

CDC Coffee Break: Using Qualitative Methods To Evaluate Public Health Programs



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Division for Heart Disease and Stroke Prevention



Good afternoon everyone and welcome to today's Coffee Break presented by the Evaluation and Program Effectiveness Team in the Division for Heart Disease and Stroke Prevention at the CDC. We're very lucky to have Dr. Aisha Tucker-Brown as today's presenter. Aisha is an evaluator on the evaluation team at CDC's Division for Heart Disease and Stroke Prevention.

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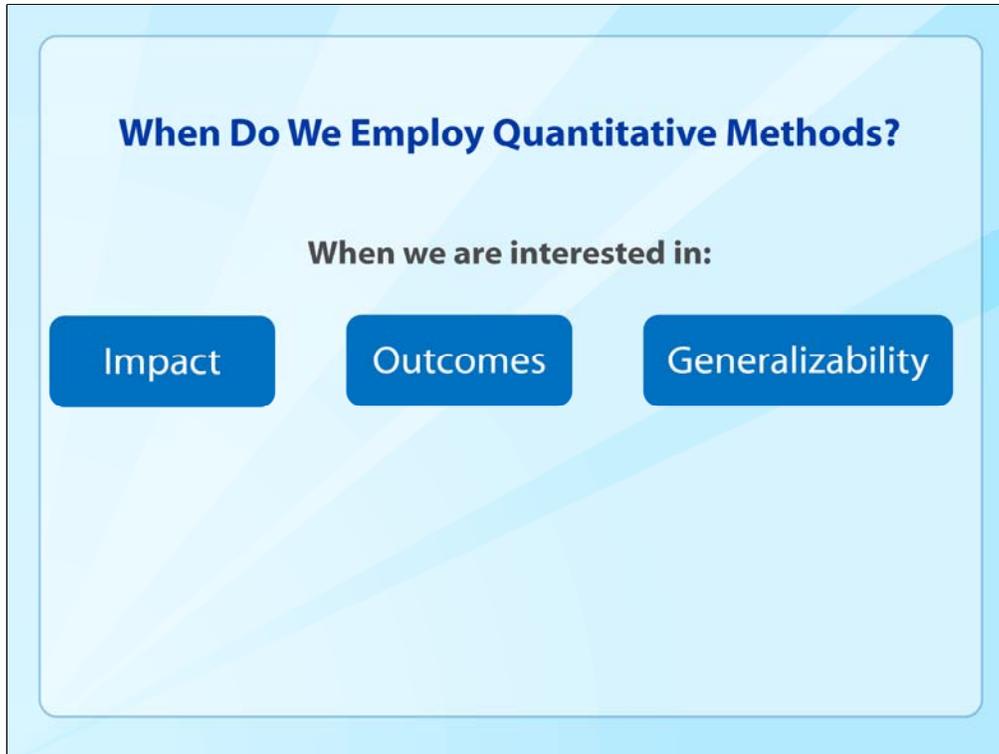
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Overview

- ❑ **When is it appropriate to employ qualitative methods?**
- ❑ **What are some qualitative methods that can enhance my evaluation?**
- ❑ **What benefits will I see based on the inclusion of qualitative methods in my evaluations?**

So today we're going to talk about using qualitative methods to evaluate public health programs. And we'll focus on answering a few of the questions that I know you guys always have, because we have them here too. When is it appropriate to employ qualitative methods? What are some qualitative methods that can enhance my evaluation? And, what benefits will I see based on the inclusion of qualitative methods in my evaluation?

Some people have used qualitative methods quite a bit; some, none at all. And many of have at least dabbled in the arena of using some qualitative methods. And so, as we talk about this today, I'd like you reflect upon your past experiences, and also to think about some of the questions you have in the future.



We often find ourselves asking, when is it important to use qualitative methods? When is it important to use quantitative methods? And there always seems to be a comparison between the two. So I thought we'd first start out with identifying that using quantitative methods definitely has a purpose and a use, and it's important, and usually when we're asking questions based on impact—so we want to know what the impact of our program is, or we want to know what the general outcomes are, and especially the health outcomes of our programs. And then definitely, if we'd like to be able to generalize past our samples to some greater population, we definitely need to be doing a more quantitative evaluation and employing more quantitative methods.

When Do We Employ Qualitative Methods?

