Better Data Collection and Use with REDCap

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September 19, 2024

THE CITY OF COLUMBUS
ANDREW J. GINTHER, MAYOR

COLUMBUS PUBLIC HEALTH

If you have a mobile device connected to the internet, please scan the QR code for a quick preliminary survey.

Presentation Outline

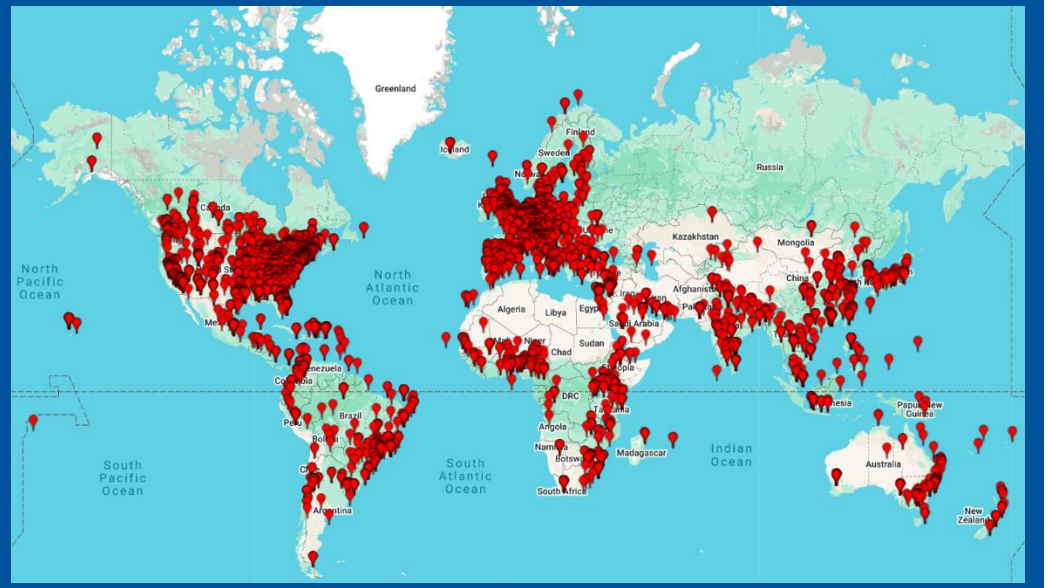
1) What is REDCap?
2) Setting up REDCap at Columbus Public Health
3) Our Current REDCap Uses
4) Advantages of REDCap
5) Process & Considerations for Using REDCap at your LHD
6) Live Demo (if time and technology allows)

1) What is REDCap?

REDCap is:

a web-based application developed by Vanderbilt University for building and managing online surveys and databases

https://projectredcap.org



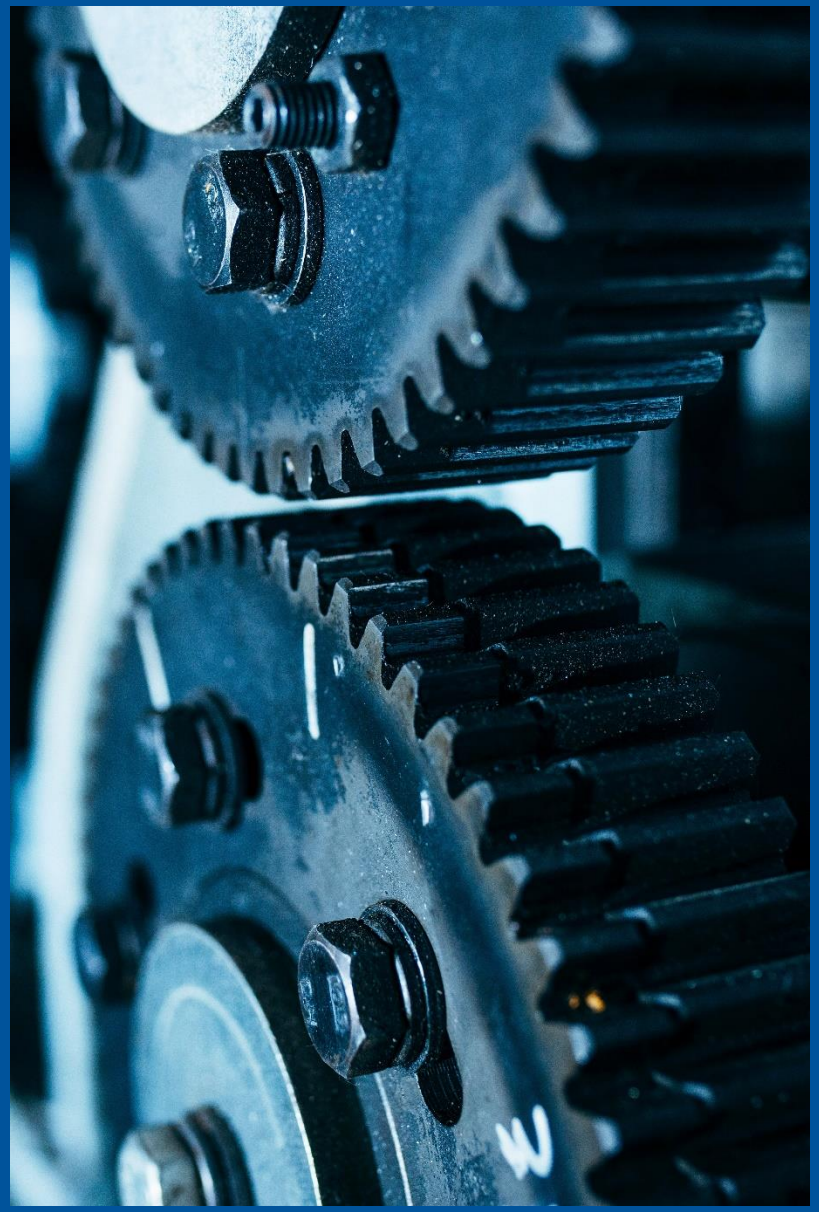
REDCap is:

- Free
- HIPAA-compliant & secure
- A tool for data collection & management
- Able to export data to various analysis programs
- Used by 7,456 institutions in 159 countries

https://projectredcap.org

How REDCap works:

- Available at no charge to nonprofit organizations
- Your organization is responsible for installation & support, as well as administration (user accounts & permissions)
- Users access it from anywhere via a web browser

