PCMH Research Methods Series

Anthropological Approaches:

Uncovering Unexpected Insights About the Implementation and Outcomes of Patient-Centered Medical Home Models

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This brief focuses on using anthropological approaches to evaluate patient-centered medical home (PCMH) models. It is part of a series commissioned by the Agency for Healthcare Research and Quality (AHRQ) and developed by Mathematica Policy Research under contract, with input from other nationally recognized thought leaders in research methods and PCMH models. The series is designed to expand the toolbox of methods used to evaluate and refine PCMH models. The PCMH is a primary care approach that aims to improve quality, cost, and patient and provider experience. PCMH models emphasize patient-centered, comprehensive, coordinated, accessible care, and a systematic focus on quality and safety.

I. An Anthropological Approach

The hallmark of anthropology is the exploration of the complexity and nuances of human interactivity and culture. As a research discipline, anthropology combines humanist and social science strategies. The method that sets anthropology apart from other disciplines is ethnography, the qualitative process of exploring in depth the whys and hows of human culture, behavior, and expression. Using this ethnographic method, anthropologists can uncover unexpected insights that are best gained by studying a topic in person, in situ, over time, and from diverse perspectives.

The ethnographic method uses multiple data collection techniques including participant observation, interviews, focus groups, and textual analysis to construct a holistic and contextual view of the phenomena under study. During their research, anthropologists make observations and pursue perspectives from diverse angles and in diverse ways. They observe and talk with people from different social categories who have varying relationships to the phenomena under study and conceptualize and respond to those phenomena in unique ways. Anthropological inquiry combines information about people's thoughts gathered through interviews with information collected by observing their behavior and social interactions. In the context of the PCMH, this can include interviewing and observing doctors, nurse practitioners, office managers, and patients to explore the ways in which they experience and understand concepts such as care coordination or quality improvement.

Anthropologists immerse themselves in the rich, largely qualitative data set that results from their research and conduct iterative analyses to identify emerging themes and glean insights about the meaning of the data. The goal of an anthropological approach is a credible interpretation of the data that is well described, provides valuable insights, and can be replicated.

Anthropology has much to contribute to the field of PCMH evaluation, in which researchers aim to not only describe implementation and outcomes, but also uncover contextual meaning and reasons behind those descriptions within a rapidly evolving health care system. An anthropological approach can help researchers evaluating the PCMH identify transformations, along with the underlying factors in the practice, among patients, and in the community that drive how transformation decisions are

made, how the changes occur, and how the changes affect those involved. The approach goes beyond examining quantitative outcomes to explore the qualitative aspects of how the practice is transforming, why particular changes are (or are not) occurring in a given primary care practice, and how all affected parties conceptualize and experience the changes. This approach necessitates investigation of issues from multiple perspectives and by multiple means, including collecting data as expressed by clinicians, other staff members, and patients. Anthropological evaluations are designed to identify the shared cultural meanings between and among different groups of stakeholders (such as providers, staff, and patients), and determine how culture is constructed at the practice. A longitudinal evaluation from an anthropological perspective involves documentation of the dynamic change in practice culture and patients' interactions with this change as PCMH transformation initiatives unfold.

Data collection methods. Typically, an anthropological approach uses multiple qualitative methods to collect data that are useful on their own as well as complementary to quantitative data in a mixed-methods study. These qualitative methods enable PCMH evaluators to place themselves intimately within the PCMH context and to use participant observation, interviewing, and focus group techniques to uncover how the practice functions; how patients, providers, and staff interact; and how these stakeholders describe their thoughts and experiences in their own words. Four common qualitative anthropological data collection methods are: (1) participant observation, (2) in-depth interviews, (3) focus groups, and (4) textual analysis.

Participant Observation. Participant observation is the quintessential fieldwork method in anthropology. Anthropologists use various degrees of participant observation, from full participation in ongoing activities to passive observation within the locations of interest. Participant observation is useful at multiple stages of an evaluation: (1) initially, to identify issues that need to be explored with other data collection methods; (2) ongoing, as process evaluation; and (3) following other types of data collection, to triangulate earlier findings and directly observe the specific phenomena that participants have spoken about. Participant observation allows the researcher to assess actual behavior in real time; information gathered in this way can strengthen interpretation of information collected through interviews. Large projects that employ multiple observers can use an observation template to guide observers in taking notes about core phenomena and allow them to add notes about other phenomena. It is important to ensure that observations of any location take place at different times of the day and week to identify patterns and differences.

