

Assessing Context in Implementation Research Using Qualitative Methods

Key Takeaways:

- Context is dynamic and multi-level, and therefore may require multiple methods to assess.
- These qualitative methods might include ethnography, co-creating theories of change, and brainwriting pre-mortem.
- Assessing at multiple points (pre-implementation, mid-implementation, etc.) over time is also important.
- A semi-structured approach (e.g., with templates) to assessing context works well with team-based data collection and analysis.
- Theories, models, and frameworks (TMF) can and should support assessment of context, but it's important to make space for emergent discovery (i.e., discovery that doesn't necessarily align with TMF).

Readings Referenced:

- Bates, J., & Ellaway, R. H. (2016). Mapping the dark matter of context: A conceptual scoping review. *Medical Education*, 50(8), 807–816. <https://doi.org/10.1111/medu.13034>
- Bauer, M. S., & Kirchner, J. (2020). Implementation science: What is it and why should I care? *Psychiatry Research*, 283, 112376. <https://doi.org/10.1016/j.psychres.2019.04.025>
- Bikker, A., Atherton, H., Brant, H., Porqueddu, T., Campbell, J. C., Gibson, A., McKinstry, B., Salisbury, C., & Ziebland, S. (2017). Conducting a team-based multi-sited focused ethnography in primary care. *BMC Medical Research Methodology*, 17(1). <https://doi.org/10.1186/s12874-017-0422-5>
- Bunce, A., Gold, R., Davis, J., McMullen, C. K., Jaworski, V., Mercer, M. B., & Nelson, C. C. (2014). Ethnographic process evaluation in primary care: explaining the complexity of implementation. *BMC Health Services Research*, 14(1). <https://doi.org/10.1186/s12913-014-0607-0>
- Fetters, M. D., & Rubinstein, E. B. (2019). The 3 Cs of Content, Context, and Concepts: A Practical Approach to Recording Unstructured Field Observations. *Annals of Family Medicine*, 17(6), 554–560. <https://doi.org/10.1370/afm.2453>
- Finley, E. P., Huynh, A. K., Farmer, M. M., Bean-Mayberry, B., Moin, T., Oishi, S. M., Moreau, J. L., Dyer, K. E., Lanham, H. J., Leykum, L. K., & Hamilton, A. B. (2018). Periodic reflections: a method of guided discussions for documenting implementation phenomena. *BMC Medical Research Methodology*, 18(1). <https://doi.org/10.1186/s12874-018-0610-y>



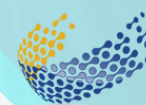
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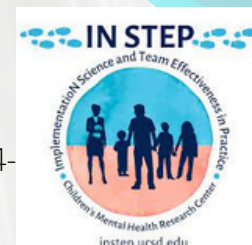


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Center for HIV Identification, Prevention
and Treatment Services



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ACTRI Dissemination and
Implementation Science Center

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SAN DIEGO | CENTER FOR AIDS RESEARCH

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Readings Referenced, continued:

