

Insights

Qualitative Data Collection: 6 Things Researchers Need to Know to Get it Right

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- *In more than 4 million homes across America, children are living and playing while being exposed to the damaging effects of lead.*
- *Approximately 3,500 infants die from sleep-related causes every year, and thousands of babies and mothers miss out on the benefits of continued exclusive breastfeeding.*
- *Black, American Indian, and Alaska Native (AI/AN) women are two to three times more likely to die from pregnancy-related causes than white women.*



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These statistics are more than just numbers – they represent millions of children throughout the country, each with their own stories and individual lived experiences. But at first glance, it is difficult to contextualize this data and fully understand the root causes of these alarming rates. Public health researchers can help a wider audience feel a connection to the data at hand.

What is Qualitative Data?

Qualitative data is the descriptive and conceptual findings collected through questionnaires, interviews, or observation. Analyzing qualitative data allows us to explore ideas and further explain quantitative results. While quantitative data collection retrieves numerical data (what,

where, when), qualitative data, often presented as a narrative, collect the stories and experiences of individual patients and families (why, how):

Example 1:

- *Quantitative Data:* 87 percent of adults with sickle cell disease reported missing a preventative care appointment.
- *Qualitative Data:* During a virtual interview, a patient with sickle cell disease shares that she sometimes misses appointments due to not having reliable access to transportation.

Example 2:

- *Quantitative Data:* About 4 million infants are born each year in the United States, and most of them receive newborn screening for conditions that can cause serious health problems.
- *Qualitative Data:* During a focus group discussion, health care workers express that there is no time allocated to discuss the process of newborn screening with new parents.

Qualitative analysis is important because the rich detail shared by individuals is extremely powerful in thinking through complex systems and can illustrate how the implementation of our programs and policies are working in real life and ultimately lead to change.

Here are six tips for gathering qualitative data and making the most out of your analysis.

1. Define your research question.

What data are you looking to collect? A qualitative research question is a definite or clear statement about your project's area of concern, a condition to be improved, a difficulty to be eliminated, or a troubling question that exists. It not only defines who your participants will be, but guides the data collection methods needed to achieve the most detailed responses. Your question should be clear and concise with a focus on one health issue.

Example research problem: *What are the barriers and facilitators among Black mothers to exclusively breastfeeding for the recommended six months?*

When developing your research question, consider the following:

- What do you most want to know? What question(s) will you address?
- What is known about this issue and what theoretical approaches have been applied to this problem? What do you want to learn more about?
- What led you to this question?
- Why is this problem or question important to you, policymakers, academics, health care professionals? Or why is it important to the population/community you are aiming to

improve?

- How will this question make a new contribution to the field of public health?

2. Determine the best data collection(s) method for your research question.

The two most common qualitative data collection methods within health care and quality improvement research are in-depth interviews and focus groups with patients, family members, community members, or key informants. Focus groups allow researchers to collect data rather quickly from multiple participants and can result in a robust conversation between the participants, providing very rich and genuine responses. On the other hand, in-depth individual interviews allow for a more personal interaction. This method may be more appropriate for collecting long, detailed responses from one participant or if the conversation is about more private information. Understanding the resources available and constraints of your project will help you determine which method is best for answering your research question.

Also, consider if your interview or focus group will be conducted virtually, over the phone, or in person. Each approach comes with its own set of benefits and challenges. For example, conducting a focus group virtually allows you to utilize chat features and visually display your questions, but your group may lack the same energy or connectedness from being in-person.

Other qualitative data collection methods include observation, documentation review, case studies, community mapping, and systemic data collection. Mix data collection methods to test consistency, clarify results, or provide a deeper analysis from the different features of each method.

3. Develop a cohesive interview guide.

An interview guide is a list of open-ended questions that provide a framework for your interview or focus group. The goal is to collect as much information as possible, so your interview questions should encourage your participants to openly share their experiences. These three types of questions with help you get started:

1. Broadest research questions: *"Tell me what it's like..."*
2. Follow-up questions: *"Can you elaborate on ..."*
3. Targeted questions: *"Have you ever experienced..."*

4. Stay neutral – Let participants share their stories.

Preventing bias is critical for collecting genuine, honest responses from your participants. This can be achieved by conducting an interview with the mindset that you are there to learn about the participants' experiences. Conducting an interview with assumptions of what your participant will share may lead to leading questions that force specific responses. That's why it's important to inspect your interview guide ahead of time for leading questions to reduce the risk of bias. See examples below.

Leading question: *"Do you have difficulty breastfeeding your child because of time constraints?"*

This question assumes that the mother is experiencing challenges with breastfeeding due to a specific cause that could be an assumption made by the interviewer.

Neutral Question: *"What has your experience been with breastfeeding?"*

This question allows the participant to say themselves if they are or are not breastfeeding and whether it's been difficult. A follow-up question could be:

- *"Has breastfeeding ever been difficult for you? If so, tell me about a time that it was."*
The first question may result in a short response from your participant, so a follow-up question will continue to allow the participant to answer more freely about their experiences.

Remaining neutral also requires you to be cautious of your body language and natural but unscripted reactions to your participant's responses. Practice staying neutral by conducting an interview with a partner using a very basic research question (e.g. "What is your favorite color?"). Experiment using broad, follow-up, and target questions while your partner takes notes of your behaviors. This exercise is helpful for sticking to your interview guide while speaking in a comfortable, welcoming manner.

5. Double Up!

If possible, work with at least one additional team member when conducting and analyzing qualitative research. Having a research partner is especially useful when conducting a focus group. One team member will moderate the group while the other takes notes. The moderator can then focus on guiding the conversation and navigating the interview guide and while the note-taker captures participants' responses and can begin establishing themes in real-time. Be sure to set clear expectations of your roles prior to the interview, preferably in writing. You do not want to finish conducting a focus group and realize that neither you nor your partner recorded the session!

6. Analyze your findings.

Once the data is collected, it is time to think about the story you will tell. Listen or read through your interviews to identify answers to your research question, repeated words and phrases, and experiences that have not been researched prior. Combining all your data from separate interviews and connecting themes will unveil answers to your research question and outline the efforts needed to address the health issue that your project is aiming to improve.

Data Collection is a necessary part of quality improvement. [Learn more](#) about how collecting data can make a huge difference in the results of a public health initiative.