In-Depth Individual Interviews. In-depth interviews using open-ended questions aim to capture the mental and experiential world of the informant. Individual interviews allow participants to tell their stories, uninterrupted, in a detailed and coherent manner, without worrying about what their peers may think (as in a focus group). Given the frequent requirement in PCMH evaluations for multiple interviews (often conducted by more than one interviewer) and the desire to compare and contrast responses of interviewees, the most useful type of interview for PCMH evaluation is the semi-structured interview, which combines consistency with flexibility. A semi-structured interview uses an interview guide with a core list of open-ended questions and anticipated followup questions to ensure that researchers ask all participants a minimum set of identical questions, in order to collect reliable, comparable qualitative data. In addition, this interview technique allows researchers to ask spontaneously generated questions to probe for clarification of participants' responses and to follow

new, relevant topics that participants raise. Semi-structured interviews should be conducted by someone trained in qualitative interviewing and comfortable using open-ended questions to encourage participants to expound on their thoughts. The length of the interviews can vary and evaluators can audio record and transcribe them. PCMH evaluations include interviews with all types of participants involved in the process of care—patients, registration clerks, nurses, medical assistants, residents, physicians, and allied health staff. Collecting a range of viewpoints provides rich information and often unexpected insights on the PCMH and its impact by exposing areas of challenge or success for the practices.

Focus Groups. The focus group is a group interview method useful for obtaining information on relatively unstudied topics for which the full range of relevant domains is not known and the dynamic interaction among participants is of interest. Researchers choose focus groups over individual in-depth interviews when data acquisition will benefit from the dynamic that is created through group discussion. The discussion often elicits information and insights that might not be gained from an individual interview, including the colloquial ways in which participants speak with one another about working in or seeking care from the practice.

For example, in the baseline assessment phase of a PCMH evaluation, evaluators might use focus groups to (1) enable practice personnel to grapple with their expectations for practice transformation or (2) identify some issues to address early on and others to address later in the process. To maintain participants' confidentiality and foster a comfortable environment for expressing ideas, researchers usually avoid including participants at different levels of status and within supervisory hierarchies in focus groups.

The following factors are critical to the success of focus groups:

1. Thoughtful creation of a list of open-ended questions designed to draw participants into discussion on desired topics.
2. Careful attention to recruitment of participants who have the desired characteristics or experiences and who are comfortable with non-hierarchical group discussion.
3. Skillful group facilitation by a trained focus group moderator.
4. The presence of an observer who keeps process notes, operates the recording equipment, and assists the moderator as needed.

Focus groups usually include 6 to 12 participants, and last 1 to 2 hours. Discussions are audio recorded and transcribed with participants' identities masked. Each focus group is considered a unit of analysis (N=1), irrespective of the number of participants. Moderators should strive to facilitate open and dynamic dialogue among participants to allow opportunities for creative insights.

Textual Analysis. Practices produce a wide range of documents that provide valuable windows into their operation, values, and mechanisms. Anthropological methods can be used to examine the underlying themes and patterns in documents such as practice mission statements, informational brochures, and procedure manuals. To understand the broader context in which the practice, its employees, and its delivery of services exist, researchers can conduct a systematic review of textual materials produced

by the practice for its staff, its patients, and the public to identify how stakeholders think about the practice's overall mission, services, and transformation goals. One less-commonly considered type of textual material that can provide useful insights into the practice environment is practice-produced narratives. Evaluators can obtain rich insights into otherwise unarticulated beliefs, motivations, and dreams about and for the practice culture if individuals and groups construct their own practice narratives, record their practice histories, and even participate in re-biography—rewriting their stories to reflect their transformations—as part of the transformation process.

Data analysis methods. Data for qualitative analysis most often consist of interview and focus group recordings and transcripts, field notes written during participant observation sessions, textual documents, and notes written about the data collection process itself. The techniques used for qualitative data analysis involve careful and repeated listening to the recordings and reading of transcripts, field notes, and collected textual documents. Anthropologists view this process as becoming "immersed" in the data as they search for themes. As the researchers listen to the recordings and read the texts, they commonly take notes on the content and on their developing analytic thoughts. Analysis is an ongoing process that begins as the first data become available and continues to the end of data collection. For large projects with teams of researchers, individual review of the data is followed by repeated group sessions for team members to discuss and compare their analyses and to arrive at an agreed-upon interpretation. This process is especially helpful for comparison and triangulation of findings from mixed-methods studies that use multiple qualitative and quantitative methods.

Projects using qualitative methods quickly amass large amounts of non-numeric data that can become difficult to manage. In response to this, private companies, government agencies, and open-source teams have created computer-assisted qualitative data analysis software packages that allow researchers to assign topical codes to chunks of text by using a codebook created in advance by the project team, and/or generating codes as needed during the coding process. An anthropological approach to data analysis considers data within the context of the entire text in which they appear. In this sense, coding in and of itself does not constitute the analysis, but it is an efficient *tool to facilitate* later phases of analysis during which coding is used to sort and locate data on specified topics.

II. Uses of an Anthropological Approach

Next, we discuss ways of applying the anthropological approach to evaluations of PCMH models.

Study particular phenomena. Anthropological methods have been used in evaluations of PCMH models to study such phenomena as how practice employees interact to identify needed changes, how changes are implemented and communicated throughout the practice and to patients, how practice employees and patients conceptualize the changes and the change processes, and challenges to and facilitators of sustaining those changes.

Identify impacts of transformation. Anthropological methods are also used to identify the multilevel impact of transformation efforts and how stakeholders conceptualize the influence of the changes on their roles in the health care system, and on health care delivery, quality of care, patient experience,

and other outcomes. For example, Bitton et al. (2012) conducted a multi-method evaluation of a medical home pilot in Massachusetts that used qualitative methods to uncover underlying meanings and contextual factors associated with the transformation process. Their comparative case study approach allowed them to find, for instance, that practices considered a wide variety of types of changes to be "transformation," and responded differently to working with transformation consultants.

