CHAPTER 1: THE NEED FOR RAPID REVIEWS TO INFORM HEALTH POLICY AND SYSTEMS

Etienne V. Langlois, Sharon E. Straus, Rhona Mijumbi-Deve, Simon Lewin, Andrea C. Tricco
LEARNING OBJECTIVES

- Introduce the rapid review approach
- Describe its application for health policy-making and health systems strengthening
RAPID REVIEWS

Rapid reviews are a type of knowledge synthesis in which the steps of a systematic review are streamlined or accelerated to produce evidence in a shortened timeframe.
KEY MESSAGE #1

Policy-makers often need and request evidence to plan, develop, and implement health policies.
KEY MESSAGE #1

IMPLEMENT

DEVELOP

EVIDENCE

PLAN

IMPLEMENT

HEALTH POLICIES
KEY MESSAGE #2

Systematic reviews are increasingly used to inform policy decisions and produce guidance for health systems, yet the production of systematic reviews is often protracted and misaligned with decision timelines.
KEY MESSAGE #2

SYSTEMATIC REVIEW TIMELINE

DECISION-MAKING TIMELINE
KEY MESSAGE #3

Rapid reviews have emerged as a useful approach to provide actionable and relevant evidence in a timely and cost-effective manner.
KEY MESSAGE #3

SYSTEMATIC REVIEW TIMELINE

DECISION-MAKING TIMELINE

RAPID REVIEW TIMELINE
## KEY MESSAGE #3

<table>
<thead>
<tr>
<th>Categories of rapid evidence products</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventories</td>
<td>Inventories only list the evidence that is available on a given topic. There is no attempt to appraise, summarize or synthesize the evidence for further use, nor is there an attempt to present conclusions or recommendations to the knowledge user.</td>
</tr>
<tr>
<td>Rapid response briefs</td>
<td>Rapid response briefs present a summary of the best available evidence in a synthesized and contextualized manner, in direct response to a decision-maker's question. They are <em>knowledge translation</em> products created through formal methods to synthesize and appraise the evidence. They do not generate new knowledge, but use findings that are already available, especially from existing systematic reviews.</td>
</tr>
<tr>
<td>Rapid reviews</td>
<td>Rapid reviews represent a <em>knowledge generation</em> strategy. They synthesize findings and assess the validity of research evidence using “abbreviated” systematic review methods, modifying these methods to generate evidence in a short time.</td>
</tr>
</tbody>
</table>
## Key Message #3

<table>
<thead>
<tr>
<th>Policy step</th>
<th>Description</th>
<th>Example of rapid review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority-setting</td>
<td>Identifying and conceptualizing priority issues for the policy agenda.</td>
<td>Rapid review of the evidence on prevention and control of vector-borne diseases in urban areas of low- and middle-income countries, with the aim of informing policy priorities.</td>
</tr>
<tr>
<td><strong>Policy formulation</strong></td>
<td>Assessing options to develop policies. Here, policy-makers can make the most of rapid reviews that focus on different questions, including but not limited to rapid reviews of effectiveness to identify the benefits and harms of policy options, and rapid reviews of economic evaluations to explore the cost-effectiveness of different policy interventions.</td>
<td>Rapid review of international models of primary care provision and primary care policies.</td>
</tr>
<tr>
<td>Policy Implementation</td>
<td>Mobilizing resources by governments and implementers. At this stage, informative rapid reviews could include qualitative evidence syntheses to assess factors influencing the implementation and scalability of a policy.</td>
<td>Rapid review of barriers to and facilitators of the implementation of e-health systems in rural communities.</td>
</tr>
</tbody>
</table>
KEY MESSAGE #4

Rapid reviews are generated through a transparent, scientific, and reproducible method that respects the key principles of knowledge synthesis.
KEY MESSAGE #4

KEY PRINCIPLES OF KNOWLEDGE SYNTHESIS

- Reproducible Methods
- Transparent Methods
- Scientific Methods
- Generate Rapid Reviews
KEY MESSAGE #5

