

Researchers' Perceptions of Electronic Health Record Data Quality

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Research Questions

This study investigates researcher perceptions of EHR data quality based on the specific context of a researcher's intended reuse. It addresses three research questions:

- RQ 1. How do researchers actually assess the data quality of an EHR dataset for secondary research purposes?
- RQ 2. What impact does data quality have on EHR data reuse intentions and behavior?

Method

Data collection: Semi-structured interviews (n=7).

Data analysis: Thematic analysis.

Findings

We identified the following four themes:

1. Communication between researchers and data analysts is key to establishing data quality: Data quality is influenced by the interaction between the researchers and the data analysts; the better the conversation between the two groups, the better the data set is expected to be, and the better the quality of the data is perceived to be.

2. The success of the initial data pull is key: All participants mentioned the importance of the initial data pulls' success as the byproduct of effective communication between researchers and data analysts.

3. Multiple data pulls are at times necessary to achieve sufficient data quality: Some participants mentioned that analysts had to conduct multiple data pulls for them in order to reach a high enough threshold for their perception of data quality.

4. Accuracy is a critical dimension of data quality: All participants mentioned the importance of accuracy to their concept of data quality. Illustrative quotations include:

- “So, the question is, was an x-ray done, yes or no? And the answer is, yes, on this date. That question and that answer are highly accurate” (Participant, 1).
- “You need [Electronic Health Record data] to be as accurate and correct as possible to draw correct conclusions” (Participant, 7).

