



# Introduction to Qualitative Methods in Implementation Science

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# Introduction

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# Agenda

- Qualitative Research Approaches
- Overview of Data and Methods
- Organizing and Preparing Your Qualitative Team
- Developing Your Qualitative Assessments
  - Selecting Methods
  - Interview Guides
  - Observation Guides

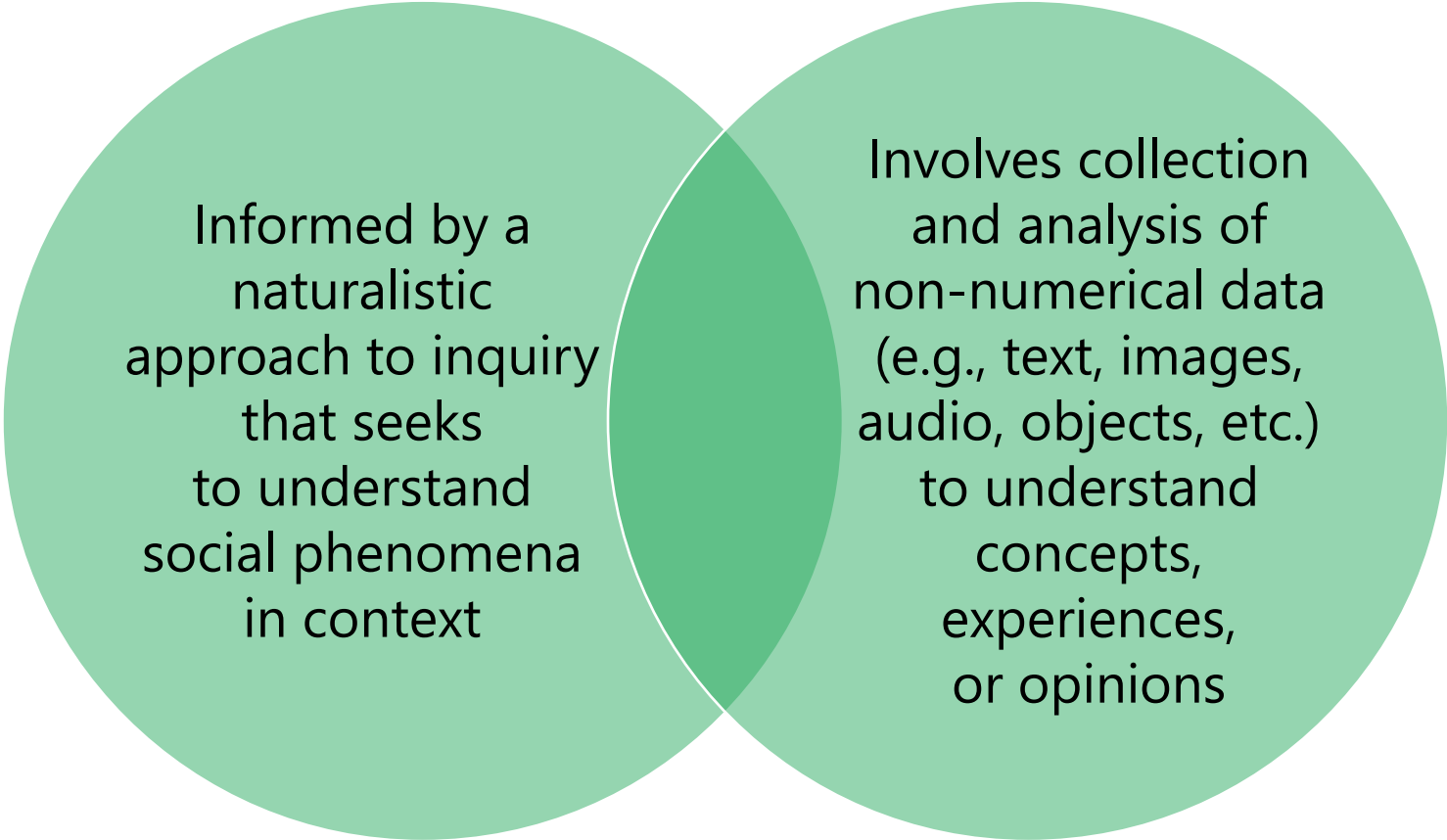


# Let's Chat!

**What's your experience using qualitative methods in implementation science projects?**

(Respond in the chat box)

# Qualitative Research



Informed by a naturalistic approach to inquiry that seeks to understand social phenomena in context

Involves collection and analysis of non-numerical data (e.g., text, images, audio, objects, etc.) to understand concepts, experiences, or opinions

# Qualitative Research Approaches

# Qualitative Research Approaches

- **Phenomenology**

- What is the meaning, structure, and essence of the lived experience of implementation for a certain group of people (e.g., end users, persons impacted)?