Various methods exist to expedite the conduct of reviews to inform health policy and systems decisions; the main challenge lies in accelerating review methods while maintaining robustness and transparency.
KEY MESSAGE #5

MAINTAIN ROBUSTNESS

MAINTAIN TRANSPARENCY

ACCELEARTE REVIEW METHODS
KEY MESSAGE #6

The complexity of health systems decision-making is both an important challenge and a key opportunity for developing the field of rapid reviews of health policy and systems evidence.
KEY MESSAGE #6

HEALTH SYSTEMS DECISION-MAKING IS COMPLEX
ACKNOWLEDGEMENTS

EDITORS
- Andrea C. Tricco
- Etienne V. Langlois
- Sharon E. Straus

SUPPORT
- Jesmin Antony
- Huda M. Ashoor
- Melissa Courvoisier
- Susan Le
CHAPTER 2: PERFORMING RAPID REVIEWS

Valerie J. King, Chantelle Garrity, Adrienne Stevens, Barbara Nussbaumer-Streit, Lisa Hartling, Curtis S. Harrod, Jeanne-Marie Guise, Chris Kamel
LEARNING OBJECTIVES

- Describe potential ways to streamline systematic review methods to produce rapid reviews
- Present recommendations on the conduct of rapid reviews
Early and continuing engagement with the research requester is essential for focusing the rapid review and ensuring that it is appropriate to the needs of stakeholders.
KEY MESSAGE #2

Methods can be streamlined at all stages of the review process.

However, a standardized or commonly agreed upon set of methods for conducting rapid reviews does not exist, and the consequences of various streamlining choices for the validity of conclusions from a rapid review are uncertain.
KEY MESSAGE #2

THERE ARE VARIOUS STREAMLINING METHODS AT EACH STEP OF THE REVIEW PROCESS

HOWEVER, THE VALIDITY OF CONCLUSIONS FROM RAPID REVIEWS ARE UNCERTAIN
KEY MESSAGE #3

Researchers need to make transparent methodological choices, informed by stakeholder input, to ensure that the evidence review is fit for its intended purpose.
<table>
<thead>
<tr>
<th>Review step</th>
<th>Commonly employed methods and approaches</th>
<th>Key considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Needs assessment, topic selection, and topic refinement</strong></td>
<td>Most use standard intake processes, involving the requester, to refine the topic, obtain clarity on purpose(s), and determine whether rapid review is a suitable method. Total production timeline generally 1 to 4 months</td>
<td>Work with requester to ascertain intended purpose, scope and timeline, and ensure the proposed approach fits the intended purpose. A preliminary literature search can help to inform conversations with requester and to scope the review. Map the mandate to timeline and deliverables.</td>
</tr>
<tr>
<td><strong>Protocol development</strong></td>
<td>A protocol is commonly prepared, serving as a point of reference to avoid (or document) deviations, but is usually not formally registered. Producers typically use a PICO format and develop key questions iteratively with requesters</td>
<td>Consider registering the protocol with PROSPERO and include “rapid review” or a similar term in the title. Use PRISMA reporting items to guide protocol development and review reporting, and to track the overall process and information flow.</td>
</tr>
</tbody>
</table>
## KEY MESSAGE #3

<table>
<thead>
<tr>
<th>Review step</th>
<th>Commonly employed methods and approaches</th>
<th>Key considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature search</td>
<td>Many rapid reviews are based on searches of the PubMed/MEDLINE, Cochrane Library, and Embase databases. Most entail a search of two or more databases, with common limits being date, language (generally English only), and study design; geographical limits may be used to enhance applicability. Some level of grey literature searching is common, but contact with authors is uncommon.</td>
<td>Tailor the selection of literature databases to the topic. Addition of a grey literature search depends on the topic, purpose, and timeline. Use a staged search to first identify existing systematic reviews, then studies with other designs that will provide the most rigorous evidence to answer the question. Peer review of the search strategy, using a tool such as the PRESS checklist can help to optimize the search strategy.</td>
</tr>
<tr>
<td>Review step</td>
<td>Commonly employed methods and approaches</td>
<td>Key considerations</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Screening and study selection</td>
<td>Approaches are highly variable, with about half of rapid reviews using a single reviewer, with or without verification by a second reviewer</td>
<td>Choose the approach for study screening and selection according to requirements of the review and resources available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In lieu of dual screening and selection, reasonable approaches involve using a single experienced reviewer for application of inclusion criteria and two reviewers for application of exclusion criteria, or using one person for screening with verification of a subset of records by another</td>
</tr>
</tbody>
</table>
## Key Message #3

