



How to Do a Rapid Qualitative Review (Qualitative Evidence Synthesis)

Professor Andrew Booth, Cochrane Qualitative and Implementation Methods Group (QIMG) in association with the Cochrane Rapid Reviews Methods Group

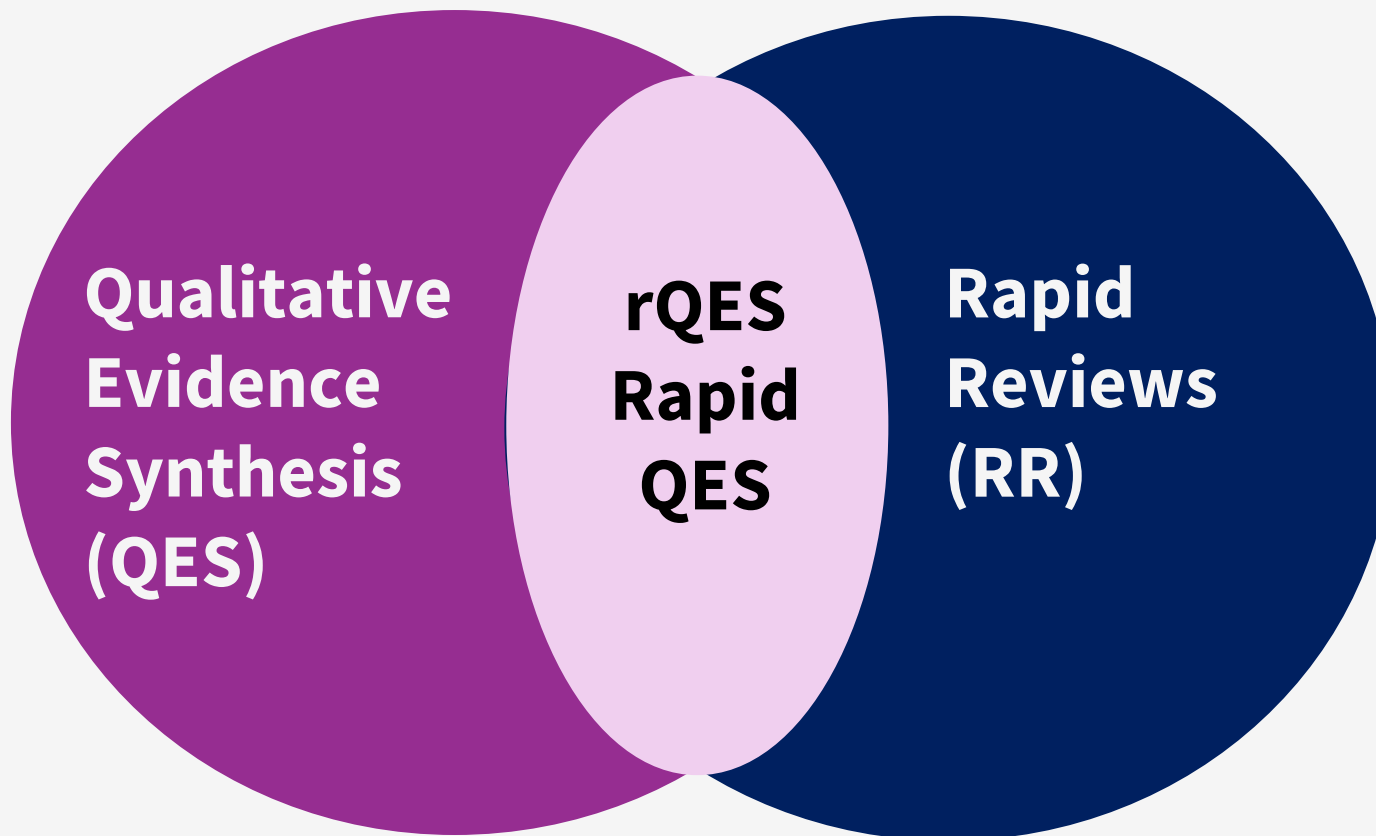
Trusted evidence.
Informed decisions.
Better health.



A Methodological Alliance!

**Cochrane Qualitative and
Implementation Methods Group (QIMG)**

**Cochrane Rapid Reviews
Methods Group**



**Andrew Booth, Isolde Sommer,
Jane Noyes, Catherine Houghton,
Fiona Campbell.**

What is a rapid Qualitative Evidence Synthesis (rQES)?

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Cochrane Rapid Qualitative Review/Evidence Synthesis

Definition:

‘A type of evidence synthesis that brings together and summarises information from different qualitative research studies to produce evidence for people such as the public, healthcare providers, researchers, policymakers, and funders in a systematic, resource-efficient manner. This is done by:

speeding up the ways we plan, do and/or share the results of conventional structured (systematic) reviews, by **simplifying or omitting** a variety of methods that should be clearly defined by the authors.’

BMJ Evidence Based Medicine Rapid reviews methods series

1. Guidance on literature search. Klerings I, Robalino S, Booth A, Escobar-Liquitay CM, Sommer I, Gartlehner G, Devane D, Waffenschmidt S; Cochrane Rapid Reviews Methods Group. *BMJ Evid Based Med*. 2023 Nov 22;28(6):412-417. doi: 10.1136/bmjebm-2022-112079.
2. Guidance on team considerations, study selection, data extraction and risk of bias assessment. Nussbaumer-Streit B, Sommer I, Hamel C, Devane D, Noel-Storr A, Puljak L, Trivella M, Gartlehner G; Cochrane Rapid Reviews Methods Group. *BMJ Evid Based Med*. 2023 Nov 22;28(6):418-423. doi: 10.1136/bmjebm-2022-112185.
3. Involving patient and public partners, healthcare providers and policymakers as knowledge users. Garritty C, Tricco AC, Smith M, Pollock D, Kamel C, King VJ; Cochrane Rapid Reviews Methods Group. *BMJ Evid Based Med*. 2024 Jan 19;29(1):55-61. doi: 10.1136/bmjebm-2022-112070.
4. Guidance on assessing the certainty of evidence. Gartlehner G, Nussbaumer-Streit B, Devane D, Kahwati L, Viswanathan M, King VJ, Qaseem A, Akl E, Schuenemann HJ; Cochrane Rapid Reviews Methods Group. *BMJ Evid Based Med*. 2024 Jan 19;29(1):50-54. doi: 10.1136/bmjebm-2022-112111.
5. Guidance on rapid qualitative evidence synthesis Andrew Booth, Isolde Sommer, Jane Noyes, Catherine Houghton, Fiona Campbell The Cochrane Rapid Reviews Methods Group and Cochrane Qualitative and Implementation Methods Group (CQIMG) *BMJ Evid Based Med*. doi: 10.1136/bmjebm-2023-112620
6. Guidance on the use of supportive software. L Affengruber, B Nussbaumer-Streit, C Hamel, M Van der Maten, J Thomas, C Mavergames, R Spijker, G Gartlehner. On behalf of the Cochrane Rapid Reviews Methods Group *BMJ Evid Based Med*. doi: 10.1136/bmjebm-2023-112530
7. *[How to do a rapid scoping review]*. Fiona Campbell, Senior Lecturer in Evidence Synthesis, Newcastle University. *BMJ Evid Based Med*.
Tuesday 12 March 2024, 09:00 UTC *Rapid Reviews webinar series*

Also: Updated recommendations for the Cochrane rapid review methods guidance for rapid reviews of effectiveness. Garritty C, Hamel C, Trivella M, Gartlehner G, Nussbaumer-Streit B, Devane D, Kamel C, Griebler U, King VJ; Cochrane Rapid Reviews Methods Group. *BMJ*. 2024 Feb 6;384:e076335. doi: 10.1136/bmj-2023-076335.

NB. This is in the *Rapid Reviews* series but...

- **As Authors we acknowledge that:**
 - There are myriad reasons why an alternative to a conventional qualitative review might be required.
- **We therefore use ‘rQES’ to signify**
 - **Rapid** qualitative evidence syntheses in the narrow sense but also...
 - **Resource-constrained** qualitative evidence syntheses (e.g. limited budgets; PhD and Masters student projects; multi-component or multi-topic reviews where the resource for each component/topic is relatively little).