- Fix, G. M., Kim, B. Y., Ruben, M. A., & McCullough, M. B. (2022). Direct observation methods: A practical guide for health researchers. *PEC Innovation*, 1, 100036. <https://doi.org/10.1016/j.pecinn.2022.100036>
- Higginbottom, G., Pillay, J., & Boadu, N. Y. (2015). Guidance on Performing Focused Ethnographies with an Emphasis on Healthcare Research. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2013.1550>
- Nilsen, P., & Bernhardsson, S. (2019). Context matters in implementation science: a scoping review of determinant frameworks that describe contextual determinants for implementation outcomes. *BMC Health Services Research*, 19(1). <https://doi.org/10.1186/s12913-019-4015-3>
- Pfadenhauer, L. M., Mozygemba, K., Gerhardus, A., Hofmann, B., Booth, A., Lysdahl, K. B., Tummers, M., Burns, J., & Rehfuess, E. (2015). Context and implementation: A concept analysis towards conceptual maturity. *Zeitschrift Für Evidenz, Fortbildung Und Qualität Im Gesundheitswesen*, 109(2), 103–114. <https://doi.org/10.1016/j.zefq.2015.01.004>
- Rabin, Borsika A., et al. Using Ethnographic Approaches to Document, Evaluate, and Facilitate Virtual Community-Engaged Implementation Research, 2022, <https://doi.org/10.21203/rs.3.rs-2002118/v1>.
- Stadnick, N. A., Cain, K. L., Oswald, W. E., Watson, P., Ibarra, M., Lagoc, R., Ayers, L. O., Salgin, L., Broyles, S. L., Laurent, L. C., Pezzoli, K., & Rabin, B. A. (2022). Co-creating a Theory of Change to advance COVID -19 testing and vaccine uptake in underserved communities. *Health Services Research*, 57(S1), 149–157. <https://doi.org/10.1111/1475-6773.13910>
- Tomoaia-Cotisel, A., Scammon, D. L., Waitzman, N. J., Cronholm, P. F., Halladay, J. R., Driscoll, D. J., Solberg, L. I., Hsu, C., Tai-Seale, M., Hiratsuka, V. Y., Shih, S. C., Fetters, M. D., Wise, C. J. E., Alexander, J. C., Hauser, D., McMullen, C. K., Scholle, S. H., Tirodkar, M. A., Schmidt, L. S., . . . Stange, K. C. (2013). Context Matters: The Experience of 14 Research Teams in Systematically Reporting Contextual Factors Important for Practice Change. *Annals of Family Medicine*, 11(Suppl_1), S115–S123. <https://doi.org/10.1370/afm.1549>
- UCLA IS Hub YouTube Playlist: <https://youtube.com/playlist?list=PLleXfMZxqWd5YHUfQhmlSwfKjgwcbIAjZ>

Readings Responsive to Consultation Questions:

Qualitative Methods in Implementation Science: <https://cancercontrol.cancer.gov/sites/default/files/2020-09/nci-dccps-implementation-science-whitepaper.pdf>

Designing questions to assess regularly throughout implementation:

- Finley, E. P., Huynh, A. K., Farmer, M. M., Bean-Mayberry, B., Moin, T., Oishi, S. M., Moreau, J. L., Dyer, K. E., Lanham, H. J., Leykum, L. K., & Hamilton, A. B. (2018b). Periodic reflections: a method of guided discussions for documenting implementation phenomena. *BMC Medical Research Methodology*, 18(1). <https://doi.org/10.1186/s12874-018-0610-y>
- Documenting the Complexities of Implementation with Periodic Reflections (Drs. Erin Finley & Alison Hamilton): <https://www.youtube.com/watch?v=UBBnjlo3Auk&t=24s>

Designing Interview Guides:

- Hamilton, A. B., & Finley, E. P. (2019). Qualitative methods in implementation research: An introduction. *Psychiatry Research-neuroimaging*, 280, 112516. <https://doi.org/10.1016/j.psychres.2019.112516>

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Readings Responsive to Consultation Questions, continued:

Analyzing digital data/social media data:

- Brennan, C. L., Swartout, K. M., Cook, S. G., & Parrott, D. J. (2016). A Qualitative Analysis of Offenders' Emotional Responses to Perpetrating Sexual Assault. *Sexual Abuse: A Journal of Research and Treatment*, 30(4), 393–412. <https://doi.org/10.1177/1079063216667917> [Example with strong analysis section, co-authored by Alison's colleague]

Using qualitative methods to address how implicit racism and white supremacy might undermine equity interventions to eliminate racial disparities