<table>
<thead>
<tr>
<th>Review step</th>
<th>Commonly employed methods and approaches</th>
<th>Key considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data extraction</td>
<td>Approaches vary, but data extraction by a single reviewer, with or without verification, is the most common method</td>
<td>Similar to the situation for screening, the number of independent reviewers varies, but a reasonable approach is to use a single reviewer to extract data, with a second reviewer checking at least a 10% random sample of extractions for accuracy. Use of dual performance or checking may be needed more for extraction of quantitative results than for extraction of descriptive study information. Limit extraction to key study characteristics and outcomes.</td>
</tr>
<tr>
<td>Risk-of-bias assessment</td>
<td>For most rapid reviews, some risk-of-bias or quality assessment of included studies is conducted by a single reviewer, with or without verification</td>
<td>The choice of appraisal instrument varies, with both standard and customized approaches in use. An approach similar to that for data extraction can be used (i.e. single reviewer, with verification by a second reviewer).</td>
</tr>
</tbody>
</table>
## Key Message #3

<table>
<thead>
<tr>
<th>Review step</th>
<th>Commonly employed methods and approaches</th>
<th>Key considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge synthesis</td>
<td>Narrative summaries are common, with meta-analysis performed only infrequently</td>
<td>An iterative approach to the synthesis process can involve post hoc protocol adjustments</td>
</tr>
<tr>
<td></td>
<td>Final reports often include implications, recommendations for policy, and discussion of research limitations</td>
<td>The quality of the body of evidence and the strength of any recommendations can be assessed using an approach such as the GRADE system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The limitations of the review should be discussed and cautious conclusions provided</td>
</tr>
<tr>
<td>Report production and dissemination</td>
<td>Peer review is common, but is often performed internally</td>
<td>Software tools can help to automate and track review steps</td>
</tr>
<tr>
<td></td>
<td>Reports are often disseminated beyond the original requester, but are infrequently published in the peer-reviewed literature</td>
<td>Standardization of processes and templates aids in production of the report and enhances transparency of the review</td>
</tr>
</tbody>
</table>

**Abbreviations:** GRADE, Grading of Recommendations Assessment, Development and Evaluation; PICO, population, intervention, comparator, outcome; PRESS, Peer Review of Electronic Search Strategies; PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses
KEY MESSAGE #4

Information technologies can assist researchers in the conduct of rapid reviews by making various steps in the process more efficient.
# KEY MESSAGE #4

<table>
<thead>
<tr>
<th>Product name (cost)</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Abstrackr, OpenMeta[Analyst]</strong></td>
<td>Suite of products on the website of the Brown University School of Public Health</td>
</tr>
<tr>
<td>(open source, freely available)</td>
<td>Abstrackr is a semi-automated citation screening software program</td>
</tr>
<tr>
<td></td>
<td>OpenMeta[Analyst] is software for performing meta-analysis of continuous, binary, or diagnostic test accuracy data</td>
</tr>
<tr>
<td><strong>Covidence</strong></td>
<td>Primary screening and data-extraction tool for Cochrane authors</td>
</tr>
<tr>
<td>(first review free; subscription required for subsequent reviews)</td>
<td>Full text can be highlighted and linked to prepare a risk-of-bias table</td>
</tr>
<tr>
<td></td>
<td>Data can be exported into various analytic packages</td>
</tr>
<tr>
<td><strong>DistillerSR</strong></td>
<td>Tool for citation import and tracking for inclusion and exclusion</td>
</tr>
<tr>
<td>(purchase of licence required)</td>
<td>Customizable data-extraction tables</td>
</tr>
<tr>
<td></td>
<td>Data can be exported into various analytic packages</td>
</tr>
</tbody>
</table>
**KEY MESSAGE #4**