- **Ethnography**

- What are the cultural characteristics of a certain group of people (e.g., in an organization) involved in implementation? What role do they play in the process of implementation?

- **Social Construction**

- What are the implementation actors' reported perceptions, explanations, beliefs, and worldviews? What consequences do these have for implementation?

-Ingold, 2008; Patton, 2015; Faro et al., 2022

# Qualitative Research Approaches

- **Critical Theory**

- How do the experiences of inequality, injustice, and subjugation shape implementation?

- **Feminist Inquiry**

- How does the lens of gender shape and affect our understandings and actions in the process of implementation?

- Faro et al., 2022



# Qualitative Research Approaches

- **Grounded Theory**

- Theory from systematic comparative analysis, “grounded” in fieldwork, to explain what has been and is observed
- Beyond phenomenology, as the explanations that emerge are genuinely NEW knowledge used to generate NEW theory

- **Case Study**

- Describes a single unit, i.e., a person, organization, or institution, to identify how a complex set of circumstances converge to produce a particular manifestation, i.e., an organizational change process

-Hancock, 1998; Patton, 2015

# Key Distinctions

## Qualitative

- Examines phenomena through words and other textual material
- Holistic
- Focuses on description
- Traditionally inductive or **BOTTOM-UP** to develop new theories and hypotheses
- Emphasizes the “voices” of participants through quotes

## Quantitative

- Deals with numbers, statistics, and measurement
- Reductionist
- Deductive or **TOP-DOWN** to test existing theories and hypotheses
- Emphasizes replication and generalizability

# Qualitative Research in Implementation Science

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Tends to be more positivist and deductive

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Targets *a priori* research questions

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Practical, focused, and time-limited

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Inherently multidisciplinary and team-based (rather than solo)

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Multiple partners and settings (rather than long-term, in-depth engagement with one community)

-Cohen et al., 2018

# Qualitative Research: What, Why, and How?

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What are the barriers to implementing an innovation?

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How do we ensure an innovation is feasible for a particular setting?

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What do partners think about an innovation's fit with their setting and the populations that stand to benefit?

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Why do some practitioners try an innovation and others do not?

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Why do some patients receive an innovation and others do not?

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How integrated is the innovation within a setting? What would improve its reach? What inhibits its reach?

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How is an innovation used after initial implementation support ends?

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Why would an organization discontinue or sustain an innovation?

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Why has an ineffective intervention not been de-implemented?

-Hamilton and Finley, 2019

# Uses of Qualitative Research



Develop/tailor programs to service delivery contexts and experiences of potential users



Adapt interventions and measures for use in new settings and in new populations



Advance and assess implementation strategies



Conduct process evaluations to assess day-to-day dynamics of implementation



Document the conditions of the people we study, and act as their advocates



Testify before government agencies and local, state, and federal legislatures



Enable programs to take seriously the cultures of the communities that they serve

# Qualitative Methods in Mixed- Method Research

Purpose	Description
<b>Triangulation</b>	Seeking <b>convergence, corroboration</b> , or <b>correspondence</b> of results from multiple methods. Do results address the same phenomenon or provide the same answer to the same question?
<b>Complementarity</b>	Seeking broader, deeper, more comprehensive understandings by tapping into different aspects of the same phenomenon, i.e., embedding results of qualitative analysis within a quantitative dataset to contextualize overall results.
<b>Development</b>	Using results of one method to inform creation of another, i.e., instrument construction.
<b>Initiation</b>	Evoke paradox, contradiction, divergence to generate fresh insights; dissonance welcome!
<b>Expansion</b>	Expanding the scope/range of a study. Are unanticipated findings produced by one dataset explained by another?