Explore related topics. Other PCMH-related topics that could be explored using an anthropological approach include: (1) changes among providers and staff in the practice that increase efficiency and satisfaction with work roles, work flow, communication, and patient access; (2) evolving processes for team-based care delivery and care coordination; (3) how providers and staff view their work and their place within the practice's health care delivery structure; (4) providers' and staff members' expectations for patients' participation in their care and in the practice's continuing transformation; (5) patients' perspectives of their own engagement in their care, disease management, and disease prevention; (6) patients' role as a source of feedback to the care team; and (7) patients' satisfaction with the care they receive and with the means by which they receive it.

Collect data within the practice context. Given that PCMH evaluators must search for meaning and context within the physical space of a medical practice, participant observation is particularly useful. On the passive end of the participant observation spectrum, researchers might sit unobtrusively in the waiting room to observe patients' behaviors there, interactions with and among the reception staff, and behaviors and tasks of reception staff. Observers might also note the layout and décor of the waiting area, emotional tone of the room, length of wait times, communication, and even interactions among front desk staff, nurses, providers, and others. These types of observations are helpful for understanding critical PCMH issues such as patient access and communication, teamwork, hand-offs, documentation, intra-staff communication, duplication of effort, and other work flow issues. At the other end of the spectrum, researchers might use "secret" patients—people hired and trained to pose as patients to experience the practice first-hand and report back to the evaluation team. This is done only with the practice employees' prior informed consent, in which staff agree to this process without being notified when or with which patient it will occur. Another way to observe practice work flow and interactions in the clinical areas between patients, providers, and staff is to conduct patient and staff pathways. With this method, a researcher shadows patients (with their consent) from reception through checkout, including in the exam room. At other times, the researcher accompanies particular practice staff wherever they go (except in the exam room) during clinic sessions.

III. Advantages

One goal of evaluating PCMH models is to investigate whether and how transformation has occurred in a practice. Here we discuss some of the advantages of using anthropological methods in the PCMH context.

Gather diverse perspectives. The overall advantage of using an anthropological approach is that it provides researchers with multiple perspectives on the functioning of the medical practice and provides patients, providers, and staff the opportunity to explain their thoughts and experiences in

their own words. An anthropological approach using multiple methods to gather information from multiple perspectives creates a more holistic picture of the phenomena under study. For example, using participant observation following interviews or focus groups allows evaluators to conduct a type of validation—observing independently whether participants' reports about the functioning of the practice correspond with witnessed events.

Complement quantitative methods. Information collected through an anthropological approach stands on its own as a means to develop insights about the transformation of a practice and also complements quantitative findings available through survey and outcomes data research. Using a holistic, anthropological approach within a mixed-methods evaluation design provides the opportunity for researchers to find out the whys and hows surrounding the phenomena that are documented through quantitative methods, and provides insights into the contexts and personal meanings that stakeholders bring to their work and practice environment. The result is a more complete picture of what is actually happening in the practices. For the purposes of a comprehensive, mixed-methods PCMH evaluation, qualitative research often serves as a preliminary step upon which to base the development or choice of surveys for a larger quantitative evaluation. For example, using participant observation to see directly how work flow occurs can help the evaluator craft more meaningful survey questions.

Gain insights through iterative inquiry. Additionally, the use of iteration in anthropological inquiry can enhance the insights of a PCMH evaluation. The iterative nature of an anthropological approach facilitates creating unique lines of investigation that enable evaluators to understand the mental world and lived realities of the subjects. Such flexibility is helpful in situations in which the investigational focus is rapidly changing or evolving. This type of iterative inquiry uses repeated cycles of data collection and analysis, with each cycle leading to improved and often more focused questions. In this way, insights and questions that arise during earlier analyses are woven into subsequent data collection, and the iteration helps ensure coverage of all relevant and emerging subject areas. These insights can lead to the development of better data collection tools and hypotheses and, in the end, to richer data sets and more rigorous and insightful interpretations of phenomena.

IV. Limitations

There are challenges to consider regarding use of an anthropological approach and qualitative methods for PCMH evaluation.

Requires additional time, labor, and skills. The collection and analysis of a comprehensive set of this type of data may be time consuming and labor intensive, and requires a skill set that is different from that required for quantitative methods. The project must employ staff who are, or can be, specifically trained in qualitative research methods.

Yields information with limited generalizability. In addition, the smaller sample of study participants involved in qualitative research does not allow for generalization of findings beyond the group with which the evaluation study has been conducted. The use of mixed qualitative and quantitative methods can enhance generalizability.

V. Conclusion

Evaluations of PCMH efforts benefit from an anthropological approach that uses multiple qualitative methods to gather information from multiple perspectives to create a more holistic picture of the phenomena under study. The approach explores the qualitative aspects of whether and how PCMH activities are implemented and how clinicians, office staff, and patients conceptualize and experience the activities.

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