

What is ACCORDS?

ACCORDS conducts pragmatic research in real-world settings to improve health care and outcomes, by providing:

- A multi-disciplinary, collaborative research environment to catalyze innovative and impactful research
- Strong methodological cores and programs, led by national experts
- Consultations & team-building for grant proposals
- Mentorship, training & support for junior faculty
- Extensive educational offerings, both locally and nationally



ACCORDS Upcoming Events

<p>May 9, 2022 12:00-1:00 PM MT</p>	<p>Learning Health Systems: <i>Models & Methods for Embedded Research</i> <i>The Swiss Learning Health System: A National Initiative to Support Evidence Uptake in Policy and Practice</i></p> <p><i>Presented by: Stefan Boes, PhD</i></p>
<p>May 18, 2022 3:00-4:00* PM MT</p> <p>*note time change</p>	<p>Qualitative and Mixed Methods Research Mini-Series: <i>Reporting and Presenting Data from Qualitative and Mixed Methods Studies</i></p> <p><i>Presented by: Allison Jaure (nee Tong)</i></p>
<p>May 23, 24, & 25 10:00 -3:00 PM MT</p>	<p>COPRH Con 2022: <i>Disseminating, Scaling and Sustaining Pragmatic Research</i></p> <p><i>Registration NOW OPEN; visit COPRHCon.com</i></p>



Rapid Qualitative Analysis: Techniques for Rigor and Impact

Presented by:

Karen Albright, PhD

Associate Professor, General Internal Medicine

Associate Director, Denver-Seattle Center of Innovation



RAPID QUALITATIVE ANALYSIS: TECHNIQUES FOR RIGOR AND IMPACT

KAREN ALBRIGHT, PHD

APRIL 20, 2022



VA
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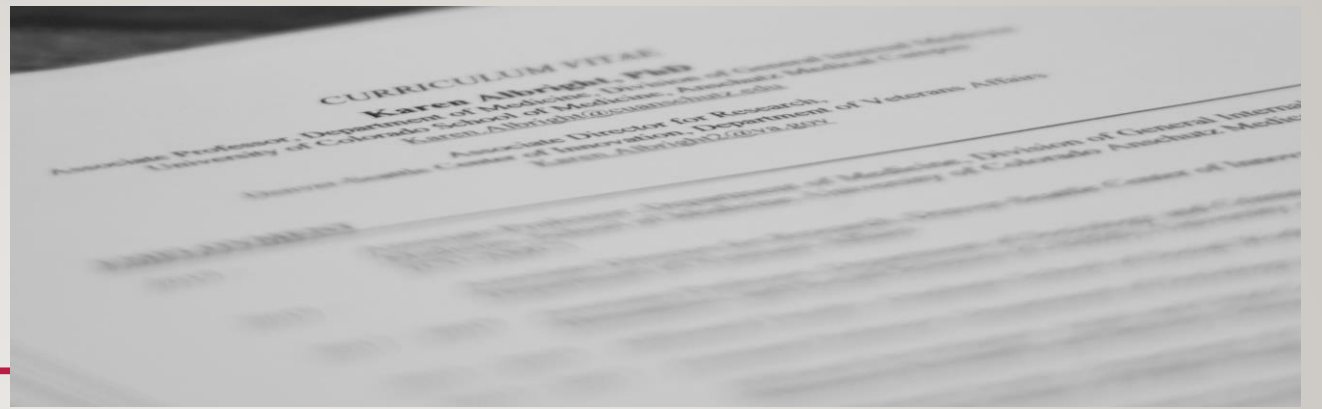
School of Medicine
UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS

INTRODUCTION AND BACKGROUND

- Sociology PhD (focus on inequality), Health services researcher for 17 years
- Postdoctoral fellowships to facilitate the development of social scientists within the field of health research
 - Robert Wood Johnson Scholar in Health Policy at UCB/UCSF
 - NIMH Postdoctoral Fellow, Center for Culture and Health, Semel Institute for Neuroscience and Human Behavior at UCLA/Stanford
- Associate Director, Denver-Seattle Center of Innovation (COIN), VA
- Associate Professor, Division of General Internal Medicine, University of Colorado School of Medicine