<table>
<thead>
<tr>
<th>Product name (cost)</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EPPI-Reviewer</strong></td>
<td>Supports development of all types of systematic reviews, including complex reviews</td>
</tr>
<tr>
<td>(available to Cochrane authors free of charge; subscription fee for others)</td>
<td>Includes reference management, screening, data extraction, and risk-of-bias assessment</td>
</tr>
<tr>
<td></td>
<td>Contains quantitative and qualitative analysis functions. Allows coding of text and generation of keywords</td>
</tr>
<tr>
<td><strong>GRADEpro GDT</strong></td>
<td>Software for generating evidence profiles and summary-of-findings tables for systematic reviews and supporting development of guideline recommendations</td>
</tr>
<tr>
<td>(freely available)</td>
<td></td>
</tr>
<tr>
<td><strong>Rayyan</strong></td>
<td>Software for semi-automated screening titles and abstracts</td>
</tr>
<tr>
<td>(freely available, web-based, including mobile applications)</td>
<td></td>
</tr>
</tbody>
</table>
### KEY MESSAGE #4

<table>
<thead>
<tr>
<th>Product name (cost)</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Review Manager (RevMan)</strong> (purchase of licence required for non-Cochrane review use)</td>
<td>Contains Cochrane review template, including tables of study characteristics, comparisons, charts for risk-of-bias assessment, and templates for graphical display of results</td>
</tr>
<tr>
<td></td>
<td>Integrates meta-analysis software</td>
</tr>
<tr>
<td><strong>System for the Unified Management, Assessment and Review of Information (SUMARI)</strong> (free, but registration required)</td>
<td>Suite of modules for systematic reviews produced by the Joanna Briggs Institute and available to systematic review researchers. Includes tools for data extraction and critical appraisal for multiple study designs</td>
</tr>
<tr>
<td></td>
<td>Can import and manage citations</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

EDITORS
- Andrea C. Tricco
- Etienne V. Langlois
- Sharon E. Straus

SUPPORT
- Jesmin Antony
- Huda M. Ashoor
- Melissa Courvoisier
- Susan Le
CHAPTER 3:
IMPROVING QUALITY AND EFFICIENCY IN SELECTING, ABSTRACTING, AND APPRAISING STUDIES FOR RAPID REVIEWS

Ba’ Pham, Reid C. Robson, Sonia M. Thomas, Jeremiah Hwee, Matthew J. Page, Andrea C. Tricco
To present methods and recommendations for selecting, abstracting, and assessing studies for rapid reviews of health policy and systems interventions.
RAPID REVIEW METHODS

The evidence-base supporting streamlined methods is limited and evolving, and we need further evidence to define robust approaches.

<table>
<thead>
<tr>
<th>Review step</th>
<th>Common streamlined methods</th>
<th>Related Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study selection</td>
<td>Conducted by one reviewer, with or without verification</td>
<td>Single-reviewer screening of titles/abstracts missed on average 8%–20% of eligible studies but substantially reduced screening time relative to screening by two reviewers.</td>
</tr>
<tr>
<td>Data abstraction</td>
<td>One reviewer abstracts, with or without verification</td>
<td>Compared with dual data abstraction, single abstraction with verification resulted in more errors but saved time. However, the errors did not cause major changes in the effect estimates.</td>
</tr>
<tr>
<td>Quality assessment</td>
<td>One reviewer assesses, with or without verification</td>
<td>-</td>
</tr>
</tbody>
</table>
KEY MESSAGE #1

Rapid review teams should consider including content experts and experienced reviewers to increase review rigour and expedite the review process.
KEY MESSAGE #1

- Increases review rigour and expedites review process
- Rapid review teams
- Content experts: e.g. in health policy and systems research
- Experienced reviewers: e.g. in study selection, data abstraction, and quality assessment
KEY MESSAGE #2

Well-defined eligibility criteria, explanation and elaboration forms, pilot-tests and reviewer training are recommended to support reviewers in study selection, data abstraction, and quality assessment.
KEY MESSAGE #2

Eligibility criteria should be defined clearly and used consistently.