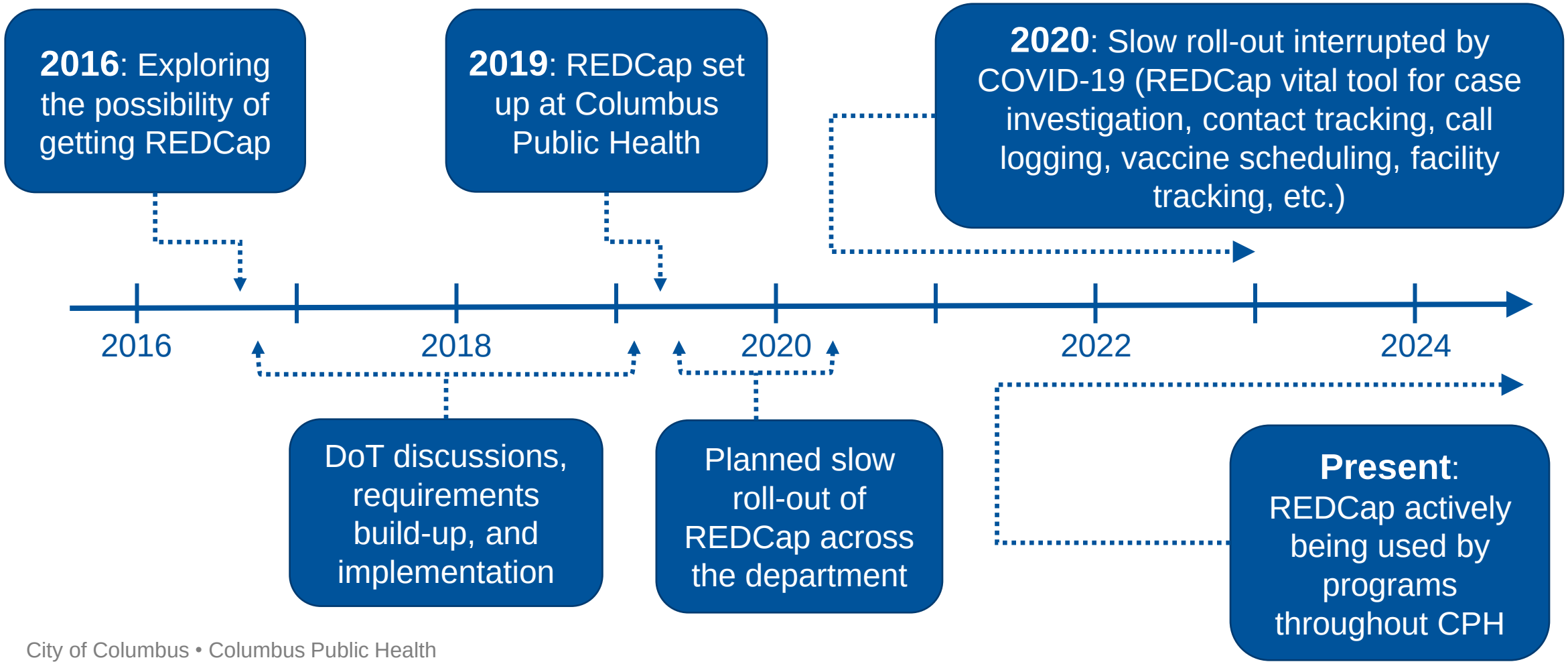


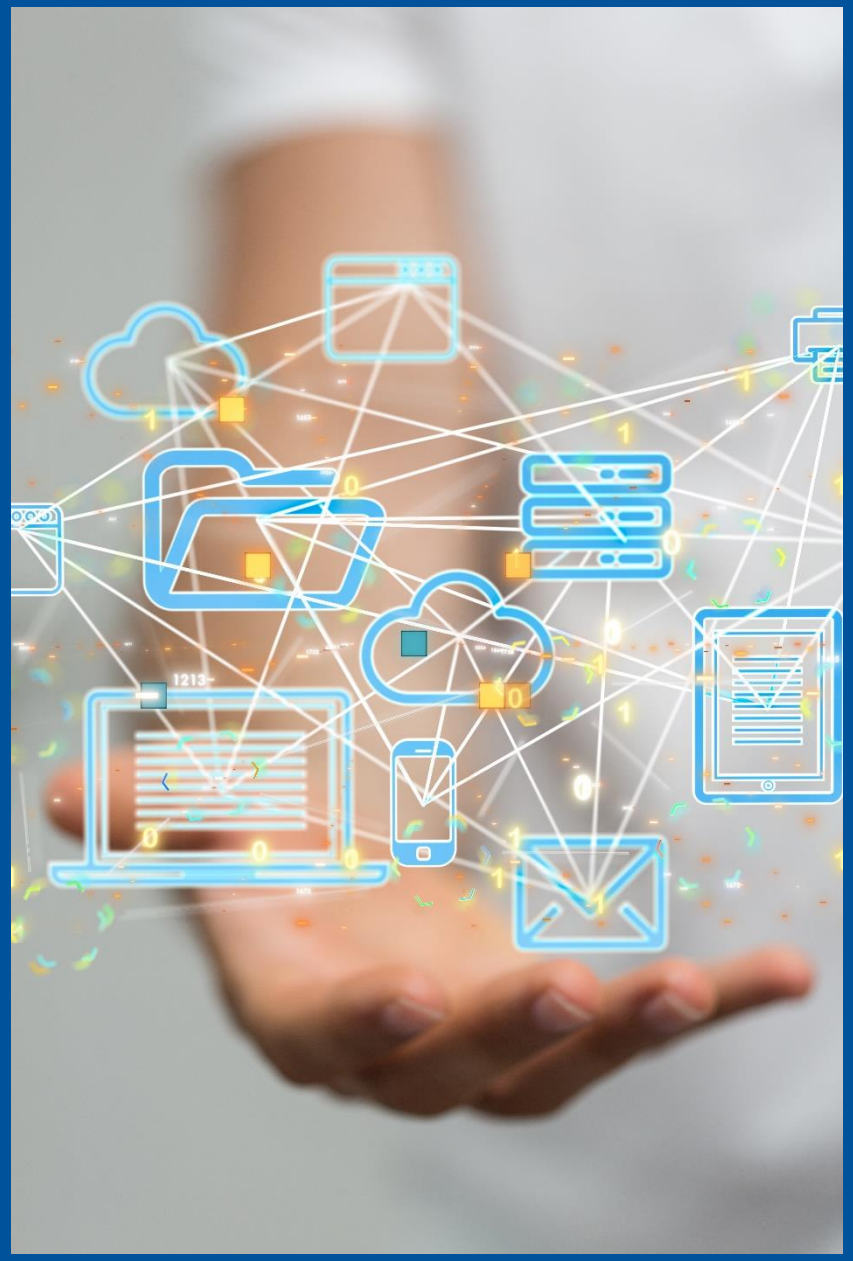
REDCap Features

- Highly customizable
- Simple to create, copy, modify, and/or share projects
- Advanced capabilities and many design & functionality options
- Tracks user activity
- Ability to create a survey in multiple languages

2) Setting up REDCap at Columbus Public Health

Timeline of REDCap at CPH





IT Resources

- Web server
- MySQL database server
- SMTP email server
- File server (optional)
- Other - Knowledgeable IT staff, Consortium membership

For more information please visit
https://projectredcap.ord/software/requirements/

City Department of Technology

- Provide Platform-Based Services/ Technological Administration
  - Software Install/upgrade/maintenance
  - Maintain servers
  - Monitor network performance
  - File storage
  - Other technical support…

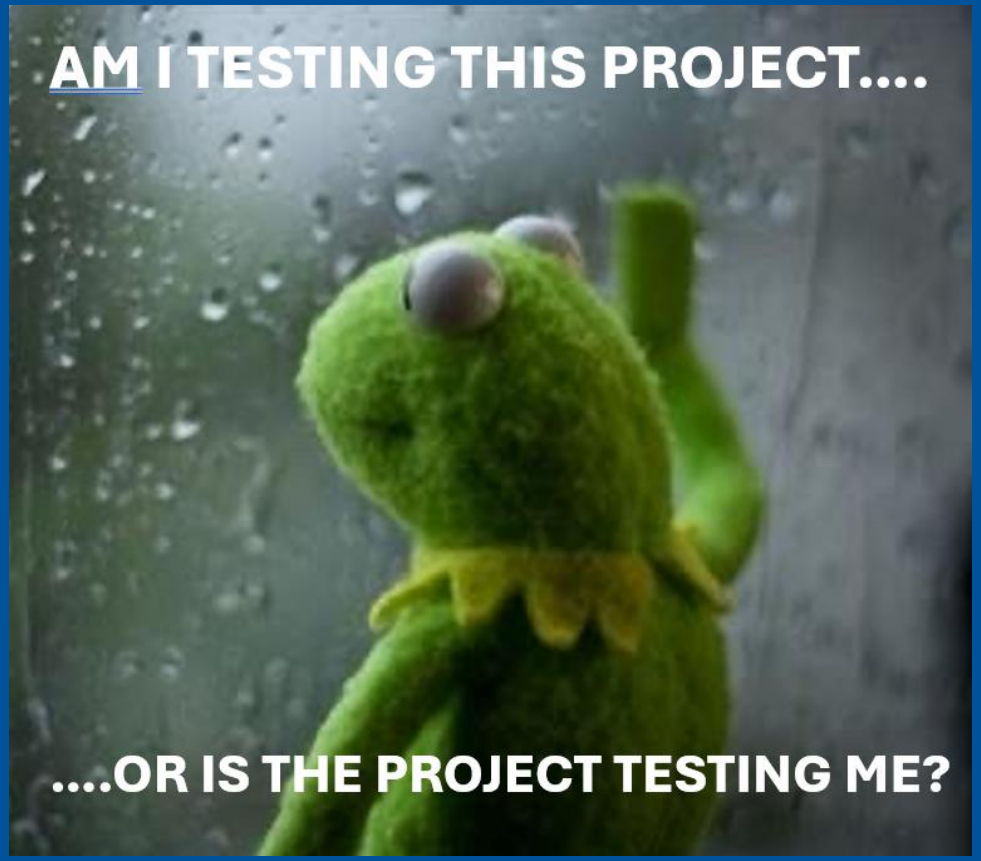
CPH, Office of Epidemiology

- General Application Administration
  - Manage users
  - Project production review/approvals
  - Project troubleshooting
  - Trainings
  - Email in-box
  - Work with DoT
- Project Requests and Creation

3) Current REDCap Uses at Columbus Public Health

Since 2019…

- We’ve created over 1,000 projects and added over 500 user accounts
- REDCap has been used by programs in all nine divisions of our health department
- Our Office of Epidemiology has built up our knowledge and skills to create a wide variety of project types



Administrative Tools

REDCap New User Request

Please submit the form below to request a new CPH REDCap user account. The approval process generally takes 1-2 business days. You will be notified of account approval via email.

If you have questions, please email REDCapCPH@columbus.gov.

New User Information

First Name
* must provide value
First Name

Last Name
* must provide value
Last Name

Work Email
* must provide value
Work Email Address

Work Phone
* must provide value
Work Phone Number

Supervisor Name (First & Last)
* must provide value
Supervisor Name

How will you be using REDCap?
* must provide value

- [ ] Entering data
- [ ] Viewing data
- [ ] Analyzing data
- [ ] Other
- [ ] Unsure

Select all that apply.

Please list the REDCap Project(s) you need access to.

Please download and review the CPH REDCap User Agreement.

