Systematic reviews vs. rapid reviews: What’s the difference?

Andrea C. Tricco PhD MSc
Jesmin Antony, MSc
Sharon E. Straus, MD MSc

CADTH Rapid Review Summit
Objectives

• To discuss the difference between rapid reviews and systematic reviews

• To present results from 3 methods projects on rapid reviews

• To select a rapid review approach that will be tested in a diagnostic study
What is a Systematic Review?
Definition of Systematic Review

- Cochrane Collaboration definition:
  A systematic review uses systematic and explicit methods to identify, select, critically appraise, and extract and analyze data from relevant research [Higgins & Green 2011]
Efficacy and safety of cognitive enhancers for patients with mild cognitive impairment: a systematic review and meta-analysis

Andrea C. Tricco PhD MSc, Charlene Soobiah BSc, Shirra Berliner RN MSc, Joanne M. Ho MD, Carmen H. Ng MSc BSc, Huda M. Ashoor BSc, Maggie H. Chen PhD MSc, Brenda Hemmelgarn MD PhD, Sharon E. Straus MD MSc

CMAJ, November 5, 2013, 185(16)

Conducted for the Drug Safety and Effectiveness Network
A systematic review usually has...

- Protocol registered with PROSPERO and published in Sys Rev journal
- Comprehensive and systematic literature search (6 databases)
- Pre-defined inclusion and exclusion criteria (i.e., study eligibility criteria)
- Risk of bias appraisal (Cochrane for trials, McHarm for reporting harms)
- Pre-defined data abstraction form
- Synthesis based on the totality of evidence
- Discussion, providing limitations of included studies and review process
- Each step conducted by 2 reviewers, independently
Limitations of systematic reviews

- Systematic reviews take an average 1,139 hours (range 216 to 2,518 hours) to complete
- Usually require a budget of at least $100,000 [Petticrew, 2006]
- Very resource-intensive

**Example:** 1 year to conduct, 6 months to publish, 11 randomized trials included
What is a Rapid Review?
Definition of Rapid Review

• Formal definition does not exist

Rapid reviews are a form of knowledge synthesis in which components of the systematic review process are simplified or omitted to produce information in a timely manner [Khangura 2012]
Comparative safety and effectiveness of inhaled long-acting agents (corticosteroids, beta agonists) for chronic obstructive pulmonary disease (COPD):
A rapid review and network meta-analysis

Andrea C. Tricco, Lisa Strifler, Fatemeh Yazdi, Paul Khan,
Carmen Ng, Jesmin Antony, Kelly Mrkulas, Alistair Scott, Jennifer D'Souza, Roberta Cardoso, Sharon E. Straus.

Conducted for the Ontario Drug Policy Research Network
A rapid review usually has...

- Protocol registered with PROSPERO and published in Sys Rev journal
- Comprehensive and systematic literature search (3 databases)
- Pre-defined inclusion and exclusion criteria (i.e., study eligibility criteria)
- Risk of bias appraisal (Cochrane for trials, McHarm for reporting harms)
- Pre-defined data abstraction form
- Synthesis based on the totality of evidence
- Discussion, providing limitations of included studies and review process
- Each step conducted by 1 reviewer, independently
Limitations of rapid reviews

- Might be susceptible to bias as a consequence of streamlining the systematic review process
  - Sampling bias, choosing studies bias, obtaining accurate data bias [Tricco, 2008]
- We currently don’t know the extent of this bias

Example: 4 months to conduct and submit report, 183 randomized trials included
What are other similarities and differences between systematic reviews and rapid reviews?
Systematic reviews vs rapid reviews

