

Rapid Qualitative Analysis: Updates & Developments

Alison B. Hamilton, PhD, MPH

Chief Officer of Implementation & Policy, VA Center for the Study of
Healthcare Innovation, Implementation & Policy

Professor-in-Residence, UCLA Department of Psychiatry & Biobehavioral
Sciences

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Poll Question #1

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How familiar are you with rapid qualitative analysis?

- I use it all the time/frequently
- I think I use it but I'm not sure
- I've used it but I no longer use it
- I know what it is but I've never used it
- I don't know what it is

Objectives

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- Rapid analysis recap
- Developments with the approach
 - Frequently asked questions over 7+ years
 - Comparing rapid to thematic analysis
 - Publishing based on a rapid analysis approach
- Limitations
- Criteria for “good” qualitative research

Review: guiding question

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How can we conduct qualitative research in compelling, rigorous, efficient, and impactful ways?

- Facilitate utility of research findings
- Translate findings into practice
- “Researchers should strive to demonstrate how the data are meaningful, appeal to various audiences, and engage stakeholders in the relevance of the research.” (Chandler et al., 2015)

Review: why rapid qualitative methods?

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- Most common critique of qualitative research is that it “takes too much time”
- Health services research, evaluation research, implementation research, etc. increasingly rely on qualitative methods
 - Constricted timeframe
 - Frequent demand for products
 - High expectation of rigor

Rapid techniques: critical review (Vindrola-Patros & Johnson, 2020)

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Six primary reasons for rapid:

1. reduce time
2. reduce cost
3. increase the amount of collected data
4. improve efficiency
5. improve accuracy
6. obtain a closer approximation to the narrated realities of research participants

Review: what is unique about rapid qualitative research?

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- Approach is “telescoped” and action-oriented
- A pragmatic need for qualitative data exists, e.g., to describe:
 - The environment where an intervention, educational practice, social policy will be implemented
 - The process that occurs while the intervention is underway
 - “Usual” services, practices, everyday experience
- Typically and preferably conducted by teams
- Typically need to draw data quickly from multiple sources; often triangulate with quantitative data
- Potentially less time to critique, reflect, synthesize

Review of rapid approach

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Review of rapid approach

- Part of the Sort & Sift, Think & Shift method (ResearchTalk, Inc.)
- Recommended for semi-structured data collection methods (not unstructured methods)
 - Individual interviews, focus group interviews
 - Clear topic/domain of inquiry for each interview question
 - Might be mapped to a conceptual/theoretical model with specified constructs
 - Consistent approach to data collection

Review of rapid approach

Approach:

- Summarize each data collection episode (e.g., interview) using a template of domains
 - Emphasis on verticality of individual data collection episodes
- Create matrices from summaries
 - Emphasis on horizontality across multiple data collection episodes
- Review summaries and matrices to identify key points, potential themes, quality and consistency of data collection, directions for further data collection and analysis, etc...
- Continue analyzing data as needed for different products and goals

For step-by-step guidance:

https://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/video_archive.cfm?SessionID=780

Review: why templated summaries?

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- Driving question: what's in your data?
 - creating an inventory of data contents
 - “condensing” data (condensing=“selecting, focusing, simplifying, abstracting, and/or transforming the data” [Miles, Huberman, Saldana, 2019])
- “Sketch” of the data collection episode

➤ ***Intent is to enhance accessibility to what's in the data***

- Use line numbers from transcripts, create a rich “table of contents”
- Write notes about where content is strong

What can you do with your rapid analysis?

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- Obtain a quick accessible understanding of what's in the data
 - Especially important/useful if you did not collect all of the data
 - Helpful for giving yourself/your team a starting place
- Use summaries to inform subsequent waves of data collection
- Prepare reports/presentations/manuscripts
- Develop topic monitoring (aka coding) approach that is informed by depth and breadth of data related to each domain
- Divide up the labor of reviewing transcripts
 - With sufficient training, can be done by individuals who don't have extensive qualitative methods training
- Assess quality of data collection across team

Frequently asked questions: technical/methodological

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- Do summaries need to be checked?
- How do you summarize focus groups?¹
- Do you need transcripts for rapid analysis?²
- Can you write memos as you summarize?