Attachment: CPHREDCap_UserAgreement.pdf (0.08 MB)

By indicating Yes and signing this form, I, _____, acknowledge that I have read, understand, and will abide and follow the CPH REDCap User Agreement rules and conditions.
* must provide value

○ Yes ○ No

reset

Please provide an electronic signature.
* must provide value

Add signature

Administrative Tools

Office of Epidemiology Request Form

Please enter in the details of your request for data and/or services from the Office of Epidemiology.

There is a new data request from [redacted] from **Admin.**

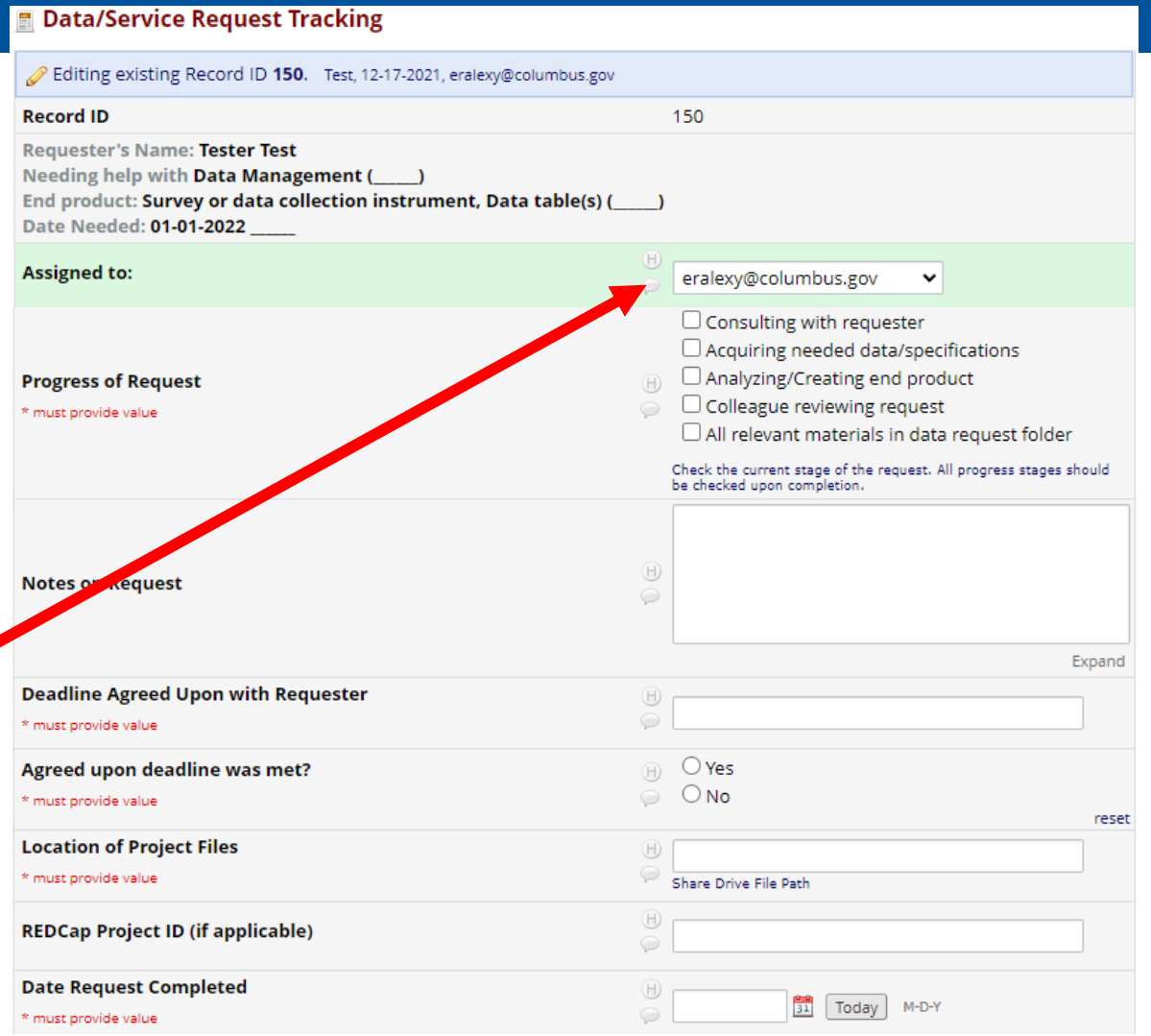
Date Needed: 1-2 work weeks

Type of Request: REDCap

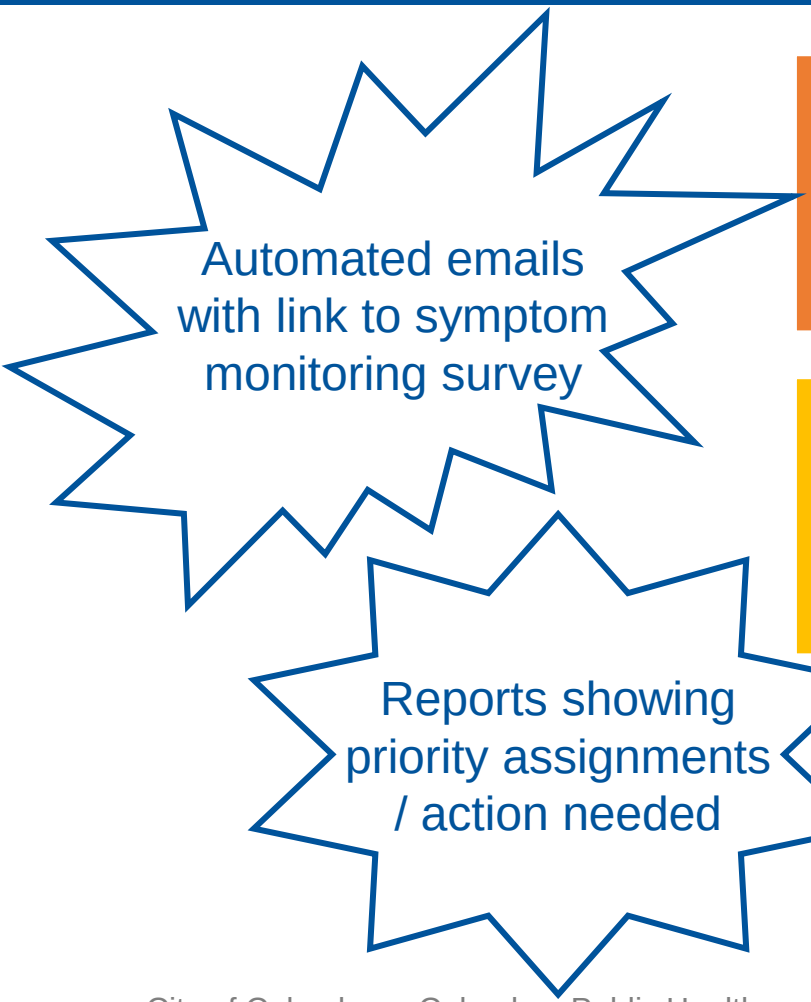
Details of Request: Hello! Could we have a gift card survey/form created for …

End Product: Survey or data collection instrument

Click here to assign data request and track: Data/Service Request Tracking



Case & Contact Investigations



COVID-19 Cases

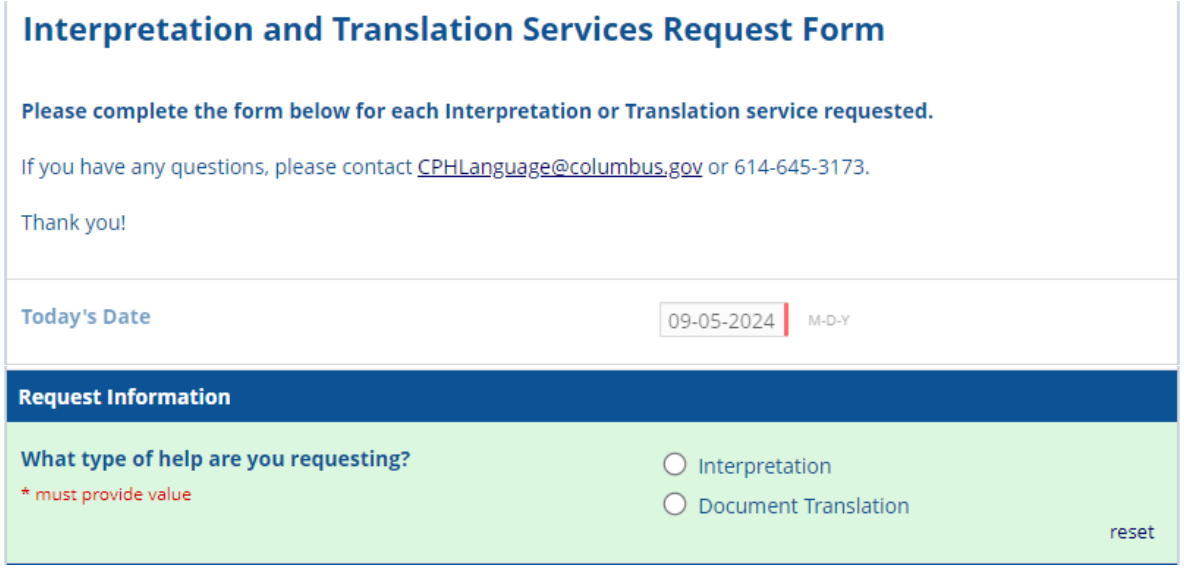
COVID-19 Close Contacts

Mpox Contacts

Ebola Monitoring

Measles Contacts

Collaboration between teams



Interpretation and Translation Services Request Form

Please complete the form below for each Interpretation or Translation service requested.

