

INSTITUTE FOR DEFENSE ANALYSES

DATAWorks 2021: Introduction to Qualitative Methods

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Executive Summary

Qualitative research methods, which involve the collection and analysis of non-numeric data, are a valuable approach for defense research. When qualitative methods include systematic approaches in collection and analysis, they can allow insights that would otherwise go undetected. This training provides an introduction to qualitative methods focused on familiarizing researchers with systematic methods for collecting and analyzing qualitative data.

Qualitative data is non-numeric data, often textual data. Sources of qualitative data include interpersonal exchanges in the form of interviews and focus groups, textual documentation, survey comment boxes, and direct observation. Qualitative data is often thought of as subjective in contrast to quantitative data, which is often perceived as objective. In reality, qualitative data can be either subjective or objective, which is also the case for quantitative data. The subjectivity or objectivity of data is unrelated to whether its format is numerical or textual.

Whether data are subjective or objective depends on the source of the data and whether human opinion or emotion (i.e., subjective experience) impacted the content of the data, regardless of its format. Although this training's examples

of qualitative data focus on interviews, which are a subjective form of qualitative data, many of the takeaways regarding data collection preparation and analysis relate to qualitative data that is objective, as well.

Qualitative methods can provide insights that would not otherwise be obtainable in many cases, such as identifying system requirements or desirable features, brainstorming fresh ideas, identifying problems or issues, exploring use cases, or analyzing complex dynamics. Despite this, drawing defensible conclusions from qualitative data requires that qualitative studies be well designed and include rigorous analyses.

Regardless of the specific reason for using qualitative data, a well-designed qualitative study should include intentional, a priori planning. A description of the collection methods and analytic process that will be employed should be prepared ahead of data collection. A key benefit of qualitative methods is that they are flexible, and research plans should support emergent shifts in direction to account for new contextual understandings that may arise throughout the research. A well-designed qualitative research study should also include a plan for ensuring the veracity of both

the data and the analytic process, and consider whether a mixed methods approach employing both qualitative and quantitative methods would be most appropriate.

In analyzing qualitative data, the analyst must keep in mind that they are working as a sensor. Analysts process qualitative information in the same way physical sensors process environmental information in order to provide conclusions about such factors as speed and humidity, for example. Because of this, analysts must be attuned to their own calibration.

An analyst's expert experience is important in any analysis, but, particularly in qualitative analyses, analysts must not let their personal experience bias their conclusions about the data. A recursive approach to analysis—including multiple checks on the data and analytic process—known as hermeneutics is a key feature of qualitative analysis. In concluding a qualitative analysis and communicating results, researchers should include a descriptive illustration of the interpretive path they followed, showing how they derived meaning from their results and reached their conclusions.

This training provides detailed descriptions of the steps needed to plan for, collect, and analyze qualitative data. We use a medical training interview as a case example, promoting the use of semi-structured interviews as providing an appropriate balance between the organizational benefits of more structured approaches and the flexibility benefits of less structured ones.

The preparatory steps of qualitative research covered in this training include designing research questions, constructing an interview guide, deciding on sampling needs, and designing a recruitment strategy. The training also covers best practices for conducting an interview, including examples of recommended approaches for building rapport with participants and asking questions in ways that support emergent discovery.

In its discussion on the analysis of qualitative data, this training provides examples of how to develop and adapt a codebook throughout the research project, how to analyze data recursively using a hermeneutic process, and how to summarize, synthesize, and communicate findings once the analysis is complete.

This training recommends codebooks be drafted early in the research process as part of the study preparation but emphasizes that codes, code definitions, and the codebook as a whole can and should be adapted throughout the analysis. Descriptive and thematic analyses can be helpful in summarizing the data, but synthesizing the data should involve telling a story about the relationships discovered in the data.

This training provides a broad introduction to qualitative methods, using interview examples as an entry point. Its goal is to enable defense researchers to adopt more rigorous, systematic approaches to qualitative data regardless of its source.

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Introduction to Qualitative Methods

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Task Leader: Rebecca Medlin

DATAWorks 2021

Institute for Defense Analyses

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Goals of this Training

Introduce qualitative methods

 Familiarize researchers with an interview approach to qualitative data collection

Introduce a systematic approach to analyzing qualitative data



What is Qualitative Data?