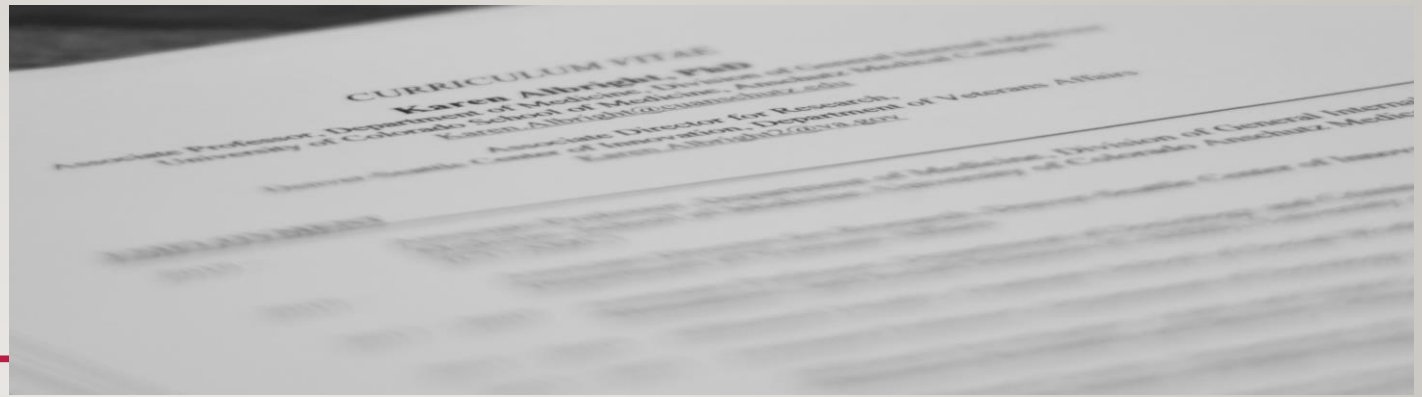


RESEARCH AGENDA



- To investigate the perspectives and behaviors of various stakeholders re: particular health care approaches, technologies, and experiences
 - Health care providers, health care staff, patients, and/or patients' parents; often comparing perspectives across roles in order to identify areas of miscommunication and misunderstanding
 - Focus on how marginalized populations interact with the U.S. healthcare system, in both the private and public health domains
- Particular interest in identifying barriers to care among socioeconomically disadvantaged/underserved populations
 - E.g., Homeless Veterans, low-income American Indians, low-income Latinos, residents of underserved rural areas
- Focus on testing potential solutions for improving care
 - E.g., collaborative efforts between public health entities and private practices, policy change across silos of care within the VA, school based health centers, technological interventions, and efforts to improve health literacy

METHODOLOGICAL EXPERTISE



- Extensive experience in qualitative research methods and data analysis and in mixed methodological design
 - Karen Albright and Christine Jones. 2022. “Methodological Progress Note: The Case for Mixed Methods in Quality Improvement and Research Projects.” *Journal of Hospital Medicine*. [epub ahead of print: 16 March 2022]
 - Karen Albright, Katherine Gechter, and Allison Kempe. 2013. “The Importance of Mixed Methods in Pragmatic Trials and Dissemination and Implementation Research.” *Academic Pediatrics* 13(5): 400-7.
- Qualitative leadership roles at the University of Colorado, Anschutz Medical Campus
 - Lead Evaluator, Center of Excellence in Eliminating Health Disparities (2009-2010)
 - Core Lead, Qualitative Research Methods Core, Adult & Child Consortium for Health Outcomes Research and Delivery Science (ACCORDS) (2010-2015)
 - Director, Qualitative Research Methods Core, Center for Implementation Science and Prevention (CRISP) (2011-2014)
 - Director, Qualitative Research Methods Forum (QRMF) (2010-2015)
 - Current project with several collaborators (NU, Mayo, ACCORDS) on best practices for developing qualitative cores on medical campuses