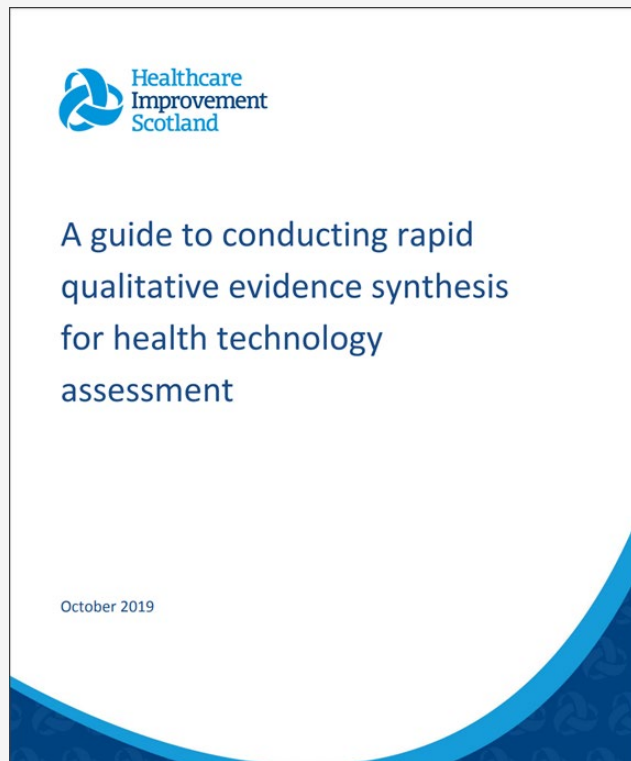
What an rQES is not

An excuse for carelessness or poor quality!

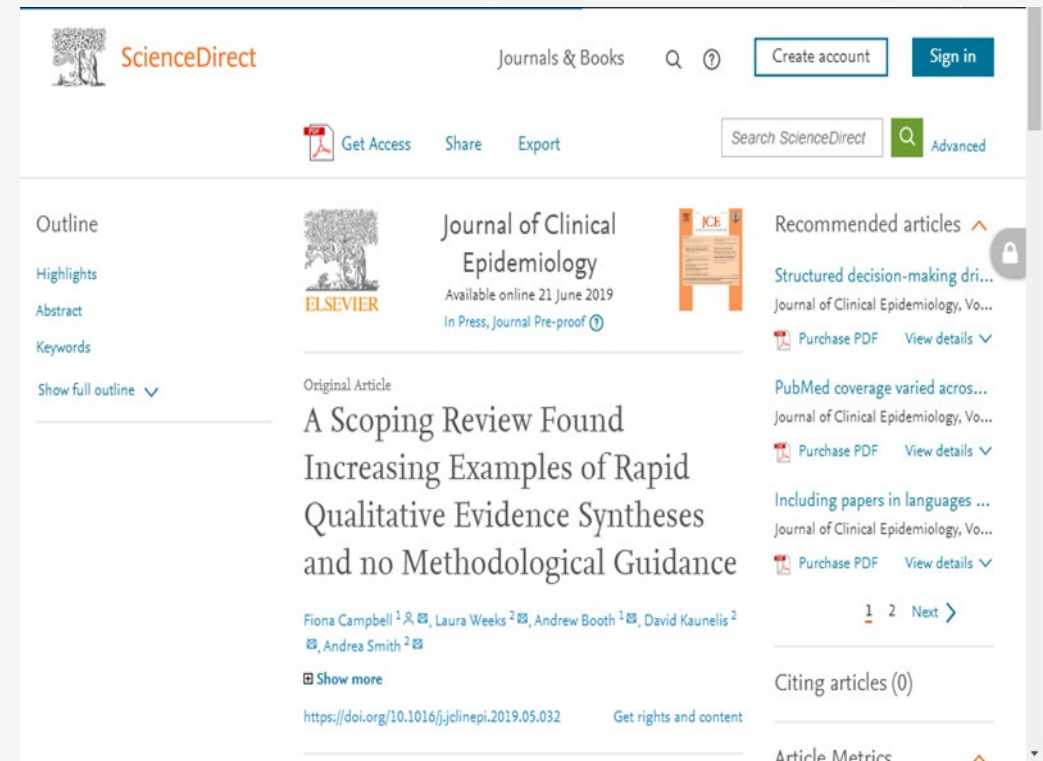
- “As editor and associate editor of journals publishing qualitative work in the health field, I have witnessed a proliferation of submissions in recent years of “**quick and dirty**” technical reports that position themselves as products of “qualitative metasynthesis.””
- “By conforming to a highly technical set of sorting and selecting operations, all of which are attaining increasing credibility as expectations for manuscripts claiming to be metasynthesis reports, and rendering findings that reflect only the most superficial of commonalities across the final subset of studies, they are privileging standardized technique over interpretive imagination, conceptual depth, and the insights that could be obtained from cross fertilization across diversities.”
- “These kinds of technical reports often reveal nothing of the gorgeous and evocative depth and details reported in the original studies, and grossly misrepresent what they reported as findings by virtue of ignoring that which is not common across the full body of work. And although they may list such factors such as the year, location, and discipline of the original investigator(s) in their tabularized summaries of the key facts of the studies they summarize, they rarely take any of the chronology and temporality of the evolving body of exploration into critical consideration.” (**Thorne, 2017**)

A Brief History of rQES – Part 1

Initial examples largely concentrated around health technology assessment (2019)



<https://past.htai.org/wp-content/uploads/2019/11/Rapid-qualitative-evidence-synthesis-guide.pdf>



Campbell F, Weeks L, **Booth A**, Kaunelis D, Smith A. A scoping review found increasing examples of rapid qualitative evidence syntheses and no methodological guidance. *Journal of Clinical Epidemiology*. 2019 Nov 1;115:160-71.

A Brief History of rQES – Part 2



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Home > Journals > International Journal of Technology Assessment in Health Care > Volume 37 Issue 1 > Rapid qualitative evidence syntheses (rQES) in health...



International Journal of Technology Assessment in Health Care

Article contents

- Abstract
- Background
- Lessons and experiences conducting rapid qualitative evidence syntheses
- Discussion
- References

Rapid qualitative evidence syntheses (rQES) in health technology assessment: experiences, challenges, and lessons

Published online by Cambridge University Press: 09 October 2020

Umair Majid and Laura Weeks

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Abstract

Healthcare decision makers are increasingly demanding that health technology assessment (HTA) is patient focused, and considers data about patients' perspectives on and experiences with health technologies in their everyday lives. Related data are typically generated through qualitative research, and in HTA the typical approach is to synthesize primary qualitative research through the conduct of qualitative evidence synthesis (QES). Abbreviated HTA timelines often do not allow for the full 6–12 months it may take to complete a QES, which has prompted the Canadian Agency for Drugs and Technologies in Health (CADTH) to explore the concept of “rapid qualitative evidence synthesis” (rQES). In this paper, we describe our experiences conducting three rQES at CADTH, and reflect on challenges faced, successes, and lessons learned. Given limited methodological guidance to guide this work, our aim is to provide insight for researchers who may contemplate rQES. We suggest several lessons

Experience from leading health technology assessment agency (2020)