Screening, abstracting, and assessment forms should define and elaborate on concepts and terms, ideally with examples.

Improving quality and efficiency

Procedures and materials should be pilot-tested by the review team.

Training should be provided initially and as needed during the review to ensure consistency.
Authors of the studies included in the rapid review should be consulted to gather further information on methods conduct regarding study selection, data abstraction and quality assessment, if time allows.
ACKNOWLEDGEMENTS

EDITORS
- Andrea C. Tricco
- Etienne V. Langlois
- Sharon E. Straus

SUPPORT
- Jesmin Antony
- Huda M. Ashoor
- Melissa Courvoisier
- Susan Le
CHAPTER 4: SELECTING RAPID REVIEW METHODS FOR COMPLEX QUESTIONS RELATED TO HEALTH POLICY AND SYSTEM IMPROVEMENTS

Sandy Oliver, Michael Wilson, G. J. Melendez-Torres, Mukdarut Bangpan, Kelly Dickson, Carol Vigurs
LEARNING OBJECTIVES

- Describe strategic decisions for selecting the appropriate method for conducting rapid reviews.
KEY MESSAGE #1

A two-stage process of first scoping the literature, then selecting a focus, is an effective approach for conducting health policy and systems reviews under time constraints.
KEY MESSAGE #1

Stage one

- Develop review question
  - Discussion with stakeholders to initiate review

- Map of studies

Stage two

- Refine/ narrow review question
  - Discussion with stakeholders to tailor review
  - Map of studies
  - Exclude studies

- Synthesis
  - Discussion with stakeholders to interpret findings
KEY MESSAGE #2

The complexity of health policy and systems research requires transdisciplinary collaboration, which can, if managed well, speed and enhance a review.
KEY MESSAGE #2

Inception with stakeholders
- Setting answerable question(s)
- Initial conceptual framework
- Agreeing the format of report, timescale & further meetings

Discussion with stakeholders
- Most relevant type of evidence
- Check conceptual framework

Discussion with stakeholders
- Most relevant aspects of studies
- Check conceptual framework

Rapid review of evidence
- Report to stakeholders

Initial search strategy
Gauge the literature

Final search strategy
Limit or expand initial search
Final search

Static conceptual framework
Code, appraise & analyse studies

Evolving conceptual framework
Code, appraise & analyse studies

Cluster, tabulate & summarise studies

Annotated bibliography

Tabulate studies to inform narrative synthesis

Summary of themes

Framework synthesis

Faster reviews involve
- Fewer stakeholders,
- Fewer discussions,
- Less iteration, and
- Greater use of past accumulative work
### Key Message #2

