



Start with the right question and other keys to successful Qualitative research in PBRNs

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Qualitative Research...

Our basic goal today: Demystify the process of doing qualitative research in order to maximize the excitement and minimize the mess!



A quick poll:

Which response best describes your experiences with qualitative research?

- A. I have no idea what qualitative research is.
- B. I'm pretty familiar with research and quantitative studies – how different can qualitative be?
- C. I'm familiar and comfortable with reading and understanding qualitative research, but haven't actually done much myself.
- D. I do so much qualitative research, I could be giving this webinar.



5 Basic Components of Research: Qualitative

Defining the question

Determining the study design

Identifying the participants

Collecting the data

Analyzing the data



Step 1: Defining the question

This is the most important step!

Sets the stage for all subsequent steps

If done poorly, all your work may be for naught



Asking the Right Question...

What are you interested in?

What knowledge gap exists?

What do you want to do?

**Should you do a literature review
before your study?**
Some disciplines will tell you NO
But in health care research, YES



A caveat about qualitative research questions...

Quantitative research questions should be pretty firm BEFORE data collection

- Additional questions may arise (“post hoc”)
- Strongest question is the one for which the study was designed.

Qualitative research questions can change during data collection

- Data collection and data analysis proceed together, by same researchers
- If original question is found not to be the most important, etc., may change or refine the question



Poll: Which of these is a good qualitative question?

- A. Why did the chicken cross the road?
- B. Why do chickens with Cage Layer Fatigue illness decide not to cross the road?
- C. How many chickens cross the road within 1 week of visiting a chicken medicine office?
- D. Does the addition of integrated behavioral health to a chicken medicine office increase the likelihood that a chicken with Cage Layer Fatigue illness will cross the road?

Study Aims: Qualitative Questions

Aim	Analysis/ Objective	Research Question
Identification	Identify/ Name	What is this? Who is that? What is important here
Description	Qualitative Description	What is going on here? What is the nature of the phenomenon? What are the dimensions of the concept? What variations exist? What meanings/practices occur in lived experience?
Descriptive	Normative description	What is the value of the phenomenon?
Generation / Association	Interpretative Explanation Generation	What is happening here? What patterns exist? How do phenomenon differ and relate to each other? How does it work? How did something occur/happen?

Study Aims: Qualitative Questions

Aim	Analysis/ Objective	Research Question
Testing Prediction	Theory testing	Is the original theory correct? Does the original theory fit other circumstances? Are there additional categories or relationships?
Intervention	Evaluation	How can I make “x” happen? What difference does this program/intervention make?

Question review

Which are good QUALITATIVE research questions?

Use qualitative research when...

- you want to know why, not is it statistically significant
- you want to know how come, not how many
- you want to know the reasons and the understanding
- you want to know what part matters, not by how much it matters

5 Basic Components of Research

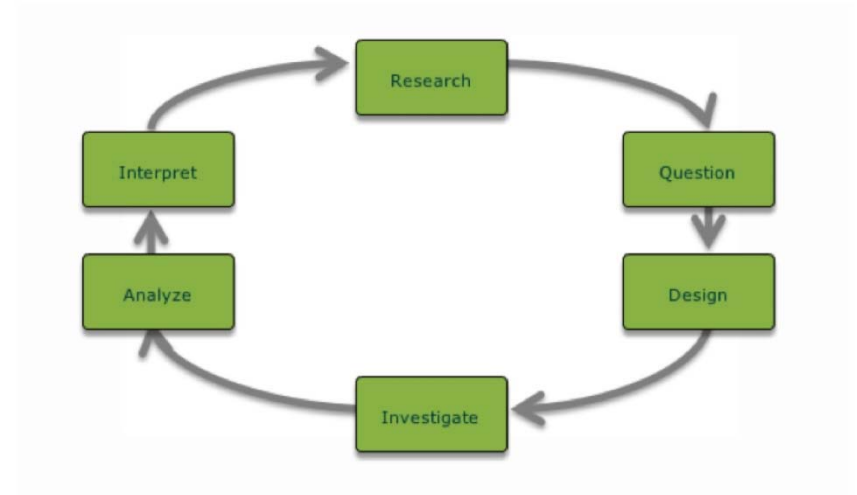
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Qualitative techniques

Observations

- Structured vs. unstructured
- Participant vs. pure observer
- Self-observation



Review of existing materials

- Documents
- Cultural products

Interviewing



Poll: Observations

Which of these observations could be included in a qualitative study?