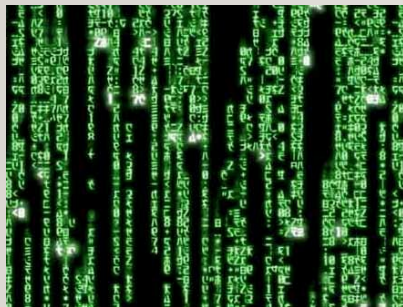
INTERESTED IN MAKING DATA ACTIONABLE

- Interested in impact and in *applying* qualitative and mixed methodologies
 - What good are data if they're not actually translated or applied?
- Frequent speaker on the application of qualitative or mixed methods in implementation science and/or the translation and integration of health and social sciences
- President of the Association for Applied and Clinical Sociology (2019-2020)
- Chair of the Sociological Practice and Public Sociology, American Sociological Association (2020-2021)



IMPACT: FROM DATA TO INFORMATION

- There is an important distinction between data and information:
 - **Data**: individual elements that exist in an unprocessed raw state
 - **Information**: processed data that become actionable when examined in a specific context and translated to relevant audiences



OVERVIEW AND AGENDA



- Qualitative methods and implementation science
 - Challenges to timely, impactful research and the need for analytic innovation
- Rapid qualitative analysis
 - Definition and explanation of process
- The opportunities and constraints of rapid qualitative analysis
- Q&A (and please use the chat function throughout the talk)

QUALITATIVE METHODS AND IMPLEMENTATION SCIENCE

- Qualitative methods are excellent tools to help researchers
 - Develop interventions or programs
 - Identify effective components within those interventions or programs
 - Determine when, how, where, and for whom the interventions or programs are most (and least) successful - and *why*
- Qualitative data can help ensure that the intervention will be feasible and useful

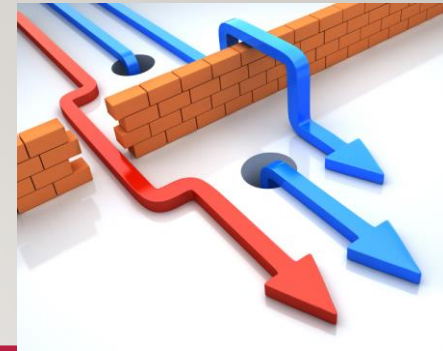


QUALITATIVE METHODS AND IMPLEMENTATION SCIENCE

- Implementation science = the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice (Eccles & Mittman, 2006)
- Qualitative methods are highly relevant for the work of implementation scientists
 - Adaptable to specific implementation settings
 - Enable detailed understanding about how well and why different implementation components work together



THE SLOW PACE OF RESEARCH



- But the time-intensiveness of traditional qualitative research methods is increasingly in tension with rapidly changing health care delivery needs and health services research environment
- Over the timeline required to plan, conduct, and analyze a clinical trial, funding priorities may change, health care policies evolve, and newer therapies and technologies are often developed
- The slow pace of healthcare research is a contributing factor to the dissemination of less relevant or even obsolete findings
 - Need more flexible research designs and rapid qualitative approaches

Gale, R.C., Wu, J., Erhardt, T. *et al.* Comparison of rapid vs in-depth qualitative analytic methods from a process evaluation of academic detailing in the Veterans Health Administration. *Implementation Sci* **14**, 11 (2019).

THE INEFFICIENCIES OF RESEARCH WASTE

- Our modern research environment also suffers from the phenomenon of “research waste”
 - Half of completed research is never published, has avoidable design flaws, or does not align with health systems’ priorities
 - Once evidence is established, only one third of studies are implemented
- **Rapid qualitative analysis** is one way to develop contextually relevant interventions to time-sensitive problems and reduce research waste

Chalmers I, Glasziou P. Avoidable waste in the production and reporting of research evidence. *Lancet*. 2009;374:86–89.