**Options for rapid review and what can be done in the available time**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Project management</th>
<th>Building on prior work</th>
<th>Synthesis methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informing internal policy discussions, management decisions, within days</td>
<td>One or two reviewers sharing the task</td>
<td>Search for and within existing syntheses (reviews, evidence-gap maps, evidence-informed guidance)</td>
<td>Cluster and tabulate systematic reviews identified to create an annotated bibliography, a stand-alone product for rapid responses, or an interim text to focus discussion with stakeholders for rapid reviews before analysing across the set of studies to generate new knowledge</td>
</tr>
<tr>
<td></td>
<td>Quick iterations between review team and policy team to compare evidence needed with evidence identified</td>
<td>Search databases presenting evidence-quality standards or judgements (e.g. DoPHER(^b), Health Systems Evidence, Cochrane, Campbell, 3ie(^c))</td>
<td>Prepare summary tables outlining key findings from systematic reviews, quality appraisal of systematic reviews (e.g. for those indexed on Health Systems Evidence database, which provides appraisals for all reviews that it contains), countries where studies were conducted (e.g. for systematic reviews found on Health Systems Evidence database)</td>
</tr>
<tr>
<td>Purpose</td>
<td>Project management</td>
<td>Building on prior work</td>
<td>Synthesis methods</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Informing public debates, within weeks</td>
<td>Small core team to allow collective interpretation before and after review, with policy customer and within team</td>
<td>As above, and search within specialist topic sources</td>
<td>Apply a static framework to analyse across a set of studies with summary tables and a <strong>summary of themes</strong> (e.g. a rapid review of malpractice frameworks and models)</td>
</tr>
<tr>
<td></td>
<td>Large review team to apply standardized procedures</td>
<td>Reanalyse existing systematic reviews to address new questions</td>
<td></td>
</tr>
<tr>
<td>Informing urgent policy decisions, within months</td>
<td>Small review team to allow collective interpretation and iteration, with policy customer and within team</td>
<td>As above, and perform Boolean searches of bibliographic databases (balancing sensitivity and specificity to suit the time available)</td>
<td>Apply an evolving framework to synthesize findings to suit evidence needs and the extent and maturity of the literature (a <strong>framework synthesis</strong>)</td>
</tr>
</tbody>
</table>

*a For each option, the tasks listed are those that can be performed in the time available, and the products achievable are highlighted in bold text.
*b Database of promoting health effectiveness reviews.
*c International Initiative for Impact Evaluation.*
KEY MESSAGE #3

Initializing a rapid review requires a framework from which to organize the concept under study, based on a set of focused questions or an existing framework (either borrowed or customized) which either remains unchanged – static – or is allowed to evolve as knowledge accumulates from the search.
KEY MESSAGE #4

Using a static framework may speed a review, but this benefit must be balanced against the risk of missing the significance of a theme that emerges from the literature.
KEY MESSAGE #3&4

FASTER, LEAST SOPHISTICATED SYNTHESIS

FOCUSED QUESTIONS & SUB-QUESTIONS
Developed in discussion with stakeholders to guide a targeted, rapid search of the most relevant evidence

STATIC THEMATIC FRAMEWORKS
Applies existing frameworks reflecting acknowledged theory, policy, or practice

EVOLVING FRAMEWORKS
Initial framework can be borrowed from existing theories, or constructed in discussions between the review team and stakeholders

SLOWER, MOST SOPHISTICATED SYNTHESIS
KEY MESSAGE #5

In areas already covered extensively by existing systematic reviews, a search identifying existing reviews may allow reviewers to simply summarize and integrate the review findings, resynthesize the primary studies, or update the search and reanalyse one or more of the systematic reviews.
KEY MESSAGE #5

PRIOR SYSTEMATIC EVIDENCE AND ANALYSIS CAN REDUCE THE TIME FOR REVIEWING ACTIVITY

REANALYSIS OF PRIMARY STUDIES FROM SYSTEMATIC REVIEWS

Questions related to complex interventions can be informed by a set of reviews, where the individual reviews address different intervention components

REVIEW-LEVEL SYNTHESIS

Results of the reviews themselves are of interest, but their component studies are not examined

UPDATES OF SYSTEMATIC REVIEWS

Existing systematic reviews can be supplemented by updating the literature searches
ACKNOWLEDGEMENTS

EDITORS
- Andrea C. Tricco
- Etienne V. Langlois
- Sharon E. Straus

SUPPORT
- Jesmin Antony
- Huda M. Ashoor
- Melissa Courvoisier
- Susan Le
CHAPTER 5: ENGAGING POLICY-MAKERS AND HEALTH SYSTEMS MANAGERS IN THE CONDUCT OF RAPID REVIEWS

Andrea C. Tricco, Wasifa Zarin, Vera Nincic, Patricia Rios, Paul A. Khan, Marco Ghassemi, Sanober S. Motiwala, Ba’ Pham, Sandy Oliver, Sharon E. Straus, Etienne V. Langlois
LEARNING OBJECTIVES

- To discuss the importance of engaging policy-makers and health systems managers in the rapid review process.
KNOWLEDGE USER

A knowledge user is defined as an individual who is likely to be able to use research results to make informed decisions about health policies, programs and/or practices.