Table 1 General comparison of rapid review versus systematic review approaches

<table>
<thead>
<tr>
<th></th>
<th>Rapid review</th>
<th>Systematic review</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timeframe</strong></td>
<td>≤ 5 weeks</td>
<td>6 months to 2 years</td>
</tr>
<tr>
<td><strong>Question</strong></td>
<td>Question specified <em>a priori</em> (may include broad PICOS)</td>
<td>Often a focused clinical question (focused PICOS)</td>
</tr>
<tr>
<td><strong>Sources and searches</strong></td>
<td>Sources may be limited but sources/strategies made explicit</td>
<td>Comprehensive sources searched and explicit strategies</td>
</tr>
<tr>
<td><strong>Selection</strong></td>
<td>Criterion-based; uniformly applied</td>
<td>Criterion-based</td>
</tr>
<tr>
<td><strong>Appraisal</strong></td>
<td>Rigorous; critical appraisal (SRs only)</td>
<td>Rigorous; critical appraisal</td>
</tr>
<tr>
<td><strong>Synthesis</strong></td>
<td>Descriptive summary/categorization of the data</td>
<td>Qualitative summary +/- meta-analysis</td>
</tr>
<tr>
<td><strong>Inferences</strong></td>
<td>Limited/cautious interpretation of the findings</td>
<td>Evidence-based</td>
</tr>
</tbody>
</table>

Khangura, 2012
Methods project 1: Update of 2 systematic reviews on rapid reviews
Objective and methods

• Objective:
  – To update 2 previous systematic reviews [Ganann 2010; Watt 2008] on rapid review methods

• Methods:
  – Searched multiple electronic databases and a sample of grey literature
  – 2 reviewers independently screened citations, full-text articles, and abstracted data
Results

N=3392 citations from MEDLINE, EMBASE, Cochrane Library, previous systematic reviews, and grey literature

N=3135 excluded titles and abstracts

N=257 potentially relevant full-text articles

N=156 excluded full-text reports

N=101 rapid reviews

N=90 rapid review reports (with methods)
## Study Characteristics

### Year of Publication

<table>
<thead>
<tr>
<th>Year of Publication</th>
<th>No. of Rapid Reviews (n=101)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997-2000</td>
<td>3</td>
</tr>
<tr>
<td>2001-2005</td>
<td>13</td>
</tr>
<tr>
<td><strong>2006-2010</strong></td>
<td><strong>44</strong></td>
</tr>
<tr>
<td>2011</td>
<td>17</td>
</tr>
<tr>
<td>2012</td>
<td>16</td>
</tr>
<tr>
<td>2013</td>
<td>4</td>
</tr>
<tr>
<td>Not Reported</td>
<td>4</td>
</tr>
</tbody>
</table>

### Country

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of Rapid Reviews (n=101)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>17</td>
</tr>
<tr>
<td><strong>Europe (including UK)</strong></td>
<td><strong>61</strong></td>
</tr>
<tr>
<td>North America (Canada &amp; USA)</td>
<td>20</td>
</tr>
<tr>
<td>Asia</td>
<td>1</td>
</tr>
<tr>
<td>South America</td>
<td>1</td>
</tr>
<tr>
<td>Africa</td>
<td>1</td>
</tr>
</tbody>
</table>

---

**Study characteristics**
### Results (continued)

<table>
<thead>
<tr>
<th>Study Characteristics</th>
<th>No. of Rapid Reviews (n=101)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Article Type</strong></td>
<td></td>
</tr>
<tr>
<td>Application</td>
<td>84</td>
</tr>
<tr>
<td>Comparison</td>
<td>4</td>
</tr>
<tr>
<td><strong>Duration of Review</strong></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 month</td>
<td>3</td>
</tr>
<tr>
<td>1-6 months</td>
<td>18</td>
</tr>
<tr>
<td>7-12 months</td>
<td>3</td>
</tr>
<tr>
<td>Not Reported</td>
<td>77</td>
</tr>
<tr>
<td><strong>Full Methods Reported</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>90</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
</tr>
<tr>
<td><strong>Protocol</strong></td>
<td></td>
</tr>
<tr>
<td>Protocol published</td>
<td>2</td>
</tr>
<tr>
<td>Protocol not mentioned</td>
<td>99</td>
</tr>
</tbody>
</table>
Results (continued)

Methods characteristics

<table>
<thead>
<tr>
<th></th>
<th>SR method</th>
<th>Streamlined method</th>
<th>Not reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature Search</td>
<td>54%</td>
<td>39%</td>
<td>7%</td>
</tr>
<tr>
<td>Limitations</td>
<td>4%</td>
<td>76%</td>
<td>20%</td>
</tr>
<tr>
<td>Screening</td>
<td>20%</td>
<td>59%</td>
<td>21%</td>
</tr>
<tr>
<td>Data Abstraction</td>
<td>9%</td>
<td>64%</td>
<td>27%</td>
</tr>
<tr>
<td>Quality Appraisal</td>
<td>13%</td>
<td>56%</td>
<td>31%</td>
</tr>
</tbody>
</table>