- Abrams, J. A., Tabaac, A. R., Sullivan, S., & Else-Quest, N. M. (2020). Considerations for employing intersectionality in qualitative health research. *Social Science & Medicine*, 258, 113138. <https://doi.org/10.1016/j.socscimed.2020.113138>
- Bowleg, L. (2017). Towards a Critical Health Equity Research Stance: Why Epistemology and Methodology Matter More Than Qualitative Methods. *Health Education & Behavior*, 44(5), 677–684. <https://doi.org/10.1177/1090198117728760>
- Shelton, R. C., Adsul, P., & Oh, A. (2021). Recommendations for Addressing Structural Racism in Implementation Science: A Call to the Field. *Ethnicity & Disease*, 31(Suppl), 357–364. <https://doi.org/10.18865/ed.31.s1.357>
- Shelton, R. C., Adsul, P., Oh, A., Moise, N., & Griffith, D. M. (2021). Application of an antiracism lens in the field of implementation science (IS): Recommendations for reframing implementation research with a focus on justice and racial equity. *Implementation Research and Practice*, 2, 263348952110494. <https://doi.org/10.1177/26334895211049482>
- Shelton, R. C., Griffith, D. M., & Kegler, M. C. (2017). The Promise of Qualitative Research to Inform Theory to Address Health Equity. *Health Education & Behavior*, 44(5), 815–819. <https://doi.org/10.1177/1090198117728548>
- Shelton, R. C., Philbin, M. M., & Ramanadhan, S. (2021). Qualitative Research Methods in Chronic Disease: Introduction and Opportunities to Promote Health Equity. *Annual Review of Public Health*, 43(1), 37–57. <https://doi.org/10.1146/annurev-publhealth-012420-105104>

Implementation Science Questions/Issues:

Measuring implementation context to address health disparities:

- Shelton, R. C., Chambers, D. W., & Glasgow, R. E. (2020). An Extension of RE-AIM to Enhance Sustainability: Addressing Dynamic Context and Promoting Health Equity Over Time. *Frontiers in Public Health*, 8. <https://doi.org/10.3389/fpubh.2020.00134>

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Implementation Science Questions/Issues, continued:

Identifying key aspects of contextual differences:

- Nilsen, P., & Bernhardsson, S. (2019b). Context matters in implementation science: a scoping review of determinant frameworks that describe contextual determinants for implementation outcomes. *BMC Health Services Research*, 19(1). <https://doi.org/10.1186/s12913-019-4015-3>
- Pfadenhauer, L. M., Gerhardus, A., Mozygemba, K., Lysdahl, K. B., Booth, A., Hofmann, B., Wahlster, P., Polus, S., Burns, J., Brereton, L., & Rehfues, E. (2017). Making sense of complexity in context and implementation: the Context and Implementation of Complex Interventions (CICI) framework. *Implementation Science*, 12(1). <https://doi.org/10.1186/s13012-017-0552-5>
- Rogers, L., De Brún, A., & McAuliffe, E. (2020b). Defining and assessing context in healthcare implementation studies: a systematic review. *BMC Health Services Research*, 20(1). <https://doi.org/10.1186/s12913-020-05212-7>

Balancing context needs with budget constraints:

- Saldana, L., Chamberlain, P., Bradford, W. D., Campbell, M., & Landsverk, J. (2014). The cost of implementing new strategies (COINS): A method for mapping implementation resources using the stages of implementation completion. *Children and Youth Services Review*, 39, 177–182. <https://doi.org/10.1016/j.childyouth.2013.10.006>
- Saldana, L., Ritzwoller, D. P., Campbell, M., & Block, E. P. (2022). Using economic evaluations in implementation science to increase transparency in costs and outcomes for organizational decision-makers. *Implementation Science Communications*, 3(1). <https://doi.org/10.1186/s43058-022-00295-1>

Brainwriting pre-mortem, virtual ethnography, and theory of change methods:

- Gilmartin, H. M., Lawrence, E. L., Leonard, C., McCreight, M., Kelley, L., Lippmann, B., Coy, A., & Burke, R. E. (2019). Brainwriting Premortem: A Novel Focus Group Method to Engage Stakeholders and Identify Preimplementation Barriers. *Journal of Nursing Care Quality*, 34(2), 94–100. <https://doi.org/10.1097/ncq.0000000000000360>
- Rabin, B.A., Cain, K.L., Salgin, L. et al. Using ethnographic approaches to document, evaluate, and facilitate virtual community-engaged implementation research. *BMC Public Health* 23, 409 (2023). <https://doi.org/10.1186/s12889-023-15299-2>
- Stadnick, N. A., Cain, K. L., Oswald, W. E., Watson, P., Ibarra, M., Lagoc, R., Ayers, L. O., Salgin, L., Broyles, S. L., Laurent, L. C., Pezzoli, K., & Rabin, B. A. (2022b). Co-creating a Theory of Change to advance COVID -19 testing and vaccine uptake in underserved communities. *Health Services Research*, 57(S1), 149–157. <https://doi.org/10.1111/1475-6773.13910>