Knowledge User Engagement: Canadian Institutes of Health Research (CIHR); [Available from: http://www.cihr-irsc.gc.ca/e/49505.html.]
KEY MESSAGE #1

Knowledge users (including policy-makers and health systems managers) should be engaged during the conduct of rapid reviews to enhance the relevance and applicability of the reviews in the decision-making process.
KEY MESSAGE #1

There is opportunity to engage knowledge users throughout the review

Integrated knowledge user engagement necessitates additional time and resources
KEY MESSAGE #2

The level of engagement should be meaningful, yet tailored to available resources, and will depend on the objectives of engagement, the points at which engagement occurs in the review process, and the methods used for engagement.
KEY MESSAGE #2

FREQUENCY AND INTENSITY OF ENGAGEMENT

ONE-TIME CONSULTATION

MORE THAN 1 CONSULTATION

CONSULTATION AT EVERY STEP
KEY MESSAGE #2

OBJECTIVES OF ENGAGEMENT

- Establish a research agenda
- Prioritize indicators
- Develop a framework
- Establish learning materials to be included in a curriculum
- Establish clinical, policy, or system recommendations
- Develop a tool kit to support evidence use
- Finalize knowledge translation and uptake strategies
- Aid decision-makers in their decision-making processes
KEY MESSAGE #2

POTENTIAL POINTS OF ENGAGEMENT

- Topic selection
  - Prioritize a list of topics

- Conceptualize & design
  - Develop question
  - Develop protocol

- Search & data collection
  - Locate literature
  - Collect & appraise evidence

- Data synthesis
  - Data analysis
  - Interpretation

- Knowledge product
  - Manuscript/report
  - Briefs

- Uptake & evaluation
  - Monitor use & impact

- Feedback on usability of the review
  - Feedback on clarity & readability of report

- Refine question, define eligibility criteria

- Refine and prioritize the list

- Refine & supplement search, input on data collection tools

- Interpretation
  - Input in analysis, interpret & contextualize findings

- Manuscript/report
- Briefs

- Monitor use & impact

- Locate literature
  - Collect & appraise evidence

- Develop question
  - Develop protocol

- Develop question
  - Develop protocol

- Locate literature
  - Collect & appraise evidence
KEY MESSAGE #2

METHODS OF ENGAGEMENT

- In-person/telephone meetings
- Email communications
- Document sharing and feedback
- Surveys, focus groups, interviews
- Workshops, webinars, educational rounds
- Nominal group techniques, Delphi
KEY MESSAGE #3

Conceptual frameworks are available to help provide a structure and mechanism to facilitate engagement.
KEY MESSAGE #3

Framework for effective engagement in comparative effectiveness research

- Deverka, 2012
  - Gathering professional/patient experience/values
  - Using quantitative/qualitative methods to gather input
  - Decision-making based on engagement
  - Enhancing the usefulness of evidence for a decision

Framework for engaging policy-makers in health policy and systems research

- Oliver & Dickson, 2016
  - Gathering policy-maker input and building a relationship
  - Increasing policy-maker awareness and skills
  - Obtaining stable funding, training and support to address queries
  - Building a team experienced with decision-making
KEY MESSAGE #4

Other things to consider when engaging knowledge users include: establishing early partnerships, planning ahead, communicating expectations and responsibilities clearly, ongoing training and support, accessibility, and documentation of all interactions.
KEY MESSAGE #4

When engaging knowledge users, consider the following:

- Plan ahead
- Establish early partnerships
- Communicate expectations and responsibilities
- Provide ongoing training and support
- Be accessible
- Document all interactions
ACKNOWLEDGEMENTS