SR method: Systematic review method
Streamlined method: Streamlined method
Not reported: Not reported
Conclusions

• Several rapid review reports identified
• Little consistency exists in the field
• Methods not well reported in the literature
• Prospective study that compares the results from a rapid review and a systematic review has never been conducted
Methods project 2: Survey of organizations that conduct rapid reviews
Objective and methods

• Objective:
  – To survey organizations conducting rapid reviews

• Methods:
  – International survey of 63 organizations administered via FluidSurvey
  – Survey pilot-tested prior to administration
  – Reminders to non-respondents sent every 2 weeks
Results

Study flow figure of participants

63 organizations contacted

22 did not respond

41 responses (65%)
Results (continued)

Word cloud figure for the frequency of terms
Results (continued)

Review Duration Range in Weeks

- 1-6 weeks: 40%
- 7-12 weeks: 30%
- 13-24 weeks: 16%
- 25-36 weeks: 13%
- >36 weeks: 1%

Duration of review
Results (continued)

Government Agencies & Health Ministries
- Yes: 77%
- No: 23%

Healthcare Organizations, Hospitals & Community Health Agencies
- Yes: 59%
- No: 41%

Healthcare Professionals
- Yes: 16%
- No: 84%

Industry
- Yes: 5%
- No: 95%

Commissioning agency
### Results (continued)

<table>
<thead>
<tr>
<th>Review Stage</th>
<th>Most frequent streamlined approach</th>
<th>% Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying relevant studies</td>
<td>Used previous review(s) as a starting point</td>
<td>94%</td>
</tr>
<tr>
<td>Limitations on search strategy</td>
<td>Limited review by date of publication</td>
<td>90%</td>
</tr>
<tr>
<td>Identifying relevant studies</td>
<td>Screening conducted by ONE reviewer only</td>
<td>85%</td>
</tr>
<tr>
<td>Data Abstraction</td>
<td>Data abstraction performed by ONE reviewer only</td>
<td>83%</td>
</tr>
<tr>
<td>Quality (risk of bias) appraisal process</td>
<td>Risk of bias assessed by ONE reviewer only</td>
<td>85%</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Narrative summary</td>
<td>90%</td>
</tr>
</tbody>
</table>

Summary results of most frequent streamlined approach
Conclusions

• Varied terminology used to describe a rapid review
• Rapid reviews usually conducted in 1-12 weeks
• Government agencies and health ministries are primary commissioners
• Many different streamlined methods being used
Methods project 3: Delphi to select a candidate review method
Objective and methods

**Objective:**
- To conduct a consensus-building exercise to select a rapid review approach that will be prospectively tested in a diagnostic study

**Methods:**
- Invited editors, healthcare providers, researchers, and policy-makers
- Participants asked to rank the 6 most frequent rapid review approaches identified in our SR and survey (see handout)
- Results presented to participants and discussion facilitated
- Final re-ranking of the survey to follow
Results

26 individuals contacted

3 did not respond

64 responses (41%)

130 individuals contacted

89 did not respond
## Results (2)

<table>
<thead>
<tr>
<th>Rapid review Approach</th>
<th>Feasibility</th>
<th>Timeliness</th>
<th>Comprehensiveness</th>
<th>Risk of Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach 1</td>
<td>1st</td>
<td>2nd</td>
<td>5th</td>
<td>1st</td>
</tr>
<tr>
<td>Approach 2</td>
<td>2nd</td>
<td>1st</td>
<td>6th</td>
<td>5th</td>
</tr>
<tr>
<td>Approach 3</td>
<td>5th</td>
<td>3rd</td>
<td>3rd</td>
<td>4th</td>
</tr>
<tr>
<td>Approach 4</td>
<td>3rd</td>
<td>4th</td>
<td>2nd</td>
<td>6th</td>
</tr>
<tr>
<td>Approach 5</td>
<td>4th</td>
<td>5th</td>
<td>1st</td>
<td>2nd</td>
</tr>
<tr>
<td>Approach 6</td>
<td>6th</td>
<td>6th</td>
<td>4th</td>
<td>3rd</td>
</tr>
</tbody>
</table>