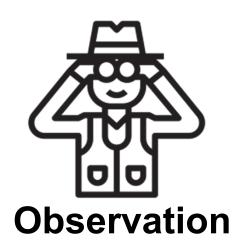
Qualitative data is non-numeric data, often text data







Interview



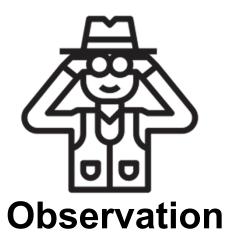
Qualitative data is non-numeric data, often text data







Interview



Written Comments

"No good view from the back"

"Leg cramped during driving"

Textual **Documentation**

Test Conditions:

- -Terrain descriptions
- Location of test, area maps



Audio and الكاا Visual Media

- Recordings of participant using new system
- Screen captures of software use



Qualitative data is often thought of as subjective and quantitative data as objective

Qualitative & Subjective

Best Books of 2020



Titles of best in fiction, best in biography, best in kid's, etc.

Quantitative & Objective

MPH

Qualitative data can be subjective or objective; the same is true for quantitative data

Qualitative & Subjective

Best Books of 2020



Titles of best in fiction, best in biography, best in kid's, etc.

Qualitative & Objective

- Arkansas
- Connecticut
- West Virginia

Quantitative & Subjective

System Usability Score



Quantitative & Objective MPH



Examples focus on interviews, which are subjective, but much is relevant to all qualitative data

Qualitative & Subjective

Best Books of 2020



Titles of best in fiction, best in biography, best in kid's, etc.

Qualitative & Objective

- Arkansas
- Connecticut
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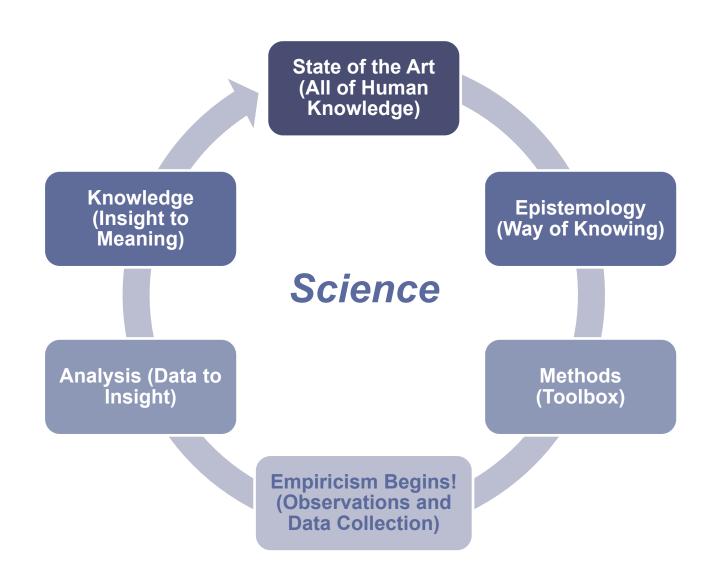
System Usability Score



Quantitative & Objective MPH



An epistemology is the foundational "way of knowing" that underlies any research approach





Qualitative research involves planning for knowing through interpretation

When are qualitative methods useful?

- Identifying requirements or desirable features
- Brainstorming fresh ideas
- Identifying problems or issues
- Exploring use cases and spaces
- Analyzing complex dynamics

What should I see in a well designed qualitative study?

- Intentional planning description of methods and preparation
- Qualitative research questions that support emergence shifts in direction to account for new understanding.
- A plan to check or otherwise assure veracity of both data and analysis
- Mixed methods integration (if applicable)

What is considered rigorous when analyzing data?

- Analyst as a sensor controlling bias versus experience is sensor calibration
- Recursive analysis (hermeneutics)
- Appropriate checks on data AND analysis
- Communicating results
 - Descriptive illustration of interpretive path
 - Meaning from the findings



Preparing for Qualitative Data Collection



Prior planning is key to rigorous qualitative research

Consider what you want to learn and the resources that are available for the study

- Identify points of inquiry and research questions
- Apply relevant theories about what factors you should be looking for to help build your codebook
- Identify your target population and sample
 - Stratify within your sample and decide on how to recruit
- Determine data collection strategies

Case Study: ProTrain4U Clinical Chart Training

ProTrain4U creates professional training sessions for medical providers

The training is developed with...

- An embedded understanding of the work
- Goals to affect patient privacy and discrimination
- Proven approaches to support short format learning

A qualitative interview is used to collect "test-trainee" feedback as well as ideas for new courses:

https://www.youtube.com/watch?v=eNMTJTnrTQQ

Identify points of inquiry and research questions

Start with a Central Question that covers a broad area of interest

 How did the ProTrain4U Training help medical providers to improve their work practices and deliver better patient care?

