday, April 20th at [appointment]
Where: 2250 Mall Drive, North Charleston, SC 29406

If you have any questions, or need to reschedule or cancel your appointment. Please let us know by replying to this email or calling/texting 843-714-1352.

Project status: Development

Completed steps 6 of 7

Main project settings

- Use surveys in this project?
- Use longitudinal data collection with defined events?
- Use the MyCap participant-facing mobile app?

Design your data collection instruments & enable your surveys

- Online Designer
- Data Dictionary

Enable optional modules and customizations

- Repeating instruments?
- Auto-numbering for records?
- Scheduling module (longitudinal only)?
- Randomization module?
- Designate an email field for communications (including survey invitations and alerts)?
- Twilio SMS and Voice Call services for surveys and alerts?

Set up project bookmarks (optional)

User Rights and Permissions

Test your project thoroughly

Move your project to production status

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REDCAP PROJECT SET-UP (3,4,5/7)

- Step 3: Optional Modules and Customizations
 - Select "I'm Done"
- Step 4: Set up project bookmarks (optional)
 - Select "I'm Done"
- Step 5: User Rights and Permissions
 - Add study team members with custom rights

Add new users: Give them custom user rights or assign them to a role.

Add new user + Add with custom rights

— OR —

Assign new user to role Assign to role

Create new roles: Add new user roles to which users may be assigned.

Enter new role name + Create role
(e.g., Project Manager, Data Entry Person)

The screenshot shows the 'Main project settings' page. Three sections are highlighted with red circles and arrows pointing to the 'Optional' status indicator:

- Enable optional modules and customizations:** This section includes options for Repeating Instruments, Auto-numbering for records, Scheduling module, Randomization module, and Designate an email field for communications.
- Set up project bookmarks (optional):** This section allows creating custom bookmarks to webpages that exist inside or outside of REDCap.
- User Rights and Permissions:** This section allows granting other users access to the project or editing the user privileges of current users.

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TRANSLATING TO SPANISH

The screenshot shows the left-hand navigation menu. Under the 'Applications' section, 'Multi-Language Management' is circled in red.

Languages Settings Save Changes

Manage the available languages in this project using the table and options below by following these steps:

- Create a base language. This is the language that corresponds to the project's language, i.e. the language of the REDCap user interface elements, such as this text, or the label of a submit button. This usually also matches the language used for field labels, survey instructions, etc., but not necessarily. Mark this language as the *Base Language*. If this language matches your data dictionary language, then you might want to mark it as the *Fallback* as well.
- In case your data dictionary elements are not matching the *Base Language*, add a matching language. You probably will set this as the *Fallback language* (the ultimate fallback will always be the *Base Language* for all user interface elements, and the data dictionary elements as set up outside of Multi-Language Management will provide the ultimate fallback for those in case the *Fallback* does not provide a value).
- Add any other languages that you wish to offer.
- Provide translations for the different languages by clicking the tabs above, or use the icons to the right of each language in the table shown below. Keep in mind that languages have to be *Active* and enabled for individual instruments in data entry and/or survey modes separately.
- Test your translations by switching back and forth between languages on your data entry forms and/or surveys. Note that only active languages will be available for selection on those places.
- Learn how to implement some language-related action tags, such as @LANGUAGE-SET, if desired. Learn about them here: @ Action Tags

+ Add a new language

Currently, there are no languages set up in this project.

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TRANSLATING TO SPANISH

Add New Language

Initialize a new language ...

from available system languages

There are no system languages available.

- or -

from a file (JSON, CSV, or INI)

Choose File No file chosen

Include the following:

- Translations of user interface items
- Translations of project-specific items*

*These include: fields, survey settings, ASIs, alerts, missing data code labels, ...

- or -

by creating the language from scratch

Cancel > Continue

Add New Language

Language ID

es

A unique identifier (case-insensitive) for this language. It is recommended to use the ISO code, such as 'en' or 'en-US' for English, or 'es' for Spanish. Use only letters and hyphen (and optionally numbers at the end). View list of ISO 639-1 language codes. View list of ISO 3166-1 country codes.

Language Display Name

Español

This is the name of the language as shown in the language selectors. This should be entered in its language, such as 'English' or 'Deutsch' (for German).

Language Notes

Enter any notes regarding this language

Notes may be useful to provide additional information about the language, the source of the translations, or any other information that is relevant to you. Notes are exported on demand only, and never imported (except when creating a new language).

Sort Override (optional)

Provide alternate name for sorting purposes

If set, this will be used instead of the display name for determining the sort order of languages in language selectors.