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Implementation Science Questions/Issues, continued:

Ensuring fidelity when handing off:

- Peterson, A. E., Bond, G. R., Drake, R. E., McHugo, G. J., Jones, A., & Williams, J. A. (2014). Predicting the Long-Term Sustainability of Evidence-Based Practices in Mental Health Care: An 8-Year Longitudinal Analysis. *The Journal of Behavioral Health Services & Research*, 41(3), 337–346. <https://doi.org/10.1007/s11414-013-9347-x>
- Sigmarisdóttir, M., Rodríguez, M.M.D., Gewirtz, A. et al. Five-year fidelity assessment of an evidence-based parenting program (GenerationPMTO): inter-rater reliability following international implementation. *BMC Health Serv Res* 23, 576 (2023). <https://doi.org/10.1186/s12913-023-09611-4>
- Song, Y., MacEachern, L., Doupe, M., Ginsburg, L., Chamberlain, S. A., Cranley, L., Easterbrook, A., Hoben, M., Knopp-Sihota, J. A., Reid, R. C., Wagg, A., Estabrooks, C. A., Keefe, J., Rappon, T., & Berta, W. (2022). Influences of post-implementation factors on the sustainability, sustainment, and intra-organizational spread of complex interventions. *BMC Health Services Research*, 22(1). <https://doi.org/10.1186/s12913-022-08026-x>
- Sprang, G, Eslinger, J, Silman, M, & Ascienzo, S. (2019). Predictors of Evidence-Based Treatment Implementation, Sustainability, and Fidelity. *Best Practices in Mental Health*. May 1;15(1)41-8.

Choosing among different implementation science frameworks for your study:

- Dissemination & Implementation Models in Health: <https://dissemination-implementation.org/>
- Strategies for Selecting and Using Dissemination & Implementation Theories, Models, and Frameworks (Drs. Russ Glasgow & Alison Hamilton): <https://www.youtube.com/watch?v=m3MnkqQ6cwY&t=2s>
- Damschroder, L. J. (2020). Clarity out of chaos: Use of theory in implementation research. *Psychiatry Research-neuroimaging*, 283, 112461. <https://doi.org/10.1016/j.psychres.2019.06.036>
- Lynch, E. A., Mudge, A. M., Knowles, S., Kitson, A., Hunter, S. B., & Harvey, G. (2018). “There is nothing so practical as a good theory”: a pragmatic guide for selecting theoretical approaches for implementation projects. *BMC Health Services Research*, 18(1). <https://doi.org/10.1186/s12913-018-3671-z>
- Moullin, J. C., Dickson, K. S., Stadnick, N. A., Albers, B., Nilsen, P., Broder-Fingert, S., Mukasa, B., & Aarons, G. A. (2020). Ten recommendations for using implementation frameworks in research and practice. *Implementation Science Communications*, 1(1). <https://doi.org/10.1186/s43058-020-00023-7>

Approaching implementation scientists/finding collaborators and/or demonstrating competence:

- Padek, M., Colditz, G. A., Dobbins, M., Koscielniak, N. J., Proctor, E. K., Sales, A. E., & Brownson, R. C. (2015). Developing educational competencies for dissemination and implementation research training programs: an exploratory analysis using card sorts. *Implementation Science*, 10(1). <https://doi.org/10.1186/s13012-015-0304-3>
- Shea, C. R., Young, T. L., Powell, B. J., Rohweder, C. L., Enga, Z., Scott, J. A., Carter-Edwards, L., & Corbie-Smith, G. (2017). Researcher readiness for participating in community-engaged dissemination and implementation research: a conceptual framework of core competencies. *Translational Behavioral Medicine*, 7(3), 393–404. <https://doi.org/10.1007/s13142-017-0486-0>