*Ranked based on the distribution of "very" and "extremely" on the 7-point Likert scale, except Risk of Bias was ranked on distribution of “not at all” and “very”

---

Summary of ranking results by approach
Conclusion

• The highest ranked method was: Approach 1
  • 1st in feasibility and risk of bias,
  • 2nd in timeliness
• We will use the information from the e-delphi alongside the in-person delphi from today to select the rapid review approach for our study
Ultimate goal of this research

Rapid review definition (Shannon Kelly)

Identify and characterize rapid review methods

Identify 6 frequently used methods

Diagnostic study to test a rapid review approach

“We can give you results within 4 months, but the meta-analysis estimates will be biased by 35%.”
Proposed diagnostic study

- Will use these results to inform a diagnostic study:
  - Index test: Rapid Review Approach
  - Reference standard: Systematic Review
  - 3 Canadian Knowledge Synthesis Centers
  - Targeting CIHR and PCORI (need US partners)

**Diagnostic Accuracy of Rapid reviews compared To Systematic reviews (DARTS)**
Summary

• Rapid reviews differ from systematic reviews because short cuts are taken to make the process more efficient
• Rapid reviews are particularly attractive to policy-makers
• Bias resulting from these short cuts is unclear
• Research is being conducted to address this gap
Rapid Reviews Series in the Systematic Reviews Journal
Acknowledgements

• Canadian Institutes of Health Research/Drug Safety and Effectiveness Network
  – Operating grant to update 2 systematic reviews, international survey, delphi
  – New investigator award
• Research team: Jesmin Antony, Wasifa Zarin
• Co-investigators: Drs. Straus, Moher, Hutton, Sherifali
Questions?

triccoa@smh.ca
In-person discussion: Ranking the most frequent rapid review methods
Objective

To conduct an online survey and consensus-building exercise (Delphi) to select a rapid review approach that will be tested in a study called DARTS (Diagnostic Accuracy of Rapid reviews compared To Systematic reviews)
Chatham House Rule:
Participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.
Vote now!

• www.slido.com
• #RapidReview
**Rapid Review Approach 1**

**Literature search:** searched more than one database, limited to published sources only

**Search limit:** limited by both date and language

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** one person abstracted data, while another person verified

**Risk of bias assessment:** one person assessed for risk of bias, while another person verified

### Feasibility

<table>
<thead>
<tr>
<th>1 Not at all</th>
<th>2 Low</th>
<th>3 Somewhat</th>
<th>4 Neutral</th>
<th>5 Moderately</th>
<th>6 Very</th>
<th>7 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>17</td>
<td>11</td>
</tr>
</tbody>
</table>
Rapid Review Approach 1

**Literature search:** searched more than one database, limited to published sources only

**Search limit:** limited by both date and language

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** one person abstracted data, while another person verified

**Risk of bias assessment:** one person assessed for risk of bias, while another person verified

**Timeliness**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>11</td>
<td><strong>12</strong></td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Rapid Review Approach 1

**Literature search:** searched more than one database, limited to published sources only

**Search limit:** limited by both date and language

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** one person abstracted data, while another person verified

**Risk of bias assessment:** one person assessed for risk of bias, while another person verified

### Comprehensiveness

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Low</th>
<th>Somewhat</th>
<th>Neutral</th>
<th>Moderately</th>
<th>Very</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td><strong>11</strong></td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>
Rapid Review Approach 1

**Literature search:** searched more than one database, limited to published sources only

**Search limit:** limited by both date and language

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** one person abstracted data, while another person verified

**Risk of bias assessment:** one person assessed for risk of bias, while another person verified

### Risk of Bias

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>11</td>
<td>9</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>
Rapid Review Approach 2

**Literature search:** used previous systematic review(s) as a starting point to identify relevant studies; no grey literature search was conducted

**Search Limit:** search *not* limited by language or date

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

### Feasibility

<table>
<thead>
<tr>
<th>1 Not at all</th>
<th>2 Low</th>
<th>3 Somewhat</th>
<th>4 Neutral</th>
<th>5 Moderately</th>
<th>6 Very</th>
<th>7 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>18</td>
<td>9</td>
</tr>
</tbody>
</table>
Rapid Review Approach 2