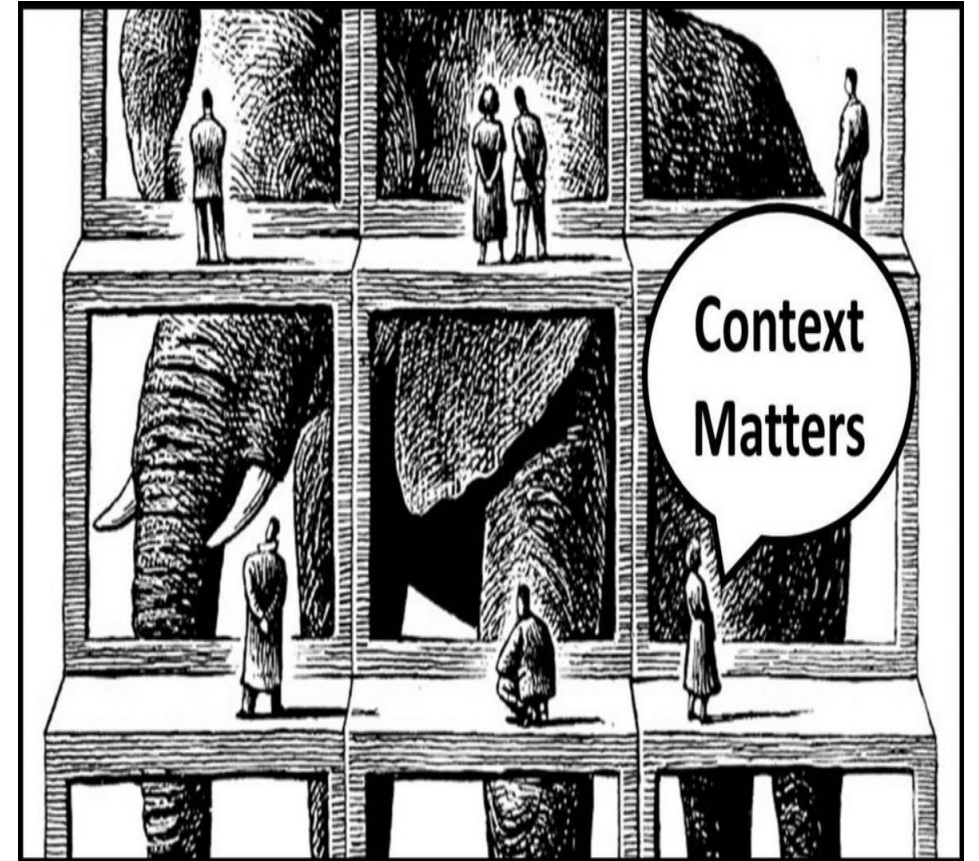
-Green, 2007; Patton, 2015

# Data and Methods

# Qualitative Data We Collect and Analyze

1. What people **SAY** they believe, think or do
2. What people actually **DO**
3. What are people's **UNSPOKEN** or **UNRECOGNIZED** thoughts and beliefs?
4. The **CONTEXT** of the above three points

-Helman, 2007





# Common Qualitative Methods

Observations

Interviews

Focus groups

Concept mapping

Document review

Other methods we don't have time to get into

# Observation

- Researcher watches and records unfolding events and processes
  - **Structured observation**
    - Researcher uses formal protocol for recording specific behaviors during a certain period
  - **Participant observation**
    - Researcher takes part in the activities under study while observing and recording what occurs

-Bernard, 2018

# Observation

- **Participant observation**

- Reduces the problem of reactivity
- Informs sensible, culturally and linguistically relevant interview questions
- Facilitates in-depth understanding of what's going on in a setting
- Engenders confidence in the meaning of the data

-Bernard, 2018

# Observation

- **Participant observation**

- Results in fieldnotes—written records of observations, jottings, notes of conversations and interviews, and emerging ideas and preliminary insights maintained throughout the study period
- "Hanging out" is hard work and necessitates obsessiveness and skills in organization

-Bernard, 2018

# Long-Term and Short-Term Ethnography

## **Long-term**

- Months or years
- Often bound by geography
- Open and ongoing engagement
- Typically flying solo

## **Short-term**

- Days or weeks
- Popular in health services research
- Not necessarily bounded by geography
- Focused and intense engagement
- Often involves team-based approach