Cancel + Add Language

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TRANSLATING TO SPANISH

Languages Forms/Surveys Alerts Misc User Interface Settings Save Changes

Manage the available languages in this project using the table and options below by following these steps:

1. Create a base language. This is the language that corresponds to the project's language, i.e. the language of the REDCap user interface elements, such as this text, or the label of a submit button. This usually also matches the language used for field labels, survey instructions, etc., but not necessarily. Mark this language as the *Base Language*. If this language matches your data dictionary language, then you might want to mark it as the *Fallback* as well.
2. In case your data dictionary elements are not matching the *Base Language*, add a matching language. You probably will set this as the *Fallback* language (the ultimate fallback will always be the *Base Language* for all user interface elements, and the data dictionary elements as set up outside of Multi-Language Management will provide the ultimate fallback for those in case the *Fallback* does not provide a value).
3. Add any other languages that you wish to offer.
4. Provide translations for the different languages by clicking the tabs above, or use the icons to the right of each language in the table shown below. Keep in mind that languages have to be *Active* and enabled for individual instruments in data entry and/or survey modes separately.
5. Test your translations by switching back and forth between languages on your data entry forms and/or surveys. Note that only active languages will be available for selection on those places.
6. Learn how to implement some language-related action tags, such as @LANGUAGE-SET, if desired. Learn about them here: @ Action Tags

+ Add a new language Export or import general settings ? : ? ?

ID	Display Name	Edit	Active	Base Language ?	Fallback ?	RTL ?	Actions
es	Español		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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TRANSLATING TO SPANISH

[Languages](#) [Forms/Surveys](#) [Alerts](#) [Misc](#) [User Interface](#) [Settings](#) [Save Changes](#)

Select a language: Español

You may translate any of the REDCap's stock user interface elements seen on forms/surveys, such as field validation error messages, survey submit buttons, and other things that typically cannot be defined in a project. Please keep in mind that you probably do not need to translate all user interface terms since it is likely that many of them might not be used on your forms/surveys. Tip: Use the 'highlight' feature on the Settings tab above to highlight all untranslated text on the page as a quick way of determining which specific elements need to be translated.

Filter items on this page: Hide translated items

[All](#) [Common](#) [Field Types](#) [Data Entry](#) [Survey](#) [Validation](#) [Protected Email](#) [reCAPTCHA](#)

Controls & Display Elements

[Languages](#) [Forms/Surveys](#) [Alerts](#) [Misc](#) [User Interface](#) [Settings](#) [Save Changes](#)

Select a language: Español

This is the base language. Items cannot be edited here, but they can be modified in the *Online Designer* (or via *Data Dictionary* upload) and on the *Survey Settings* page. However, fields and individual survey settings can be excluded from translation here. **To start or continue translating the base language text, click a language button above.**

Use this page to manage which instruments will be translated, separately in data entry and survey modes. Furthermore, use it to navigate to the various sub-pages, such as field exclusions (base language only), or translations of field items (labels, etc.), survey settings (title, instructions, etc.) and ASI emails.

Instrument	Data Entry	Survey	Fields	Survey Settings	ASI Language Source	Export
Event Registration Form	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Google reCAPTCHA is enabled on this REDCap system. The reCAPTCHA display language can be dynamically changed by associating a Google-supported language ([List of Language Codes](#)) with this language.

reCAPTCHA language code value:

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REDCAP SURVEY DISTRIBUTION TOOLS

- Survey Distribution Tools:
 - Custom Survey Link
 - QR Code

[Data Collection](#)

- Survey Distribution Tools
- Record Status Dashboard
- Add / Edit Records

[Applications](#)

- Project Dashboards
- Alerts & Notifications
- Multi-Language Management
- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging and Email Logging
- Field Comment Log
- File Repository
- User Rights and DAGs
- Data Quality
- API and API Playground

Public Survey URL:

Custom Public Survey URL:

Protect the public survey using the Google reCAPTCHA feature

Link Actions

- Open public survey
- Open public survey + Log out
- Send me URL via email
- Survey Access Code or QR Code

Link Customizations

- Get Short Survey Link
- Create Custom Survey Link
- Get Embed Code

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REDCAP ALERTS

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REDCAP PROJECT SET-UP (6,7 / 7)

- Step 6: Test Your Project Thoroughly
 - Select "I'm Done"

- Step 7: Move Your Project to Production
 - Make sure all steps are marked as "I'm Done"

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HOW DID IT WORK?

- Allows for easy data export and collection
- Limits burden on study coordinators
- Provides an accessible source of study information for potential participants
- Builds community recruitment

Tele-PCIT

Fortaleciendo relaciones saludables por Tele-PCIT para familias en Carolina del Sur



¿Se preocupa por la conducta de su hijo y quiere fortalecer su relación? ¡Quizás podamos ayudar!