Balas EA, Boren SA. Managing clinical knowledge for health care improvement. *Yearb Med Inform*. 2000;1:65–70.

Hanney SR, Castle-Clarke S, Grant J, et al. How long does biomedical research take? Studying the time taken between biomedical and health research and its translation into products, policy, and practice. *Health Res Policy Syst*. 2015;13:1.

WHAT IS RAPID QUALITATIVE ANALYSIS?

- An applied method used to obtain actionable, targeted qualitative data on a shorter timeline than traditional qualitative methods
 - But rapid does not equal rushed!
- Is pragmatic, follows accepted scientific practices, is rigorous, and facilitates the collection of readily applied qualitative data
- Compared with traditional qualitative approaches, rapid qualitative analysis does **not** seek to provide a theoretically rich, in-depth understanding of a concept or phenomenon
- Data collection and analysis aim to identify or broaden the understanding of key mechanisms, intervention elements, salient descriptors, or facilitators and barriers of a program to address time-sensitive research questions

Gale et al., 2019

DIFFERENCES BETWEEN TRADITIONAL AND RAPID APPROACHES

TRADITIONAL QUAL ANALYSIS

- Typically more exploratory or inductive
- Descriptive, broad, interpretive
- Usually involves line-by-line coding
- Qualitative analytic software
- More time – data collection & analysis

RAPID QUAL ANALYSIS

- Typically more explanatory or deductive
- More specific, targeted focus
- Summary tables &/or matrices to compare data
- Microsoft Word or Excel sufficient
- Quicker time frame, though may need to return and expand later

Adapted from Jessica Young and Ashley Mog, “Two Rapid Analysis Approaches: Template and Matrix Analyses,” 2022.

HIGHLY RELEVANT FOR HEALTH SERVICES RESEARCH

- Health services researchers embedded within a health system are particularly well-positioned to conduct rapid qualitative analyses
 - Lead projects that are of importance to the health system
 - Are familiar with key stakeholders
 - Can incorporate stakeholder viewpoints to ensure the relevance of research in a dynamic health care environment with rapidly changing policies
- Thus, rapid qualitative analysis processes may be one way to shorten the traditional research timeline by quickly identifying and addressing real-world challenges in a health care system

Gale et al., 2019

SO... HOW DO YOU DO IT?

- 4-step process, utilizing both a templated summary table and a matrix displaying a further condensed version of the data
 - Summary table – Allows for more detail
 - Takes more time
 - Enables identification of differences across participant types
 - Matrix – Good for high level, limited number of domains
 - Quicker
 - Flattens individual participant types
- Under some circumstances some researchers may choose to utilize one or the other



STEP 1: DEVELOP A TEMPLATED SUMMARY TABLE

- This will be populated with data extracted from transcripts, including illustrative quotes
- The first column (sometimes row) of the table consists of pre-specified “domains”
 - Like *a priori* codes - based on data collection guides and/or questions/issues pre-identified as critical
 - Mapped to questions in the interview guide and/or any frameworks used
 - Include an “other” category to capture data that seem important but doesn’t fit into pre-identified domains
- The second column/row summarizes key points from the data and captures illustrative quotes
- Always good practice to have the entire team review a draft summary table and have the entire analytic team test it with a single transcript, then modify as needed
- To provide guidance to analysts completing the summaries, it is also helpful to identify corresponding questions from the guide that will likely prompt participants to address the specified domain