# Long-Term and Short-Term Ethnography

## Long-term

- Apprenticeship model to learning
- Possible to capture more than one instance of a phenomenon
- Data collection, analysis, and interpretation are often separated in time

## Short-term

- Relies on background knowledge and other experts to scaffold and hone observations
- Captures as much as possible in as many ways as possible – one shot
- Data collection, analysis, and interpretation happen iteratively and simultaneously

# Interviews

- **Informal interviews**

- Distinguished by lack of structure and control
- Researcher keeps record of daily conversations
- Used in early phases of participant observation and in exploratory research

-Bernard, 2018

# Formal Interviews

- **Structured**

- Cover a specific question set; ask participants the same questions, with the same wording and in the same order

- **Semi-Structured**

- Flexible guide; useful when only have one chance to interview someone

- **Unstructured**

- Allow participant to shape interview's direction and focus



# Hallmarks of Qualitative Interviews

- Open-ended vs. closed or fixed-alternative questions
- Participants can respond based on things they consider important
- Ability to ask participants to define or elaborate on something they mentioned as being possibly important

-Bernard, 2018

# Focus Groups

- **Guided discussion with limited number of questions**

- Convene 6 to 10 participants to discuss and provide data on specific issues (however, unit of analysis is the group; not individuals)
- They are not town halls or what you see on CNN, Fox News, or MSNBC
- Goal is to get quality data within a social setting where participants think about their own views in relation to the views of others
- Useful for quickly assessing a group or community's ideas about a specific topic
- Not generally advised for sensitive topics

# Focus Groups

- **Some applications**

- Construct locally valid surveys (e.g., identify suitable questions and response categories)
- Obtain input into and assess reactions to innovation or implementation
- Understand barriers and facilitators in an implementation setting
- Field test a survey tool for coherence
- Cross-check findings derived from other methods

# Concept Mapping: What Is It?

- **Part of mid-century anthro toolkit!**

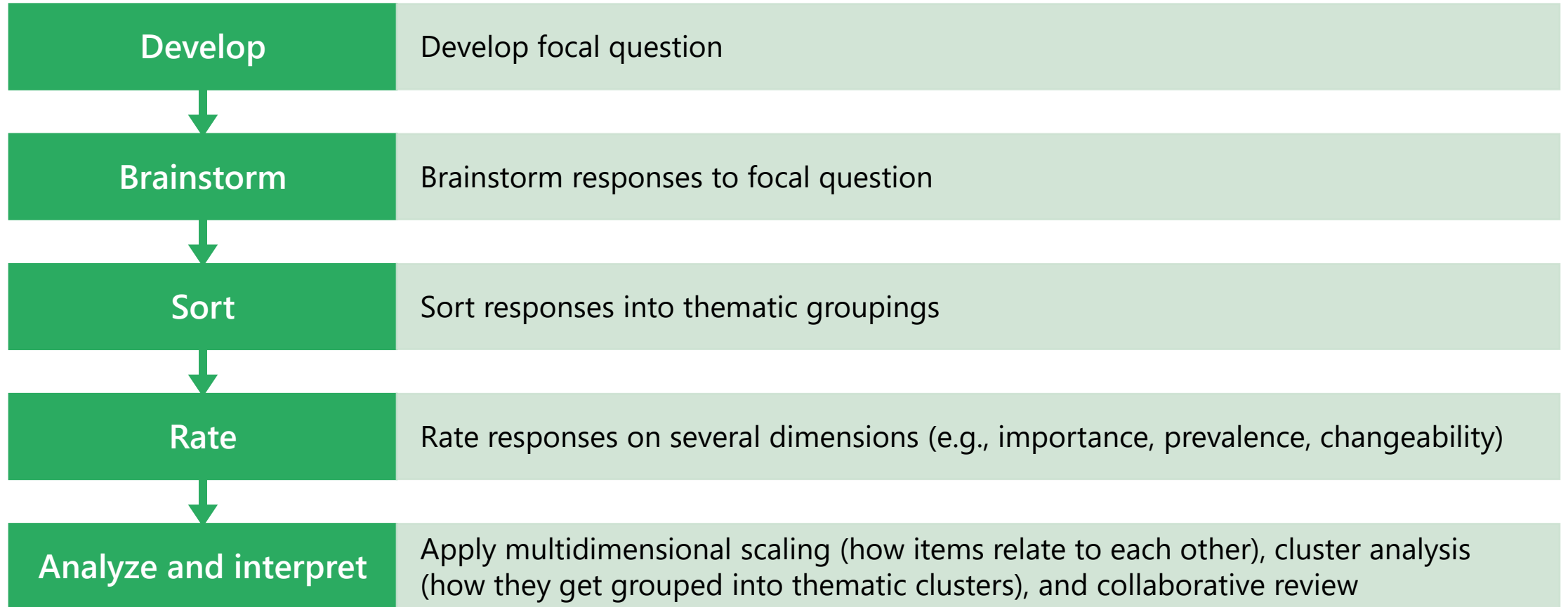
- Participatory, mixed-method process involving free-listing, pile-sorting, and ranking activities
- Useful when working with diverse partners with differing ideas about key issues being studied
- Can be done individually or in groups
- Assists in determining locally-relevant action items and intervention strategies
- Aided by software (e.g., Concepts Systems, Inc.)