- A. What tasks medical assistants perform during a day in the office
- B. What conversation occurs during an office staff meeting
- C. How long patients wait in an exam room after the MA leaves but before the doctor arrives
- D. All of these above

Observations



Interviewing

Unstructured

- conversation

Semi-structured

- Focus group – more breadth on a topic
- Individual – more depth on a topic
 - Depth interviews, life history, critical incident, oral history

Structured

- Surveys/questionnaires
- Rank order methods




Structured interviews

Spoken questionnaire or survey

Appropriate when you know enough to ask specific, quantifiable questions

Types of questions include:

- How important is something
 - How commonly does something occur
 - Rank order some issues in order of importance
 - How do you feel about something
 - Etc.
- 

Semi-structured individual interviews

Designed to explore areas of interest to investigator

- Guided, focused, concentrated and open-ended
- Co-created by investigator and interviewee
- Analogy: clinical history taking (physician has agenda of questions to cover, but uses open ended questions and follows patient's responses)

Choosing a semi-structured individual method

In-Depth interviews

- Intensively explore a particular topic

Life histories

- Personal biographies

Oral histories

- Personal experiences of some event

Critical incidents technique

- Exploration of defining moments



Group semi structured interviews: focus groups

Definition:

A group of people (usually 6 – 12) who have been selected because they have something in common to share their feelings or thoughts about an issue, product, service or idea in a comfortable, permissive environment, led by a skilled moderator.

“Unit of analysis” is the group

- A focus group of 8 does not equal 8 individual interviews

Advantages of focus groups

Work well when power differential exists between participants and decision makers

Can investigate complex behaviors and motivations

Can learn about degree of consensus on a topic

Respectful to participants



Disadvantages of focus groups

Purpose must be research


Topic and participants must be appropriate for a group discussion

Does not supply data for statistics



Poll: which method would you choose?

How to improve the provision of screening colonoscopies by clinicians in your PBRN...

- A. Observations of clinicians discussing colon cancer screening with patients
 - B. Semi-structured individual interviews with clinicians and with patients
 - C. Focus groups of patients over 50
 - D. review of malpractice documents from cases where patients with colon cancer sued their primary care physicians
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Choosing participants

Multiple methods exist

Need to justify reason used with purpose of study



Selecting participants

Maximum variation

- Seek broadest range of information and ideas
- Choose selection criteria theoretically diverse around topic of interest

Key Informants

- A cost efficient way to gain access and understanding
- Around the issue or culture being studied, these individuals are well entrenched, active, reflective and articulate.
- Usually have multiple, in-depth encounters with researcher, but can be used for more specific purposes

Selecting participants


Snowball

- Early participants suggest future participants
- “think like you,” “believe the opposite of you,” “know a lot”, etc.

Purposeful (aka purposive)

- Participants are selected specifically by various factors
 - Demographics
 - Experiences
 - Outcomes

Convenience

- Really, the most common method used
 - Who do you know, where do you live, how much money do you have, how much time do you have...
 - Often acknowledged in limitations
- 

Focus group participants

For focus groups: look for “homogenous strangers”

- Can be “natural” group vs. just for research
- Homogenous around research topic or area
 - Age, gender, ethnicity, social status, powerfulness, etc.
- Strangers traditionally preferred, but not necessary
 - Can do multiple groups
 - Use skilled moderator

Poll: Who would you select for participants?

You want to refine an intervention to increase screening for domestic violence in the offices using focus groups to gain stakeholder input (and you can only afford to hold 3 groups)

- A. A group of patients, a group of clinicians and a group of office staff
- B. A group of only women patients, a group of women clinicians and staff and a group of men clinicians and staff
- C. A group of women patients with a history of domestic violence, a group with women patients with no such history and a group of men patients
- D. A group of women patients, a group of men patients and a group of clinicians and office staff





Designing the interview/observation guide

What do you want to know?