For each Central Question, define up to seven sub-questions that can be directly answered

- 1. What kinds of design features or activities were liked/disliked by trainees?
- 2. Which topics or issues are most important for managing clinical data in your office?
- 3. For well-received training features, how did the feature enable the attendees' learning?
- 4. For less useful training features, what could be improved?
- 5. What kind of changes did this training inspire in the workplace?

Consider relevant theories about what factors might shape topics that emerge and how you analyze

What phenomena should you expect given prior research?

 Theories regarding effective training approaches might guide which questions we ask

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What phenomena should you expect given prior research?

 Theories regarding effective training approaches might guide which questions we ask

Be open to discovery of new or unexpected relationships

 You may need to combine or extend existing theories to explain your observations

Consider relevant theories about what factors might shape topics that emerge and how you analyze

What phenomena should you expect given prior research?

 Theories regarding effective training approaches might guide which questions we ask

Be open to discovery of new or unexpected relationships

 You may need to combine or extend existing theories to explain your observations

Use what you already know as a basis for early codebook drafting

 Exploring codes and the concepts they relate to prepares you to adapt your line of questioning during interviews



Identify your target population and sample

Who is the user?

Who are the people you want to ask? You'll want a sample of these people.

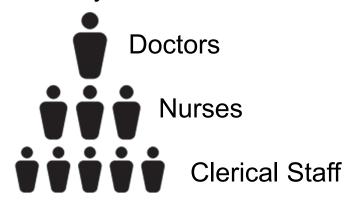


ProTrain4U works with a medical clinic to test a beta version of their training

Stratify within the study population so you ask the right people the right questions

If the structure of the population is known, consider recruiting or collecting your data based on the structure

Authority Hierarchies:



Roles:



Plan your recruitment according to what you've determined is the desired population

Recruiting is an outgrowth of preparation

- Select recruiting methods that will get the participants you want
- Influences generalizability of findings

Recruiting plan needs to mesh with your <u>sampling</u> strategy

Purposive Sampling

- Approaches sampling with representation in mind
 - Covers a range or targets a demographic

Convenience Sampling

- Approaches sampling opportunistically
 - Samples from near, associated, or available and willing

Determine your data collection strategy: build an interview guide

Use your research questions and understanding of population structure

Identify discussion topics

Develop specific questions for each topic

Questions should be open ended and avoid leading a specific response

Craft to coax a rich response

Questions for the Research Side

How did the ProTrain4U Chart training course help you improve awareness, work practices, and ultimately deliver better patient care?

- 1. What kinds of design features or activities were liked/disliked by trainees?
- 2. Which topics or issues are most important for managing clinical data in your office?
- 3. For well received training features, how did the feature enable the attendees learning?
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Questions for the Human Side

I would like to get your overall reaction to the training...

 What was your general impression of the training?

Questions for the Research Side

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- 5. What kind of changes did this training inspire in the workplace?

Questions for the Human Side

I would like to get your overall reaction to the training...

- What was your general impression of the training?
- What was your favorite or least favorite part of the training?
- What kinds of topics came up during course discussion, either between participants or with facilitators?
- Can you tell me about any of the activities that were done in the training that have really stuck with you?
- How might this training inspire changes that affect the actual care the patients receive?

Goal is to generate discussion that will help address your research question from different, relevant angles

Conducting Interviews



Choose your interview method according to your

research goals



Unstructured Interview



Semistructured Interview

Flexible and Pre-Planned Recommended



Structured Interview

Most Organized, Least Flexible

Least Organized, Most Flexible



Consider your interview approach and plan for it ahead of time

As the researcher, you are the "sensor," and how you decide to document the information is important

 Capture audio and video whenever possible and when the participant consents; at a minimum, take notes

Rapport between researcher and participant is very important

- Approach the interview professionally, consider how your present yourself, where you conduct your interviews
- Include icebreakers or "warm-up" questions in your interview guide
- Share read-ahead of interview guide
 - Use this together during the interview



Running interviews takes more than a question set

Just you and participant – interpersonal exchange is front and center

- Think about roles think of yourself as a novice, you're a newbie and the participant is the one getting you up to speed
- Show genuine interest, sympathy, and a desire to understand their experience and viewpoint
- Let the participant drive the focus about 75%

During the session, look for inconsistencies in the story then probe that topic

 Called "breakdowns" – these are key indicators that there is something to be discovered

Strategies for tough customers

- Asking for stories or examples works well
 - Storytelling offers good opportunities to ask questions and uncover data
 - Listen for those breakdowns, then inquire
- Ask them to comment on viewpoints opposing their own
 - Data embedded in description of the "conflict"