rQES Step	Experience	Perspective	Lesson
Formulating Research Questions	Iterative research question and search development using PICO.	Iteration ensures that the available literature is aligned with the rQES research questions and also of a manageable volume with the rapid context.	Iteration is necessary to ensure sufficient and manageable literature to answer the research questions. It can help prevent an “empty” rQES in situations where there has been little to no research published on a specific technology and condition; and, it can also prevent an unmanageable number of citations for heavily researched areas.
Identifying Relevant Research to Answer the Research Questions	The number of databases searched as well as date and language limits used at times retrieved too few or too many citations.	Comprehensive database searching in QES takes time, which may not be available in rQES. rQES requires a more rapid search approach that limits literature by scope or focus.	Search limits, including date limits, language limits, and study design filters, are required for rQES. Iterative search development and question formulation will add time to the review process upfront but will help ensure a sufficient and manageable body of literature. Search limits may be more broad or narrow, depending on the quantity of research published for a particular topic.
Initial and Full-text Screening Stages	Using a single reviewer for title, abstract, and full-text screening substantially reduced the time spent on this step.	Since less time is spent on screening, more time is available for analysis and writing to ensure that the findings respond directly to the research question(s).	Using a single screener may reduce time needed to screen but may introduce opportunities to miss articles that may be relevant to the policy problem. Reviewers should detail the screening methods, procedures, and tools used in the final rQES report for transparency and accountability. Reviewers can also conduct pilot screening, or discuss screening decisions with a colleague.
Quality Appraisal	One reviewer appraised included studies using a brief tool, QuaRT.	The QuaRT tool is advantageous in rQES because it is brief and focuses on the most commonly reported methodological details of qualitative studies. This characteristic ensures that quality adjudications are aligned with how primary study authors have chosen to frame the methodology and methods of their manuscript. A single reviewer with experience in qualitative research facilitated rigorous quality appraisal.	Using a brief tool to guide appraisal is feasible in a rapid context, although the appraiser should have previous exposure to the principles of qualitative research design and conduct.
Extracting Descriptive (Study and Patient Characteristics) Data	A single reviewer extracted data from included studies into a standardized data extraction form at the same time as conducting quality appraisal.	Performing descriptive data extraction and quality appraisal simultaneously saves time because included articles have to only be reviewed once.	Conducting descriptive data extraction and quality appraisal simultaneously saves time and broadens how the quality of included studies can be represented in the final report.
Synthesizing and Writing the Findings	One theme that captures the most relevant data anchored our writing of narrative summaries for remaining themes. Time did not allow for attention to and reporting of all concepts represented in the primary literature.	Synthesizing and writing concurrently and iteratively allows the reviewer to stay close to the pre-specified research and policy questions. Using one theme as an anchor helped to maintain alignment between the rQES results and the research questions.	Reviewers must prioritize the reporting of emergent themes that are present in the primary literature. They may focus on the codes, concepts or themes that are most frequently apparent in the retrieved literature at the same times as those themes they deem most relevant to the policy questions, ideally through discussion with stakeholders.

A Brief History of rQES – Part 3

- One of a series of rapid reviews from Cochrane contributors to inform the **COVID-19 pandemic**.
- Began **end of March 2020**
- Found **36 eligible studies and sampled 20 of these**
- First rapid Qualitative Evidence Synthesis to be published in the Cochrane Library
- **Four weeks** from registration to publication
- Relied on:
 - core team to work consistently on the review
 - team of experts to give feedback ASAP
 - supportive editorial team with “all hands on deck”

Cochrane Database of Systematic Reviews

Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis

Cochrane Systematic Review - Qualitative | Version published: 21 April 2020 [see what's new](#)

<https://doi.org/10.1002/14651858.CD013582>



[View article information](#)

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| Declan Devane | Linda M Biesty



Emergency Evidence Response Service



Who is the review for: Ministries of health, healthcare facilities and other stakeholders to plan, implement and manage IPC strategies for respiratory infectious diseases.

Health care workers and infection prevention and control (IPC) for respiratory infectious diseases: **Implementation considerations**

Health care workers point to several factors that influence their ability and willingness to follow IPC guidelines. This includes the source of the guidelines, how relevant they are and how they are communicated. Other factors include support from managers, workplace culture, and provision of training. Physical space, access to and trust in personal protective equipment (PPE) are key elements. A desire to deliver good patient care and protect their own family and friends also motivate healthcare workers to follow guidelines. The review highlights the importance of including all facility staff, including support staff, when implementing IPC guidelines.



Training and education

Mandatory training (on infection transmission and PPE use) for all staff who have contact with patients

Delegate person for training/engagement/support

Help all staff to understand the importance of IPC
Ensure staff are properly fitted for PPE to avoid discomfort
Consider the impact of IPC on patient and family – loneliness, stigmatisation

Organisational support

Clear evidence-based guidelines in line with National and International guidance
Plan for effective communication of any changes to guidelines
Consider additional workload when caring for patients in isolation and the burden of PPE use

Physical environment

Provide enough space to isolate, minimize overcrowding, restrict visitors
Provide adequate facilities for staff handwashing, changing and showering
Provide adequate supplies of quality PPE, recognising increase in demand

Trusted evidence.
Informed decisions.
Better health.

The information for this summary is taken from the following Cochrane rapid review of qualitative research: Houghton C, Meekel P, Delaney H, Smalle M, Glenton C, Booth A, Chan XHS, Devane D, Betty LM. Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis. Cochrane Database of Systematic Reviews 2020, Issue 4. Art. No.: CD013582. DOI: 10.1002/14651858.CD013582.



Cochrane Review of qualitative research
[More summaries of our reviews](#)
[More Covid-19 relevant summaries](#)

Health care workers and infection prevention and control (IPC) for respiratory infectious diseases: Implementation considerations



Photo by Sgt. Leila Tascaroni

Who is this summary for?

The questions below are drawn from the findings in a new Cochrane Review. These are prompts that are intended to help ministries of health, healthcare facilities and other stakeholders to plan, implement and manage IPC strategies for respiratory infectious diseases.

About the review

A Cochrane rapid review of qualitative research explored barriers and facilitators to health care workers' compliance with infection prevention and control (IPC) recommendations for respiratory infectious diseases (Houghton 2020). The review analysed 20 qualitative studies from different countries.

When respiratory infectious diseases become widespread, such as during the Covid-19 pandemic, health care workers' use of infection prevention and control (IPC) strategies becomes critical. These strategies include the use of personal protective equipment (PPE) such as masks, face shields, gloves and gowns; the separation of patients with respiratory infections from others; and stricter cleaning routines. These strategies can be difficult and time-consuming to implement.



Lessons Learned

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A QuEST for speed: rapid qualitative evidence syntheses as a response to the COVID-19 pandemic

[Linda Biesty](#) , [Pauline Meskell](#), [Claire Glenton](#), [Hannah Delaney](#), [Mike Smalle](#), [Andrew Booth](#), [Xin Hui S. Chan](#), [Declan Devane](#) & [Catherine Houghton](#)

[Systematic Reviews](#) **9**, Article number: 256 (2020) | [Cite this article](#)

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Abstract


Background



The COVID-19 pandemic has created a sense of urgency in the research community in their bid to contribute to the evidence required for healthcare policy decisions. With such urgency, researchers experience methodological challenges to maintain the rigour and transparency of their work. With this in mind, we offer reflections on our recent experience of undertaking a rapid Cochrane qualitative evidence synthesis (QES).

Methods


This process paper, using a reflexive approach, describes a rapid QES prepared during, and in response to, the COVID-19 pandemic.

International Journal of Qualitative Methods







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Opening Windows Behind Closed Doors: Reflections on Working Qualitatively During a Pandemic

[Pauline Meskell](#) , [Catherine Houghton](#), and [Linda Biesty](#) [View all authors and affiliations](#)

[All Articles](#) | <https://doi.org/10.1177/16094069211008313>

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The contribution of qualitative evidence in epidemic and pandemic research has been articulated in previous editorials of this journal ([Teti et al., 2020](#)) and attention given to the pivotal role of qualitative methods in identifying social responses to COVID-19 ([Vindrola-Padros et al., 2020](#)). In addition, we feel it is also timely to explore the concept of “team” during this period and what adaptations pandemic restrictions has brought to how teams organize themselves, interact and the benefits and challenges that this brings. In this editorial, we reflect on our experiences of being part of a team conducting qualitative research during a pandemic, which has affected every aspect of our lives. Something this significant creates an opportunity for new learning. We consider what we have learned during this time and what aspects we can use to inform and enrich us.

No picture is complete without looking at the losses as well as the gains, so we will also reflect on what we have had to surrender in our online world, during this time. This reflection will assist us in identifying what we believe needs to be recaptured when this pandemic is over and what we need to consign to the pandemic vaults of history. In true qualitative spirit we have themed our reflections: accessibility, intimacy, and networking.

The Latest Chapter!

