



REVIEW ARTICLES

**A taxonomy of rapid reviews links report types and methods
to specific decision-making contexts**

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Require evidence in short time frames to support time-sensitive decisions

Have transparent, unbiased, reliable evidence product

Can you have your cake and eat it too?



Rapid Reviews

- If we alter our methods to make standard systematic reviews more timely...
 - which alterations are likely to increase error and bias (and should be avoided)
- Motivation for this paper: to understand the range of projects, when they are commissioned, for whom, their methods and resources, and how one can judge the impact of the choices

Methods

- Literature review
- Key informant interviews (producers)
- Developed a framework for describing rapid reviews
- Ultimately included 10 studies describing methods, 2 empiric studies evaluating rapid review methods, 19 interviews

Table 1. Dimensions of standard systematic reviews that may be altered in rapid products

Dimension	Possible alterations
Scope	Limit the type of questions (e.g., efficacy only, specific populations, new technology only, and single technology only) Limit number of questions Limit number of studies that can be included
Comprehensiveness	Limit search strategy (e.g., number of databases, gray literature, date, setting, and language) Limit study types included (e.g., existing systematic reviews only and randomized controlled trials only) Limit textual analysis (e.g., no full-text review and limit number of extraction items)
Rigor/quality control	Eliminate dual study selection Eliminate dual data extraction Limit or eliminate internal or external review of final product (e.g., peer review)
Synthesis	Limit or eliminate risk of bias/quality assessment of individual studies Limit or eliminate either quantitative or qualitative analysis Limit or eliminate strength/quality of evidence assessments (e.g., using Grading of Recommendations Assessment, Development and Evaluation [GRADE])
Conclusions	Simplify or eliminate any conclusive statements about the direction of the evidence

Examples

- Found 36 examples of rapid *products* from 20 producers
- Among these:
 - Personnel ranged from 0 to 9 (typical 1-3 or 2-4)
 - Audience was usually a health system
 - Worked directly with the nominator(see Table 2)

Methods

- Huge variation
- Most limited the scope, e.g. the comparisons, the designs, the technologies
- Varying degrees of altering the comprehensiveness of review (e.g. limiting databases, languages, gray literature)
- Varying degrees of altering the quality control methodologies or the synthesis activities

Variation in Methods

- By production time [Table 3]
- By product

Different Types of Products

- Evidence Inventory: list what is available, and contextual information; do not synthesize or draw conclusions
- Rapid Response: organize, evaluated literature, do not formally synthesize, often use existing systematic reviews
- Rapid Reviews: do synthesis, possibly grade strength of evidence, constrained scope, maybe sacrifice quality control
- Automated Approaches: uncommon, uses algorithms to generate meta-analyses using pre-extracted data

Context/Limitations

- Rapid products often are aimed at helping a specific end user make a specific decision within the user's time frame
- Risk of missing evidence
- Limited ability to appreciate nuances of the evidence
- Might be mistaken for a systematic review

Comparing SRs and Rapid Products

- Only 2
- Study from Australia looked at rapid reviews in HTA on surgical interventions; found 7 rapid products that had a corresponding systematic review that was contemporaneous; no instances in which the essential conclusions differed; authors thought that full reviews might be more appropriate for safety outcomes

Recommendations

- Research need to compared validity of rapid reviews
- Use their method of classification by extent of synthesis rather than production time
- Recognize the different context in which these are produced