Case Example: Interview on the ProTrain4U Clinical Chart Training



There are some common steps for all scientific interview research

- 1. Collect background information and design research questions
 - Possibly also sub-questions
- 2. Build an interview guide.
 - Use conversational, open-ended questions that cover research questions from different angles
- 3. Decide on sampling needs and design a recruiting strategy
- Conduct interviews
 - Use your interview guide as a tool to help moderate interaction between you and the participant
- 5. Review and analyze the data
 - Use a cyclical process of recursively revisiting data (hermeneutic cycle)
 - Review the accuracy and appropriateness of both your data and analysis approach throughout your analytic process
- 6. Summarize data and synthesize findings based on meaning and strength of explanation.
 - When continued analysis yields the same findings, you have achieved "saturation"

Step 1: Collect background information and design research questions

ProTrain4U is developing a Clinical Chart Training

Proven approaches to support short format learning

Short format trainings use interactive exercises and illustrative examples to promote discussion amongst participants and with instructors.

An embedded understanding of the work
In a clinical setting, different roles use the same data in different ways.

Goal is to improve patient privacy and reduce discrimination

Patient privacy and discrimination are two key topics that need to be included in the training.

Step 1: Collect background information and design research questions

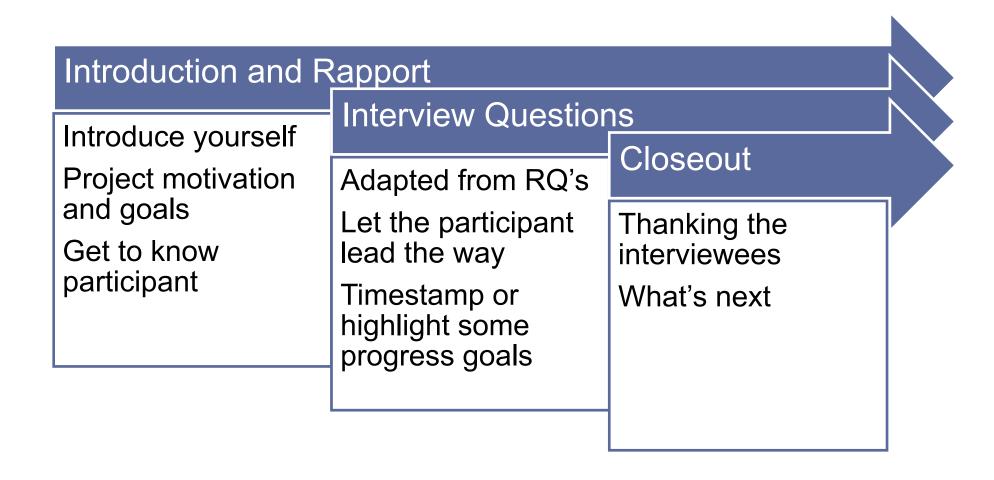
1. How did the ProTrain4U Chart training course help medical office workers to improve their work practices and deliver better patient care?

- 1. What kinds of design features or activities were liked/disliked by trainees?
- 2. Which topics or issues are most important for managing clinical data in your office?
- 3. For well received training features, how did the feature enable the attendees learning?
- 4. For less useful training features, what could be improved?
- 5. What kind of changes did this training inspire in the workplace?

2. How can ProTrain4U deliver better short format training products to the medical care community?

- 1. How well did the Chart course cover topics related to capturing and managing clinical patient information?
- 2. What kinds of clinical office work topics are related to medical chart data management?
- 3. Do different worker roles in the clinical setting mandate different training needs?

Step 2: Build an interview guide – three major phases to an interview



Step 2: Build an interview guide – have a plan for how to build rapport starting out

Introduction and Rapport (2-5 minutes)

- -Introduction to interviewer
 - o Introduce self and offer a few details about professional background.
 - Offer contact information for yourself and another responsible party on the project.
- Introduction to interview project purpose and how the data will be used
 - Describe the project and goals.
 - Offer details about how you intend to use the participant's feedback.
- -Get to know the participant
 - oWhat is your name?
 - •What is your profession or role at the clinic?
 - o How long have you been doing this work or in this role?

Step 2: Build an interview guide – ask the interview questions that address your research question

Interview Questions (cover 5 questions by the 10-minute mark)

RQ #1 - How did the ProTrain4U Chart training course help you improve awareness, work practices, and ultimately deliver better patient care?