DOMAIN (IVG QUESTIONS)	KEY POINTS & EXEMPLAR QUOTES
AD Involvement (2)	
AD Awareness (3)	
AD Training, Materials, Resources & Usefulness (4, 5 & 6)	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Relevant interview guide questions noted in parentheses </div>
Local VA Networks (7)	
External (not local VAMC) Networks (8)	
Interactions with Leadership (9)	
Individual/Program Performance Tracking and Feedback (10)	
Provider Engagement (11)	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Corresponding CFIR domain and construct= Process: engaging </div>
Evidence AD Does/Does Not Work (12)	
Areas of Improvement (13)	
Confidence in Program (14)	
Recommendations for Rollout (15)	
Success Stories (16)	
Other Observations	

Gale, R.C., Wu, J., Erhardt, T. *et al.* Comparison of rapid vs in-depth qualitative analytic methods from a process evaluation of academic detailing in the Veterans Health Administration. *Implementation Sci* 14, 11 (2019).

Focus Group Identifier	Domain: Role	Domain: Experience	Domain: COVID Impact	Domain: Stress & Burnout	Domain: Solutions	Domain: Other
Illustrative Quotes						

“Using Rapid Qualitative Analysis to Identify Distress and Burnout among Faculty at an Academic Medical Center: The Experience of Researchers during the First 18 Months of the COVID-19 Pandemic.” (WellDOM Task Force, Research in Progress)



STEP 2: SUMMARIZE INDIVIDUAL TRANSCRIPTS

- Use the templated summary table to generate one summary for each transcript
 - Use short understandable bullets with one data point per bullet
 - Closely tied to the data - not intended to be interpretative, just paraphrase and summarize
 - Shouldn't take more than one hour to summarize a 40-60 minute transcript
- Standardize level of detail across the team
 - All team members will summarize the same transcript first, to test drive the template and review process together
- If working as a team, the qualitative lead should conduct a secondary review of the summaries to check for overall consistency and quality of the summaries
 - Should discuss with analysts; may require some revisions to ensure consistency in the data being recorded across interviews

STEP 3: CREATE A MATRIX

- Next, consolidate all the summaries by participant type (or other relevant variable) for visual display
- Helps to identify commonly occurring themes and allows comparison across groups
- Create a matrix from the information in the transcript summary table
 - Excel is sufficient - one tab per participant group (or other variable as relevant)
- Set up your matrix to capture several pieces of data (Gale et al., 2019):
 - (1) Broad themes or categories – typically derived from high-level analysis of the identified domains (e.g., the role of training)
 - (2) Within each theme, a brief sub-theme or descriptor –
E.g., What participants reported as working well, and what they saw as not working well
 - (3) Illustrative quotes – evidence to support each sub-theme

	A	B	C	D	E
1	Theme	What worked well?	Exemplar quotes	Opportunities for improvement?	Exemplar quotes
2	Training	Collaborating with other detailers for training or sharing of information and resources	<i>"I just think the most helpful part is to see... how other facilities are approaching the different initiatives, and they all have wonderful things they can share because it's better to borrow what they have and cater it to your facility rather than reinventing the wheel the whole time." Detailer 9</i>	Increased availability of in-person trainings	<i>"I'm a big proponent of face-to-face meetings so that you can actually work over three days on the new modules, whatever you're going to be detailing, bringing in experts to give presentations on it to make sure that you have the appropriate background on it, bringing in physician champions so that you can actually practice the modules on them, make sure that the key messages that you're talking about are going to be well accepted." Detailer 4</i>
3	Interactions with Leadership	Gaining clinic leadership support before engaging providers	<i>"Meeting with leadership and getting their buy-in. It's just really one of the most important things a detailer can do. Because if you're telling providers to do something and leadership doesn't agree with what you're doing, then you're going to get in trouble." Detailer 2</i>	Stronger relationships with leaders and champions	<i>"You know, I'm not sure who the pain champion was then. I just know that he was the ACOS [Assistant Chief of Staff] for primary care and that he could help with making the largest change, 'cause if leadership says sometimes, "This is something we need to pay attention to," people are more likely to pay attention to it." Detailer 4</i>
	Academic Detailers	Providers	← One tab per participant group		

Gale, R.C., Wu, J., Erhardt, T. et al. Comparison of rapid vs in-depth qualitative analytic methods from a process evaluation of academic detailing in the Veterans Health Administration. *Implementation Sci* 14, 11 (2019).