BMJ Journals

BMJ Evidence-Based Medicine

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Booth A, Sommer I, Noyes J, Houghton C, Campbell F. Rapid reviews methods series: guidance on rapid qualitative evidence synthesis. *BMJ Evidence-Based Medicine* Published Online First: 14 February 2024. doi: 10.1136/bmjebm-2023-112620



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Rapid reviews methods series: guidance on rapid qualitative evidence synthesis



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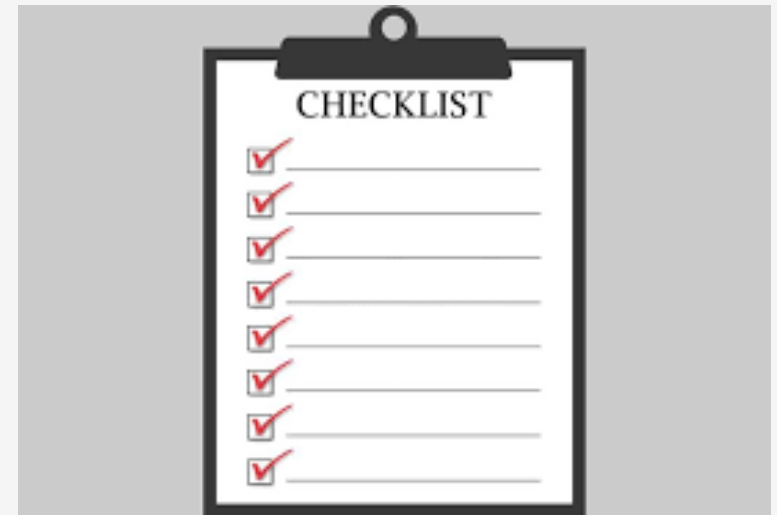
 Andrew Booth^{1, 2}, Isolde Sommer^{3, 4}, Jane Noyes^{2, 5}, Catherine Houghton^{2, 6}, Fiona Campbell^{1, 7} The Cochrane Rapid Reviews Methods Group and Cochrane Qualitative and Implementation Methods Group (CQIMG)
Correspondence to Professor Andrew Booth, Univ Sheffield, Sheffield, UK; a.booth@sheffield.ac.uk

Abstract

This paper forms part of a series of methodological guidance from the Cochrane Rapid Reviews Methods Group and addresses rapid qualitative evidence syntheses (QESs), which use modified systematic, transparent and reproducible methods to accelerate the synthesis of qualitative evidence when faced with resource constraints. This guidance covers the review process as it relates to synthesis of qualitative research. 'Rapid' or 'resource-constrained' QES require use of templates and targeted knowledge user involvement. Clear definition of perspectives and decisions on indirect evidence, sampling and use of existing QES help in targeting eligibility criteria. Involvement of an information specialist, especially in prioritising databases, targeting grey literature and planning supplemental searches, can prove invaluable. Use of templates and frameworks in study selection and data extraction can be accompanied by quality assurance procedures targeting areas of likely weakness. Current Cochrane guidance informs selection of tools for quality assessment and of synthesis method. Thematic and framework synthesis facilitate efficient synthesis of large numbers of studies or plentiful data. Finally, judicious use of Grading of Recommendations Assessment, Development and Evaluation approach for assessing the Confidence of Evidence from Reviews of Qualitative research assessments and of software as appropriate help to achieve a timely and useful review product.

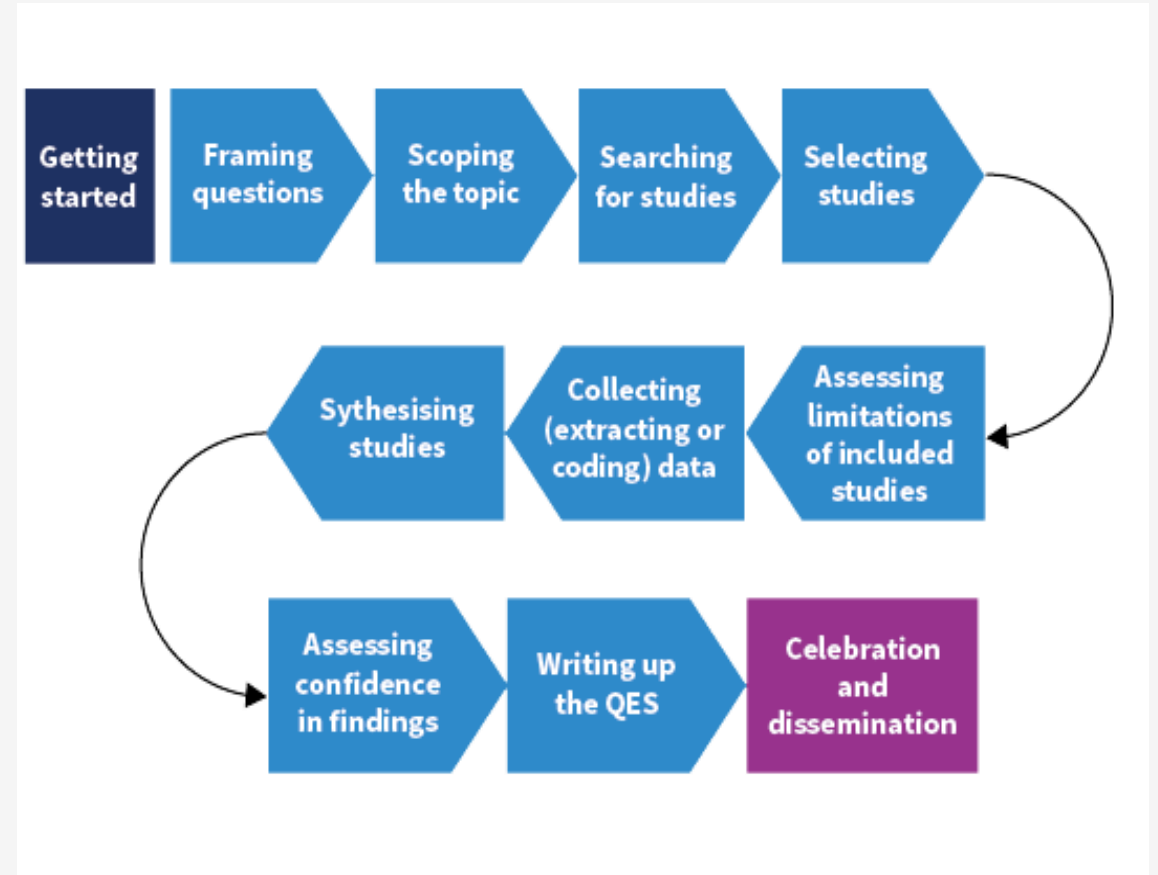
What it is

- **20 recommendations** made, based on our collective and published experience and on our interpretation of the generic Cochrane Rapid Review guidance.
- Cover **whole review process** and seek to stop short of endorsing a specific approach or single method.
- Supported by **Supplementary Appendix** with evidence cited where available
- **Informed by current work** in progress on the *Cochrane and Campbell Handbook of Qualitative Evidence Synthesis*
- **A starting point** for an empirical methodological agenda



The Recommendations

- **Follow** the stages of a conventional Qualitative Evidence Synthesis as outlined in the recently released Cochrane Interactive Learning Module 12: Introduction to qualitative evidence synthesis
- **Mirror** the Chapters in the Forthcoming *Cochrane-Campbell Handbook of Qualitative Evidence Synthesis*
- **Complement** the other articles in the Cochrane Rapid Reviews Methods Series in *BMJ Evidence Based Medicine*



Recommendations for resource-constrained Qualitative Evidence Syntheses (rQES)

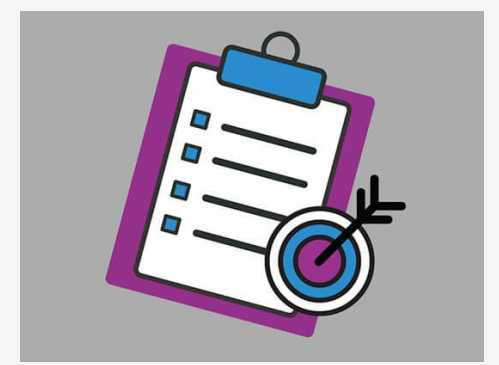
Table 2 Recommendations for resource-constrained qualitative evidence synthesis (rQES)