Cuidadores de niños con dificultades de comportamiento están invitados a participar en un estudio de investigación para Terapia de la Interacción Padre-Hijo (PCIT, por sus siglas en inglés). La terapia es gratuita y las familias participantes recibirán compensación.

¿Qué es la Terapia de la Interacción Padre-Hijo (PCIT)?

PCIT es un tratamiento validado, basado en ciencia, para reducir comportamientos difíciles en niños pequeños. A diferencia de otras terapias, PCIT incluye un componente de entrenamiento en directo en el que las terapeutas observan cómo juegan el padre y el hijo entre ellos y le proveen entrenamiento en vivo para el manejo de comportamiento. Las terapeutas entrenan a los padres usando estrategias positivas y les proporcionan herramientas para manejar el comportamiento de su hijo.

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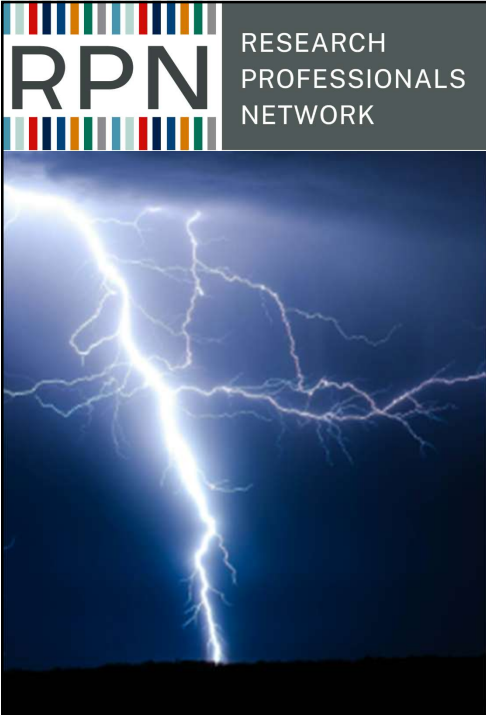
LESSONS LEARNED AND BEST PRACTICES

- Redcap can be used effectively for participant facing recruitment
- Can be accessible for families to better understand research
- Eases process for coordinators and families

Reminder that all participant facing recruitment materials (including REDCap forms) need to be approved by your IRB



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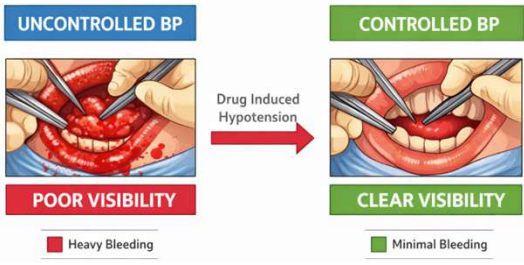
UTILIZING AUTOMATIC SURVEY DISTRIBUTION


- **Anita He, PhD** – Research Project Manager & Assistant Professor, BU/BMC

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DATA COLLECTION VIA AUTOMATED SURVEYS

- **Case:**
 - A comparison of Dexmedetomidine, Nicardipine, and Labetalol to induce hypotensive anesthesia and their effects on surgeon visibility, blood loss, hemodynamic parameters, operation time, and adverse events during orthognathic surgery
 - Survey use: PI self-report of surgical visibility
 - My role: back-end support



ChatGPT-generated image 

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FRAMING THE PROBLEM, NEED, OR CHALLENGE

- **Population**
 - Low-risk adult patients undergoing a pre-specified orthognathic surgery performed by the PI
- **Intervention**
 - Three antihypertensive agents (Dexmedetomidine, Nicardipine, and Labetalol)
 - Widely used to intentionally control intraoperative BP to reduce blood loss & improve visibility
- **Outcomes**
 - **[Primary]Surgical site visibility score (0-5) reported by the PI after the case**
 - [Secondary]Blood loss, hemodynamic parameters, operation time: extracted from EPIC by an unblinded CRC
- **Study design**
 - Randomized double-blinded prospective experimental comparison study
 - Blinded: PI & subjects
 - Unblinded: a surgery participating resident (CRC) & anesthesia provider
 - Screening & Consent at pre-op appointment (2-4 weeks before surgery)



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HOW IS REDCAP USED AS A SOLUTION?

- **The Need**
 - **Collect the PI's rating of the surgical field visibility after each case**
 - Time sensitive response + Verification of the case + Blinded status
- **REDCap Solution**
 - **Automated survey to the PI sent within a day of each case**
 - Triggering logic: PI's email
 - Timing control: Subject's surgery schedule (known to the unblinded CRC)
 - Verification without unblinding: PI's recall of the approximate timing of each case



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REDCAP PROJECT SET-UP

Project Setup

Main project settings

Complete! ✔

Some options below are disabled because they may not be modified once the project is in production status.

