

Data Quality Matters - Common Causes of Poor Data Quality (Part 2 of 4)



CARES Inc of NY
200 Henry Johnson
Blvd.
Suite 4
Albany, NY 12210
518-489-4130
caresny.org

This is the second installment in a four-part series focusing on data quality, and will provide an overview on the common causes of poor data quality, as well as some first steps to begin to make data quality improvements at your agency. The previous newsletter outlined the four main components of data quality: completeness, accuracy, timeliness and consistency, and addressed how struggles in those areas can potentially result in poor data quality on a system level. Poor data quality at individual agencies can occur for a multitude of reasons. Typically, those causes may fall into one of three categories:(1)

- Technical Causes
- Human Error
- Organizational Causes

Technical Causes – The technical causes of poor data quality generally refer to technological issues. This occurs when a database system does not have functionalities in place to assist with complete data collection. For example, the HMIS prompts an HMIS user when certain data elements are missing. Not having that feature in the database increases the likelihood that information is incomplete, potentially creating data quality issues within the system.

Human Error – This cause can be intentional or unintentional. Most human error will be unintentional. This can occur when there is a misspelling or a mix-up of numbers for a client's date of birth or social security number, for example. Depending on who completes the paperwork and intake form, there could also be transcription errors caused by an inability to read handwriting. Research suggests that the likelihood of data entry error increases when data is collected and entered by different staff. While these errors can occur from time to time, monitoring data helps ensure the errors are caught and subsequently corrected. More intentional errors may arise when the effort is not made toward verifying that all the information is accurate at intake and/or data entry. For example, some agencies may let the client fill out an intake form and that may lead to incorrect answers simply because the client is uncertain. They may skip over questions they don't know how to answer or incorrectly mark something, like housing status, due to lack of understanding about the question being asked. Conversely, if a staff member fills out the paperwork through an interview process, he or she may forget the definition of a particular data element or may not feel comfortable asking a particularly question, such as health conditions. Another intentional error that is difficult to overcome is a lack of motivation. Part of the frustration for some agencies entering into HMIS is that they are required to enter into multiple database systems. It could be that one system is only used to generate reports for funders, and aside from that, the data does not seem to be looked at or used. It may cause some staff members or even the whole agency to feel there is not as much incentive for ensuring data quality—either through timely data entry or completeness.

Organizational Causes – The processes implemented at an agency may also sometimes lead to poor data quality, and unfortunately this is often the hardest cause to identify and correct. Often if data is not a priority for an agency, then it is not going to be a priority for the department and staff members who are responsible for entering the data. One component that

may lead to the organizational culture surrounding data is staff turnover. That means that knowledge regarding the data entry process, definitions about the data elements and understanding of the data monitoring process can be lost. You can minimize the impact of employee turnover at your agency by taking advantage of all the highly accessible recorded trainings and webinars on our website. Understanding the causes of poor data quality can help an agency look at their own practices and culture to address potential data issues. Improving Data Quality

The next two installments of this series will go into much greater depth regarding foundational and comprehensive strategies that agencies can use to look at their own practices and culture to address potential data issues. Until then, we'd like to give a few Minnesota HMIS-centric suggestions, to get you started on the road to improving your agency's data quality. Ideas include:

1. Read all CRHMIS newsletters to ensure that you are up-to-date on all data collection requirements and developments.
2. Keep up-to-date on the latest HUD Data Standards to understand how to better collect HUD Universal Data Elements. The HUD Exchange website is a great place to find these materials, in addition to other more resources that may be helpful: <https://www.hudexchange.info/resources/documents/HMIS-Data-Standards-Manual.pdf>
3. View our monthly Data Completeness and Quality reports published on our website for your CoC: [CRHMIS Reports](#)
4. Schedule time to make sure that the staff who are collecting data from clients are able to circle back to read and review what the data entry staff eventually entered into HMIS, to confirm the data is accurate.
5. Run aggregate reports regularly (removing any identifiable information) and share them with direct service staff at meetings to check for accuracy and to recognize your data improvement accomplishments!

Stay tuned for the third installment in this Data Quality Matters series to find out even more ways your team and your agency can cultivate better data quality.