If you have any questions, please contact CPHLanguage@columbus.gov or 614-645-3173.

Thank you!

Today's Date 09-05-2024 M-D-Y

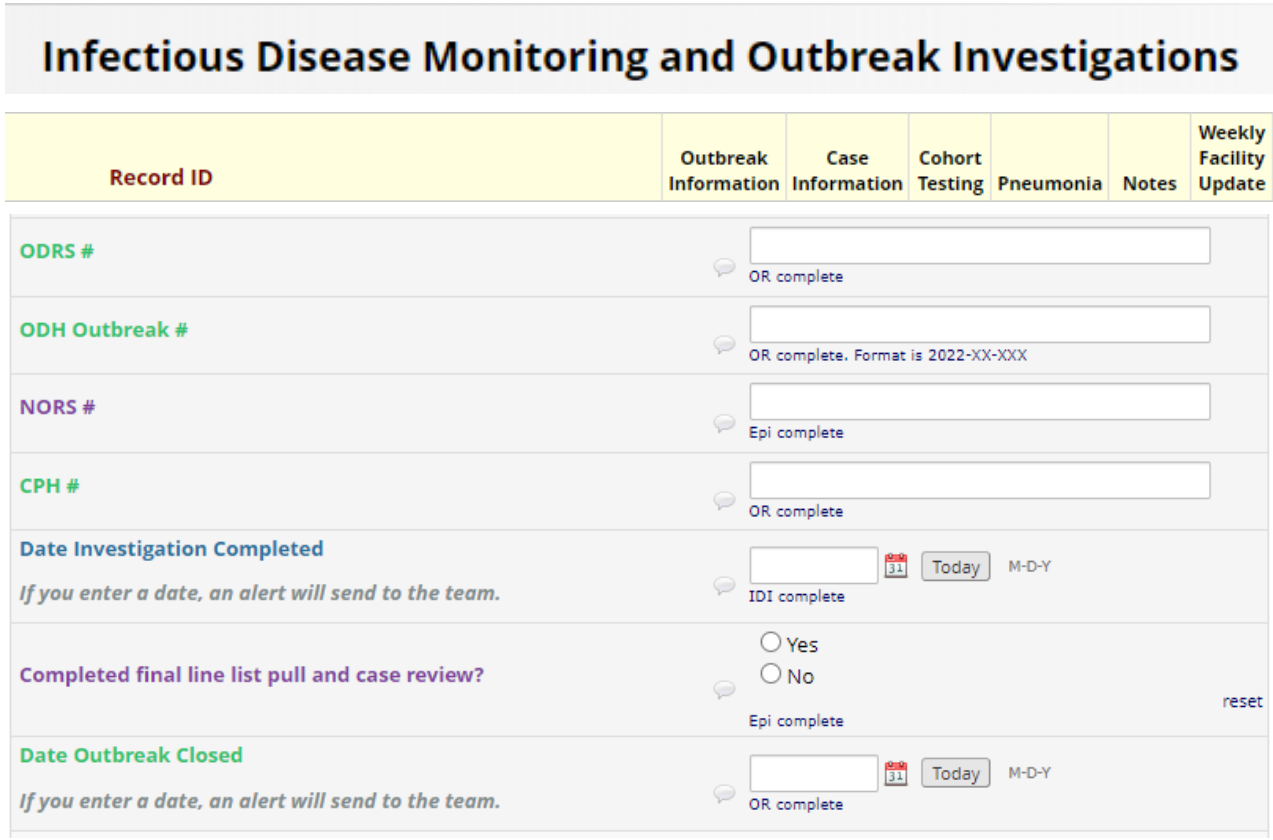
Request Information

What type of help are you requesting?

* must provide value

- Interpretation
- Document Translation

reset



Infectious Disease Monitoring and Outbreak Investigations

Record ID	Outbreak Information	Case Information	Cohort Testing	Pneumonia	Notes	Weekly Facility Update

ODRS #

OR complete

ODH Outbreak #

OR complete. Format is 2022-XX-XXX

NORS #

Epi complete

CPH #

OR complete

Date Investigation Completed

If you enter a date, an alert will send to the team.

Today M-D-Y

IDI complete

Completed final line list pull and case review?

- Yes
- No

reset

Epi complete

Date Outbreak Closed

If you enter a date, an alert will send to the team.

Today M-D-Y

OR complete

Public Surveys/Requests

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AAA

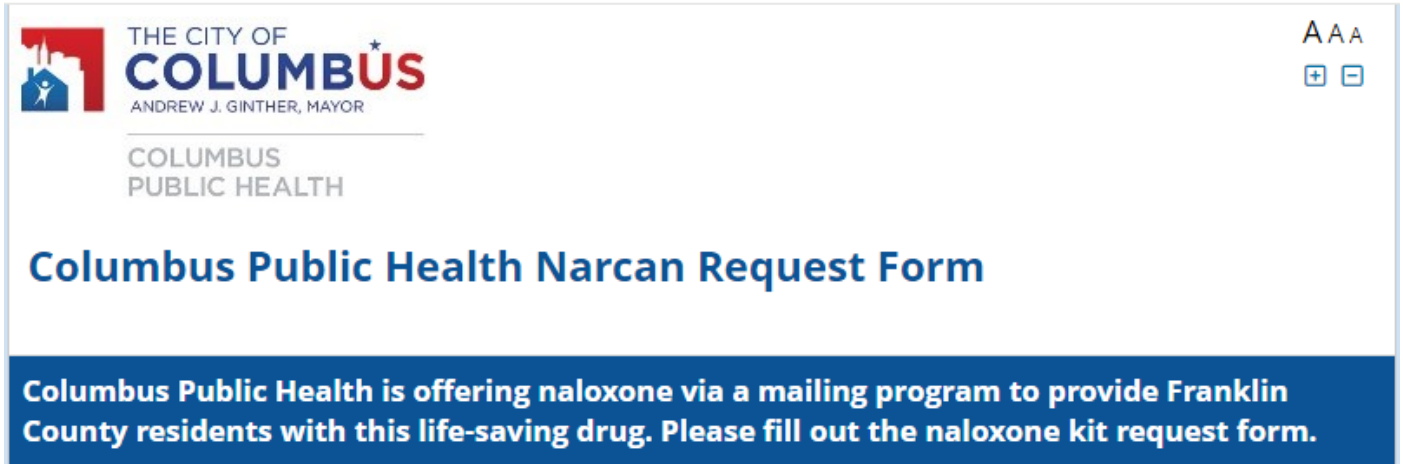
Preceptorship/Volunteer Application

Please complete the survey below.

If you have any questions, please reach out to Krystie Weist, Human Resources Representative, 614-645-5589, kaweist@columbus.gov

Thank you!

STUDENT INFORMATION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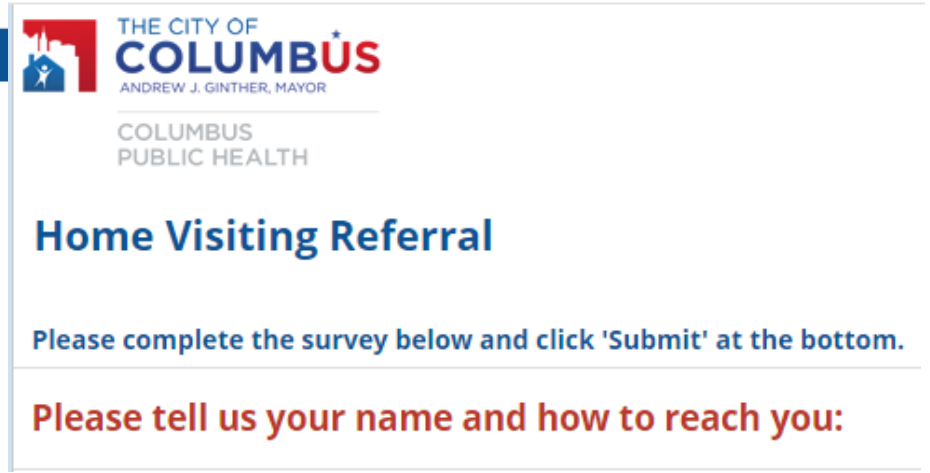
AAA