¹Fox AB, Hamilton AB, Frayne SM, Wiltsey-Stirman S, Bean-Mayberry B, Carney D, Di Leone BA, Gierisch JM, Goldstein KM, Romodan Y, Sadler AG. Effectiveness of an evidence-based quality improvement approach to cultural competence training: The Veterans Affairs' "Caring for Women Veterans" program. *Journal of Continuing Education in the Health Professions*. 2016 Apr 1;36(2):96-103.

²Abraham TH, Finley EP, Drummond KL, Haro EK, Hamilton AB, Townsend JC, Littman AJ, Hudson T. A Method for Developing Trustworthiness and Preserving Richness of Qualitative Data During Team-Based Analysis of Large Data Sets. *American Journal of Evaluation*. 2020 Aug 20:1098214019893784.

Frequently asked questions: philosophical/epistemological

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- Isn't this very reductionistic?
- Aren't we losing detail and nuance with this approach?
- Does rapid replace coding?
- Can you identify themes with a rapid approach?¹
- Can you publish results based on rapid analysis only?

¹For a construct-driven rapid approach, see Gale RC, Wu J, Erhardt T, Bounthavong M, Reardon CM, Damschroder LJ, Midboe AM. Comparison of rapid vs in-depth qualitative analytic methods from a process evaluation of academic detailing in the Veterans Health Administration. *Implementation Science*. 2019 Dec 1;14(1):11.

How does a rapid approach compare to other approaches?

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BMJ Open

Can rapid approaches to qualitative analysis deliver timely, valid findings to clinical leaders? A mixed methods study comparing rapid and thematic analysis

Results Rapid analysis data management took less time than thematic analysis (43 hours vs 116.5 hours). Rapid analysis took 100 hours, and thematic analysis took 126.5 hours in total, with interpretation and write up taking much longer in the rapid analysis (52 hours vs 8 hours). Rapid analysis findings overlapped with 79% of thematic analysis findings, and thematic analysis overlapped with 63% of the rapid analysis findings. Rapid analysis recommendations overlapped with 55% of those from the thematic analysis, and thematic analysis overlapped with 59% of the rapid analysis recommendations.

Taylor B, Henshall C, Kenyon S, Litchfield I, Greenfield S. Can rapid approaches to qualitative analysis deliver timely, valid findings to clinical leaders? A mixed methods study comparing rapid and thematic analysis. *BMJ Open*. 2018 Oct 8;8(10):e019993.

Of note:

- RA team unconsciously suppressed two findings that were politically challenging
- RA in a health service setting without background knowledge may be inappropriate (importance of being embedded)
- ‘did-not-find rate’ of around 1 in 10 for both methods → qualitative researchers will never elicit perfectly overlapping findings, regardless of method
- “We do not advocate RA for granular exploration of complex questions, for example, individuals’ experience of phenomena.”

Publishing from a rapid analysis: yes, you can

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Pre-Implementation Strategies to Adapt and Implement a Veteran Peer Coaching Intervention to Improve Mental Health Treatment Engagement Among Rural Veterans THE JOURNAL OF RURAL HEALTH

Christopher J. Koenig, PhD;^{1,2} Traci Abraham, PhD;^{3,4} Kara A. Zamora, MA;¹ Coleen Hill, BA;¹
P. Adam Kelly, PhD, MBA;^{5,6,7} Madeline Uddo, PhD;^{5,6,8} Michelle Hamilton, PhD;^{5,8} Jeffrey M. Pyne, MD;^{3,4} &
Karen H. Seal, MD, MPH^{1,9,10}

We used rapid qualitative analysis techniques,⁴⁰⁻⁴³ including structured templates and matrix displays for VA staff interviews and narrative case summaries for veteran interviews. CBOC provider and staff interviews were rapidly analyzed 1 site at a time. Average time for rapid analysis was 3 weeks. Veteran interviews were analyzed progressively. Qualitative rapid analyses were conducted with the purpose of generating research findings for use in EBQI meetings, which were held within 2-3 months of the CBOC provider and staff interviews.