Recommendation number	Item
	Setting the review question and topic refinement
R1	Ensure involvement of knowledge users, even when the QES is abbreviated or accelerated; especially when setting the review question and refining the topic, to ensure key perspectives are included
R2	Use templates to fast-track writing of a protocol. The protocol should always be publicly available and should be registered if the rQES timescales permit
	Setting eligibility criteria
R3	Together with knowledge users
R4	Clearly define the <i>included perspectives</i> . A rapid QES (rQES) may need to limit the <i>number of perspectives</i> , with a focus on those most important for decision-making
R5	Define if 'indirect evidence' is to be used in the absence of direct evidence. An rQES may focus on direct evidence, except when only indirect evidence is available
R6	Consider <i>privileging rich qualitative studies</i> ; consider a stepwise approach to inclusion of qualitative data and explore the possibility of sampling
R7	Consider including multiple QES within a <i>mega-synthesis</i>
	Searching
R8	Involve an information specialist (eg, librarian) in prioritising sources and search methods
R9	Consider limiting database searching to two or three multidisciplinary databases and, if resources allow, searches of one or two specialised (subject or regional) databases
R10	Even when resources are limited, consider factoring in time for peer review of at least one search strategy
R11	Selectively target appropriate types of grey literature and supplemental searches, including citation chaining, especially for diffuse topics
	Study selection
	<i>Title and abstract screening/full-text screening</i>
R12	Use pre-prepared, pretested templates to limit the scale of piloting, calibration and testing
R13	Target and prioritise identified risks of either over-zealous inclusion or over-exclusion specific to each rQES
R14	Focus quality control procedures on specific threats (eg, use additional reviewers and report percentages for double screening)
	Data extraction
R15	Use a single reviewer to extract data using a piloted template, with a second reviewer for checking, or code data directly from full-text articles, again with checking. Limit data extraction to minimal essential items. Consider re-using data extracted from primary studies included in previous QESs
	Assessment of methodological limitations
R16	In the absence of validated risk of bias tools for qualitative studies, choose a tool according to CQIMG guidance together with expediency
R17	Use a single reviewer to assess methodological limitations, with verification of judgements (and support statements) by a second reviewer
	Synthesis
R18	Favour descriptive thematic synthesis or framework synthesis, except when theory generation (meta-ethnography or analytical thematic synthesis) is a priority
R19	Consider whether a conceptual model, theory or framework offers a rapid way to organise/code/interpret/present findings
R20	Target GRADE-CERQual assessments at findings most critical to decision-making. Additional reviewers could verify all, or a sample of, assessments. Consider reusing GRADE-CERQual assessments if findings are relevant and of demonstrable high quality
	Additional considerations
R21	Use review management software or qualitative analysis management software to streamline the process

CQIMG, Cochrane Qualitative and Implementation Methods Group; GRADE-CERQual, Grading of Recommendations Assessment, Development and Evaluation approach for assessing the Confidence of Evidence from Reviews of Qualitative research; QES, qualitative evidence synthesis.

Recommendations for rQES

Setting the review question and topic refinement



- **R1 Ensure involvement of knowledge users, even when the QES is abbreviated or accelerated; especially when setting the review question and refining the topic, to ensure key perspectives are included**
 - **R2 Use templates to fast-track writing of a protocol. The protocol should always be publicly available and should be registered if the rQES timescales permit**
- Involvement of knowledge users remains important – can help with priorities and focus
 - Also see: **Rapid Reviews Methods Series**: Involving patient and public partners, healthcare providers and policymakers as knowledge users. *BMJ Evidence-Based Medicine* 2024-02-01 , DOI: 10.1136/bmjebm-2022-112070. C Garritty, AC Tricco, M Smith, D Pollock, C Kamel, VJ King
 - NB. **Cochrane QES Protocol and Review Template** <https://zenodo.org/records/10050961>
 - “Most recently, the template helped support authors of a rapid qualitative evidence synthesis prepared as part of Cochrane’s response to the COVID-19 pandemic by providing standardised text that could be adapted rapidly (Houghton et al, 2020). The success of the template lies partly in striking a balance between instruction and flexibility, so that qualitative evidence synthesis authors can be guided, but not constricted in the development of their reviews...”

Recommendations for rQES

Setting eligibility criteria #1



Together with knowledge users

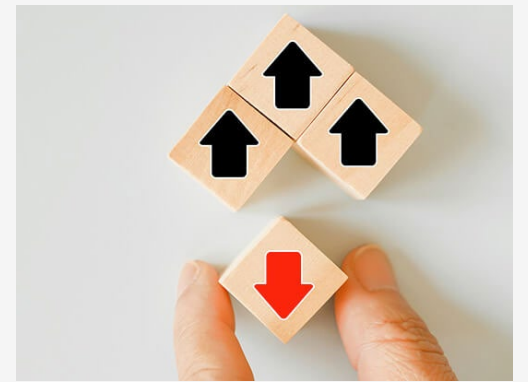
- **R3** Clearly define included perspectives. A rapid QES (rQES) may need to limit the number of perspectives, with a focus on those most important for decision-making
- **R4** Define if ‘indirect evidence’ is to be used in the absence of direct evidence. An rQES may focus on direct evidence, except when only indirect evidence is available

- SPICE or PerSPECTiF will prompt to identify the relevant perspectives
- But you may have to limit to Primary Perspectives (e.g. Patients; Public) for your specific question
- “Covid” (**Direct**) rQES included SARS, Middle East respiratory syndrome (MERS), tuberculosis (TB), influenza-like illness/respiratory infections (*Indirect*)
- Infant feeding for Zika virus (**Direct**) included other conditions with swallowing difficulties e.g. Cerebral Palsy (*Indirect*)

Recommendations for rQES

Setting eligibility criteria #2

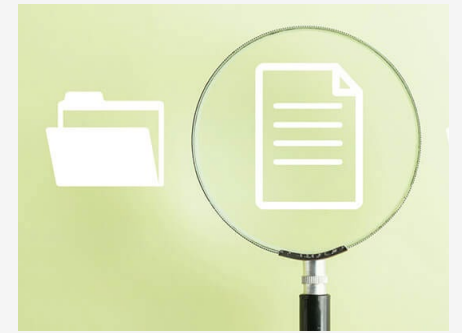
- **R5 Consider privileging rich qualitative studies; consider a stepwise approach to inclusion of qualitative data and explore the possibility of sampling**
- **R6 Consider including multiple QES within a mega-synthesis**



- Two ‘burning’ issues from *Cochrane and Campbell Handbook of QES: Sampling and Richness*.
 - Manuscript under submission by Ames et al on richness scale.
 - Qualitative research → Qualitative data → Data from Surveys
-
- Manuscript under submission by Booth et al on Overviews of QES (Mega-syntheses)
 - Also chapter in *Cochrane/Campbell Handbook of QES*

Recommendations for rQES

Searching #1



- **R7** Involve an information specialist (eg, librarian) in prioritising sources and search methods
- **R8** Consider limiting database searching to two or three multidisciplinary databases and, if resources allow, searches of one or two specialised (subject or regional) databases
- **Minimum** – Peer Review of Strategy; Advice on Strategy and Sources
- **Preferred** – Conducting the Searches and Documentation
- A **very good Scopus search** plus judicious databases
- Scopus includes records from the MEDLINE and EMBASE databases, among other included sources. Scopus has more than double number of records in PubMed (54M+ records in Scopus compared to PubMed's 24M+ records).
- **But, as a federated search engine, Scopus loses PubMed functionality!**

Recommendations for rQES

Searching #2

- **R9 Even when resources are limited, consider factoring in time for peer review of at least one search strategy**
 - **R10 Selectively target appropriate types of grey literature and supplemental searches, including citation chaining, especially for diffuse topics**
- **PRESS Peer Review of Electronic Search Strategies: 2015 Guideline Explanation and Elaboration (PRESS E&E)**
https://www.cadth.ca/sites/default/files/pdf/CP0015_PRESS_Update_Report_2016.pdf
 - **Grey Matters (CADTH HTA agency)**
<https://greymatters.cadth.ca/>
 - **Citation Chaser**
<https://www.eshackathon.org/software/citationchaser.html>



Recommendations for rQES

Study selection: Title and abstract screening/ full-text screening



- **R11 Use pre-prepared, pretested templates to limit the scale of piloting, calibration and testing**
- **R12 Target and prioritise identified risks of either over-zealous inclusion or over-exclusion specific to each rQES**
- **R13 Focus quality control procedures on specific threats (e.g., use additional reviewers and report percentages for double screening)**