Disable ✔ Use surveys in this project? [?](#)

Enable ✘ Use longitudinal data collection with defined events? [?](#)

Enable ✘ Use the MyCap participant-facing mobile app? [?](#)

Modify project title, purpose, etc.

Enable optional modules and customizations

Some options below are disabled because they may not be modified once the project is in production status.

Modify ✔ Repeating instruments [?](#)

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

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

Disable ✔ Randomization module [?](#)

Disable ✔ Designate an email field for communications (including survey invitations and alerts) [?](#)

Online Designer- Instruments

Instrument name	Fields	PDF	Enabled as survey	Instrument actions	Survey related options
Pre-Op Visit-Enrollment & Randomization ←	18		Enable	Choose action	
Enrollment Confirmation	2		Enable	Choose action	
Surgical Visit	13		Enable	Choose action	
Survey to Dr. Mehra ←	3		Enable ✔	Choose action	Survey settings ✔ Automated Invitations ✔
Safety Review ✔	8		Enable	Choose action	

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REDCAP PROJECT SET-UP

Automated Invitations Setting

1. Send when PI's email is entered

STEP 2: Conditions

Specify conditions for sending invitations:

When the following survey is completed:
-- select a survey --

OR

When the following logic becomes true:
[pi_email] <> "
(e.g., [age] > 30 and [sex] = "1")

How do I use special functions? **Mock record in development**

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

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

How to use "stop logic" to disable an automated invite

Pre-op Instrument

		Validated Field
[pi_email]	Dr. Mehra's email address	text (email)
[survey_planned]	Date and time to send the survey to Dr. Mehra	text (datetime_mdy)

2. Send based on the surgery schedule

STEP 3: When to send invitations AFTER conditions are met

Send immediately

Send on next -- select day -- at time [] H:M

Send the invitation [0] days [0] hours [10] minutes
after [] "Date and time to send the survey to Dr. Mehra" [survey_planned] [?](#)

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

3. Reminder everyday for up to 3 times

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 -- select day -- at time [] H:M

Send every [1] days [0] hours [0] minutes

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

– AND –

Recurrence: Send up to 3 times

4. Check Survey Invitation Log with a mock record

Data Collection

Survey Distribution Tools ←

Record Status Dashboard

Add / Edit Records

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HOW DID IT WORK?

Confidential

Page 1

Hypotension Anesthesia Med RCT: Blood Loss & Surgical Field Visibility Survey

Dear Dr. Mehra,

Please record the estimated blood loss and surgical field visibility.

Thank you!

Date and time of the surgery? (for verification purpose)

What was the estimated blood loss? (mL)

Fromme's scale of surgical field visibility

- 0 = no bleeding, virtually bloodless field
- 1 = mild bleeding, no surgical nuisance
- 2 = moderate bleeding, a nuisance without interference with accurate dissection
- 3 = moderate bleeding that moderately compromised surgical dissection
- 4 = bleeding, heavy but controllable with significant interference with dissection
- 5 = massive uncontrollable bleeding

Premise:

- PI's proactiveness in responding to the survey
- CRC's prompt entry of screening data and monitoring of the subject's schedule
- Relatively low case volume per day

# records	112
# records completed as anticipated	102 (91%)
# records with reminders	8 ➤ 3/8 due to rescheduling of surgeries (rescheduled date entered after initial surveys have been sent)
# surveys completed beyond the date of surgery	6 ➤ 2/6 completed before reminders
#incomplete survey	1

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LESSONS LEARNED AND BEST PRACTICES

- Validated fields required for logic trigger
- Check your automated survey invitation setup with a mock record
- Typical application for automatic surveys
 - e.g., a survey set to be sent 4 times to each participant after discharge, one per week, in an observational trial

STEP 2: Conditions

Specify conditions for sending invitations:

When the following survey is completed:

--- select a survey ---

OR

When the following logic becomes true:

[surgical_visit_arm_1][discharge_time] <= "

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

[How do I use special functions?](#)

Test logic with a record: -- select a 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 the invitation 7 days 0 hours 0 minutes

after "Date and time of discharge" (Surgical visit (Arm 1: Control)) - [discharge_time]

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

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

Just once

Multiple times on a recurring basis:

Send every 7 days after initially being sent.

Tip: A monthly recurrence can be approximated as 30.44 days.

Send up to 4 times total (including the first time sent).