How many observations/interviews will you be doing?

How long do you have for the interview/observation?

Interview questions

- Probes – delve deeper into question
- Prompts – when responses are not forthcoming
- Demographics – best at end
- Begin with less sensitive questions



Data collection


Data notes

- Investigator takes brief notes, later expands

Recordings

- Audiotape less expensive, less intrusive than video
- Video picks up non-verbal as well as verbal
- Recording can be transcribed for analysis, or can analyze directly from recordings

Researcher notes

- Necessary even when recordings done
 - Describe events, unexpected happenings, barriers, personal reflection, etc.
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Poll: how do you want to collect these data

In integrated behavioral and primary care practices, you want to describe the interactions between providers

- A. Videotape observations of warm handoffs between providers
- B. Observe warm handoffs and make written notes about the interactions
- C. Audiotape observations of warm handoffs between providers
- D. I want to do interviews instead!



5 Basic Components of Research

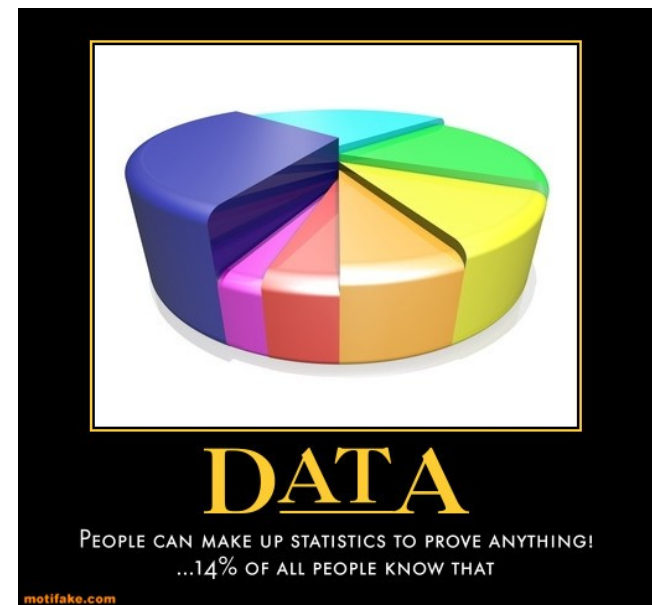
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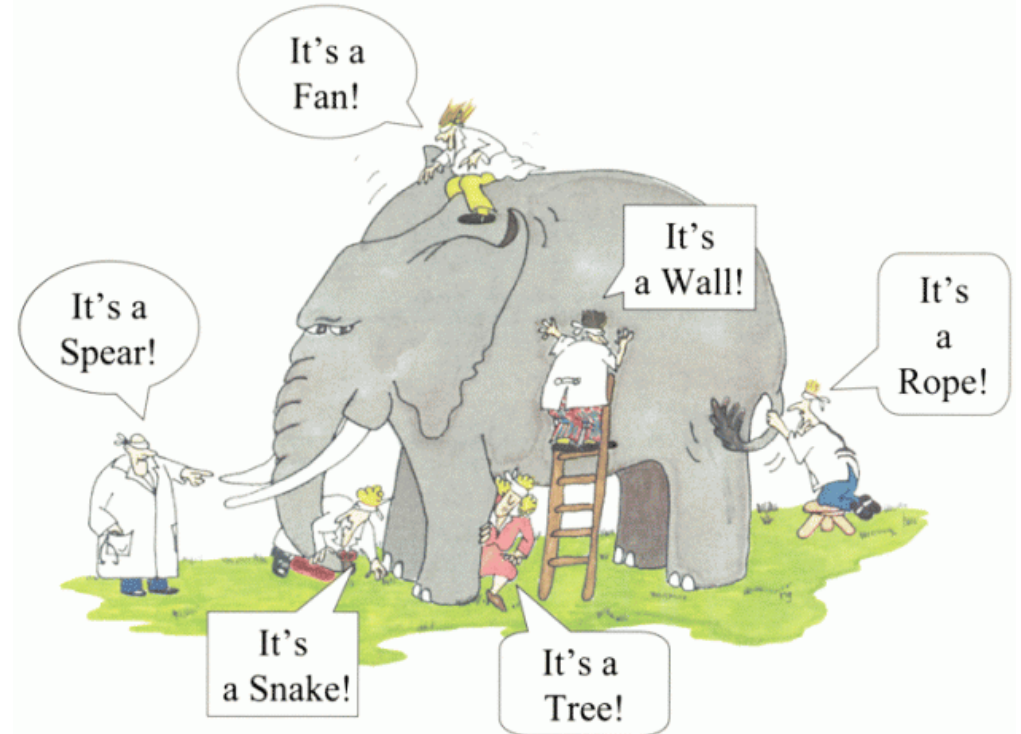
Analyzing qualitative data

