

Invitation Email

Subject: Invitation to Participate in Feedback Discussion on Improving Case Data Entry Workflows

Dear ,

I hope this message finds you well! My name is Miringu, a Technology Practitioner from Skylight Digital, and I am part of an ongoing effort in partnership with the CDC. We are initiating interviews aimed at improving the manual case data entry process within health departments.

The purpose of the feedback discussion is to gather data that will be used to improve upon current CDC efforts to enhance manual case data entry processes. Our goal is to develop strategies that support public health professionals like yourself by streamlining data management tasks, thereby improving overall operational workflow and response capabilities.

We would be honored if you or one of your staff members in the following capacities could participate in this feedback discussion:

- Case Reporting Data Entry
- Case Reporting Data Surveillance
- Case Reporting Data Analyst
- Case Reporting Data Manager

Your involvement would entail participating in a 60 minute interview.

Why Participate?

- This is a great opportunity to highlight the challenges and inefficiencies your team may be encountering and to propose solutions that are truly impactful.
- Your input can directly influence the development of tools and strategies aimed at enhancing public health data management nationwide.
- By improving data entry processes, you contribute to the broader goal of enhancing public health response capabilities through more efficient and accurate data handling.

We are committed to ensuring that your participation is rewarding and that the findings from this study provide tangible benefits to your team and others across the country. All information shared during the study will be handled with the utmost confidentiality and will only be used for research purposes.

We look forward to hearing from you!

Discussion Guide

Jobs to Be Done

- What are the main goals and tasks you aim to achieve in your daily work, particularly concerning case reports?
- How does the process of manual data entry affect your work and primary responsibilities?
- Which of your goals is most significantly impacted by the demands of manual data entry?
- If you were to hire us to fix anything related to manual data entry, what would it be?
- We will be sharing our [screen](#) to discuss some jobs that are impacted by manual data entry. Which of these jobs are most relevant to your work? What is missing from this list?
- Among the jobs influenced by manual data entry, how would you rank them in terms of most painful to least painful. Additionally, how frequently do you encounter each of these tasks in your work? What amount of time is spent on each (ballpark)?
- If you were to hire us to fix anything for you, what would that be? Why?

Manual Data Entry Journey

- Could you describe the step-by-step process you follow when you receive a new case report that needs to be entered manually?
- What specific tools or systems do you use at each step of the data entry process?
- How do you handle data from different sources? Are there different processes depending on the source or type of data?
- Can you walk me through the last case you processed manually? What were the steps?

Time Allocation and Efficiency

- How do you prioritize your data entry tasks throughout the day?
- What tasks related to data entry do you find most time-consuming and why?
- During a typical day, how much time do you spend entering data versus managing data already entered?
- Have there been times when data entry tasks have prevented you from completing other important work? Could you provide specific examples?

Pain Points and Challenges

- What are the most frequent issues you encounter with manual data entry?
- Can you describe a recent problem you faced with manual data entry and how you resolved it?
- Are there recurring data errors? Things that happen again and again? What do you think causes these errors?
- What aspects of your current data entry process do you find most frustrating? Could you share why?

Tools and Systems Utilization

- What systems are you using to help you process your case data?
- What features of your current data management tools do you find most beneficial? Why?
- What cons, if any, exist in your current tools that affect your ability to enter or manage data effectively?

- How have the tools you use changed in the past few years? Have these changes impacted your workflow?

Desired Improvements and Automation Perspectives

- If you had a magic wand and could design an ideal data entry system, what features would it have?
- What are your thoughts on automation for data entry tasks? Are there specific tasks you believe should or should not be automated?
- What concerns, if any, do you have about integrating automated systems into your current workflow?

Impact of Manual Data Entry on Workflow

- How does manual data entry impact the speed and accuracy of case reporting and investigation in your department?
- During high-pressure situations, like an outbreak, how does the data entry process hold up? What changes?
- What measures have you or your department taken to cope with high volumes of data entry during critical times?
- If your time was freed up from manual data entry, what would that mean for you personally?
- How much time would that save you per day? Per week?
- How would you use that additional time?

Additional Tools and Workarounds

- Have you developed any personal shortcuts or workarounds to make data entry easier or faster? Please describe them.
- Are there informal tools or methods you use that are not officially part of your workflow? How do they help?

- What common data formats and structures are managed, and what challenges are associated with them?
- What are the different data formats at the surveillance level specifically and how does that affect the ingestion process?
- Tell me about the last time you interacted with a software solution that digitizes texts?
 - How would having a software solution that can digitizes texts impact your current manual data entry workflow?
- How frequently are new data formats introduced and what is the process for integrating them?
- What legacy data formats that are still in use? What are they, and what are the challenges?

File Structure

- What is the structure of these files, including headers and column data types? Are these elements consistent?
- What is the complexity of data in each cell (single entries, lists, JSON, nested elements)?
- Are specific data formats (e.g., geo-coordinates, datetime) used within cells consistently?
- How often do you encounter inconsistencies in file structures, and what are the common causes?
- What tools or are used to validate the consistency of file structures?

Data Management and Quality

- Does each record have a unique ID? How are these IDs generated and mapped?
- How is data quality managed, and what tools are used by stakeholders to interact with Line Lists?

- What are the primary challenges in ensuring data accuracy and completeness?
- What is used to represent missing data (0, null, n/a)?
- What processes are in place for merging records?
- How is historical data managed, and what are the challenges associated with it?
- When I get reports from providers, what information would we enter into the relevant surveillance systems to consider a case as complete?

Privacy and Security

- What is considered PII? What measures are taken to anonymize this data?
- Are there specific anonymization protocols followed, and how often are they updated?
- How is access to PII data controlled and audited?

Technical Considerations and Limitations

- What technical requirements must an automated system meet to integrate with the current data management system?
- What do your case reporting workflow and case investigation workflow look like from a technical perspective?
- How are tasks and jobs currently prioritized in the workflow, and what factors influence these priorities?
- What tech environment limitations need to be considered?
- What systems and tech-stack does the team use?
- What's their workflow like?
- What would be the appropriate place to apply MDE?
- Do they use NBS? Do they have plans to update and utilize NBS mod?
- What are the common integration challenges faced with new systems or tools?
- Are there any scalability concerns with the current tech environment?

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