Leave blank to continue triggering and sending forever.

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

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FOOD FOR THOUGHT


- How would you collect the surgical site visibility data differently with REDCap?
 - Can repeated entry of the PI's email be avoided?
 - What if the daily surgical volume is high?
 - What if the PI's prompt response is not feasible in practice?



ChatGPT-generated image




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RPN

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UTILIZING REDCAP ALERTS

- **Sarah J Bourne, MPH** – Program Coordinator, MUSC

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ENTRYWAY: YOUTH & ADULT SUBSTANCE USE TREATMENT TRENDS

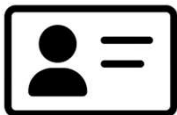


- **Centralized Recruitment & Participant Screening**
 - Social media, community events, clinics, & more
 - Youth Collaborative, Cannabinoid Research Collaborative, Project Quit
- **Nationwide Participants Ages 12+**
 - Substance use studies (i.e., alcohol, cannabis, nicotine, opioids)
- **In-Person & Remote Options for “Intake” Screening**
 - In-depth assessment covering physical health, mental health, & substance use
- **Averaged 262 Contacts/mo., 117 Eligibility Surveys/mo., & 30 Intakes/mo. in 2025**



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MANY MOVING PARTS = MANY REDCAP NEEDS



COLLECT PARTICIPANT CONTACT CARDS

Reports organize new contacts by age, location, substance of interest



ALERTS FOR ELIGIBILITY & INTAKE SURVEYS

Notify staff when a survey has been completed



ALERTS TO REVISIT PARTICIPANTS

Remind staff to revisit in special cases



ALERTS FOR AE DURING INTAKE

Instantly notify staff & clinicians of acute safety concerns



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SUICIDAL IDEATION (SI) ALERTS: EVALUATION

Intake Participant
Completes PHQ-9
Survey via Self-
Administration

- **Flagged questions that indicate SI**
 - Thoughts of self-harm/better off dead
 - Past month SI
 - Lifetime suicide attempt

Staff & Clinicians
Receive Alert to
Assess Acute Safety

- **Includes information for staff to relay to clinicians**
 - Clinician order determined by participant age
 - Contact information provided



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STEP 1: TRIGGERING THE ALERT

Applications

- Project Dashboards
- Alerts & Notifications**
- Multi-Language Management
- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging and Email Logging
- Field Comment Log
- File Repository
- User Rights and DAGs
- Customize & Manage Locking/E-signatures
- REDCap Mobile App

+ Add New Alert

Edit Alert #1 (Unique Alert ID: A-1182)

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: Intake SI Endorsement: Sarah Bourne (Ages 23 and up)

STEP 1: Triggering the Alert

- A) How will this alert be triggered?
- When a record is saved on a specific form/survey*
 - If conditional logic is **TRUE** when a record is saved on a specific form/survey*
 - When conditional logic is **TRUE** during a data import, data entry, or as the result of time-based logic

B) Trigger the alert...

when "Patient Health Questionnaire (PHQ-9) Adole" is saved with any form status (excludes data imports)

while the following logic is true:

(([phq_9]>0 or [phq_12]=1) and [yc_age]>22.99 and [visit_staff]='15')

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

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

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

Allow pausing of recurrences? (Existing interval will continue if the logic becomes true again after becoming false.) [?](#)

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

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

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



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STEP 2: SET THE ALERT SCHEDULE

STEP 2: Set the Alert Schedule

When to send the alert?

Send immediately

Send on next at time H:M

Send the alert days hours minutes
after

Send at exact date/time: H:M

Send it how many times?

Just once

Every time the form/survey in Step 1B is saved
(excludes data imports)

Multiple times on a recurring basis:

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

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

Alert expiration:
(optional) H:M

This alert will be auto-deactivated at the specified date/time above. Note: This will cause any already-scheduled notifications not to be sent after the expiration time.

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STEP 3: MESSAGE SETTINGS

STEP 3: Message Settings

Alert Type: Email SMS Text Message Voice Call

Email From:

Email To:
* must provide value

Or manually enter emails:

Email CC:
* must provide value

Or manually enter emails:

Email BCC:

Or manually enter emails:

Email to send email-failure errors:

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STEP 3: MESSAGE SETTINGS (CONTINUED)

Subject: Intake SI Alert

Message: Prevent piping of data for Identifier fields (?)

Open Sans Paragraph 10pt

B I U

This is message is being sent to you for follow-up.

