



Rapid Review Guidance Document

Adapted from Hartling L, Guise JM, et al. Fit for purpose: perspectives on rapid reviews from end-user interviews (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5316162/>)⁴, Hartling L, Guise JM, et al. EPC Methods: An Exploration of Methods and Context for the Production of Rapid Reviews (<https://www.ncbi.nlm.nih.gov/books/NBK274092/>)³, Hartling L, Guise JM, et al. EPC Methods: AHRQ End-User Perspectives of Rapid Review (<https://www.ncbi.nlm.nih.gov/books/NBK362006/>)² and Rapid Reviews to Strengthen Health Policy and Systems: A Practical Guide – Chapter 2 (<http://www.who.int/alliance-hpsr/resources/publications/rapid-review-guide/en/>)⁵

Context of a Rapid Review

Background and description of rapid reviews

- “Rapid reviews ‘are literature reviews that use methods to accelerate or streamline traditional [systematic review] processes’ in order to meet the needs and timelines of the end-users (e.g., ‘government policymakers, health care institutions, health professionals, and patient associations’).” They may require engaging more often with the nominator/end-user to assure the review meets their needs compared to a traditional systematic review.
- Systematic reviews are comprehensive, often use substantial resources, and may take up to one to two years to complete. In contrast, rapid reviews shorten the process while maintaining methodological rigor and transparency. Decisions made about the methods should include clear rationales for any limits placed on the literature search, study selection and abstraction, risk of bias assessments, and decisions about synthesizing results. Rapid review reports may take up to six months to complete.^{2,3}

When to consider a rapid review versus other types of evidence reviews

- Decision: What is the nature of the decision or end-users’ need? Consider if one or more apply:
 - Single health system or most health systems
 - Short timeframe/timing of the decision (i.e., several weeks to six months)
 - Purchasing, coverage, implementation, de-implementation decisions
 - Decisions around which option to pursue
 - For guideline development, guideline updates, policy decisions
- Product: Is a rapid review the right fit for the end-users’ decision or need?
 - Certainty or high degree of confidence is not required, particularly when the evidence base is large or the key questions are broad
 - No or limited synthesis needed to inform the decision

- Interim product is acceptable (e.g., important RCTs in process, but the need is urgent)
 - Constraints of rapid review methods (e.g., limited search, one reviewer assessing risk of bias) will provide sufficient information and be credible for the end-user
- Trade-offs between benefits and harms are not known to be significant
- Costs and resources needed to implement are not substantial or there are compelling forces to implement an intervention with very little evidence
- Little clinical or public controversy
- Evidence base, scope and topic: Is a rapid review the right fit for the available evidence base?
 - Amount of evidence is small
 - Amount of evidence is large or broad, but the end-user does not require a high degree of certainty or detail
 - Recent systematic review(s) is/are available
 - Narrow well-defined scope (e.g., limited population, one device, new drug)
 - Limited years of interest
 - Other rapid evidence products besides a rapid review may be appropriate; discussion with the end-user and their needs will ultimately decide which product is appropriate

Rapid Review Process and Methods

Rapid review methods draw from and streamline systematic review methods to assure quality and transparency within the context of the methodologic decisions made for a specific review⁶. Flexibility is necessary in making decisions about the methods used so the review responds to the end-users' needs and timeframe while maintaining methodological quality. Transparent reporting of the methods used and limitations of the evidence synthesis is extremely important. The focus and conceptualization of the topic with input from the end-user is key and may require several iterations of the key questions (KQ), scope of the review (including populations, interventions, comparators, outcomes, timeframe and settings [PICOTS]), and eligibility criteria for inclusion of studies.

The decisions that need to be made, and the tradeoffs, will likely differ for each review, based on factors such as the number of publications identified in the scoping searches and degree of topic refinement, hence the need for flexibility. These decisions include limitations to the original scope, search, inclusion criteria, PICOTS, study designs, use of dual screening and review, risk of bias assessment (or method used), and synthesis and assessment of the strength of evidence. It is critical that the Methods section for each review explicitly describe these decisions and their rationale.

Topic development: Topic nomination and selection

- End-user submits nomination (describing scope, need, and timeframe)
- Nomination is appropriate and of high value for an AHRQ evidence review
- Topic scoping and topic development brief

- Considerations for SR vs. rapid review applied, decision made to do a rapid review
 - Discuss the narrowed scope to meet timeframe with nominator (e.g., limit the number of questions, interventions and outcomes)
 - Confirm that rapid review will meet nominator's decisional need
- [Pre-award contracting process TBD]

Establishing KQ and PICOTS

- Key questions (KQ) and PICOTS are fully developed in conjunction with the end-user and, if needed, one or more subject matter experts, to focus the scope of the review
 - Finalize a limited number of KQ and PICOTS
 - Brief abstract (3-5 sentences) posted on EHC website to notify the public

Literature search

- Streamline systematic review methods by limiting the scope of the search
- Describe decisions made to target searches and rationale for these decisions
- Document the full search strategy for at least one electronic database
- Limits appropriate for all rapid reviews
 - Start with search for systematic reviews
 - English-language publications only
 - Full study published (exclude meeting abstracts)
 - Consider grey literatures search (e.g., need information about implementation, no studies were identified in published literature searches)
- Additional limitations based on topic and end-user needs
 - Databases, search dates
 - Study design

