Tip Sheet:

4 Practical Tips for Improving Data Quality in Case Management Programs

Refugee service providers collect a range of client data to determine and document client eligibility for federally funded programs, to ensure the quality and timeliness of services, to track program progress and outcomes, and to inform decision making. Ensuring the quality of the data collected and reported is essential to each of these processes. This document provides tips for ensuring that the data collected as part of case management is relevant, complete, correct, and consistent.

What is "quality" data?

There are many different criteria or standards that can be used to define data quality. A simple approach is to think about *quality* data as data that meets the **3 C's criteria**. Quality data is:

- **Complete:** there is no missing data or dashes or letters where there should be numbers.
- **Correct:** the data accurately reflects the reality of the project or program.
- **Consistent with what is expected:** data is free from deliberate bias or manipulation. For example we aren't seeing the same numbers appear over and over again, and we aren't seeing preferential end digits—like all numbers ending in a 0 or 5.

Data should also be **relevant**, meaning that it has a purpose and is the right data to collect for that purpose—whether that be for reporting or making programmatic decisions.

Last, data should be **timely,** being collected and reported without delays and within a timeframe that allows for it to influence decision making.

Does this scenario sound familiar?

"We needed to show outcomes achieved each reporting period, disaggregated by client age. We struggled because we had been capturing client age at program intake, and some clients had been registered a year ago or more. We weren't capturing the right data. It was messy to try to sort out and I'm sure data quality was affected."

Solution: Capture client date of birth, not current age.

Tip #1: Before you begin data collection, determine what data you need to capture

Ideally, this happens early in program start-up. In some cases, you may not be setting up a new program, but instead seeking to improve the quality of data being collected, managed and reported as part an ongoing one. In either case, determining specifically what data you need to collect is an essential first step to ensuring data quality.

Before developing or refining your data collection tools, outline what indicators you need. Consider what you need to be able to report on for donors and to learn what you want to learn for service quality assurance and internal decision making. Think about how you would like to be able to disaggregate data, too.

Next, outline what data will be required to calculate those indicators and identify which data collection tools, forms or "touchpoints" will be used to capture each data point. You may want to go further and document not only which form captures the necessary data, but also which question or field on the form captures the data. Below is just one example:

Indicator	Data Required	Source
% of current clients under the age of 18 enrolled in school	Total # of current clients under the age of 18	Client database
	Total # of current clients under the age of 18 enrolled in school within 90 days	Client database
	Date of birth	Intake form, Question 4
	School enrolment status	90-day follow-up form, Question 5.a

By making the details clear from the start, this process can help you avoid challenges later on, when aggregating and reporting data.

META can help as you work through the process of outlining what data is needed and where that data can be found. Remember to collect only **necessary** data, both for efficient use of staff time and out of respect for clients. Make a point to avoid collecting "nice to have" data.

Does this scenario sound familiar?

"When it came time to report and reflect on our services, we found that we had a lot of data that we didn't really need for reporting or program improvement. More concerning, we found that we hadn't been systematically collecting a few important data points that we really needed."

Solution: Dedicate time at program start-up to thinking critically about exactly what data will be required, and what the source of that data will be, for each necessary indicator.

Tip #2: Set up an efficient data collection and management system with built-in data quality checks

Whether you are using MS Excel or an electronic database, you need to set up your data collection and management system to allow for data to be entered, aggregated, and checked for quality. Below are a few suggestions:

- If caseworkers are using paper forms and then entering data in an Excel database, ensure that all caseworkers use the same template with the same columns to document their cases.
- To enable supervisors to merge files and aggregate data, restrict changes to the template format by password-protecting the file. If changes are needed to the file's format, discuss and make the changes as a team.
- In Excel, use controlled lists (defined answer choices in dropdown form, rather than freeform text fields) to help with aggregation and prevent data entry errors.
- Ensure that the columns, controlled list answer choices, fields or other forms in your database align exactly with the fields and choices used in your paper forms.

- Put systems in place to highlight missing data and prevent entry errors; for example, use conditional formatting and/or data validation functions in Excel. Or, for electronic databases, generate regular data completeness, quality, and/or timeliness reports, depending on the database you are using.
- To monitor your program's data quality as you go along, create automatically updating Excel graphs or use other dashboard tools.
- Reduce duplicative data entry process by integrating electronic systems, using mobile data collection tools, and setting up processes for automatically aggregating data.

Tip #3: Put in place a set of Standard Operating Procedures (SOPs) for how your organization or program will monitor data quality.

Data quality assurance SOPs can help your organization or program put processes in place to monitor data quality and take action to address issues that may arise. They can help make data quality assurance part of your organization or program's culture and routine operating practices. SOPs should at minimum outline:

- Processes for staff to check the quality of their own data on a weekly or monthly basis.
- Data quality audit processes.
- Processes for reviewing data quality reports at staff meetings or in monthly supervision.
- Timeframes for following up on any issues.

You can find sample SOPs for case file data quality assurance here, along with a case study demonstrating how one program was able to improve data quality using Excel dashboards.

Tip #4: Make sure that staff are aware of, able to, and motivated to fulfill their responsibilities when it comes to entering, reporting and monitoring the quality of data.

Putting in place data management systems and data quality assurance SOPs isn't enough to ensure data quality. Staff need to have clarity on what their roles and responsibilities are when it comes to collecting, reporting and checking the quality of data. And they need to have the skills and motivation to fulfill those responsibilities. Here are some steps you can take:

- Map out the roles and responsibilities of staff at different levels, outlining the specific responsibilities that staff have related to data collection, reporting and review of data quality. Include timeframes for each task.
- Include roles and responsibilities in SOPs.
- Include data collection, reporting and data quality review/assurance in staff job descriptions and performance objectives.
- Provide regular training on how to use data collection tools and databases, and on how to conduct each process outlined in SOPs.
- Identify data quality trends and provide training and support to staff to address these trends, whether as part of individual supervision, peer support, or group training.
- Raise staff awareness of why data quality is important, linking it to the quality of service delivery and improved outcomes for clients. Ensure that staff understand why they are collecting the data they are collecting.
- Put incentives in place to reward staff for good data quality—praise or even friendly competition can be good incentives.

If you have feedback on this tip sheet, questions, or have good examples of how your organization ensures data quality, contact us at META@Rescue.org

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