A participant currently completing the Intake Visit with **[visit_staff]** endorsed suicidality. Specifically, the participant **[yc_id]** (**[yc_gender]**, **age [yc_age]**), reported the following:

- In the **past 2 weeks**, they *had thoughts that they would be better off dead, or of hurting themselves in some way* at the following frequency: **[phq_9]**.
- The participant reported **[phq_12]** to the question: *Has there been a time in the past month when you have had serious thoughts about ending your life?*
- The participant reported **[phq_13]** to the question: *Have you **EVER**, in your **WHOLE LIFE**, tried to kill yourself or made a suicide attempt?*

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

Example:
Hi **[first_name]**! Please complete this survey: [\[survey-link:followup_survey\]](#)

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

Example of a repeating survey using recurring alerts:
Please complete your daily survey: [\[survey-link:daily_repeating_survey\]\[new-instance\]](#)

Message Attachments (Max file size: 20MB)

File Upload fields:
You may utilize files attached to records that have been uploaded into File Upload or Signature fields.

--and/or--

Attachment #1: **Intake Safety SOP_10.15.25.docx** X Delete File

Attachment #2: Choose File No file chosen

+ Add another attachment

Save Cancel

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SI ALERT EXAMPLE

From: Entryway Alert <bourne@musc.edu>
Sent: Monday, 2026 5:43 PM
To: Bourne, Sarah <bourne@musc.edu>; Gex, Kathryn <soltsik@musc.edu>
Cc: Meredith, Lindsay <meredith@musc.edu>; Tomko, Rachel <tomko@musc.edu>
Subject: Intake SI Alert

This is message is being sent to you for follow-up.

A participant currently completing the Intake Visit with **Sarah Bourne** endorsed suicidality. Specifically, the participant **Y** (**age**), reported the following:

- In the **past 2 weeks**, they *had thoughts that they would be better off dead, or of hurting themselves in some way* at the following frequency: **Several days**.
- The participant reported **Yes** to the question: *Has there been a time in the past month when you have had serious thoughts about ending your life?*
- The participant reported **Yes** to the question: *Have you **EVER**, in your **WHOLE LIFE**, tried to kill yourself or made a suicide attempt?*

Instructions for person completing the intake:

Clinician order is listed below (please move to next if the prior clinician is unavailable). Please consult with a clinician prior to the participant leaving the visit. Please be ready with the following information when consulting with the clinician (Known diagnoses, meds, and potential study. Is there any intention to act on suicidal thoughts? Have they thought about a plan? Are they currently in treatment and are they comfortable speaking with their provider about SI?)

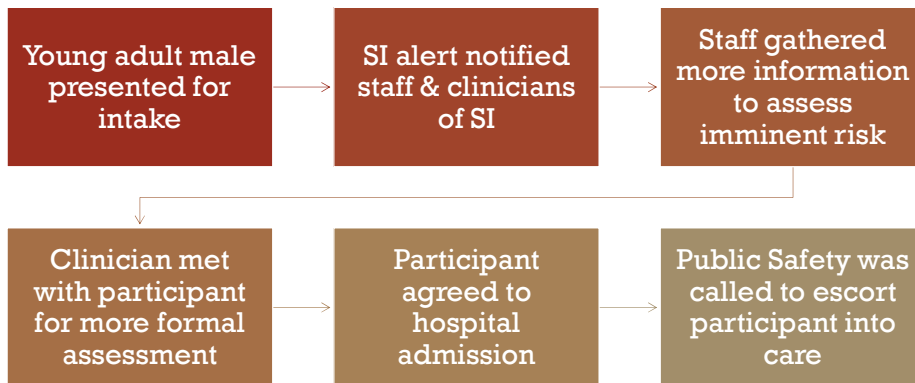
- Gex
843-792- (office)
843-864- (cell)
- Tomko;
843-792- (office)
412-953- (cell)
- Meredith;
843-792- (office)
937-243- (cell)

Instructions for clinician:

Please click here if you will be completing clinical follow-up: [ClinicalAcknowledgment](#)

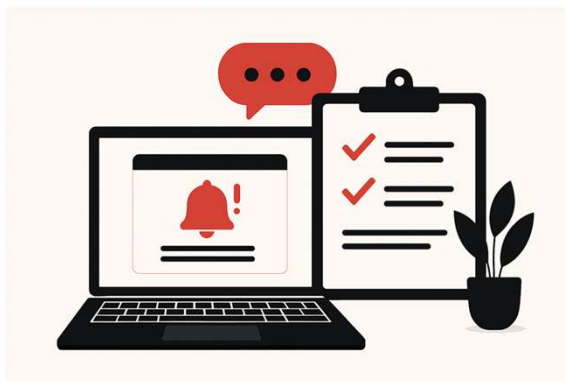
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SUCCESSFUL APPLICATION



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LESSONS LEARNED & BEST PRACTICES



- **Alerts are most useful when checking for them!**
- **Communication is still key!**
- **Best Practice:** Keep email inbox open during intakes
- **Best Practice:** Have a Safety SOP to go with alerts

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Do not edit
How to change the
design




What other ways could your team use REDCap alerts?


