






Common Qualitative Methodologies and Research Designs in Health Professions Education

H. Carrie Chen, MD, PhD, professor of clinical pediatrics, and Arianne Teherani, PhD, professor of medicine, University of California, San Francisco

Qualitative research includes many methodological approaches or research designs; we present the five most commonly used in health professions education. Choice of methodology will depend on the focus of inquiry and the framing of the research question. Each methodology has a specific goal. While data collection strategies (e.g., interview, focus group, observation, document review¹) often overlap, the approach to data analysis varies for each methodology, resulting in different research outcomes. Understanding the key features of each methodology will help researchers choose the best methodological fit for their research question.

Sample scenario: The pediatrics ward has implemented family-centered ward rounds. Concerns arise regarding didactic teaching in front of patients. Some suggest using role modeling of patient care as a teaching strategy. You wonder how students perceive teaching on family-centered rounds, if role modeling is perceived as teaching, and whether teachers deliberately role model.

	 Grounded Theory	 Phenomenology	 Ethnography	 Case Study	 Narrative
Goal/purpose	<ul style="list-style-type: none"> Develop a theoretical model for how a process or action works 	<ul style="list-style-type: none"> Understand the nature of a phenomenon, incident, or circumstance through those who experienced it 	<ul style="list-style-type: none"> Describe and interpret a group's culture/process by examining its behaviors 	<ul style="list-style-type: none"> Develop an in-depth understanding of one or a small number of cases 	<ul style="list-style-type: none"> Explore, in depth, one or more individuals' longitudinal experience(s)
Unit of study/analysis	<ul style="list-style-type: none"> Process, action, or interaction (e.g., learning on rounds or role modeling as teaching strategy) 	<ul style="list-style-type: none"> Perception of an event or experience (e.g., teaching or role modeling) 	<ul style="list-style-type: none"> Group sharing a culture (e.g., senior residents) 	<ul style="list-style-type: none"> Bounded event, activity, or program (e.g., rounds on specific ward) 	<ul style="list-style-type: none"> One or more individuals (e.g., senior clinician teacher)
Potential research question	<ul style="list-style-type: none"> How do students learn on family-centered rounds? How does role modeling impact their learning? 	<ul style="list-style-type: none"> How do team members define teaching on family-centered rounds? Does it include role modeling? 	<ul style="list-style-type: none"> Do senior residents incorporate "role model" as one of their roles? Do they consciously model patient care for junior learners? 	<ul style="list-style-type: none"> How does teaching occur during family-centered rounds on a ward with high evaluation scores? 	<ul style="list-style-type: none"> How has one clinical teacher's experience with teaching on rounds evolved with changes in ward structure and over her career?
Approach to data analysis	<ul style="list-style-type: none"> Analyze by categorizing and relating data (coding) to generate a model of the process or action 	<ul style="list-style-type: none"> Analyze for significant statements, units of meaning, and the what and/or how of participant experiences 	<ul style="list-style-type: none"> Analyze the group's behaviors for themes Interpret themes to develop cultural portrait of the group 	<ul style="list-style-type: none"> Analyze for key themes important to understanding the case Conduct thematic analysis across cases if using multiple cases 	<ul style="list-style-type: none"> Analyze story for key elements Develop themes with an emphasis on sequence, turning points, and context
Potential study outcome	<ul style="list-style-type: none"> Theoretical model explaining what and who students attend to on rounds and what factors allow an event to become a learning event 	<ul style="list-style-type: none"> Description of the concept of teaching on rounds, and whether role modeling is experienced as teaching 	<ul style="list-style-type: none"> Understanding of senior residents' role modeling beliefs/behaviors and whether they see it as a responsibility 	<ul style="list-style-type: none"> Recommended best practices from exemplar case for teaching on family-centered rounds 	<ul style="list-style-type: none"> Understanding of how teaching on rounds can evolve as faculty gain experience and/or in response to changes in work environment

Reference:
 1. Paradis E. The tools of the qualitative research trade. *Acad Med.* 2016;91. doi: 10.1097/ACM.0000000000001393.

Additional resources:
 Creswell JW. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches.* 3rd ed. Thousand Oaks, CA: Sage; 2013.
 Lichtman M. *Qualitative Research in Education: A User's Guide.* 3rd ed. Thousand Oaks, CA: Sage; 2013.
 Merriam SB, Tisdell EJ. *Qualitative Research: A Guide to Design and Implementation.* 4th ed. San Francisco, CA: Jossey-Bass; 2016.
 Teherani A, Martimianakis T, Stenfors-Hayes T, Wadhwa A, Varpio L. Choosing a qualitative approach. *J Grad Med Educ.* 2015;7:669–770.

Author contact: hcariechen@gmail.com

Downloaded from https://journals.lww.com/academicmedicine by 91.016.144.104 on 01/30/2019