Screening and study selection

- Experienced systematic reviewers should conduct study selection to assure methodological rigor
- Abstracts
 - Single reviewer screens all abstracts
 - Limits applied where possible (e.g., study design, sample size)
 - Second reviewer may be used to verify a sample (e.g., 25%) of excluded articles to assure that everything that should be included is included – to maximize sensitivity
- Full text
 - Single reviewer screens all articles
 - Limits applied (e.g., country, PICOTS, sample size)
 - Second reviewer may be used to verify a sample (e.g., 25%) of included articles to assure that included articles are appropriate for inclusion – to maximize specificity
- Consider abstract screening software with predictive algorithms (e.g., Abstrackr with prediction threshold of 0.40), especially if using a single human reviewer

- Complete PRISMA flow diagram to document article search and selection process

Data extraction

- Single reviewer data extraction, consider verification of a 25% sample by second reviewer
- Data extraction often limited by scope of the review and may not include all elements of PICOTS

Risk-of-bias (RoB) assessment

- Perform risk-of-bias assessment if few included studies and/or important to the KQs
 - Single assessor only or a second assessor verifies a 25% sample of study assessments
 - Use a study design-specific risk-of-bias assessment tool
- Consider only identifying serious RoB and including these in the evidence table
- Consider no assessment of risk of bias (beyond study design and appropriateness of analyses)
- Accept the summary assessment of risk of bias done by authors of existing systematic reviews

Grade Strength of Evidence (SoE) assessment

- Consider grading SOE to rate certainty of synthesized evidence, when feasible
 - SOE grading works best for interventions subjected to RCTs where there is at least one meta-analysis with a single estimate of effect
 - SOE grading is time intensive unless the number of outcomes is limited (maximum of 2)
 - Consider only identifying serious RoB and concerns about applicability versus full SoE assessment

Synthesis and Discussion

- Conduct narrative knowledge synthesis¹
 - May be limited to basic descriptive summary of the studies
 - Do not “vote count” (tallying up the number of studies with results that do and do not support the intervention)
 - Consider meta-analysis based on end-user’s need and included studies
 - Report results of included studies and discuss reasons for differences among studies (e.g., heterogeneity of PICOTS elements, study design, risk of bias)
- Clearly describe potential limitations arising from methodological choices
- State limitations or caution with the conclusions based on limitations of the methods used and included literature
- Present conclusions, guidance, or implications as a component of the synthesis
 - Tailor the discussion to respond to the needs of the end-user
 - Tailor the “implications for clinical and policy decision-making” section of the discussion to respond to the needs of the end-user

Draft Report production

- Use the AHRQ EPC report template.
- Conduct peer review (2-3 reviewers), no public review, no updating search prior to final report
 - Internal review, may include feedback from requester
 - One or two external peer reviewers (i.e., subject matter or methodology experts)
 - Two weeks for external review
 - One to two weeks to respond to reviewers' comments
- Concurrent AHRQ and associate editor review
- Identify potential journals for submission for publications, if appropriate
- Consider sending to end-user with option for Q&A with review team at this stage or at final report stage

Final Report

- Send to end-user with option for Q&A with review team
- EHC website posting, option for public comments without formal response
- Consider uploading evidence tables to Systematic Review Data Repository (SRDR), if appropriate

Dissemination

- Post on EHC website
- Disseminate reports beyond the requester
 - Common for reports to be posted online (e.g., organizational website)
- Presentation at conferences and publication in journals, if appropriate

Tentative Timeline

Task/Deliverable	Recipient	Time for Activity	Example Due Dates
<ul style="list-style-type: none"> Pre-review process 	TBD	TBD	1/1/2018
<ul style="list-style-type: none"> Staffing plan Project management file/schedule of deliverables COI Disclosure forms Confidentiality forms Mitigation plan (if needed) 	Secure Site Notify TOO	1 week	1/8/2018
<ul style="list-style-type: none"> Kickoff Call with end-user Kickoff Call summary 	Call participants	3 weeks	1/29/2018
<ul style="list-style-type: none"> Draft Rapid Review 	Secure Site Notify TOO	Up to 4 months	5/28/2018
<ul style="list-style-type: none"> Peer review Identify and contact potential journals for publication Determine if, and when, end-user would like a Q&A call with review team 	Secure Site Notify TOO	2 weeks	6/11/2018
<ul style="list-style-type: none"> Address peer review comments 	Secure Site Notify TOO	2 weeks	6/25/2018
<ul style="list-style-type: none"> Final Rapid Review sent to end-user and posted on EHC site Optional call between end-user and review group 	Secure Site Notify TOO	2 weeks	7/9/2018
<ul style="list-style-type: none"> Public comments an option No formal response <ul style="list-style-type: none"> If substantive, may want to address and notify end-user 			

References

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4. Hartling L, Guise J-M, Hempel S, et al. Fit for purpose: perspectives on rapid reviews from end-user interviews. *Systematic Reviews*. 2017;6:32. doi: 10.1186/s13643-017-0425-7. PMID: PMC5316162.
5. Tricco A, Langlois E, E. Straus S. Rapid reviews to strengthen health policy and systems: a practical guide. <http://www.who.int/alliance-hpsr/resources/publications/rapid-review-guide/en/>; 2017.
6. Plüddemann A, Aronson JK, Onakpoya I, et al. Redefining rapid reviews: a flexible framework for restricted systematic reviews. *BMJ Evidence-Based Medicine*. 2018. doi: 10.1136/bmjebm-2018-110990.