Columbus Public Health Narcan Request Form

Columbus Public Health is offering naloxone via a mailing program to provide Franklin County residents with this life-saving drug. Please fill out the naloxone kit request form.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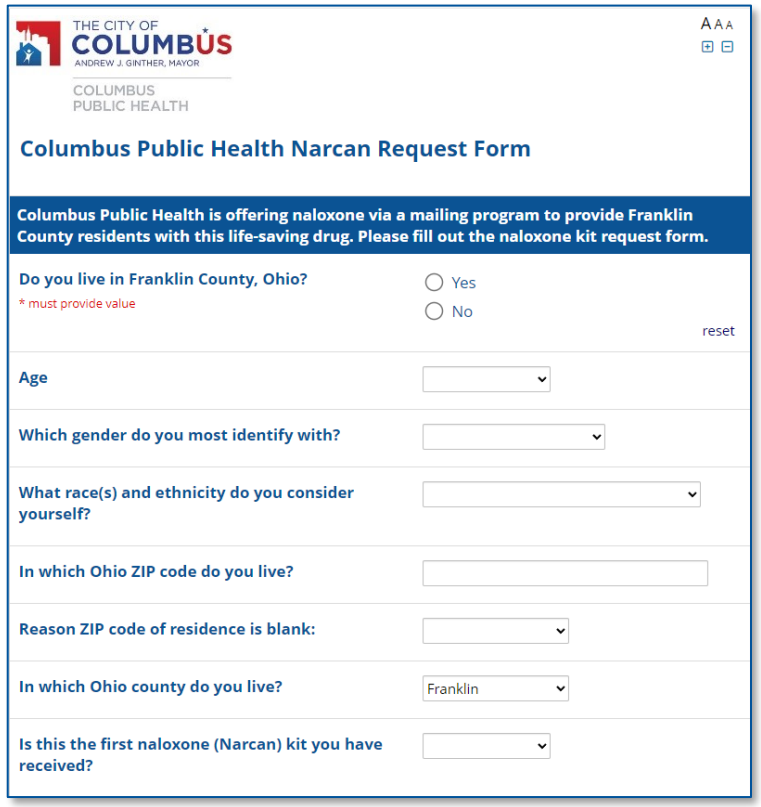
Home Visiting Referral

Please complete the survey below and click 'Submit' at the bottom.

Please tell us your name and how to reach you:

Public Surveys/Requests



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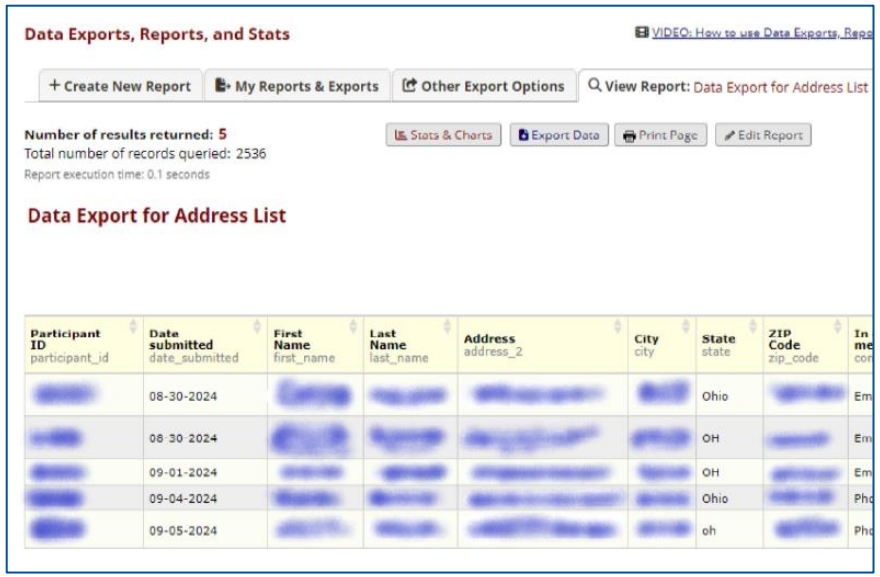
Columbus Public Health Narcan Request Form

Columbus Public Health is offering naloxone via a mailing program to provide Franklin County residents with this life-saving drug. Please fill out the naloxone kit request form.

Do you live in Franklin County, Ohio? * must provide value	○ Yes ○ No reset
Age	
Which gender do you most identify with?	
What race(s) and ethnicity do you consider yourself?	
In which Ohio ZIP code do you live?	
Reason ZIP code of residence is blank:	
In which Ohio county do you live?	Franklin
Is this the first naloxone (Narcan) kit you have received?	



Data Exports, Reports, and Stats

+ Create New Report | My Reports & Exports | Other Export Options | View Report: Data Export for Address List

Number of results returned: 5
Total number of records queried: 2536
Report execution time: 0.1 seconds

Stats & Charts | Export Data | Print Page | Edit Report

Data Export for Address List

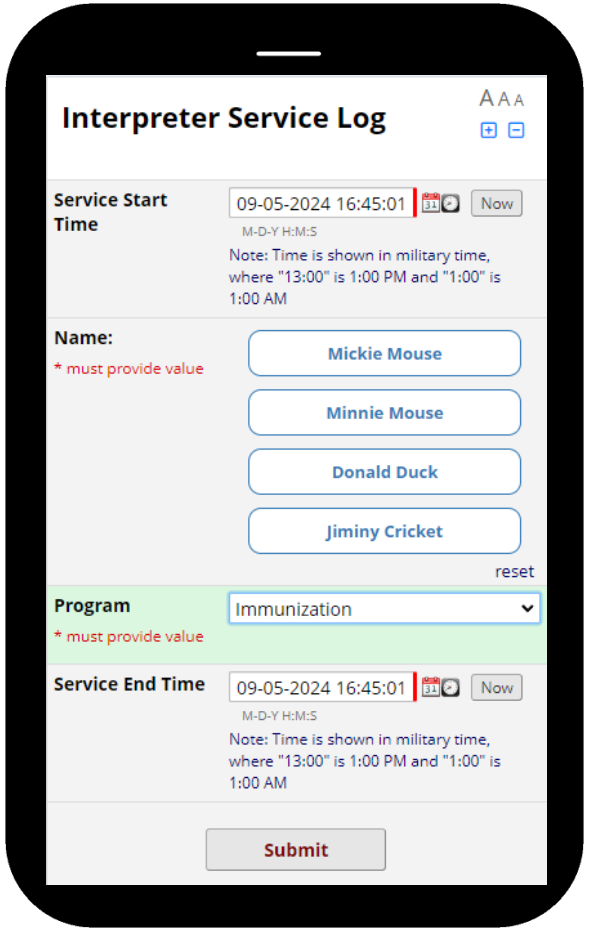
Participant ID participant_id	Date submitted date_submitted	First Name first_name	Last Name last_name	Address address_2	City city	State state	ZIP Code zip_code	In me
[redacted]	08-30-2024	[redacted]	[redacted]	[redacted]	[redacted]	Ohio	[redacted]	Em
[redacted]	08-30-2024	[redacted]	[redacted]	[redacted]	[redacted]	OH	[redacted]	Em
[redacted]	09-01-2024	[redacted]	[redacted]	[redacted]	[redacted]	OH	[redacted]	Em
[redacted]	09-04-2024	[redacted]	[redacted]	[redacted]	[redacted]	Ohio	[redacted]	Pho
[redacted]	09-05-2024	[redacted]	[redacted]	[redacted]	[redacted]	oh	[redacted]	Pho

