



Exploring incorporation of critical appraisal methods into rapid evidence reviews

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Context

- CEDAR produces evidence reviews across a range of topics and regularly evaluates the methodologies used, to improve the usefulness of outputs.
- Demand has increased for rapid evidence reviews to support timely development of guidance and recommendations.
- Where a review has short timelines, CEDAR has made pragmatic decisions around critical appraisal (CA), such as only one reviewer appraising evidence, or providing a summary of key issues using checklists as a guide.

Rapid Reviews Vs. Systematic Reviews

Rapid evidence reviews typically omit components of a full systematic review to streamline the process [4].

	Systematic Reviews	Rapid Reviews
Purpose	Identify and synthesise all relevant evidence relating to a particular topic/question.	Streamlined evidence identification and synthesis to facilitate rapid commissioning and/or clinical decision making.
Literature search	Comprehensive search of all databases and sources.	May be limited to key databases.
Appraisal process	Comprehensive appraisal of evidence including checklists and assessments of certainty.	Limited formal quality appraisal.
Synthesis and Reporting	Narrative summary of evidence supported by formal evidence synthesis where appropriate.	Narrative summary of evidence.

Objectives:

- Explore the feasibility of incorporating checklist-based CA of studies into rapid evidence review processes to inform clinical commissioning decisions.
- Improving the robustness of rapid evidence review methodology is important to patients as it means commissioning decisions are based on the best available evidence.

Methods:

- To increase the level of trust in the findings and align with best practice as suggested by the Cochrane Rapid Reviews Methods Group [1, 2], full checklist-based CA of studies was incorporated into rapid evidence review processes.
- Joanna Briggs Institute (JBI) CA checklists [3] were used to assess the quality of studies for two rapid evidence reviews produced in November 2022 and February 2023.
- CA was performed by one reviewer and verified by a second reviewer.
- Appraisal checklists were included as an appendix and a narrative summary of the CA results was included in the main text.

Conclusions:

- Including CA for studies included in a rapid evidence review is a valuable exercise to inform the reader of the quality of the evidence.
- Consequently, this can inform how trustworthy the evidence is and guide interpretation of the evidence to better inform clinical commissioning decisions.

Despite the rapid nature of the reviews, it is crucial that the information reported is **relevant** and **trustworthy** (Fig.1).

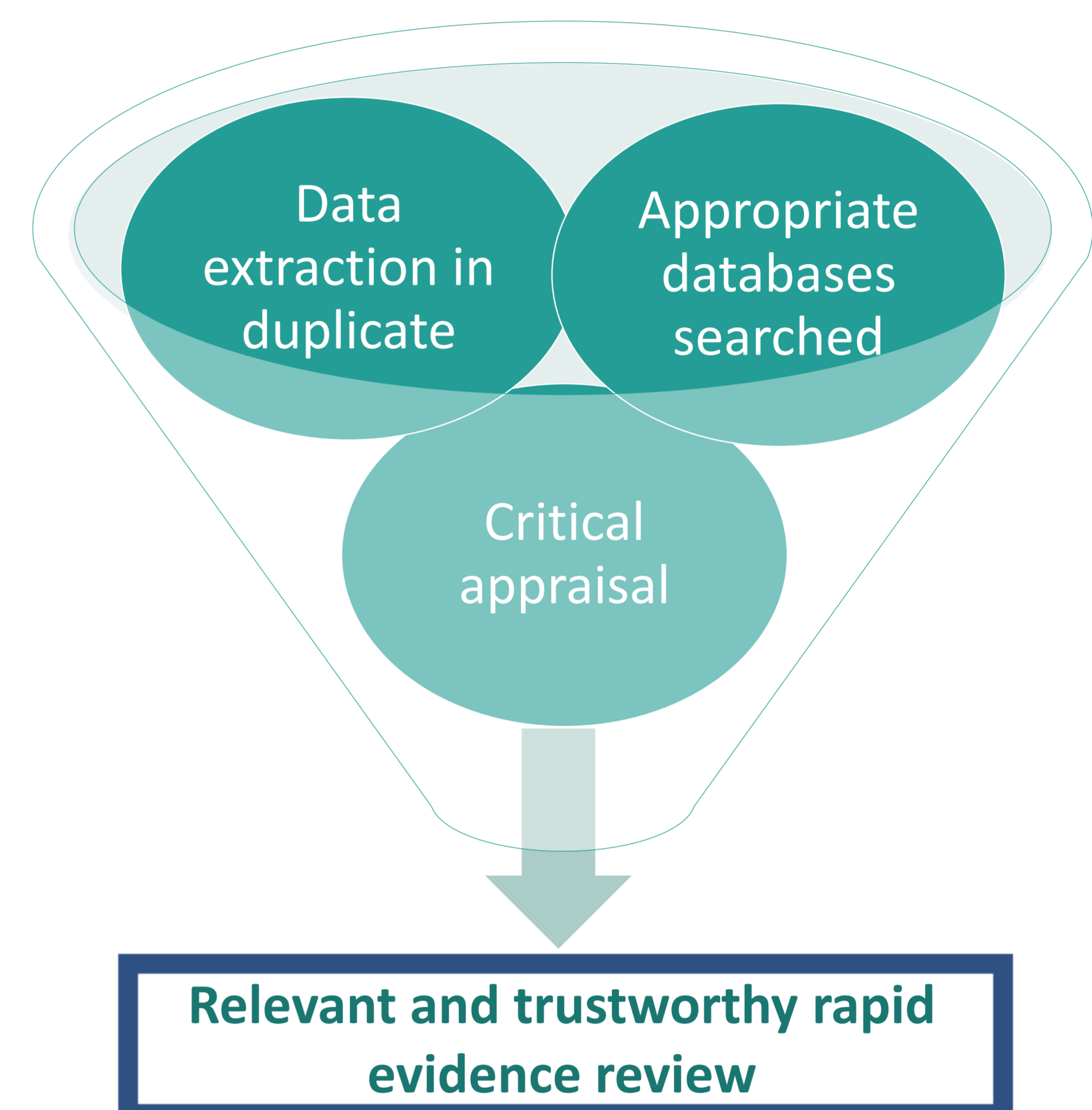


Fig. 1: Components of a relevant and trustworthy rapid evidence review.

Results:

- The inclusion of CA of all studies included in a rapid evidence review was an achievable task.
- However, it required additional resourcing and led to an increase in time to complete the review. Previous research also suggests CA is resource intensive [5].
- Specifically, time was required to perform and verify CA, consider interpretation of checklist questions, discuss discrepancies, and narratively summarise the results.

Patient, public and/or healthcare consumer involvement:

Healthcare consumers positively received inclusion of full checklist-based CA results, particularly where limited evidence existed on a topic, and considered it informative for making decisions.

References:

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3. JBI critical appraisal tools (no date) JBI. Available at: <https://jbi.global/critical-appraisal-tools> (Accessed: 08 August 2023).
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5. Nussbaumer-Streit, B., Ellen, M., Klerings, I., Sfetcu, R., Riva, N., Mahmić-Kaknjo, M., ... & Gartlehner, G. (2021). Resource use during systematic review production varies widely: A scoping review. *Journal of Clinical Epidemiology*, 139, 287-296.