- I would like to get your overall reaction to the training. What was your general impression of the training?
- What was your favorite or least favorite part of the training?
- What kinds of topics came up during course discussion, either between participants or with facilitators?
- Can you tell me about any of the activities that were done in the training that have really stuck with you?
- How might this training inspire changes that affect the actual care the patients receive?

Step 2: Build an interview guide – have specific questions for each of your research questions

RQ #2 - How can ProTrain4U deliver better short format training products to the medical care community?

- What were some of the different reactions to the training material and topics?
- Did everyone respond to the training similarly or was there some variation based on job or role?
- What kinds of clinical office work topics are related to chart data management?
- Did the training cover the right chart management topics in a complete or useful way?
- What other clinical office work topics might benefit from a similar training session?

Step 2: Build an interview guide – have a plan for how to close the interview

Closeout (begin with 2-5 minutes left)

- Thank participant for their time
- Do they have any further questions for you?
- Advise them on the next steps
 - What you will be doing with their data
 - Offer a copy of your notes to them for member checking
 - Repeat your contact information if they have any questions

Step 3: Decide on sampling needs and design a recruiting strategy

The ProTrain4U Chart Training was offered to a specific beta release audience.



- Purposive sample location
- Convenience sample of participants

Step 4: Conduct interviews – introduce yourself

(Interviewer - AJ) - 00:05 - Hello, my name is Alison Jones. I understand that you've taken a series of Chart training workshops. I'm doing qualitative evaluations about the training so we can learn more about how participants think about their training and what they've learned. So I'd like to ask you about your experience with the Chart trainings. Is that okay?

(Participant - SB) - 00:29 - Yes.

(Interviewer - AJ) - 00:29 - Okay, great um can you tell me your, your name please?

(Participant - SB) - 00:34 - My name is Shay Bloomer.

(Interviewer - AJ) - 00:34 - Shay Bloomer, okay can I call you Shay?

(Participant - SB) - 00:37 - Yes.

(Interviewer - AJ) - 00:37 - Okay thank you and Shay what do you do for a living, what's your profession?

(Participant - SB) - 00:43 - I'm a nurse.

(Interviewer - AJ) - 00:45 - You're a nurse. How long have you been nursing?

(Participant - SB) - 00:47 - I've been a nurse for 12 years.

(Interviewer - AJ) - 00:49 - Oh interesting. So first I'd like to start out and just kind of get your immediate reaction to the training, your memories of how it felt to be in the training.

What was your favorite part of the training and your least favorite part of the training?

Step 4: Conduct interviews – follow the participant's story even when it's not what you expect

(Interviewer - AJ) - 01:46 - Mm-hmm I know that training was a while ago but I'm wondering about these conversations that you were having with the facilitators and with some of your colleagues. Can you remember any particular topic that was especially interesting for you?

(Participant - SB) - 02:02 - Well one of the topics that we talked about was taking sexual histories. And as nurses who are working in HIV care and testing, it's often important for us to take a sexual history, but it can be very uncomfortable. For example, depending on who the patient is, we have patients who come in who seem too young for us to need to take it, sexual history patients who frankly seem too old for that to still be relevant. And it was interesting to talk about how we all sort of approach it in a different way and how a number of us frankly were fairly uncomfortable with the topic, but having this kind of discussion about it really helped me to feel more empowered to talk to all of my clients about their sexual history.

(Interviewer - AJ) - 02:43 - Mm-hmm so I heard you say that you're now taking these sexual histories differently and I'm wondering if because you're taking them differently, if different kinds of information actually comes out from your consultation with the patient?

(Participant - SB) - 03:03 - Yeah I think certainly, because **the truth is that I was so uncomfortable doing them before that I often sort of skipped over it or found ways to just ask yes/no questions and get through it, and so now that I'm more comfortable taking the history, I'm actually doing it with all of my patients.**

Step 4: Conduct interviews – recognize when the participant needs your permission to tell you more

(Interviewer - AJ) - 03:45 - Can you tell me anything else that you remember learning from the training?

(Participant - SB) - 03:51 – Well, one of the things that we discussed a lot at the training was patient confidentiality...

(Interviewer - AJ) - 03:55 - Mm-hmm.

(Participant - SB) - 04:00 - And I feel like I was aware that confidentiality was important. I was not aware of the many ways that we can accidentally violate patient confidentiality and it's caused me not only to look at my practice personally but to also be **thinking about the way things sort of happen in our clinic, because there are a number of things happening in our clinic that I actually think are making it harder for us to maintain patient confidentiality.**

(Interviewer - AJ) - 04:30 - Hmm that's interesting. Can you tell me more about that?