- ❑ **When we have established effectiveness, but we are interested in replication, we ask “how” a program is implemented.**
- ❑ **When we are interested in conducting a process evaluation and are seeking to know the reasons a program is not yielding the expected results, we ask “why” the program is not working.**

But those aren't always the questions we have. We often have questions that get at the “how” and “why” of our programs. So, for example, when we have established effectiveness already but we're interested in replication, so we know that our program works and we're interested in moving it and repeating it and transferring it to other places, often the question we ask is how a program has been implemented. What are the most important components that we need for transferability and how do we do that? When we're interested in conducting a process evaluation and we're seeking to know the reasons the program is not yielding the expected results, we ask why the program is not working. You can't ask how and why without seeking out or using some sort of qualitative method. It's the right way to ask those questions.

And a good example of that is through a QI program, or a quality improvement program. When you've already employed a program and you're working through the program, and you begin to see great health outcomes as a practice using new quality improvement methods or techniques, you're beginning to prove the effectiveness. There's a change in the health outcomes of the patients, but we have no idea why. We don't know which components of the program are contributing to that change. And if we're asking those kinds of questions, or we want to be able to transfer that change from practice to practice and replicate it, then we need to know what components make it work. And the only way to figure out what components make it work are to dive into the program and to really take a closer look at what the components are, how they're transferred, and how they work. And the way to do that is through the use of qualitative methods.

What Types of Qualitative Methods Can be Used?



Interviews



Focus Groups



Observations

...just to name a few

Those methods could include a host of things. And some of those things include things like document reviews, case studies, ethnographies. They also include interviews, focus groups, and observations, which are the three we'll really talk about here today, not because the others aren't important, but because of our limited time, we're choosing to focus on the three that probably most of you are using most in your evaluations.

Interviews

Interview Type	Description
Informal	Researcher is required to recollect discussion
Unstructured	Researcher allows interview to proceed at respondent's pace and subjects to vary by interviewee (to an extent)
Semi-structured	Researcher uses an interview guide
Structured	Researcher uses identical stimuli and adheres to interview schedule

And so, as we discuss interviews, we thought we'd talk a little bit about the different types of interviews that exist for you to use in your evaluation, or the different takes you could employ, the different ways you could employ the use of interviews in your methods. And so there's what's called an informal interview, which is where the researcher is required to recollect the discussion. So it's much more conversational and there's a lot of responsibility on the researcher to be able to bring back that information that they get from the respondent.

There's what's called an unstructured interview, where the researcher allows the interview to proceed at the respondent's pace and the subject to be varied and really dictated by the interviewee.

And then there's what's called a semi-structured interview, and semi-structured is probably the most common used among us evaluators, and that's when a researcher develops an interview guide and that interview guide consists of a series of questions. It also may include several probes that the interviewer uses to get the information that they're looking for from the respondent. And the semi-structured interview can vary. You may not ask the same questions in the same ways to everyone interviewed, but generally speaking the subject matter is the same and you're looking for the same things to be answered.

The last one on the list is what's called the structured interview. And the researcher uses the identical stimuli and adheres to the interview schedule, so every respondent is asked the same exact questions in the same exact order. And this is also used, but probably not used as much as the semi-structure.

Interviews (cont.)

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In keeping with our discussion around interviews, in our evaluations there are two different techniques we can use around interviewing. Those include face-to-face interviewing and also telephone interviewing. And they both have their own advantages and disadvantages. Some of the advantages to face-to-face interviews are that they can be used with respondents who would otherwise not be able to participate. For example, respondents who might be illiterate, bed-ridden, who might not be able to participate in a survey but could if you went out to them.

The evaluator can also elicit more in-depth responses or fill in information if a participant does not understand a question. There are several different data collection techniques that can be used in face-to-face interviews. For example, many open-ended questions or the use of visual aids or photographs. Then there's also certainty about who answered the questions. They're right there in front of you and you're certain about who you're interviewing. Some of the disadvantages to face-to-face interviews are cost, time, and money. They can be expensive. They can take up a lot of time, so it can also be difficult to locate the respondents for callbacks.