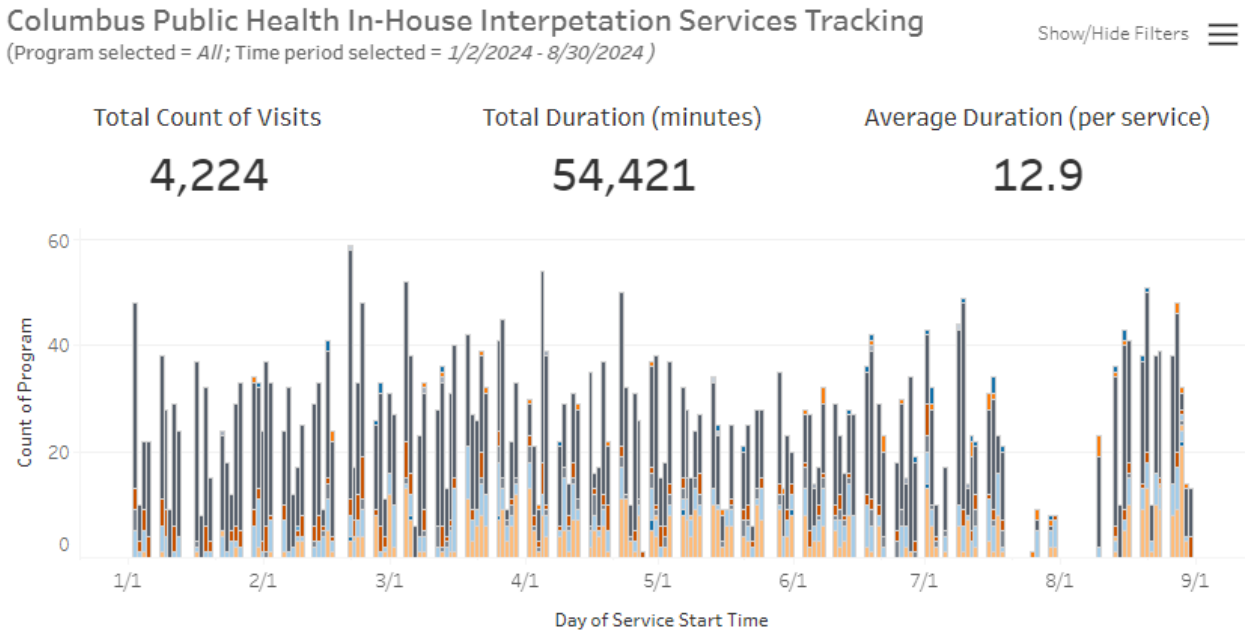
Program Tracking

Crib Distribution PID 121

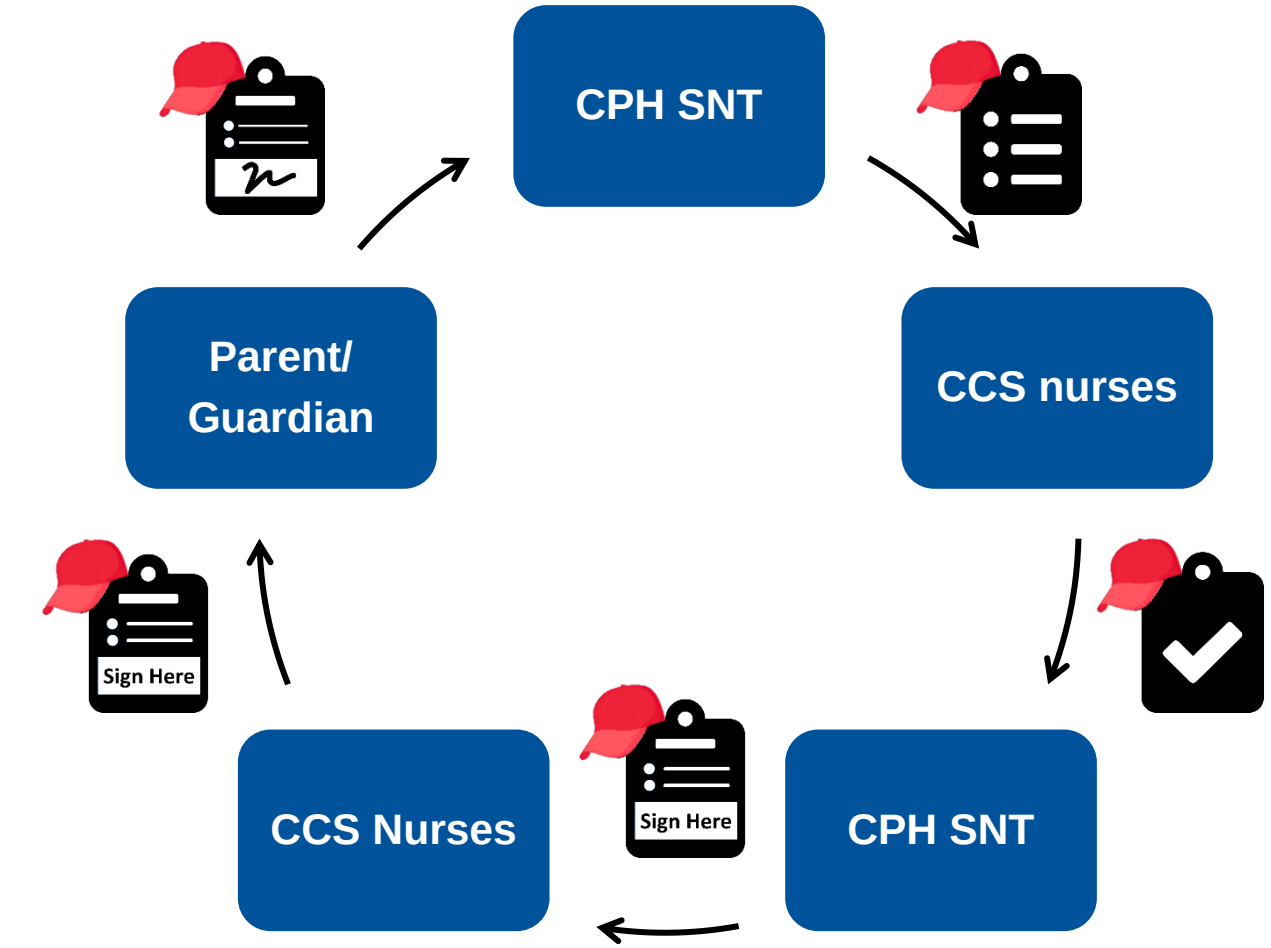
Safe Sleep Assessment				Follow-Up 1
Safe Sleep Assessment Tool	Cribs for Kids® Hold Harmless Agreement	Authorization to Release Information	Administration Tool	Safe Sleep Follow-Up
✓	✓	✓	○	○
✓	✓	✓	●	○
✓	✓	✓	●	✓
✓	✓	✓	○	○
✓	✓	✓	●	○
✓	✓	✓	○	○
✓	✓	✓	●	✓

Program Tracking





Scheduling/enrollment



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Columbus Public Health 2024 Vaccination Clinic Sign-Up

Please fill out the required information below for Columbus Public Health to come to your school to have a vaccination clinic.

Please select the type of school you're registering:
* must provide value

Nurse Name:
* must provide value

Phone Number:
* must provide value

Email:

(This information will only be used for scheduling confirmation.

Please confirm your Email:

is correct as it is required for

10/02/24 | Afternoon
10/08/24 | Afternoon
10/15/24 | Afternoon
10/17/24 | Afternoon
10/22/24 | Afternoon
10/24/24 | Afternoon
10/29/24 | Afternoon
10/30/24 | Morning
11/07/24 | Afternoon
11/12/24 | Morning
11/13/24 | Morning
11/14/24 | Afternoon
11/20/24 | Morning
11/21/24 | Afternoon
12/03/24 | Afternoon
12/05/24 | Afternoon
12/10/24 | Afternoon
12/11/24 | Morning
12/12/24 | Afternoon

Please select a date for your vaccination clinic.

Choose your clinic date/time:
* must provide value

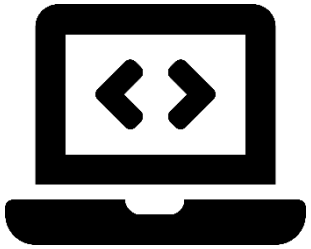
Total number of consent forms needed in English:
* must provide value

Total number of consent forms needed in Spanish:
* must provide value

General Project Creation Flow

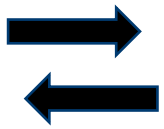
Requirements

- Discuss and agree on requirements and scope
- Gather existing resources, e.g. instruments or dictionaries



Development

- Initiate REDCap project build-out per requirements
- On-going discussions and updates
- Troubleshooting



Testing

- Test instruments (forms/surveys) data gathering (fake), email alerts and invitations, workflows, etc.
- Compile changes needed/issues

Deployment

- Place project in production/delete fake test data
- Add additional REDCap users + rights if necessary
- Distribute survey link/QR code if necessary

4) Advantages of REDCap

Some advantages include:

- Easy sharing between all staff working on a project, with the ability to limit user permissions as desired.
- Automatic tracking of changes to project data, so that accidental deletions or edits can be recovered.
- An import feature, so that data in platforms such as Excel can be easily moved into REDCap.
- An export feature, so data collected in REDCap can be put into a data analysis program.
- HIPAA-protected data can be safely collected and stored.