(Participant - SB) - 04:33 – Well, for example, we have a very small waiting area that's directly in front of where all the patient records come out and.....

Step 4: Conduct interviews – seize opportunities to capture unexpected, emergent feedback

(Participant - SB) - 04:33 – Well, for example, we have a very small waiting area that's directly in front of where all the patient records come out and we have a limited number of consultation rooms, so a number of times during the day conversations need to happen among providers and there aren't very many places for that to take place. Often what ends up happening is that at the desk where people are waiting to sort of sign in and things like that we are having discussions about patients, and we always sort of think I think of that desk as being a barrier, but in fact it doesn't block sound. And so I think that might be an issue, that we need to have a safe space for providers to be able to have discussions about patients.

(Interviewer - AJ) - 05:11 - Mm-hmm so it sounds like this is something that you've noticed at your workplace. That this area may not be... it may have been treated as a confidential space when in fact it's not? ... Have you noticed anything that's changing in addition to your own recognition of this?

(Participant - SB) - 05:31 – Well, I've started whispering and trying to keep my voice very low and I've talked to other colleagues about it to try to find another space and...

(Interviewer - AJ) - 05:42 - How's that going for you?

(Participant - SB) - 05:43 - Well, we have limited resources and so we're working on trying to identify a space, but because we really need the consultation rooms to see patients, it's been challenging.

Step 4: Conduct interviews – identify breakdowns and ask for clarification

(Interviewer - AJ) - 08:23 – Okay, so let me let me make sure that I have it right and I wrote it down correctly. So I think what I have here you mentioned earlier I thought I heard you say that there are some things that that are being done differently in terms of conversations around the desk and keeping people's voices low. So that seems to me to be a change, and now I'm hearing you say that there's not a change? So I'm wondering which part of it I'm not understanding correctly? Can you help me with that?

(Participant - SB) - 09:07 — Well, you asked about additional training and I'm not sure that people need additional training to change their attitudes. I think that like what I mentioned about what's happening at the desk, and that's not people intentionally jeopardizing patient confidentiality. It's sort of a function of the limitations of our settings, so I think that some of what we need assistance with is sort of the place where we're working and how to have those kinds of conversations that are out of patients' hearing range. But I don't think that it's intentional, I don't think people are intentionally discriminating against my patients.

(Interviewer - AJ) - 09:48 - Mm-hmm so that's a really good example of... of a problem or an issue that exists at a facility that can't obviously be changed by training but something else needs to happen. A different flow of patients or a different flow of staff so that they can discuss space? Can you think of any other structural issues at the facility that might threaten confidentiality?

Step 4: Conduct interviews – close out the interview with participant assurance in mind

(Interviewer - AJ) - 13:22 - Okay great, thank you so much for answering all these questions, it's been really helpful. Before we end, I was just wondering if there was any other feedback you'd like to provide about the training, how we could improve it or things you'd like to see us do differently?

(Participant - SB) - 13:40 - Just that I really appreciated it and it was really useful training and I hope that you'll keep me in mind for future training.

(Interviewer - AJ) - 13:47 - Great, thank you so much Shay, have a nice day.

(Participant - SB) - 13:49 - Thank you.

Analysis of Qualitative Data



Step 5: Review and analyze the data – develop a basic codebook across all interviews

Codebooks are like a bank of concepts or tags you apply to parts of qualitative data during analysis

Roles: Nurse, Doctor

Topics: Patient Confidentiality

They have varying levels of detail, often a category or an ordered category, with a description or definition

As you develop codes, you can solidify their definitions and back them up with examples and snippets from the data

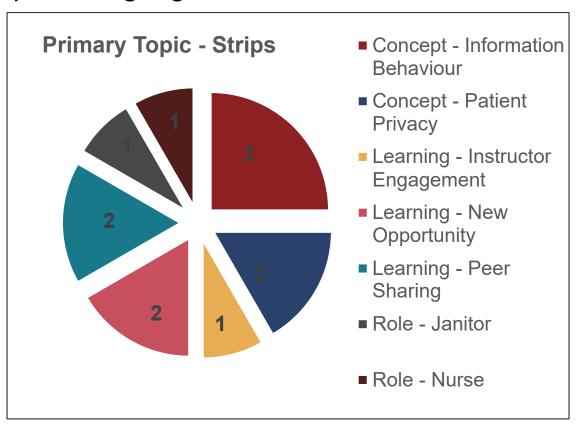
Step 5: Review and analyze the data – document your codes and their definitions