**Literature search:** used previous systematic review(s) as a starting point to identify relevant studies; no grey literature search was conducted

**Search Limit:** search *not* limited by language or date

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

### Timeliness

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>8</td>
<td>16</td>
<td>9</td>
</tr>
</tbody>
</table>

- **Timeliness Scale:**
  - 1: Not at all
  - 2: Low
  - 3: Somewhat
  - 4: Neutral
  - 5: Moderately
  - 6: Very
  - 7: Extremely
Rapid Review Approach 2

**Literature search:** used previous systematic review(s) as a starting point to identify relevant studies; no grey literature search was conducted

**Search Limit:** search *not* limited by language or date

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

### Comprehensiveness

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>1</td>
<td>6</td>
<td>11</td>
<td>6</td>
<td>15</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>
Rapid Review Approach 2

**Literature search:** used previous systematic review(s) as a starting point to identify relevant studies; no grey literature search was conducted

**Search Limit:** search *not* limited by language or date

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

### Risk of Bias

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Low</td>
<td>Somewhat</td>
<td>Neutral</td>
<td>Moderately</td>
<td>Very</td>
<td>Extremely</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>13</td>
<td><strong>14</strong></td>
<td>7</td>
</tr>
</tbody>
</table>
Rapid Review Approach 3

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by both date and language

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

### Feasibility

<table>
<thead>
<tr>
<th>1</th>
<th>Not at all</th>
<th>2</th>
<th>Low</th>
<th>3</th>
<th>Somewhat</th>
<th>4</th>
<th>Neutral</th>
<th>5</th>
<th>Moderately</th>
<th>6</th>
<th>Very</th>
<th>7</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>17</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rapid Review Approach 3

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by both date and language

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

### Timeliness

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Low</td>
<td>Somewhat</td>
<td>Neutral</td>
<td>Moderately</td>
<td>Very</td>
<td>Extremely</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>13</td>
<td>14</td>
<td>4</td>
</tr>
</tbody>
</table>
Rapid Review Approach 3

**Literature search**: searched more than one database, searched both published and grey literature

**Search limit**: limited by both date and language

**Screening**: title/abstract and full-text screening performed by one reviewer only

**Data abstraction**: data abstraction performed by one reviewer only

**Risk of bias assessment**: not performed

### Comprehensiveness

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Low</td>
<td>Somewhat</td>
<td>Neutral</td>
<td>Moderately</td>
<td>Very</td>
<td>Extremely</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>7</td>
<td>3</td>
<td><strong>14</strong></td>
<td><strong>14</strong></td>
<td>2</td>
</tr>
</tbody>
</table>
### Rapid Review Approach 3

**Literature search:** searched more than one database, searched both published and grey literature  
**Search limit:** limited by both date and language  
**Screening:** title/abstract and full-text screening performed by one reviewer only  
**Data abstraction:** data abstraction performed by one reviewer only  
**Risk of bias assessment:** not performed

#### Risk of Bias

<table>
<thead>
<tr>
<th></th>
<th>1 Not at all</th>
<th>2 Low</th>
<th>3 Somewhat</th>
<th>4 Neutral</th>
<th>5 Moderately</th>
<th>6 Very</th>
<th>7 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td><strong>13</strong></td>
<td><strong>13</strong></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
Rapid Review Approach 4

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by either date or language

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

### Feasibility

<table>
<thead>
<tr>
<th>1 Not at all</th>
<th>2 Low</th>
<th>3 Somewhat</th>
<th>4 Neutral</th>
<th>5 Moderately</th>
<th>6 Very</th>
<th>7 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>11</td>
<td>18</td>
<td>5</td>
</tr>
</tbody>
</table>
Rapid Review Approach 4