STEP 4: CONSOLIDATE TRANSCRIPT SUMMARIES

- Then populate the matrix with the individual transcript summaries
- Analytic team should meet regularly to collaboratively and iteratively review, discuss, and sort the data
 - Goal: to refine the initial list of themes and sub-themes and to highlight the most salient quotes
- Note: broad themes need not be limited to a certain number of sub-themes, though in practice there will likely be approximately 2-5

WHEN SHOULD YOU CONSIDER RAPID ANALYSIS?

- When need to quickly produce information to inform ongoing implementation or to comply with a policy mandate
 - Need to identify key actionable suggestions to stakeholders closer to “real time”
 - Need to give feedback to teams as the project continues (e.g., developmental evaluation)
- When data are text-based – i.e., written/verbal
 - E.g., interviews, focus groups, notes/chats from meetings
 - Not overly complex data or data that are necessary to analyze within an interpretive, narrative-based lens
- When need for other products or other aspects of a project
 - Need data for preliminary studies section or abstracts/conference presentations
 - Need to inform quantitative instruments, understand unexpected findings, get feedback from content experts

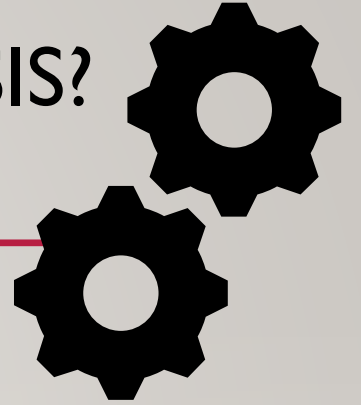


USING RAPID ANALYSIS IN COMMON METHODOLOGICAL COMBINATIONS

- Quantitative data to study outcomes; qualitative data to study processes
- Quantitative data to measure content; qualitative data to understand context
- Qualitative data to explore a phenomenon and generate a conceptual model and hypotheses; quantitative data to test the hypotheses to confirm the model's validity



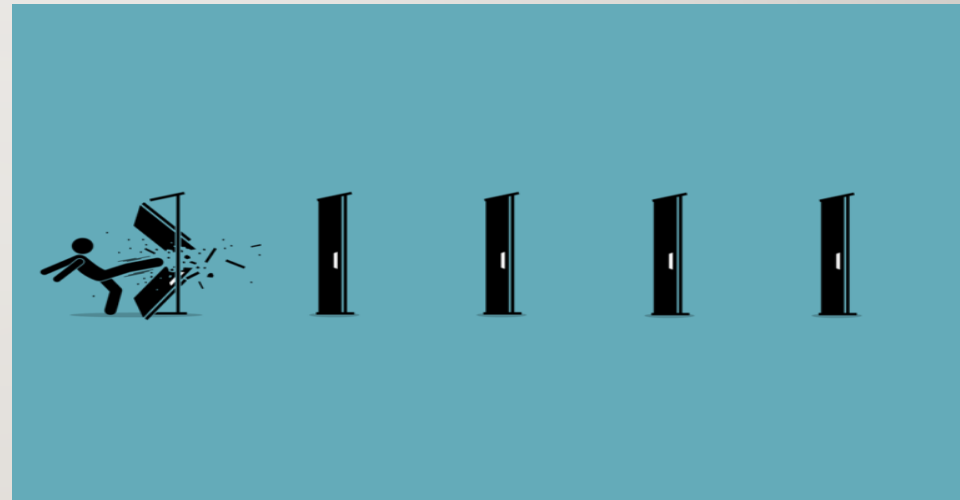
WHEN SHOULD YOU CONSIDER RAPID ANALYSIS?