Code	Definition
Role - Doctor	Doctors
Role - PA	Physicians' Assistants
Role - Nurse	Nurses
Role - Clerical	Clerical Staff
Role - Patient	Patients
Role - Janitor	Janitors
Concept - Information Behavior	How people search for and use information
Concept - Business Process	A series of steps designed to produce a product or service.
	The right to decide when, how, and to what extent others may
Concept - Patient Privacy	access your health information
	Negative interactions between individuals in their institutional
	roles (e.g., health care provider and patient) based on individual
Concept - Patient Discrimination	characteristics (e.g., race, gender).
Learning - Missing Material	Content shortfalls in beta training
Learning - New Opportunity	Opportunities for new training topics
Learning - Peer Sharing	Learning through peer story telling
Learning - Videos	Learning using instructional videos as an aide
Learning - Instructor Engagement	Learning through discussion with Instructors

Step 5: Review and analyze the data – organize your interview transcripts into strips

Identify subsets of your interviews with a coherent topic (strips)

These subsets are coded using the codebook to identify some prevailing high-level themes

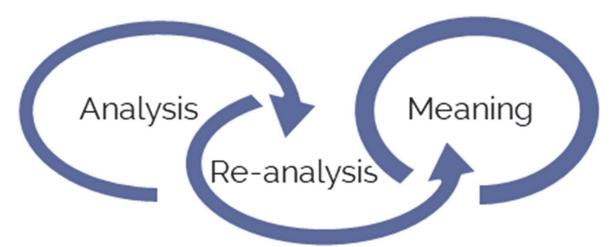


Based on this simplistic analysis, our example interview seems to focus on...

- information behaviors
- patient privacy
- aspects of training design

Step 5: Review and analyze the data – review, analyze, and code each individual strip recursively

Hermeneutic Process



Iterative, recursive process

The final coding of the strip might not be derived until several reviews

Step 5: Review and analyze the data – tie your codes to specific words or phrases

(Interviewer - AJ) - 08:23 - Okay so let me let me make sure that I have it right and I wrote it down correctly. So I think what I have here you mentioned earlier I thought I heard you say that there are some things that that are being done differently in terms of conversations around the desk and keeping people's voices low. So that seems to me to be a change, and now I'm hearing you say that there's not a change? So I'm wondering which part of it I'm not understanding correctly? Can you help me with that?

Role - Patient

(Participant - SB) - 09:07 - Well you asked about additional training and I'm not sure that people need additional training to change their attitudes. I think that like what I mentioned about what's happening at the desk and that's not people intentionally jeopardizing patient confidentiality. It's sort of a function of the limitations of our settings so I think that some of what we need assistance with is sort of the place where we're working and how to have those kinds of conversations that are out of patients' hearing range. But I don't think that it's intentional I don't think people are intentionally discriminating against my patients.

Concept - Patient Discrimination

(Interviewer - AJ) - 09:48 - Mm-hmm so I'm real that's a really good example of... of a problem or an issue that exists at a facility that can't obviously be changed by training but something else needs to happen. A different flow of patients or a different flow of staff so that they can discuss space? Can you think of any other structural issues at the facility that might threaten confidentiality?

Concept - Patient Privacy

Role - Clerical

Role - Nurse

Step 5: Review and analyze the data – recursively analyze; add new codebook codes when necessary

(Interviewer - AJ) - 08:23 - Okay so let me let me make sure that I have it right and I wrote it down correctly. So I think what I have here you mentioned earlier I thought I heard you say that there are some things that that are being done differently in terms of conversations around the desk and keeping people's voices low. So that seems to me to be a change, and now I'm hearing you say that there's not a change? So I'm wondering which part of it I'm not understanding correctly? Can you help me with that?

Intentional Malice

Role - Patient

Facility Limitations

Concept - Patient Privacy

(Participant - SB) - 09:07 - Well you asked about additional training and I'm not sure that people need additional training to change their attitudes. I think that like what I mentioned about what's happening at the desk and that's not people intentionally jeopardizing patient confidentiality. It's sort of a function of the limitations of our settings so I think that some of what we need assistance with is sort of the place where we're working and how to have those kinds of conversations that are out of patients' hearing range. But I don't think that it's intentional I don't think people are intentionally discriminating against my patients.

Facility/Process Harmonization

R

Facility Limitations

Concept - Patient Discrimination

Role - Doctor

Role - PA

Role - Nurse

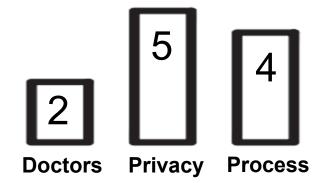
Role - Clerical

(Interviewer - AJ) - 09:48 - Mm-hmm so I'm real that's a really good example of... of a problem or an issue that exists at a facility that can't obviously be changed by training but something else needs to happen. A different flow of patients or a different flow of staff so that they can discuss space? Can you think of any other structural issues at the facility that might threaten confidentiality?