# Putting Concept Mapping into Action: Seasons of Care

- Improving Native American Elder Access to and Use of Healthcare through Effective Navigation (R01 MD010292)
  - “What factors make it easy or hard for Native American elders to get good healthcare?”
  - Inform key issues to address in navigation application (app) to promote enhanced access to and use of healthcare and health insurance
  - Influence creation of dissemination products

# Putting Concept Mapping into Action: Seasons of Care



# Putting Concept Mapping into Action: Seasons of Care

-Look at ratings by age, gender, partner type, setting, etc.

-Can triangulate with other data sources

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Difficulties obtaining and using insurance

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Insecurity from lack of knowledge

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Limited availability of services

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Scheduling challenges

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Provider issues and relationships

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Family and emotional challenges

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Health-related self-efficacy and knowledge

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Accessibility and transportation **barriers**

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Tribal/national policy

# Document Collection and Review


- **Documents = “material culture”**

- Systematically gather and inventory material relevant to the context under study (e.g., news articles, pamphlets, workflow diagrams, policies and procedures)
- Offer insight into stuff that can't be observed (e.g., events before an evaluation)
- Archival text useful for learning about institutional/organizational history
- Facilitate comparison between official statements re: program or policy with what observers see and hear “on the ground”

-Patton, 2015



# Other Methods....



<b>Open-Ended Questionnaires</b>	<ul style="list-style-type: none"><li>• Type of survey that does not limit participants to predetermined responses</li></ul>
<b>Structured Vignette</b>	<ul style="list-style-type: none"><li>• Present fictional story (e.g., a clinical case) and elicit participants' reactions</li></ul>
<b>Diaries</b>	<ul style="list-style-type: none"><li>• Written journal entries</li></ul>
<b>Imagery</b>	<ul style="list-style-type: none"><li>• PhotoVoice techniques; drawings; mapping and network diagrams; film and video</li></ul>

# Let's Chat!



**We discussed some qualitative methods we use in our implementation research. What else do you like to use?**

(Respond in the chat box)



# Organizing and Preparing Your Qualitative Research Team

# Best Folks for Qualitative Research Teams

Diverse in experience and expertise

Embrace new learning opportunities and are curious

Can build and maintain rapport with strangers

Can elicit stories/other narrative data from these strangers in their own words without losing sight of study goals

Can put actions and behaviors into context

# Essential Team Members

Project manager

Personable and dependable

Data manager with obsessive tendencies

Aware and open to disciplinary differences

Know roles, coordination processes, and timelines

Are coachable or teachable

Rewards and promotions enable low turnover

# Key Considerations for Qualitative Researchers

- Not automatons
- Talking with folks with agency
- Must be nimble/able to adapt
- Get that the research process itself can affect what they're studying and the data they're collecting
- Attributes of researcher (e.g., age, gender, dress, perceived status)
- Attributes of research technique (e.g., being recorded can cause self-consciousness, withdrawal)
- Context of research (e.g., will get different answers depending on where questions asked—box store parking lot, jail cell, clinic)

# Ongoing Reflection is Crucial



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**Recognizing** subjective/contextual aspects of qualitative research is a major strength; not a weakness

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**Always assessing** one's own assumptions and biases