 The [Slido app](#) must be installed on every computer you're presenting from

slido

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DATA SECURITY

- **Tasha Coughlin** – Research & Instructional Application Manager, BU/BMC



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Do not edit
How to change the
design



What are one or two things you do, day-to-day, to protect data in your REDCap project?

The Slido app must be installed on every computer you're presenting from **slido**

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MITIGATE REDCAP DATA SECURITY RISKS

	Security is a shared responsibility	REDCap security depends on the system and its users	
	Minimize project-level risk	Create an operational framework for safe REDCap projects	
	Create a data security culture	Continuous training, review, and documentation	

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PROJECT RISKS	MITIGATION
<ul style="list-style-type: none"> • Unlimited project design and data access • Insufficient testing • Inconsistent workflows • No survey security measures • Uncontrolled data exports, sharing, and storing 	<ul style="list-style-type: none"> • Planning & Risk Prevention <ul style="list-style-type: none"> • Data Management Plan <ul style="list-style-type: none"> • Project Access Management & Training • Data Resolution Workflows • Change Control & Testing Cycle • Survey Security <ul style="list-style-type: none"> • Verified Invitations <ul style="list-style-type: none"> • Unique Links, Survey Login, or Survey Queue • Eligibility Criteria • Spam and Fraud Prevention • Secure Data Export & Sharing <ul style="list-style-type: none"> • Limited Exports <ul style="list-style-type: none"> • Filtered and De-Identified Exports • Approved Storage • Secure Data Transfer

REDCAP 'DATA MANAGEMENT' PROJECT TEMPLATE

Project Management Template PID: 19947

[Project Home](#)
[Project Setup](#)
[Online Designer](#)
[Data Dictionary](#)
[Codebook](#)

[VIDEO: How to use this page](#)
[Create snapshot of instruments](#)
Last snapshot: 03/25/2026 1:13pm

The Online Designer will allow you to make project modifications to fields and data collection instruments very easily using only your web browser.
 NOTE: While in development status, all field changes will take effect immediately in real time.

Data Collection Instruments		Form options:		Survey options:	
+ Create a new instrument from scratch Import a new instrument from the official REDCap Instrument Library Upload instrument ZIP file from another project/user or external libraries		PDF Snapshots Form Display Logic PDF (all instruments) Descriptive Popups		e-Consent Survey Queue Auto Invitation options Survey Login Survey Notifications Survey Settings	
Instrument name	Fields	PDF	Enabled as survey	Instrument actions	Survey related options
Project Profile	17			Choose action	
Data Management	16			Choose action	Survey settings + Automated Invitations
Responsibility Matrix	4			Choose action	Survey settings + Automated Invitations
User Access Management	18			Choose action	Survey settings + Automated Invitations
Training Tracker	12			Choose action	Survey settings + Automated Invitations
Project Design Settings	27			Choose action	Survey settings + Automated Invitations
Survey Security	10			Choose action	Survey settings + Automated Invitations
Example Fields	31			Choose action	Survey settings + Automated Invitations
Testing	0			Choose action	Survey settings + Automated Invitations
Change Control	0		Enable	Choose action	

MANAGING ACCESS - TRAINING - DATA

User Rights/Roles

Role name <small>(click role name to edit role)</small>	Username or users assigned to a role <small>(click username to edit or assign to role)</small>	Expiration <small>(click expiration date to edit)</small>	Project Design and Setup	User Rights	Data Access Groups	Data Viewing Rights
—	tawatson (Tasha Coughlin)	never	✓	✓	✓	10 View & Edit
Data Entry	[No users assigned]		✗	✗	✗	10 View & Edit

Sponsor Dashboard

Sponsor Dashboard

The Sponsor Dashboard can be utilized by users who have been designated as a user sponsor for another REDCap user. In many cases a sponsor is a secondary contact person for the user or someone that helps manage the account (or perhaps they requested that the account be created). The Sponsor Dashboard allows sponsors to manage their sponsored users by viewing various information about them, such as username, name, expiration, suspended status, and some general activity. The dashboard contains various functions to allow sponsors to make requests to REDCap administrators to help manage their sponsored users. Although sponsors may not perform the actions at the bottom of this page on their own, an administrator can perform the action on their behalf when requested.