Both	Journal Art M. Y. Hami	2018 Hospital-to-Home Interventions, Use, and Satisfaction: Pediatrics	CONTEXT: Hospital-to-home transitions are critical opportunities to promote patient safety and high-	Exclude - N Yes Health Focus	Measures	Exclude	Pediatrics
Both	Journal Art G. Hesselin	2019 Effectiveness of interventions to alleviate emergency d BMC Emerg Med	BACKGROUND: The growing demand for elderly care often exceeds the ability of emergency departm	Yes Urgent Yes Health Can't Tell	Yes - Other Full Text	Include	Frail Elderly
Both	Book Sects J. M. Hugh	2018 Emergency Department Interventions for Older Adults: Emergency Departm	Older adults, particularly those 75 years of age and older, visit the emergency department (ED) with n	Yes Urgent Interventic Focus	Measures	Full Text	Acute Frail
Both	Journal Art L. Jehlo; f	2022 Transitional care interventions to reduce emergency de Beltung Nurs J	BACKGROUND: Preventable illnesses cause many emergency department visits in older adults, which c	Yes Urgent Interventic Focus	Measures	Include	Background
Both	Journal Art P. G. Jones	2021 Review article: Emergency department crowding meas Emerg Med Australas	ED crowding has been reported to reduce the quality of care. There are many proposed crowding met	Urgent anc Interventic Focus	Measures	Exclude	Turkey
Both	Journal Art A. E. Kayci	2021 Pandemic hospitals and reorganizing emergency depart Turk J Med Sci	Emergency departments have always been the first point of contact for hospitals in many situations, i	Urgent anc Interventic Focus	Measures	Exclude	Ethiopia
Both	Journal Art M. Keyfali	2023 Reducing the length of stay of cardiac patients in the Ai Int Emerg Nurs	BACKGROUND: Crowding is now a familiar challenge in the Emergency Department that can lead to si	Urgent anc Interventic Focus	Measures	Exclude	Primary study
Both	Book M. V. D. Li	2023 Effects of process changes on emergency department i International Journal	... were introduced at the emergency department (ED) to decrease crowding, such as the ... time crow	Urgent anc Interventic Focus	Measures	Exclude	Follow up intervention
Both	Book M. V. D. Li	2019 The impact of a multimodal intervention on emergency International Journal	... The objective of this study is to assess the impact of a multimodal intervention on emergency depar	Urgent anc Interventic Focus	Measures	Exclude	Duplicate
Both	Book J. Liu	2020 Redesigning an Emergency Department for Interprofessional Teamwork: A L	... Numerous ED crowding measures have been suggested, without a gold standard. A systematic revie	Urgent anc Interventic Focus	Measures	Exclude	Acute Elderly
Both	Journal Art B. Lowie; C	2023 Overcoming Stagnant Flow-A Scoping Review of Vertic Academic in the emergency department (ED) is a growing challenge and ED crowding is associated with ... A sy	Urgent anc Interventic Focus	Measures	Exclude	
Both	Journal Art M. Malik; z	2018 The impact of geriatric focused nurse assessment and i Int Emerg Nurs	BACKGROUND: Nursing assessment of elderly patients is imperative in Emergency Departments (ED) v	Yes Urgent Yes Health Can't Tell	Yes - ED W Full Text	Include	

- Guidance typically targets *random* 20% for overlap
- Test set should be completed *early* to benefit from shared reviewer learning
- Are threats from false positives (inclusions)? Or false negatives (exclusions)? Or Both?
- 20% of inclusions?; 20% of exclusions? 20% of blinded random sample?

Recommendations for rQES

Data extraction

- **R14 Use a single reviewer to extract data using a piloted template, with a second reviewer for checking, or code data directly from full-text articles, again with checking.**
- Limit data extraction to minimal essential items. Consider re-using data extracted from primary studies included in previous QESs
- **See:** Houghton C, Murphy K, Meehan B, Thomas J, Brooker D, Casey D. From screening to synthesis: using NVivo to enhance transparency in qualitative evidence synthesis. *Journal of Clinical Nursing*. 2017 Feb 26;26(5–6):873–81. Available from: <http://dx.doi.org/10.1111/jocn.13443>

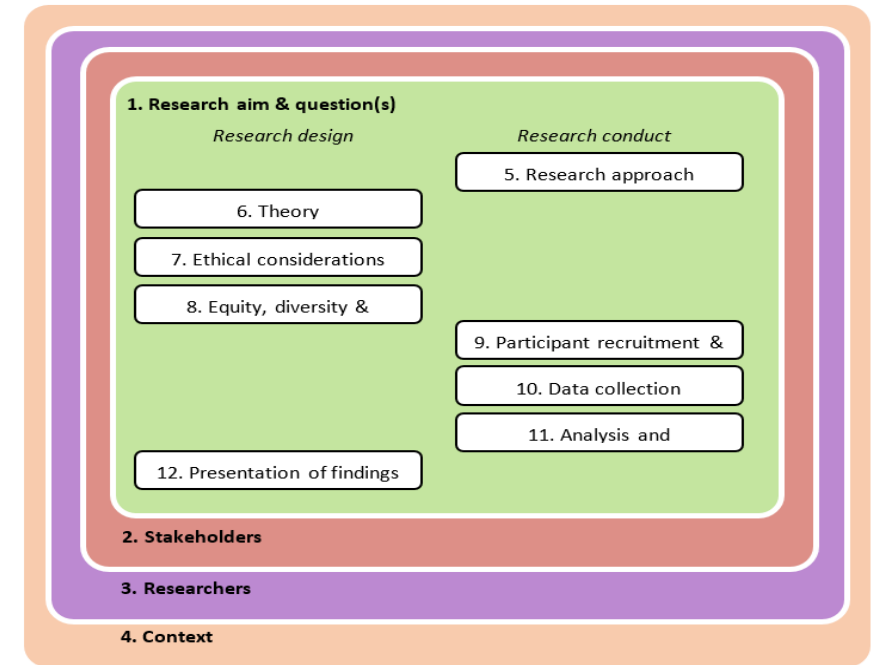


Recommendations for rQES

Assessment of methodological limitations

- **R15** In the absence of validated risk of bias tools for qualitative studies, choose a tool according to CQIMG guidance together with expediency
- **R16** Use a single reviewer to assess methodological limitations, with verification of judgements (and support statements) by a second reviewer

Figure 1. Overview of CAMELOT



- **See:** forthcoming **CAMELOT** paper from Munthe-Kaas et al
- **See:** Chapter 7 – Assessing Methodological Strengths and Limitations - of forthcoming *Cochrane-Campbell Handbook of QES*

Recommendations for rQES

Synthesis

- **R17 Favour descriptive thematic synthesis or framework synthesis, except when theory generation (meta-ethnography or analytical thematic synthesis) is a priority**
 - **R18 Consider whether a conceptual model, theory or framework offers a rapid way to organise/code/interpret/present findings**
- “The RETREAT framework considers **thematic synthesis to be appropriate for relatively rapid approaches** which can be sustained by researchers with primary qualitative experience, unlike approaches such as meta-ethnography in which a researcher with specific familiarity with the method is needed...” (Crooks et al, 2023)
 - “Newer reports suggest a widening applicability for **framework synthesis in conducting rapid reviews** (Langlois et al, 2019)...particularly noting the value of framework synthesis when considering complex interventions” (Brunton et al, 2020).
 - **Watch:** *Who Framed Qualitative Synthesis?: Thematic versus Framework approaches and how to choose.* (May 27, 2021)
<https://evidencesynthesisireland.ie/webinar/upcoming-webinar-who-framed-qualitative-synthesis-thematic-versus-framework-approaches-and-how-to-choose-2/>
 - **Read:** Shaw L, Nunns M, Briscoe S, Anderson R, Thompson Coon J. A “Rapid Best-Fit” model for framework synthesis: Using research objectives to structure analysis within a rapid review of qualitative evidence. *Research Synthesis Methods.* 2020 Oct 20;12(3):368–83. Available from: <http://dx.doi.org/10.1002/jrsm.1462>

What types of QES are there?

We identified seven considerations determining choice of methods from the methodological literature, encapsulated within the mnemonic:

Review question–**E**pistemology–**T**ime/Timescale–**R**esources–**E**xpertise–
Audience and purpose–**T**ype of data (**RETREAT**)

We mapped **15 different published QES methods** against these seven criteria. The final framework focuses on stand-alone QES methods but may also hold potential when integrating quantitative and qualitative data.

(Booth et al, *J Clin Epidemiol*, July 2018)

35 qualitative synthesis methods!