Goal = unified “whole” model, summary,
understanding

Time consuming

Investigator intensive

Fun! Exciting!



Analysis Styles

Crabtree and Miller: three main analysis styles that are used with the variety of research approaches:

Template

Editing

Immersion/Crystallization



Analysis styles: Template

Makes use of a template or organizing codebook that is applied to the text being analyzed

The codebook may be a priori (before data are collected) or a posteriori (developed during or after data collection)

The codebook may look for structure (like in content analysis), ideas, phrases, etc.

If the text reveals inadequacies in the template, modifications and revisions are made and the text is reexamined



Analysis styles: Editing

The researcher enters the text much like an editor searching for meaningful segments

Once identified, these units are sorted and organized into categories or codes

The codebook comes directly from the analysis

It is these categories that are explored for patterns and themes in the connecting phase of analysis



Analysis styles: Immersion and crystallization

The researcher spends prolonged time with the text, and emerges, after concerned reflection, with an intuitive crystallization of the data

This cycle is repeated until the reported interpretation is reached



Choice of analysis style

Depends on: the research question and aims, prior or emerging knowledge about the topic and the potential audience for the research

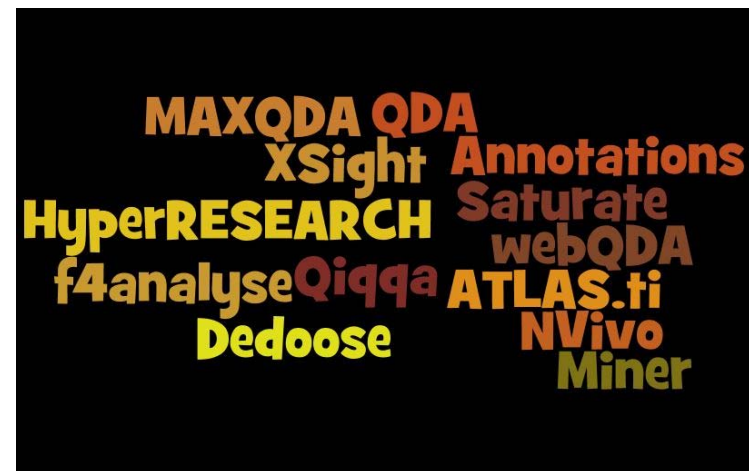
- Template style: there is a good prior knowledge of the topic, a clinical audience is anticipated, a research aim is theory testing,
- Editing and I/C styles: aim is one of exploration and/or discovery, when scant knowledge already exists, the research is participatory
- Multiple styles may be used during the course of the research

Qualitative software

Will not do the analysis for you

Can help organize and simplify data analysis

Many exist, several institutions have reviews, comparisons – or a quick review at <http://www.predictiveanalyticstoday.com/top-qualitative-data-analysis-software/>



Poll: Qualitative research pet peeves

Which is your biggest qualitative research pet peeve?

- A. Researchers who describe “lack of generalizability to larger populations” as a limitation to their study.
- B. Research methods whose entire qualitative analysis plan is: “qualitative analysis will be done using Nvivo software.”
- C. Research results from qualitative interviews which summarize the results for each question they asked... where those are the entirety of results presented.
- D. Qualitative research methods state they “sampled a random group of”



Summary

A research question sets the foundation for the rest of your research

Don't skimp on the time spent on your question



With a good research question...

Everything else falls in line:

- the study design
- the participants
- Data collection
- Data analysis

Thank you

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