And as there are advantages and disadvantages to face-to-face interviews, there are also advantages and disadvantages to telephone interviews. Telephone interviews sometimes can be seen as impersonal. There can also be an issue with no call lists or whatever you're asking, your guide needs to be very short because people may hang up. But some of the advantages are that they don't cost as much as face-to-face interviews. You can get the opportunity to interview many more people based on the smaller cost and the smaller investment of time. And you also get the face-to-face kind of personal quality in the phone interview without actually being there. So those are all things to consider when you're actually choosing between the two: what your resources are, what your time commitment is, and what your access is to the respondents based on whether or not you can get to them, or whether or not you need to use the phone.

Focus Groups

- ❑ **Participants are recruited to discuss particular topic**
- ❑ **Ideal size: 6–12 people and a moderator/note taker**
- ❑ **A series of groups is necessary for validity**
- ❑ **It is important to consider homogeneity and anonymity in selection of groups**

So, we've also identified focus groups as one of the methodologies that we can discuss here today. And participants in focus groups are recruited to discuss a particular topic. The ideal size of a focus group is anywhere from, say, 6 to 12 people, plus a moderator and a note taker. And you want to err on the smaller side of a focus group if you're talking about information that may seem harder to discuss among the respondents, and maybe the larger size group if the information is fairly benign.

A series of groups is necessary for validity of a focus group, because one focus group is seen as one unit of analysis. So even if you have 12 respondents in your focus group, they're not 12 different units. It's one unit of analysis equals a focus group, so you'll need to have a number of focus groups to increase the validity.

It is also important to consider homogeneity and anonymity in the selection of your group. People are much more likely to talk to people who they see as like themselves, or who they don't know at all. And if you can get both, that's even better, to not know who the people are in the room but they seem to be like me or like-minded, usually bodes well for a focus group, yielding enough comfort for participants to engage.

Other things to consider is that when running a focus group there's a fine line between leading too much and not getting people to contribute enough. It's also important to keep the discussion on topic without shutting people down. And it's extremely important to express to those participating in a focus group that there are no right or wrong answers.



The last method that we said we'd talk about today are observations, and I've listed a few here, some of which tell what they are by their name. So we have participant observation, unobtrusive observation, hidden observation, and disguised observation. All of these have actually been used in published evaluations where I pulled them from. But a good example of, say, a participant evaluation is the notion—and I'll stay with the quality improvement example I used earlier—when you're looking at the components of the program and what's been implemented, and so what's yielding whatever the change is that we've been able to see from an effectiveness of impact point of view, it sometimes is important to observe those changes in action.

And so, by participating, by visiting a clinic, by observing some of the changes that have been made through the QI program, one can actually see the different components of a program that are being implemented, and you can read what a program should be on paper and watch what is actually happening in the field. And then that also helps with replication and transferability. So observation is a really good method to use when you're looking at transferability and replication. And it's also very often combined with things like interviews and focus groups. So there's a need to observe what what's being told to our respondents.

Data Collection

Copious note taking

Tape and video recording

Collection of all relevant supporting materials

In all of these methods of data collection, there are certain things that are just not unique to any of them and have to happen when you're collecting qualitative data, and those things include copious note taking, audio tape or video recording, depending on what you need, collection of relevant supporting materials. All of those things are needed before you move forward into analysis because those are the things you'll take forward to figure out exactly what it is you've found. Those things will help serve as your data.

Qualitative Data Analysis

- ❑ **Searching for emergent themes**
 - Frequency: number of times something is mentioned
 - Specificity: details
 - Emotion: enthusiasm, passion, etc. in response.
 - Extensiveness: how many different people said something
- ❑ **Using computer software packages (Atlas.ti, NVivo, CDC's EZ-Text)**