Step 6: Summarize data and synthesize findings based on strength of explanation across interviews

- Multiple ways to summarize data
- Descriptive analyses: frequency that each topic came up across interviews

Specific counts not necessarily of interest; relative emphasis is what you're looking for

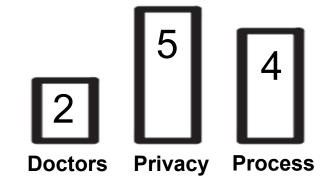


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Specific counts not necessarily of interest; relative emphasis is what you're looking for



Thematic analysis: organize your codes into themes

- Doctor
- Nurse
- Physician Assistant
- Clerical Staff
- Patient

- Process
 Harmonization
- Process
 Harmonization
- Facility
 Limitations
- Patient Privacy
- Patient Discrimination

Roles

Processes

Facilities

Outcomes



Step 6: Summarize data and synthesize findings based on meaning and strength of explanation

Synthesize your data based on your initial summarization

Describe the relationship between your themes



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Synthesize your data based on your initial summarization

Describe the relationship between your themes



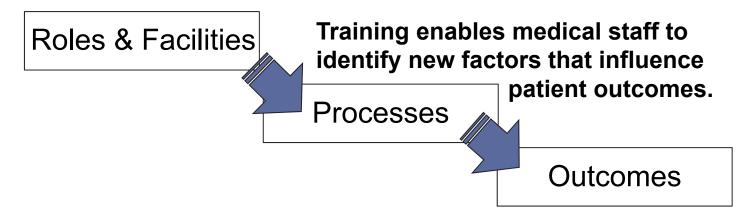
 Use quotes from your data to illustrate the relationships you propose

"Some of what we need assistance with is sort of the place where we're working and how to have those kinds of conversations that are out of patients' hearing range."

Step 6: Summarize data and synthesize findings based on meaning and strength of explanation

How did the ProTrain4U Clinical Chart Training help improve awareness, work practices, and ultimately deliver better patient care?

Beta testing showed the ProTrain4U Clinical Chart Training helps medical staff identify potential patient harm and liability areas. Clinical staff realized they have patient confidentiality issues with their current operations that could be perceived as discriminatory. They care deeply about their patients and don't want this to persist; however, these issues seem to arise from facility limitations leading to inappropriate business practices. Training helped medical personnel realize they need to address facility configuration to create appropriate venues for handling confidential patient data and discussions. This will enable better patient care.





Step 6: Summarize data and synthesize findings: report your findings through storytelling

Qualitative results should be communicated through illustration

- Storytelling is key!
- Show the reader what you noticed (quotes, pictures, diagrams)
- Demonstrate the logical path and reasoning
- If it helps, think of Sherlock Holmes
 - Description of data points he noticed and how those influenced his reasoning and conclusions
- It is likely to be verbose
 - This is necessary for rigor
 - Meaning and strength of explanation vs. confidence and significance
 - Write-ups may need a second round of summary for higher leadership

Conclusions



Apply a systematic approach to qualitative methods to enable them to contribute to your research

Qualitative projects usually use interpretation of textual data as their "way of knowing"



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Qualitative projects usually use interpretation of textual data as their "way of knowing"



Just like a quantitative project, proper *preparation* is key to success

- The project needs to be prepared to pivot or shift (i.e., "emerge")
- Qualitative data is often collected through the *interaction of humans*
 - Build and use Interview Guides

Apply a systematic approach to qualitative methods to enable them to contribute to your research

Qualitative projects usually use interpretation of textual data as their "way of knowing"

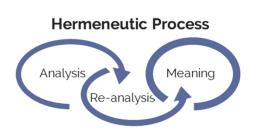


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Qualitative data should be analyzed recursively

- Your codes and how you code may change
- Organize your coded data numerically and thematically
- Synthesize your findings by showing relationships



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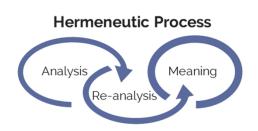


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Communicating qualitative findings is a storytelling exercise Roles & Facilities

- Show the systemic relationships you've found in the data
- Use examples to illustrate the patterns you've found
- Tell it like Sherlock Holmes would!



Questions, Comments, Discussion



REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

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