Structured template and matrix display. Provider interview recordings were summarized using a multistep procedure. First, qualitative team members used the interview guide while listening to each recording to synthesize each interview's content, noting particularly rich responses, defined as responses that were detailed and contextually meaningful.⁴⁴ Second, we developed a structured template to standardize how interview content was captured. Particularly rich responses were summarized with recording timestamps for future analysis. Third, after all interviews were transferred onto structured templates, the data were aggregated to create site-specific matrices that enabled systematic comparison between sites and regions.⁴⁵ Finally, the first author audited all templates and matrices to standardize categories and vocabulary across sites, constructing a final cross-site matrix that highlighted regional similarities and differences.

Publishing from a rapid analysis: yes, you can

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Coordinating Care Across Health Care Systems for Veterans With Gynecologic Malignancies *A Qualitative Analysis*

Medical Care • Volume 55, Number 7 Suppl 1, July 2017

Jessica L. Zuchowski, PhD, MPH,* Joya G. Chrystal, MSW, LCSW,* Alison B. Hamilton, PhD, MPH,*†
Elizabeth W. Patton, MD, MPhil, MSc,‡§ Laurie C. Zephyrin, MD, MPH, MBA,||¶#
Elizabeth M. Yano, PhD, MSPH*** and Kristina M. Cordasco, MD, MPH, MSHS*††

scribed verbatim, and spot-checked for accuracy. Transcripts were summarized in a template based on the interview guide to capture key points. The first transcript was summarized by 2 investigators independently (J.L.Z., J.G.C.) to align summarizing; they compared their summaries and resolved minor discrepancies through consensus. One investigator summarized the remaining interviews (J.G.C.), with a second investigator spot-checking summaries.

Using matrix analysis techniques,²¹ summaries were categorized by facility gynecology staffing level (no FTE; part-time FTE; full-time FTE). Two investigators (J.L.Z., J.G.C.) independently identified and grouped key themes from the summaries, and then compared themes. A third investigator (K.M.C.) reviewed and reconciled the themes generated; discrepancies were resolved by consensus. Finally, a saturation grid,²² which visually aligns support for themes across interviews, was developed to cross-check and confirm evidence of themes against the dataset.

Publishing from a rapid analysis → coding

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The Use of Telemental Health to Meet the Mental Health Needs of Women Using Department of Veterans Affairs Services

Jessica L. Moreau, PhD, MPH^{a,*}, Kristina M. Cordasco, MD, MPH, MSHS^{a,b}, Alexander S. Young, MD, MSHS^{a,c}, Sabine M. Oishi, PhD, MSPH^a, Danielle E. Rose, PhD, MPH^a, Ismelda Canelo, MPA^a, Elizabeth M. Yano, PhD, MSPH^{a,d}, Sally G. Haskell, MD^{e,f,g}, Alison B. Hamilton, PhD, MPH^{a,c}

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All interviews were audio recorded, professionally transcribed verbatim, and spot checked for accuracy. Transcripts were summarized by a team of researchers in a template of key domains developed based on the interview guide. Interviews were then coded in ATLAS.ti version 7 software (Scientific Software Development GmbH, Berlin, Germany) by the first author for topics relevant to women's mental health needs and telehealth services. Coding was checked by a second reviewer and discrepancies resolved by consensus. Transcripts were synthesized by grouping relevant coded sections of text and analyzed for emergent themes.

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.