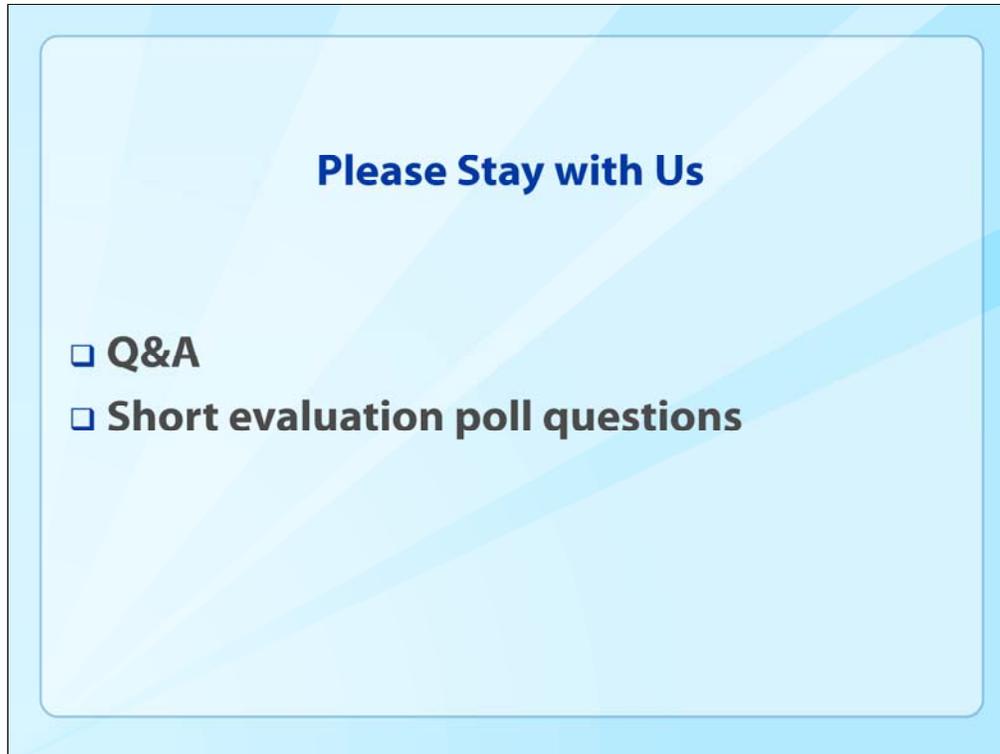
And as you move into analysis, some of the important things to consider will be that, what you're really doing is searching for emergent themes, and in that search you're identifying the frequency, so the number of times something is mentioned, the specificity, the details that the respondent gives, how well they're able to paint a picture, the emotion that respondents are giving. So, are they enthusiastic about a program? Are they passionate about it in their response? What emotion are you getting? Those are all things that need to be included in your notes, and then the extensiveness. How many different people said something? As you're counting through or looking at the frequency of things said in your data, how many people said it? And what we call that is a "preponderance of evidence." You're looking for the majority of the respondents to have said the same thing uniquely outside of each other.

And so, as you move into this qualitative data analysis, some of the computer software packages out there for you to be able to use are things like Atlas.ti, NVivo, and CDC's EZ-Text. Lots of people still use Word, they use functions of Excel to make it happen. So you do whatever is comfortable for you, but these are definitely things that exist that can help you through that process.

Qualitative Methods Enhance Any Evaluation

- **Qualitative methods:**
 - Give the ability to replicate effective programs.
 - Help to identify problems with implementation fidelity.
 - Help to answer the “how” and “why” questions.

Qualitative methods can enhance any evaluation. Any time you’re asking a “how” question or a “why” question, you’ll need to use some level of qualitative methods. But any evaluation that you develop can be made richer or can describe details even better if you employ qualitative methods. They give us the ability to replicate effective programs. They help us to identify problems with implementation fidelity, and they help us to answer the “how” and “why” questions. And at the end of the day, those are the important questions that we need in order to replicate and transfer effective programs that we see in the field.



In your experience, do you find it easier to use qualitative methods over quantitative methods?

“Easy” and “hard” are always an interesting question. But, I won’t say that I find it easier. I think that when the question requires a qualitative method, I try to make sure that those are the methods I employ. And some questions require quantitative methods, and I do the same in those areas. And so, I think it’s less about the easy and the hard of it and more about what’s practical or impractical in the setting you’re in. What kind of questions do you need to answer? What needs to be addressed? And really, when you’re asking how or why, or you’re interested in replication, then you have to figure out a way to employ some qualitative methods.

In terms of rigorous nature, would you say qualitative over quantitative?

I don’t think one takes over from the other. I think an evaluation is made more rigorous with the idea of employing both. If you can get at the great outcomes and the impacts through quantitative methods, but you can also look at the big picture and what’s actually affecting that impact and that outcome through qualitative methods, I think you’ve developed an extremely rigorous evaluation all around.

Thank You

If you have questions, please contact:
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