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**Remaining critically aware** of how one is similar and different from participants

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Never **assuming** any similarity (e.g., being of same gender or ethnicity) means one therefore "understands"

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**Thinking** critically, honestly, and openly, about the research experience and process

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**Willing to expose messiness, loose ends of research**

# Training and Capacity Building

- **Develop a consistent meeting schedule**
- **Compile and disseminate master reading list**
- **Hold collective training at the beginning of the project or when entering a new phase**
  - Team building, co-learning, skill enhancement
  - Develop shared vocabulary and knowledge of study issues
  - Common understanding of key methods and processes
  - Traditional didactics with “hands on” learning exercises
- **Pilot both the data collection tools and the data collectors**
- **Ensure familiarity with needed technology**



# Sample Training Agenda

- Improving Native American Elder Access to and Use of Healthcare through Effective Navigation (R01 MD010292)
  - Study overview
  - Roles and responsibilities of interviewers and Elder Consultants
  - Undertaking research with culturally-diverse Native American Elders
  - Organization of insurance systems and healthcare delivery for Native American Elders
  - Conducting qualitative interviews (practice/role play)
  - Conducting quantitative surveys (practice/role play)
  - Human subjects issues (problem-based learning activities)
  - Data collection and management procedures
  - Administrative nuts and bolts

# Create Protocols At the Get-Go

## Administrative

- Travel and per diem processing
- Participant reimbursement and incentives
- Team meeting schedule(s)

## Data management

- Transcription, storage, tracking, monitoring, and safety

## Maintaining safety/security of data

- Transport, passwords, electronic transfers, etc.

## In the event of...

- Mental health emergencies
- Unwanted sexual advances and harassment
- Unsafe situations
- Liability concerns

# Let's Chat!



**What are some other ideas for organizing and supporting qualitative research teams?**

(Respond in the chat box)



# Developing Your Qualitative Assessment

Selecting methods

Interview, focus group, and observation guides

# General Guidance

## Decide what data you need to answer your question(s) and how to get it

- What was emphasized in the proposal?
- Think about the conceptual model
- Bring your team together for collective input

## Things to consider

- Formal semi-structured interview = What people think or say about something
  - May miss what people actually do....
- Participant observation = Can get at what people actually do
  - Lots of rich descriptive data based in experience
  - Will not be uniform across researchers or sites

# Pragmatic Factors to Consider When Selecting Methods

Setting (e.g., public park, clinic, social service agency)

Sample size(s) and access to participants

Anticipated burden on participants

Time (e.g., length of data collection event[s], project)