Additional selected papers that cite 2013 cyberseminar

- Abraham TH, Wright P, White P, Booth BM, Cucciare MA. Feasibility and acceptability of shared decision-making to promote alcohol behavior change among women Veterans: Results from focus groups. *Journal of Addictive Diseases*. 2017 Oct 2;36(4):252-63.
- Barnett M, Brookman-Frazee L, Regan J, Saifan D, Stadnick N, Lau A. How intervention and implementation characteristics relate to community therapists' attitudes toward evidence-based practices: A mixed methods study. *Administration and Policy in Mental Health and Mental Health Services Research*. 2017 Nov 1;44(6):824-37.
- Gabrielian S, Hamilton AB, Gelberg L, Koosis ER, Johnson A, Young AS. Identifying social skills that support housing attainment and retention among homeless persons with serious mental illness. *Psychiatric Services*. 2019 May 1;70(5):374-80.
- Iverson KM, Adjognon O, Grillo AR, Dichter ME, Gutner CA, Hamilton AB, Stirman SW, Gerber MR. Intimate partner violence screening programs in the Veterans Health Administration: informing scale-up of successful practices. *Journal of general internal medicine*. 2019 Nov 1;34(11):2435-42.
- Lehavot K, Litz B, Millard SP, Hamilton AB, Sadler A, Simpson T. Study adaptation, design, and methods of a web-based PTSD intervention for women Veterans. *Contemporary clinical trials*. 2017 Feb 1;53:68-79.
- McHugh M, Brown T, Liss DT, Walunas TL, Persell SD. Practice facilitators' and leaders' perspectives on a facilitated quality improvement program. *The Annals of Family Medicine*. 2018 Apr 1;16(Suppl 1):S65-71.
- Olmos-Ochoa TT, Bharath P, Ganz DA, Noël PH, Chawla N, Barnard JM, Rose DE, Stockdale SE, Simon A, Finley EP. Staff Perspectives on Primary Care Teams as De Facto "Hubs" for Care Coordination in VA: a Qualitative Study. *Journal of general internal medicine*. 2019 May 15;34(1):82-9.
- Palinkas LA, Mendon SJ, Hamilton AB. Innovations in mixed methods evaluations. *Annual review of public health*. 2019 Apr 1;40:423-42.
- Purcell N, Burkman K, Keyser J, Fucella P, Maguen S. Healing from moral injury: A qualitative evaluation of the impact of killing treatment for combat veterans. *Journal of Aggression, Maltreatment & Trauma*. 2018 Jul 3;27(6):645-73.
- Purcell N, Zamora K, Tighe J, Li Y, Douraghi M, Seal K. The integrated pain team: A mixed-methods evaluation of the impact of an embedded interdisciplinary pain care intervention on primary care team satisfaction, confidence, and perceptions of care effectiveness. *Pain Medicine*. 2018 Sep 1;19(9):1748-63.

**Not an exhaustive list*

Limitations

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- Not well-suited for unstructured qualitative data
 - Experiential, phenomenological data
- Better suited to transcribed data
 - But alternatives are being developed and published (see Abraham et al., 2020)
- Better accomplished by embedded researchers with working knowledge of contexts and topics (see Taylor et al., 2018)
- By design, lacks detail and nuance (instead, points the user to where the detail can be found)
- Completion of summaries variable across team members (importance of norming and spot-checking)
 - Volume/style
 - Paraphrasing
 - Interpretation
- Not sufficient analytically for some journal/reviewer expectations
- Risk/danger of using rapid as a substitute for rich engagement with the data

Return to the fundamentals: What is “good” qualitative research?

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Cohen and Crabtree (2008)

1. **carrying out ethical research**
 2. **importance of the research**
 3. **clarity and coherence of the research report**
 4. **use of appropriate and rigorous methods**
 5. importance of reflexivity or attending to researcher bias
 6. importance of establishing validity or credibility
 7. importance of verification or reliability
- 
- fundamental**

Return to the fundamentals: What is “good” qualitative research?

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Tracy (2010):

1. worthy topic
2. rich rigor
3. sincerity
4. credibility
5. resonance
6. significant contribution
7. ethics
8. meaningful coherence



What is “rich rigor”?
The study uses sufficient, abundant, appropriate, and complex:

- Theoretical constructs
- Data and time in the field
- Sample(s)
- Context(s)
- Data collection and analysis processes

Pause: wait, so how do I achieve rigor?

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Constructive procedures (during—not after—data collection; Morse et al., 2002):

- methodological coherence: congruence between the research question and the components of the method
 - sampling sufficiency
 - iterative work between sampling, data collection and analysis
 - thinking theoretically
 - Theory development
- *All of these procedures are relevant and important to and achievable in rapid turn-around qualitative research!*

Poll Question #2

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Which topic would you like for a follow-up cyberseminar?

- Other qualitative analytic approaches (e.g., involving coding, memoing)
- Writing and publishing qualitative papers using a rapid analysis approach
- Engaging operations partners in qualitative results
- Using qualitative findings to inform quantitative methods (e.g., survey development)
- Achieving rigor in qualitative health services and implementation research

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Thank you!

alison.hamilton@va.gov

 @alisonh3

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