<input type="checkbox"/> Username	First Name	Last Name	Email	View user's projects	Suspended?	Account Expiration	Last Activity	Last Login	Time of latest password reset <small>Batch for selected</small>
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Logging

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

Export (CSV) | [All logging](#) | [All pages using current filters](#) | [Current page](#)

Filter by event: All event types (excluding page views)

Filter by user name: All users

Filter by record: All records

Filter by time range from: 03/23/2026 07:51 to []

Custom range: [Past Day](#) | [Past Week](#) | [Past Month](#) | [Past Year](#)

Displaying events (by most recent): 1 - 100 (Page 1 of 2)

By default, only the logged events from the **past week** are displayed below, but you may change the time range filter above.

Time / Date	Username	Action	List of Data Changes <small>OR Fields Exported</small>	Reason for <small>Data Change(s)</small>
-------------	----------	--------	---	---

MANAGING ACCESS - TRAINING — DATA CONT.

Data Workflow & Queries

Project Revision History

	Created project	03/25/2026 1:08pm	-	Created by tawatson (Tash)
	Data dictionary snapshot	03/25/2026 1:13pm	Download data dictionary	Snapshot by tawatson (Tas)
	Moved to production (current)	03/29/2026 12:17pm	Download data dictionary	Moved to production by ta

Project Revision Statistics

- Enable the Field Comment Log or Data Resolution Workflow (Data Queries)?**
For this project, you may enable either the Field Comment Log or Data Resolution Workflow (also known as the Data Queries module). The Field Comment Log (enabled by default) allows users to leave comments for any given field on a data entry form by clicking the balloon icon next to the field. All comments can also be viewed, searched, and downloaded on the Field Comment Log page.
- Require a 'reason' when making changes to existing records?**
Require users to enter a reason (200 character max) in a text box when making any data changes to an already existing record on a data collection instrument. The prompt is triggered when clicking the Save button on the page. Any 'reasons' entered can then be...

Change Control

Project Revisions

Date/Time	User	Comments and Details
03/30/2026 7:44am	tawatson	<input checked="" type="radio"/> Verified data value — OR — <input type="radio"/> Open query Assign query to a user (optional): -- select us... Notify this user of their assignment using: <input type="checkbox"/> Email <input type="checkbox"/> REDCap Messenger Comment (optional): <input type="text"/>

SURVEY SECURITY

Proactive security measures help ensure data quality

- Unique links or Survey Login
- Survey expiration dates
- Limit survey responses
- Eligibility criteria
- Verified invitation
- Survey Queue

Spam and Fraud Prevention

- CAPTCHA and challenge questions
- Honeypot questions
- Repeated confirmation questions
- Assess suspicious patterns
- Do not automate incentives

Please solve this math problem:

$10 + 2 = 12$

Submit

Re-Enter Email
* must provide value
Validation type: Email

Add Field Add Matrix of Fields Add Standardized Field (CDE)

Email addresses do not match.
* must provide value
 email match
@HIDDEN-CHALLENGE

Add Field Add Matrix of Fields Add Standardized Field (CDE)

Select Massachusetts
* must provide value

Add Field Add Matrix of Fields Add Standardized Field (CDE)

Please select Massachusetts

Add Field Add Matrix of Fields Add Standardized Field (CDE)

Leave blank if you are a human
 Checkbox 1
honeypot
@HIDDEN-SURVEY

Add Field Add Matrix of Fields Add Standardized Field (CDE)

Survey Code
Validation type: None
@HIDDEN-RANDOMNUMBER

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EXPORTING & SHARING DATA SAFELY

Filter datasets and limit exports

Use de-identified options

Use approved cloud storage

Secure data transfer – Send It

Complete or close project

De-identification options (optional)

The options below allow you to limit the amount of sensitive information that you are exporting out of the project. Check all that apply.

Known Identifiers:

- Remove All Identifier Fields (tagged in Data Dictionary)
- Hash the Record ID field (converts record name to an unrecognizable value)

Free-form text:

- Remove unvalidated Text fields (i.e. Text fields other than dates, numbers, etc.)

Project Status Management



Development



Production
(current)



Analysis/Cleanup

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PUTTING IT ALL TOGETHER

Project Management Template

Access Control & Training

Testing & Revision Control

Survey Security Tools & Settings

Data Change Control

Data Resolution Workflows

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HABITS THAT BUILD AN INTENTIONAL DATA SECURITY CULTURE...

Project Plan

Limited Access

Survey Security

Testing & Change Control

Exporting & Sharing Data Safely

Documentation

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**WE HOPE THIS WORKSHOP HAS
SPARKED SOME CREATIVE
THINKING FOR REDCAP**

**WHAT QUESTIONS DO
YOU HAVE?**