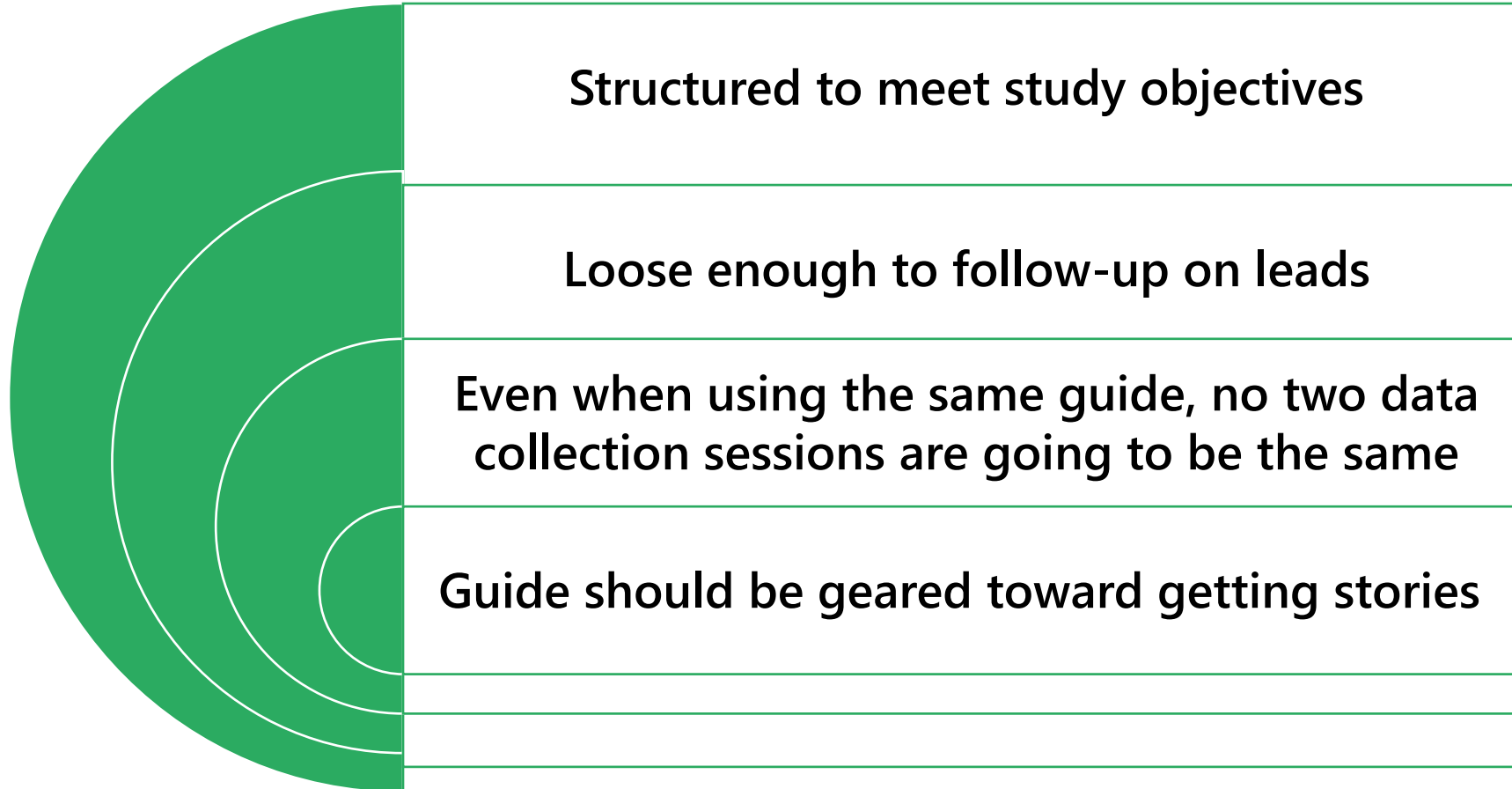
Cost (e.g., travel, transcription, incentives)

People power and resources for analysis

# General Guidance for Qualitative Work

- **Ask/observe and ask/observe again**
  - Multiple ways to answer questions
    - Example: Rewording, probes, or even overlapping questions in guides
    - Example: Repeated observations
- **Make sure team is on same page**
  - Avoid confusion
    - "Why did we ask that?"
    - "Why are we observing that?"

# Designing Interview and Focus Group Guides





# Designing Interview and Focus Group Guides



- Guide is **NOT** a questionnaire
  - Tend to be “one-sided”
  - Aim to quantify results
  - Not about conversation or story-telling
- Most follow a “funnel” structure
  - General → specific
  - Breakdown from broadest to smallest
- Useful for building “trust”
  - Creates a relaxed and open atmosphere
  - Helps with moving on to more sensitive topics

# Designing Interview and Focus Group Guides

- Intro (rapport formation) → “Warm up” → Main body → “Cool-off” → Closure
- What to think about when sequencing questions
  - Time (from earlier to more recent events)
  - Topics/domains
  - Complexity (simpler to more complex)
  - Ask first about concrete issues and move to more abstract ones
  - Start with least sensitive or threatening questions
- End on a positive note with a big THANK YOU!!!

-Schensul et al., 1999

# What Kinds of Questions to Ask

## Singular and neutral

- Ask about one thing at a time
- Don't imply a right or wrong response

## Clear and easily understandable

- Use terms/phrases that makes sense
- Tailor to the participant group

## Open-ended

- Elicit experiences, feelings, ideas, opinions, knowledge
- Not conducting an interrogation or quiz

# What Kinds of Questions Not to Ask

- **Dichotomous questions**
  - Grammatical structure implying a “yes” or “no” answer that limits expression
- **Double-barrelled questions**
  - Asking two (or more) questions in one
- **Long questions**
  - Participants may remember only part of the question, limiting their response
- **Jargon-laden questions**
  - Keep things simple so you're not asked what you mean by your question
- **Leading questions**
  - Suggesting a particular kind of answer, positive or negative