- When data collection targets and processes are highly structured
 - Targets = deliverables, selection of interviewees, interview or focus group protocols
 - Processes = Informed by frameworks like the Consolidated Framework for Implementation Research (CFIR)
 - Stakeholders clearly identifiable and accessible (e.g., board members, patients, providers, policy makers)
- When you are clear about your goals and your deliverables
- When faced with resource constraints
 - In-depth analyses can be resource-intensive; line-by-line coding and analysis may not always be possible when working with large qualitative N
 - Working with a restricted timeline (e.g., funding is for less than a year, deliverables due on a certain date)

AMONG THE BENEFITS OF RAPID QUALITATIVE ANALYSIS:

- Reduces time
- Reduces cost
- Improves efficiency
- Improves accuracy



Vindrola-Padros C, Johnson GA. Rapid Techniques in Qualitative Research: A Critical Review of the Literature. *Qualitative Health Research*. 2020 Aug;30(10):1596-604.

ADHERES TO OUR UNDERSTANDING OF GOOD QUALITATIVE RESEARCH

- The fundamentals of “good” qualitative research:
 - Carrying out ethical research
 - Importance of the research
 - Clarity and coherence of the research report
 - Use of appropriate and rigorous methods

Cohen, D. J., & Crabtree, B. F. (2008). Evaluative criteria for qualitative research in health care: Controversies and recommendations. *The Annals of Family Medicine*, 6, 331–339



BUT KEEP IN MIND...

- The high-level data used in rapid analysis may
 - Make it more challenging to determine the relevant strength of a construct
 - Miss some of the deep detail of line-by-line coding
- Rapid analysis can limit the ability to compare findings across projects unless findings are mapped to a framework that provides a consistent taxonomy
 - E.g., the Consolidated Framework for Implementation Research (CFIR)

ALSO:



- Rapid analysis's compressed timeline can result in a heavy workload and logistical burden
 - However, the burden for training is generally limited to learning how to use and populate the templates, while line-by-line coding training typically involves substantial up-front investment (e.g., how to create and use a codebook, how to use qualitative data analytic software)
- Rapid analysis has the potential to provide an overly narrow interpretation of data
- It may not be as appropriate for projects in which summarizing themes or concepts requires more subjective *interpretation* of the data than is needed when applying a structured framework

PUBLISHING WITH RAPID QUALITATIVE ANALYSIS

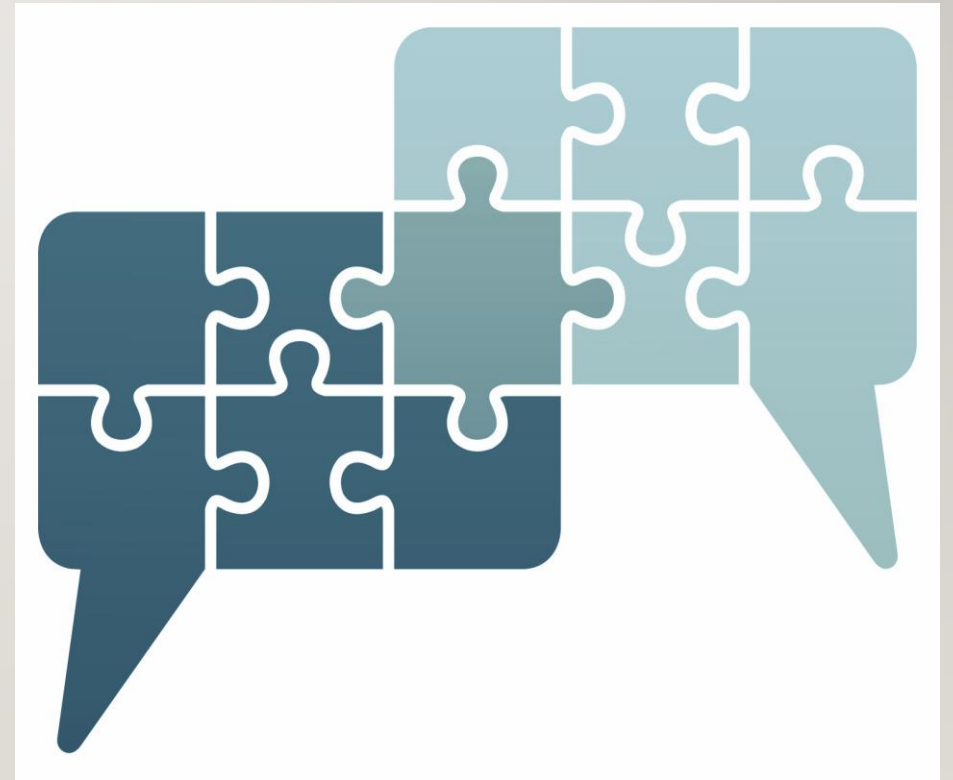
- Yes, you can publish with a rapid analytic approach!
 - See Alison Hamilton's excellent resource "Rapid Qualitative Analysis: Updates/Developments":
https://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/3846-notes.pdf
- Some researchers may choose to conduct traditional analysis following rapid analysis
 - Gale et al. (2019) did this and found that both rapid and analysis revealed several similar best practices related to implementation – but traditional analysis took 69 days longer