Flexibility

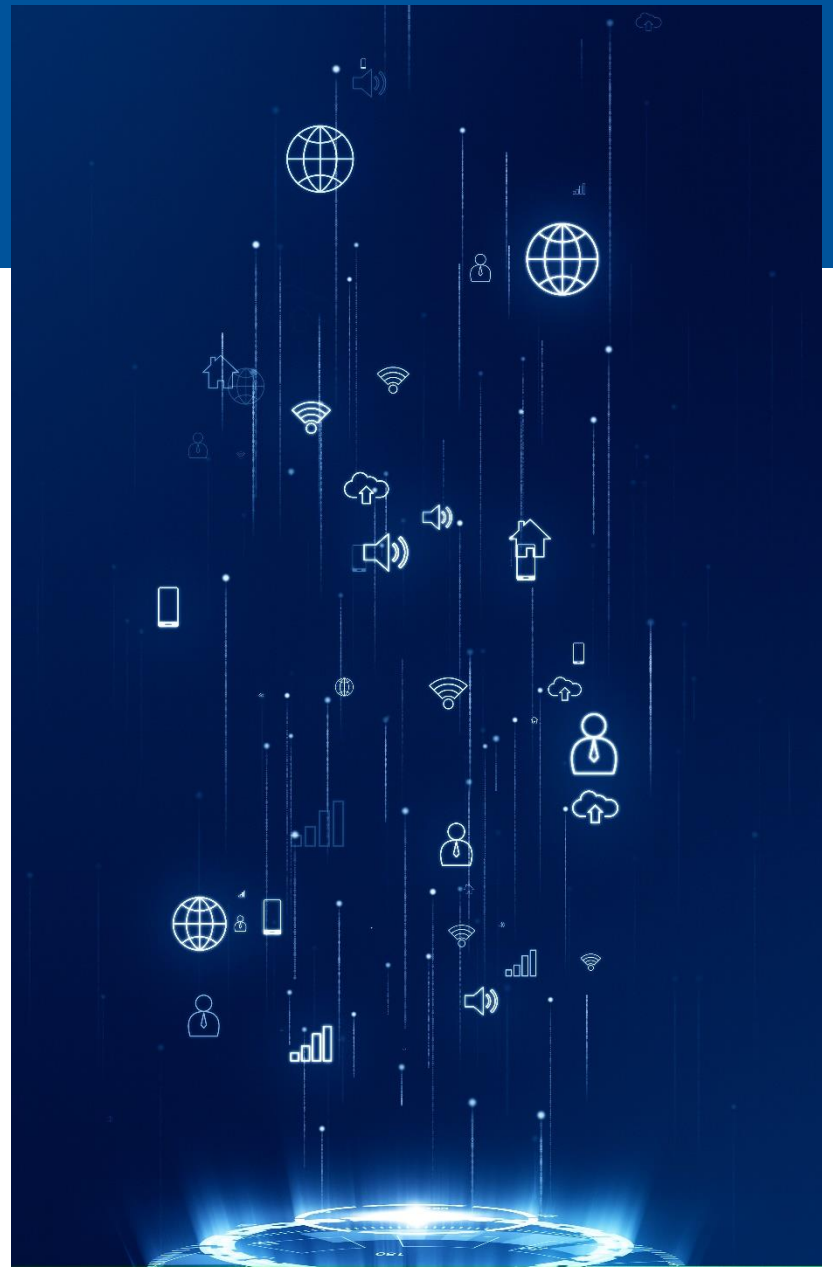
- One form or many
- Single instances, repeating instruments, or longitudinal events
- Public surveys, surveys available only by an email invitation, or forms that you have to log into REDCap to access
- More than a dozen types of fields, and many validations to control the kind of data collected

Security

- HIPAA-compliance means PHI can be securely collected and stored
- User roles control who can export data, delete forms, change settings, etc.
- Data Access Groups can be set up so users only see the data they need
- A log records any changes to the project or data by users

Works with other systems

- **Import data** in .csv format from other data systems or excel tracking
    - **Export data** to use in analysis or data visualization programs
        - **API** allows for connections that automatically retrieve or modify REDCap data

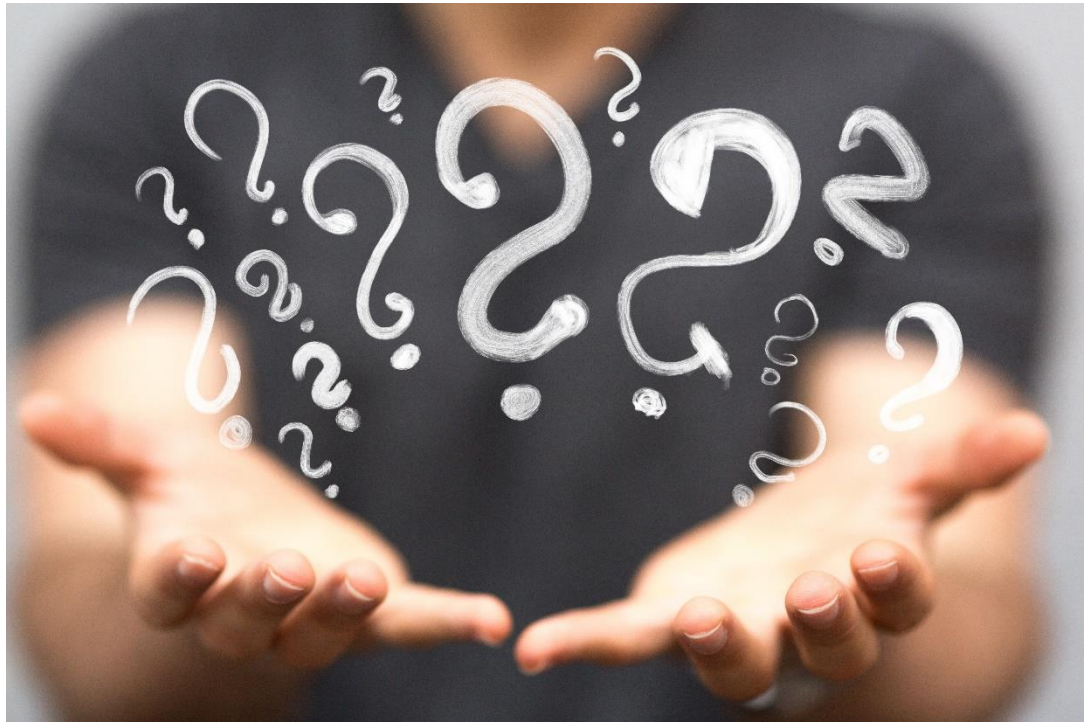


Collaboration

- Programs can work together on the same project – easy to share data, multiple users can be logged in at once
- Projects can be shared with other health departments – simple to choose what aspects of the project to export, and to create a new project based on someone else's .xml or data dictionary

Extra Features

- Smart variables
- Piping
- Embedding
- Special functions / calculations
- Hide fields / options when needs change



5) Process & Considerations for Using REDCap at your LHD

Pre-Implementation

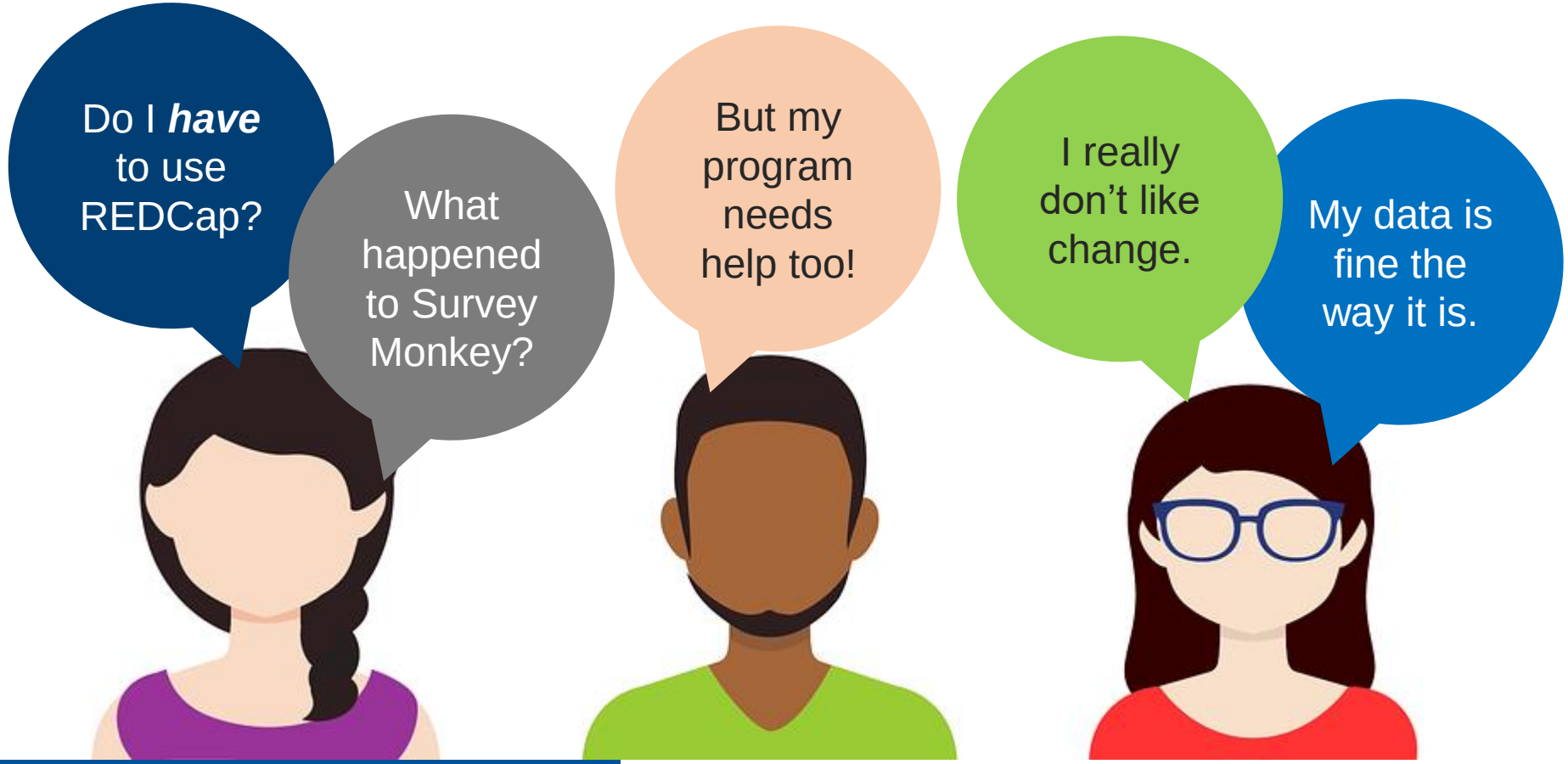
- Buy-in (Departmental Administration)
- REDCap Administrator Guides/Process
- Roll-out planning
- Training (app. administrators and user)
- Dedicated team (both at LHD and DoT)
- Use cases (RC versus other tools)