# Why Having a Good Guide Is Beneficial



Minimizes variation among researchers



Helps use researchers' time efficiently



Makes it easier to compare responses



People using findings can review questions



Enhances credibility

# Constructing Observation Guides

- Consider main research questions and conceptual model
- Select sites/events/phenomena to help answer questions
- Include prompts guiding team to "objects" and the details of them that are important to answering the question
- Can include questions for the researcher and participants and prompts for action
  - In what ways is LGBTQ+ identity represented in the space of the clinic?
  - How comfortable are you in asking questions about sexual orientation?
  - Draw a map of the physical space

# Constructing Observation Guides

- **Level of structure depends on level of needed detail**
  - Characteristics of individuals and interaction
  - Timing segments of an interaction
- **Include prompts to consider points of comparison observable within the setting/event**
  - Categories of participant (job role, age, gender, race/ethnicity)
- **Leave space for general impressions and "other observations"**

# Using RAPICE in School-Based Health Centers

## Rapid Assessment Procedure Informed Clinical Ethnography (RAPICE)

- Observations by one or more trained ethnographers
- Consultation with a multidisciplinary team (including clinicians)
- Fast-paced, yet iterative process of data collection
- Reduces burden on participants

## Two-part structure

- Protocol and Activity Guide
- Observation Template

-Palinkas and Zatzick, 2019



# Using RAPICE in School-Based Health Centers

- **Protocol and Activity Guide**

- **Steps**

- Procure operational plans of school-based health centers (SBHCs)
    - Discuss with point of contact to establish observation periods
    - Obtain general description of a typical week, discuss special circumstances
    - Collaboratively decide which clinical operations are appropriate for researcher to observe

- **Suggested activities for observation**

- Get a tour
    - Ask front desk staff to do a mock intake with you
    - Attend staff meetings
    - Have lunch with staff

# Using RAPICE in School-Based Health Centers

- **Protocol and Activity Guide**

- **Topics for discussion**

- **Informed by Exploration, Preparation, Implementation, Sustainment Framework**

- **Outer context**

- How would you describe the community to someone from elsewhere?
      - How do patients and families talk about the school?

- **Inner context**

- How would you describe your SBHC to your family?
      - Are the services you offer adequate to meet the need in your community?

- **Bridging Factors**

- What is the process like for students to get referred to you?

- **Innovation Factors**

- What kinds of changes need to be made at your SBHC to be more effective in serving LGBTQ+ students?

# Using RAPICE in School-Based Health Centers

## Observation Template

**RAPICE Observational and Informal Interview Notes**  
*Drawing on RAPICE observations and interviews with SBHC staff, complete as much of the following information as possible.*

<b>Observation Log</b> Include day/time of each observation period, general description of activities/events observed and who you spoke with	Day 1:
	Day 2:
	Day 3:
	Day 4:
	Day 5:

**Staffing and Physical Space**

**Staffing Network Map**  
*Describe the relationships or interactions you observe between staff and between staff and students. Who interacts with who? In what circumstances? To what ends?*

**Map of SBHC** (Recommendation Area 2)  
*Use the space below to draw a map of the SBHC. Include aspects like a) relation to rest of the school building, b) entrances/exits and other windows and doors, c) arrangement of waiting area and front desk, d) bathrooms, e) offices/patient rooms, and f) any unique aspects of the space.*

- Activity Log
- Relationships and interactions of staff and patients
  - Understanding job roles, relationship between job roles, decision-making processes (power structure), main interaction point for patients
- Map of the space
  - Directly related to innovations regarding physical environment
  - Understanding ease of access, privacy and confidentiality, welcoming atmosphere

# Upcoming Sessions in Series

- Conducting Ethnographic Research and Periodic Reflections (Hamilton, 6/16)
- Conducting Interviews and Focus Groups (Willging and Shattuck, 6/20)
- Analyzing, Reporting, and Disseminating Qualitative Research (Willging, Shattuck, and Haozous, 8/11)
- Meaningful Community Engagement in Qualitative Implementation Research (Willging, Tafoya, and Lawyer, 9/8)



# Let's Chat!



**What topics covered today would you like to discuss further? Other ideas for future webinars?**

(Respond in the chat box)

# For More Information...

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