PUBLISHING WITH RAPID QUALITATIVE ANALYSIS

- Key is clarity in describing methods and rationale
- Some examples to model and cite:
 - Koenig CJ, Abraham T, Zamora KA, Hill C, Kelly PA, Uddo M, Hamilton M, Pyne JM, Seal KH. Pre-Implementation Strategies to Adapt and Implement a Veteran Peer Coaching Intervention to Improve Mental Health Treatment Engagement Among Rural Veterans. *J Rural Health*. 2016 Sep;32(4):418-428.
 - Zuchowski JL, Chrystal JG, Hamilton AB, Patton EW, Zephyrin LC, Yano EM, Cordasco KM. Coordinating care across health care systems for Veterans with gynecologic malignancies: a qualitative analysis. *Medical Care*. 2017 Jul 1;55:S53-60.
 - Moreau JL, Cordasco KM, Young AS, Oishi SM, Rose DE, Canelo I, Yano EM, Haskell SG, Hamilton AB. The use of telemental health to meet the mental health needs of women using Department of Veterans Affairs services. *Women's Health Issues*. 2018 Mar 1;28(2):181-7.

REMEMBER: FIT IS (ALMOST) EVERYTHING!

- Fit between your work and the funding agency, partner, and/or mechanism
- Fit between your research purpose and the analytic approach you choose
- Then you just need to demonstrate this fit by translating it effectively to reviewers



EXCELLENT RESOURCES

- Gale, R.C., Wu, J., Erhardt, T. *et al.* Comparison of rapid vs in-depth qualitative analytic methods from a process evaluation of academic detailing in the Veterans Health Administration. *Implementation Sci* 14, 11 (2019).
- Hamilton AB. 2013. Qualitative methods in rapid turn-around health services research. Accessible at www.hsr.d.research.va.gov/for_researchers/cyber_seminars/archives/video_archive.cfm?SessionID=780
- Hamilton, AB. 2020. Rapid Qualitative Analysis: Updates/Developments. Accessible at https://www.hsr.d.research.va.gov/for_researchers/cyber_seminars/archives/3846-notes.pdf
- Nevedal, A.L., Reardon, C.M., Opra Widerquist, M.A. *et al.* Rapid versus traditional qualitative analysis using the Consolidated Framework for Implementation Research (CFIR). *Implementation Sci* 16, 67 (2021).
- Vindrola-Padros C, Johnson GA. Rapid Techniques in Qualitative Research: A Critical Review of the Literature. *Qualitative Health Research*. 2020 Aug;30(10):1596-604.

спасибо 谢谢
GRACIAS 谢谢

THANK YOU

ありがとうございました MERCI

DANKE धन्यवाद

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