Table 1. Qualitative Synthesis Methods (listed alphabetically)

Qualitative synthesis label	Short description
Aggregated analysis	Compares and aggregates themes to generate new/emerging theories e.g., Estabrooks et al. (1994)
Content analysis	Condensing and categorizing text to determine category frequency e.g., Evans and Fitzgerald (2002)
Critical interpretive synthesis	Similar to meta-ethnography, but with more focus on critical analysis and theory generation, e.g., Dixon-Woods et al. (2006a)
Ecological triangulation	Uses multiple data sources, methods, researchers, and theoretical approaches to determine the relationship between behavior, person and environment, e.g., Bazzano (2003)
Framework synthesis	Large amounts of text are managed via an a priori framework that allows data indexing e.g., Bruntton et al. (2006), Oliver et al. (2008)
Grounded formal theory	Theoretical sampling/comparative analysis interplay between theory and data, e.g., Knaeuper, (2001), Eaves (2001), (Finfgeld, 1999)
Interpretive phenomenological analysis	Double hermeneutic approach to synthesis of multiple primary sources, e.g., Smith et al. (1997)
Interpretive meta-synthesis	Hermeneutic/dialectic phases to generate a new interpretive explanation of a phenomenon, e.g., Jensen and Allen (1996)
Literature review	An evaluative, exploratory literature synthesis of primary sources, e.g., Levy and Ellis (2006)
Meta-aggregation	Interpretive/aggregative methodology grounded in pragmatism and transcendental phenomenology to aid practitioners and policy makers, e.g., Pearson (2004)
Meta-data analysis	Component of Meta-study that studies the underlying assumptions of data-analytic procedures and compares different data forms, prior to synthesis of primary data related to the same phenomenon, e.g., Zhao (1991), Paterson et al. (2001), Dennis et al. (2008)
Meta-ethnography	Interpretations of data are translated across multiple studies into one another e.g., Noblit and Hare (1988)
Metafamily	A continuum along which six qualitative synthesis methodologies are ordered from most interpretive to most theorizing, e.g., Kearney (2001)
Meta-interpretation	Involves concurrent thematic and content analysis of primary studies employing components of meta-ethnography and grounded (formal) theory, e.g., Wood (2005)
Metamethod	Component of meta-study that considers the primary methodological approaches used to gather interpret data to shape the findings emerging from primary studies, e.g., Zhao (1991), Paterson et al. (2001)
Metanarrative	Embraces primary papers from different research paradigms to provide the fullest perspective on knowledge generation, e.g., Oronthalgh et al. (2005)
Meta-study	Uses meta-data analysis, metamethod, and metatheory before synthesizing ideas deconstructed therein, e.g., Paterson et al. (2001)
Meta-summary	A positivist form of qualitative systematic review that creates thematic summaries of primary research data, e.g., Sandelowski and Barroso (2007)
Meta-synthesis	Multiple definitions (see Appendix A)—e.g., Sandelowski and Barroso (2007), Walsh and Downe (2005)
Metatheory	A component part of meta-study that explores the direction theoretical frameworks give to primary research before synthesis, e.g., Zhao (1991), Lewis & Orimes, (1999), Paterson et al. (2001), Bostron et al. (2009).
Metatriangulation	A synthesis approach that emphasizes the relationships between primary study data and the inferences drawn from data premised on the influence of selected paradigms, e.g., Lewis and Orimes (1999), Saunders et al. (2005)
Narrative summary	Produces a general description/overview and summarizes the major themes, of primary study findings and relevant issues, e.g., Evans and Kowanko (2000), Sientel (2000)

Narrative synthesis	Aims to arrange primary studies into homogenous groups, thereby making transparent any heterogeneity between them, e.g., Barnett-Page and Thomas (2009), Popay et al. (2007)
Qualitative comparative analysis	Boolean analysis of conditions in which particular outcomes can be observed based on the presence or absence of independent variables and outcomes in primary studies, e.g., Rantala and Hellström (2001)
Qualitative cross-case analysis	Provides multiple strategies for conducting cross-case analyses, including data partitioning/clustering, content analysis, and case-ordered displays, e.g., Mays et al. (2005)
Qualitative meta-analysis	Multiple definitions (see Appendix A)—e.g., Schreiber et al. (1997), Saunders et al. (2003), Berente et al. (2019)
Qualitative meta-data analysis	Multiple definitions (see Appendix A)—e.g., Sandelowski and Barroso (2003a)
Qualitative meta-synthesis	Multiple definitions (see Appendix A)—e.g., Sandelowski et al. (1997)
Qualitative research integration	Combines primary qualitative research findings with the aim of systematically and judiciously appraising differences, e.g., Thorne et al. (2004)
Realist synthesis	Starting with a theory that underlies a particular program, this approach seeks evidence across multiple forms, then integrates them by using them as forms of proof or refutation of theory e.g., Rycroft-Malone et al. (2012)
Secondary analysis of primary data	Analysis and synthesis of existing qualitative primary data to review the literature, answer the original research question(s) using different methods or answer new questions using "old" data, e.g., Hoxton (2008)
Systematic review	Multiple definitions (see Appendix A)—e.g., Denyer and Tranfield (2006)
Textual narrative synthesis	The systematic review and synthesis of findings from multiple studies. Relies on words and text to summarize/explain the findings of the synthesis, e.g., Lucas et al. (2007)
Thematic analysis	Involves systematic identification of significant/recurring/common themes in primary research prior to summarization under thematic headings—e.g., Garcia et al. (2002), Dixon-Woods et al. (2006b)
Thematic synthesis	Develops analytical themes via a descriptive synthesis to identify those explanations relevant to a particular review question, e.g., Thomas and Harden (2008)

A second criticism argues that synthesists are restricted to what is already available in the literature and that about the primary research site and setting (Savin-Baden & Major, 2007). Moreover, if the primary

Skinner, R. J., Nelson, R. R., & Chin, W. (2022). Synthesizing Qualitative Evidence: A Roadmap for Information Systems Research. *Journal of the Association for Information Systems*, 23(3), 639-677.

to leverage contextual information, including research goals, topics, and designs from primary research, thereby incorporating adequate contextual information

appropriate method (or methods) to be chosen that matches the research team's epistemological position. Moreover, by relying on heterogeneous methods for

Cochrane

Navigating the Maze!

- Cochrane has settled for **three** main types of synthesis (thematic synthesis, framework synthesis, meta-ethnography)
[Campbell has settled for **four** main types of synthesis (meta-aggregation, thematic synthesis, framework synthesis, meta-ethnography)]
- These types largely represent **equivalent primary research methods**

QES Synthesis Methods Resources

Qualitative Evidence Synthesis

<https://training.cochrane.org/learning-events/learning-live/methods/qualitative-evidence-synthesis> includes:

- **Meta-ethnography** [March 2022] [*QES webinar series*](#). Kate Flemming, University of York, UK. [[click here](#)]
- **Thematic Synthesis** [February 2022] [*QES webinar series*](#). Angela Harden, City University London and James Thomas, UCL Institute of Education, London, UK. [[click here](#)]
- **Making Sense of Framework and Best Fit Framework Synthesis** [January 2022] [*QES webinar series*](#). Professor Andrew Booth, SCHARR, University of Sheffield, UK. [[click here](#)]

Cochrane-Campbell
Handbook for Qualitative
Evidence Synthesis

Version 1.0, 2023



The *Cochrane-Campbell Handbook for Qualitative Evidence Synthesis* is the official guide that describes in detail the process of preparing and maintaining systematic reviews of qualitative evidence for Cochrane and Campbell reviews. The *Handbook* has been produced by the Cochrane Qualitative and Implementation Methods Group and members of the Campbell Qualitative Evidence Synthesis working group. It is a step-by-step guide for those conducting systematic reviews of qualitative evidence and a reference for more experienced authors.

The *Handbook* is applicable to all systematic reviews of qualitative evidence, though it is specifically relevant to Cochrane and Campbell Reviews. Part 1 covers the core methods used in Cochrane systematic reviews of qualitative evidence. Part 2 introduces a collection of chapters detailing other relevant methods to consider for the systematic review of qualitative evidence. These methods have not yet been fully tested as core methods for Cochrane Reviews. The chapters in Part 2 cover methods that are either a) established within the wider systematic review community but have not yet been fully utilised in Cochrane or Campbell Reviews or b) relatively novel but with a significant body of published methodological work behind them. Part 3 covers how to report a systematic review of qualitative evidence and provides guidance on how to peer review a qualitative evidence synthesis.

Chapters are available below for personal use via a Cochrane Account (don't have an account? Set one up for free [here](#)).