If you build it, they will come

Post-Implementation

- Hardware scaling (volume)
- Staff scaling (IT and App. Users)
- Upgrades and Downtime
- Use REDCap to use REDCap

Challenges


Do I *have* to use REDCap?
What happened to Survey Monkey?
But my program needs help too!
I really don't like change.
My data is fine the way it is.

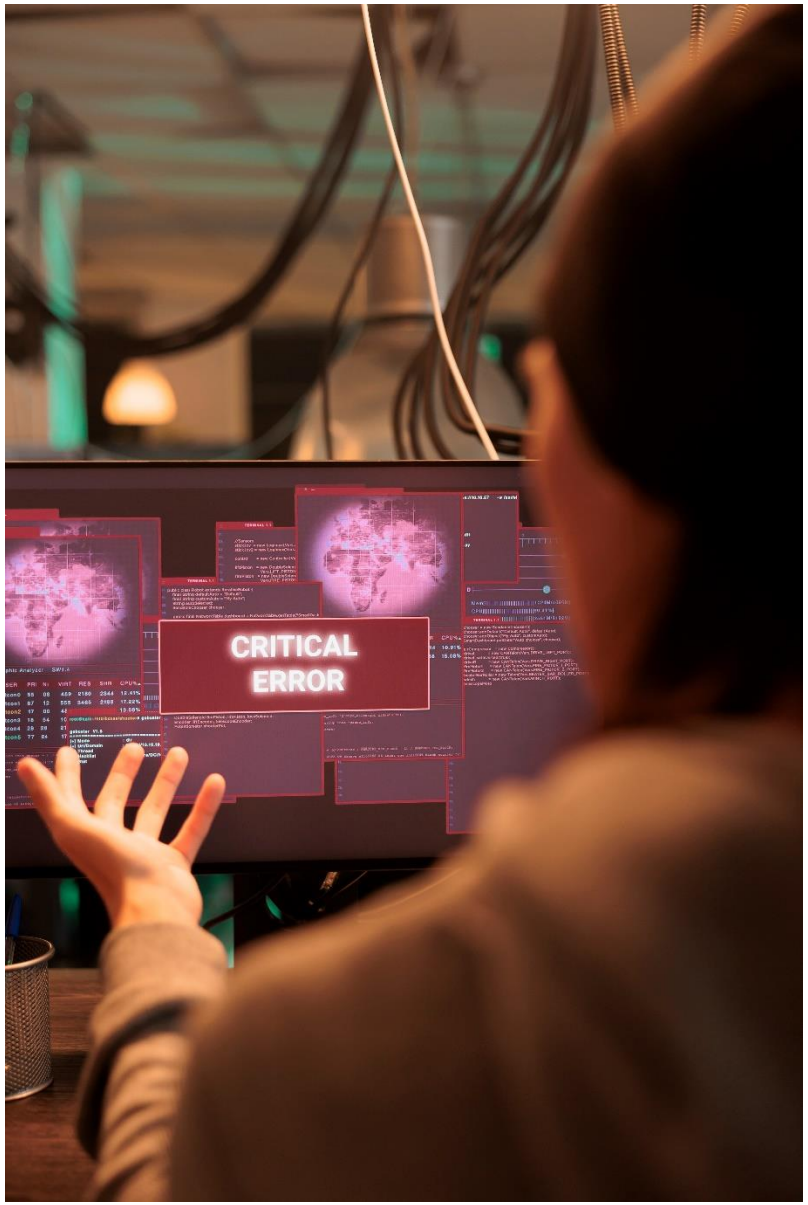
Our REDCap Life Recap

- Early Years: *baby steps / dabbling in REDCap*

- Teenage Years: *this is useful and cool stuff!*

What's next?

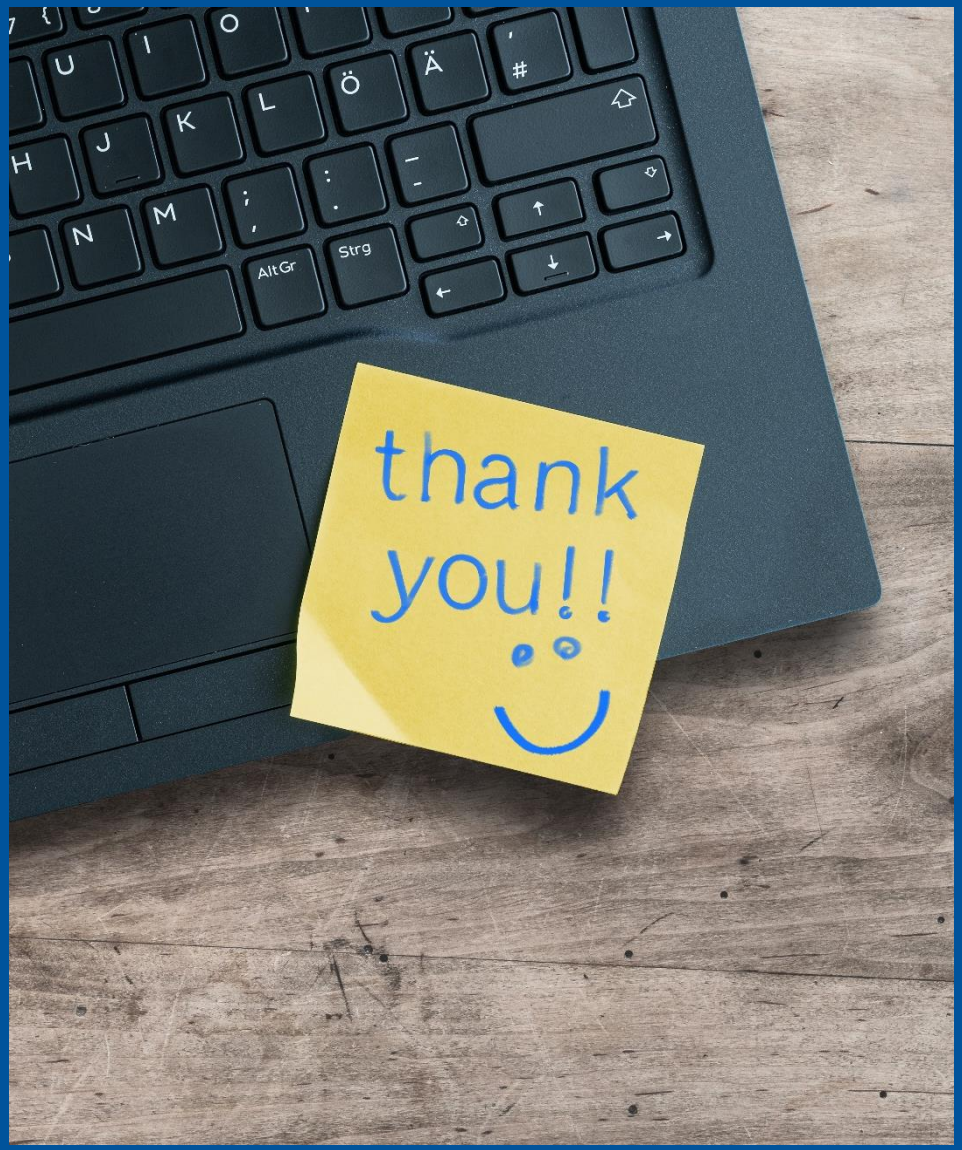
- Prime Time: *Huh, I didn't know REDCap can do that!*



6) Live Demo (if time allows)

redcapdemo.vumc.org

If you have a mobile device connected to the internet, please scan the QR code to take the live demo survey.



Thank You!

- More info (REDCap Consortium)
  - https://projectredcap.org
- Free 1-week trial
  - https://redcapdemo.vumc.org/trial/
- Contact info
  - Office of Epidemiology
    - Emily Alexy – eralexy@columbus.gov
    - Ben DeJesus – bend@columbus.gov