



## Improving Data Quality in Case Management Programs

### Guide for monitoring and evaluation (M&E) staff and program managers

Refugee service providers collect a range of data to determine and document client eligibility for programs, ensure the quality of services, track program progress and outcomes, and inform decision making. High quality data is essential for all of these activities. This guide provides tips for M&E staff, program managers, and others who help support direct service staff in collecting high quality data in case management programs.

### 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 repeatedly, and we aren’t seeing preferential end digits—like all numbers ending in a 0 or 5.

**Quality data refers to data that is complete, correct, consistent, relevant, and timely.**

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*, collected and reported without delays and within a timeframe that allows for its use in decision-making.

## Identify the data you need before beginning data collection

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.

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 know for service quality assurance and internal decision making. Think about how you would like to be able to disaggregate data, too.

**Indicators are the variables that are tracked to measure changes or achievements in connection with an intervention.**

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 will be used. 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 enrollment 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. Remember to

collect only necessary data, both for efficient use of staff time and out of respect for clients’ time. Avoid collecting “nice to have” data.

Switchboard has several resources to help you identify what data to collect for compliance and measuring success, including [this info guide](#), [this Switchboard Short](#), and [this eLearning course](#).

### Does this scenario sound familiar?

“When it came time to report and reflect on our youth mentoring program, we found that we had inadvertently collected 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.

For example, we needed to show outcomes achieved each reporting period, disaggregated by client age. We struggled because we had been capturing client age at the time of program intake and we didn’t know the youths’ exact ages at the time of reporting. We weren’t capturing the right data. It was messy to try to sort out and I’m sure data quality was affected.”

**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.

Ensure you closely review your data collection plan against your reporting requirements.

In this case, the team should capture client date of birth, not current age at time of intake, and calculate age accordingly.

## Establish systems for managing and quality-checking data

Whether you are using MS Excel or an online 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. See the [case study](#) accompanying this guide for an example of how one program improved data quality using this approach.
- Reduce duplicative data entry processes by integrating electronic systems, using mobile data collection tools, and setting up processes for automatically aggregating data.

**Want to see these tips in action?  
Check out [the companion case study!](#)**

## Set clear expectations for monitoring data quality

Data quality assurance standard operating procedures (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.

**[Switchboard's Sample Data Quality Assurance Standard Operating Procedures \(SOPs\)](#) can help you get started. This template describes sample SOPs in the context of a case management program. It is intended to be modified to suit your organizational needs.**

## Support staff in understanding and fulfilling responsibilities

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. They also need to have the skills and motivation to fulfill those responsibilities. Here are some steps you can take:

- Map out the roles 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.
- Establish channels you can use to communicate key insights from the data to staff. For example, set aside time during quarterly staff meetings or reserve space in a monthly newsletter to highlight success stories seen in the data. This helps staff remember the big picture and assures them that their data entry efforts matter to the team.
- Put incentives in place to reward staff for good data quality—praise or even friendly competition can be good incentives.

## Conclusion

Given many competing priorities, it is often challenging for case management staff to enter data on time and in a quality manner. M&E staff and others involved in managing and using that data can help in several ways, including: providing clear expectations for data quality and timely entry; communicating the value of quality data to help staff understand its importance; and conducting regular checks for data completeness and quality to catch and address potential issues early.

Ensuring quality data entry is a team task, so providing proper supports for the staff involved is key to success.

## Resources

[5 Tips for M&E Culture Change](#): Staff buy-in is crucial for securing long-term adherence to data quality standards. This Switchboard guide offers concrete tips for bringing staff on board and explaining the importance of data collection for program quality.

[How to Ensure Data Quality in Case Management: 4 Practical Strategies](#): This Switchboard webinar provides additional context and guidance on the tips presented here, including sample spreadsheets illustrating the recommended strategies.

[When's that Report Due Again? How to Develop a Monitoring and Evaluation Workplan](#): This Switchboard blog post offers concrete guidance on building key data-related tasks, including staff training, into your workplan.

[Creating High-Quality Case Management Documentation](#): This Switchboard guide can be a useful tool for training staff on proper case management documentation. You may wish to share the guide itself with staff, or to use it to develop your own internal guidance and training activities.

[Indicator Matrix Template](#): Use this Switchboard template to organize the data you plan to collect for your project. The template prompts you to carefully consider how you will use each piece of data and where you will get it from.

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