Part 1: Core methods

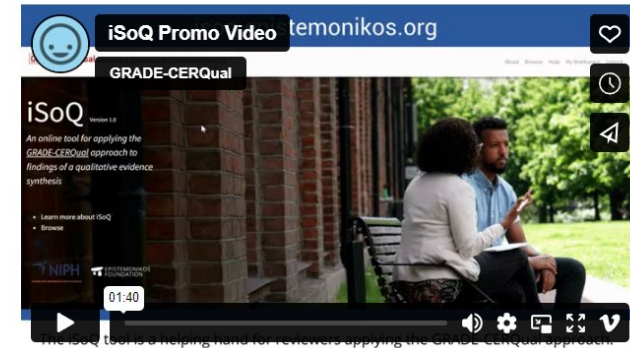
1. Starting a qualitative evidence synthesis
2. Defining the review scope and formulating review questions
3. **Selecting and using theory**
4. **Developing and using logic models**
5. **Searching for and identifying studies**
6. Selecting studies and sampling
7. Assessing study methodological strengths and limitations
8. Selecting a method of synthesis and data extraction
9. **Conducting a framework synthesis**
10. Conducting a thematic synthesis
11. **Conducting a meta-ethnography**

Recommendations for rQES

Synthesis

- **R19 Target GRADE-CERQual assessments at findings most critical to decision-making.**
- Additional reviewers could verify all, or a sample of, assessments.
- Consider reusing GRADE-CERQual assessments (*from previous QESs*) if findings are relevant and of demonstrable high quality

iSoQ - our free tool



The [interactive Summary of Qualitative Findings \(iSoQ\) tool](#) is a free online platform designed to:

- > Assist review authors with applying the GRADE-CERQual approach to the findings of a qualitative evidence synthesis (systematic review of qualitative studies) and presenting these in a Summary of Qualitative Findings (SoQF) and Evidence Profile tables.
- > Assist review authors with managing and archiving data for GRADE-CERQual assessments.
- > Make GRADE-CERQual assessments more accessible to end users, including decision makers and those who support them.

- **Use:** iSoQ tool to systematise GRADE-CERQual Assessments
- **See:** Chapter 13 - Assessing confidence in the evidence using the GRADE-CERQual approach – in Cochrane-Campbell Handbook for QES.



Recommendations for rQES:

Additional considerations

- **R20 Use review management software or qualitative analysis management software to streamline the process**

- “We strongly encourage the use of supportive software throughout RR production. Specifically, we recommend (1) using collaborative online platforms that enable working in parallel, allow for real-time project management and centralise review details; (2) using automation software to support, but not entirely replace a human reviewer and human judgement and (3) being transparent in reporting the methodology and potential risk for bias due to the use of supportive software”. (Affengrueber et al, 2024)

- **See:** Houghton C, Murphy K, Meehan B, Thomas J, Brooker D, Casey D. From screening to synthesis: using NVivo to enhance transparency in qualitative evidence synthesis. *Journal of Clinical Nursing*. 2017 Feb 26;26(5–6):873–81. Available from: <http://dx.doi.org/10.1111/jocn.13443>
- **See Also:** Affengrueber L, Nussbaumer-Streit B, Hamel C, Van der Maten M, Thomas J, Mavergames C, et al. Rapid review methods series: Guidance on the use of supportive software. *BMJ Evidence-Based Medicine*. 2024 Jan 19;bmjebm-2023-112530. Available from: <http://dx.doi.org/10.1136/bmjebm-2023-112530>

What an rQES is not!

- A qualitative evidence synthesis done **badly!**

OR

- Or a qualitative evidence synthesis done **cheaply!**



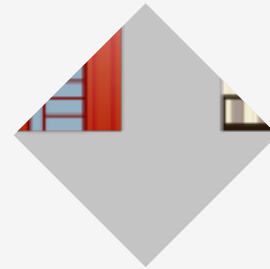
What needs to be in place?

- Experienced review team (Hartling et al. 2017, Biesty et al. 2021)
- Ongoing communication and engagement between user and producer (Hartling et al. 2017, Moons et al. 2021 , King et al. 2022)
- Well described methods including deviations from conventional evidence syntheses (Moons et al. 2021)
- Core team –frequent and often online communication. Humour, support and good will (Biesty et al. 2020)
- Co-ordination of methods so discussions happen in real time: “Throwing everything at it” (Biesty et al. 2020)



Take Home Messages

Trusted evidence.
Informed decisions.
Better health.

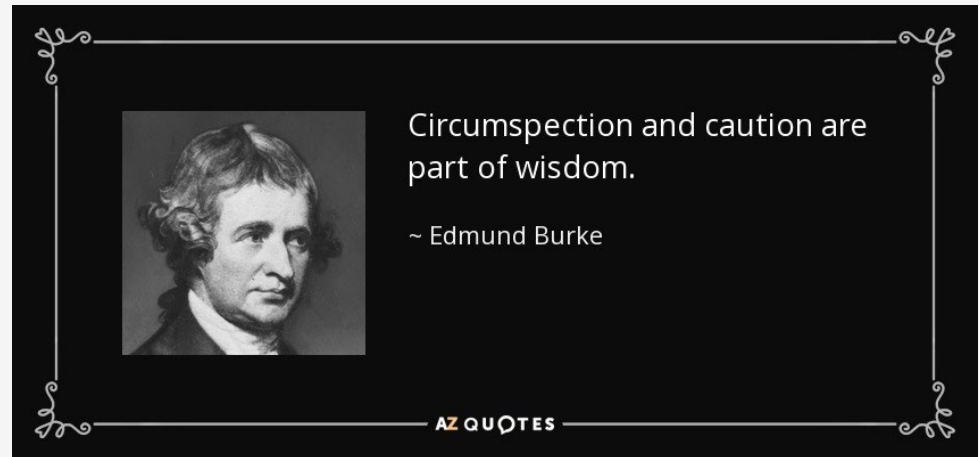


Take home messages

- Balance between **rigour and speed** - Integrity is key
- **Constant communication** within review team but also **evidence users**
- A **well-targeted study identification strategy** facilitates subsequent synthesis and analysis
- **Choice of synthesis methods** is a critical decision
- **Sampling** (purposively and judiciously) offers additional flexibility
- Tailoring may require **extending** to indirect evidence (not always pruning down the review!)

The Last Word!

- An rQES should **describe limitations and their implications** for confidence in the evidence **even more thoroughly than a regular QES**; detailing the consequences of fast-tracking, streamlining or of omitting processes all together.
- Time spent **documenting reflexivity is similarly important.**
- If QES methodology is to remain credible, rapid approaches must be **applied with insight and documented with circumspection.**



And Don't Forget!

- **Cochrane Interactive Learning Module 12: Introduction to qualitative evidence synthesis**
- **Written and compiled by:**
Andrew Booth, Professor in Evidence Synthesis in the Sheffield Centre for Health and Related Research (SCHARR) at the University of Sheffield UK and adjunct Professor at the University of Limerick, Eire.
Jane Noyes, Professor in Health and Social Services Research and Child Health, Bangor University, UK.
Dario Sambunjak and Ruth Turley, Cochrane Central Executive Team.
- **Citation:** Booth A, Noyes J, Turley R, Sambunjak D. Module 12: Introduction to qualitative evidence synthesis. In: Cochrane Interactive Learning: Conducting an intervention review. Cochrane, 2024. Available from <https://training.cochrane.org/interactivelearning/module-12-introduction-qualitative-evidence-synthesis> .

The screenshot shows the top navigation bar with the Cochrane logo and 'Cochrane Interactive Learning' text. A search bar is on the right. Below the navigation bar, the page title is 'Cochrane Interactive Learning' and the subtitle is 'Module 12: Introduction to qualitative evidence synthesis'. A blue button labeled '< Back to Interactive Learning' is visible. The main content area includes a purple bar with 'Continue module' and a clock icon indicating '90-120 minutes'. Under the heading 'What you can expect to learn (learning outcomes)', it states 'This module will teach you to:' followed by a bulleted list of five learning outcomes. The 'Authors, contributors, and how to cite this module' section lists Andrew Booth, Jane Noyes, and Dario Sambunjak and Ruth Turley. A full list of acknowledgements is mentioned at the end of the module page. The page also includes a 'Staying up to date' section stating the module was last updated on February 2024, and a footer note: 'We're pleased to hear your thoughts. If you have any questions, comments or feedback about the content of this module, please contact us.'

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