**Literature search**: searched more than one database, searched both published and grey literature

**Search limit**: limited by either date or language

**Screening**: title/abstract and full-text screening performed by one reviewer only

**Data abstraction**: data abstraction performed by one reviewer only

**Risk of bias assessment**: not performed

**Timeliness**

<table>
<thead>
<tr>
<th></th>
<th>1 Not at all</th>
<th>2 Low</th>
<th>3 Somewhat</th>
<th>4 Neutral</th>
<th>5 Moderately</th>
<th>6 Very</th>
<th>7 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>2</td>
<td>2</td>
<td>5</td>
<td><strong>20</strong></td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>
Rapid Review Approach 4

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by either date or language

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

### Comprehensiveness

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Low</td>
<td>Somewhat</td>
<td>Neutral</td>
<td>Moderately</td>
<td>Very</td>
<td>Extremely</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>10</td>
<td>16</td>
<td>1</td>
</tr>
</tbody>
</table>
### Rapid Review Approach 4

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by either date or language

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

### Risk of Bias

<table>
<thead>
<tr>
<th></th>
<th>1 Not at all</th>
<th>2 Low</th>
<th>3 Somewhat</th>
<th>4 Neutral</th>
<th>5 Moderately</th>
<th>6 Very</th>
<th>7 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td><strong>15</strong></td>
<td>14</td>
<td>2</td>
</tr>
</tbody>
</table>
Rapid Review Approach 5

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by date only; no language limit

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** risk of bias assessed by one reviewer only

---

### Feasibility

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not at all</strong></td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>20</td>
<td>4</td>
</tr>
</tbody>
</table>
Rapid Review Approach 5

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by date only; no language limit

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** risk of bias assessed by one reviewer only

### Timeliness

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>1</td>
<td></td>
<td></td>
<td>11</td>
<td></td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Somewhat</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rapid Review Approach 5

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by date only; no language limit

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** risk of bias assessed by one reviewer only

---

**Comprehensiveness**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>14</td>
<td><strong>16</strong></td>
<td>2</td>
</tr>
</tbody>
</table>
Rapid Review Approach 5

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by date only; no language limit

**Screening:** title/abstract and full-text screening performed by one reviewer only

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** risk of bias assessed by one reviewer only

### Risk of Bias

<table>
<thead>
<tr>
<th></th>
<th>1 Not at all</th>
<th>2 Low</th>
<th>3 Somewhat</th>
<th>4 Neutral</th>
<th>5 Moderately</th>
<th>6 Very</th>
<th>7 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>11</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>
Rapid Review Approach 6

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by both date and language

**Screening:** title/abstract and full-text screening performed by two independent reviewers

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

---

**Feasibility**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Low</td>
<td>Somewhat</td>
<td>Neutral</td>
<td>Moderately</td>
<td>Very</td>
<td>Extremely</td>
</tr>
<tr>
<td>0</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>18</td>
<td>3</td>
</tr>
</tbody>
</table>
Rapid Review Approach 6

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by both date and language

**Screening:** title/abstract and full-text screening performed by two independent reviewers

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timeliness</strong></td>
<td>Not at all</td>
<td>Low</td>
<td>Somewhat</td>
<td>Neutral</td>
<td>Moderately</td>
<td>Very</td>
<td>Extremely</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>15</td>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>
Rapid Review Approach 6

Literature search: searched more than one database, searched both published and grey literature

Search limit: limited by both date and language

Screening: title/abstract and full-text screening performed by two independent reviewers

Data abstraction: data abstraction performed by one reviewer only

Risk of bias assessment: not performed

Comprehensiveness

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Low</td>
<td>Somewhat</td>
<td>Neutral</td>
<td>Moderately</td>
<td>Very</td>
<td>Extremely</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>23</td>
<td>9</td>
<td>1</td>
</tr>
</tbody>
</table>
Rapid Review Approach 6

**Literature search:** searched more than one database, searched both published and grey literature

**Search limit:** limited by both date and language

**Screening:** title/abstract and full-text screening performed by two independent reviewers

**Data abstraction:** data abstraction performed by one reviewer only

**Risk of bias assessment:** not performed

---

### Risk of Bias

<table>
<thead>
<tr>
<th></th>
<th>1 Not at all</th>
<th>2 Low</th>
<th>3 Somewhat</th>
<th>4 Neutral</th>
<th>5 Moderately</th>
<th>6 Very</th>
<th>7 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>11</td>
<td>5</td>
<td>11</td>
<td>10</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Thank you for participating!