EDITORS
- Andrea C. Tricco
- Etienne V. Langlois
- Sharon E. Straus

SUPPORT
- Jesmin Antony
- Huda M. Ashoor
- Melissa Courvoisier
- Susan Le
CHAPTER 6: FOSTERING THE CONDUCT AND USE OF RAPID REVIEWS OF HEALTH POLICY AND SYSTEMS RESEARCH IN LOW- AND MIDDLE-INCOME COUNTRIES

Rhona Mijumbi-Deve, Fadi El-Jardali
LEARNING OBJECTIVES

- To identify strategies for overcoming challenges in the conduct and use of policy-relevant rapid reviews of health policy and systems research in low- and middle-income countries (LMICs).
KEY MESSAGE #1

Although there is some momentum in the use of rapid reviews for decision-making processes in LMICs, experience with rapid reviews remains limited in these settings.
KEY MESSAGE #1

EXPERIENCE IN THE USE OF RAPID REVIEWS IS LIMITED

MOMENTUM IN THE USE OF RAPID REVIEWS IS INCREASING
Several challenges impede optimal production and use of rapid reviews, including wide variation in their definition, methods, and applicability; inadequacy of resources in LMIC settings to produce them; and poor acceptability among academics who may not trust their methods.
KEY MESSAGE #2

CHALLENGES IMPEDE OPTIMAL PRODUCTION AND USE OF RAPID REVIEWS

- VARIATION IN DEFINITION, METHODS, APPLICABILITY
- INADEQUACY OF RESOURCES
- POOR ACCEPTABILITY
KEY MESSAGE #3

To ensure that the full potential of rapid reviews is achieved in LMICs, there is a need to mobilize and sustain the necessary resources in adequate amounts. Furthermore, review producers need to address the methodological concerns associated with these reviews.
KEY MESSAGE #4

Rapid review producers and knowledge users alike need to set up structures and systems supportive of rapid reviews and also need to improve the sharing of knowledge that arises from producing and using these reviews.
KEY MESSAGE #3&4

1. RAISE THE PROFILE OF RAPID REVIEWS IN LMICs
2. ADDRESS METHODOLOGICAL CONCERNS
3. INCREASE HUMAN, FINANCIAL, AND OTHER RESOURCES
4. PROVIDE SUPPORTIVE SYSTEMS AND STRUCTURES
5. ENSURE DOCUMENTATION AND KNOWLEDGE-SHARING

STRATEGIES TO IMPROVE THE CONDUCT AND USE OF RAPID REVIEWS IN LMICs
ACKNOWLEDGEMENTS

EDITORS
- Andrea C. Tricco
- Etienne V. Langlois
- Sharon E. Straus

FOR SHARING THEIR EXPERIENCES
- Nelson Sewankambo
- Marie-Gloriose Ingabire
- K2P team, Lebanon

SUPPORT
- Jesmin Antony
- Huda M. Ashoor
- Melissa Courvoisier
- Susan Le
CHAPTER 7:
REPORTING AND DISSEMINATING RAPID REVIEW FINDINGS

Shannon E. Kelly, Sharon E. Straus, Jessie McGowan, Kim Barnhardt
LEARNING OBJECTIVES

➢ To outline how to report findings from a rapid review of health policy and systems research, and discuss options for dissemination to appropriate knowledge users.
KEY MESSAGE #1

Knowledge users should be identified and engaged early and throughout the rapid review process.
KEY MESSAGE #2

Approaches to reporting and dissemination should be discussed with the primary knowledge user as early as the protocol stage.
KEY MESSAGE #1&2

1. Identify knowledge users in the early stages of the rapid review process.

2. Engage knowledge users throughout the rapid review process.

3. Discuss reporting and dissemination strategies, as early as the protocol stage.
KEY MESSAGE #3

Rapid reviews should prioritize the practical needs of the primary knowledge user over traditional or academic approaches to dissemination, by tailoring the message and methodological approach to the needs of knowledge users.
KEY MESSAGE #3

PRACTICAL NEEDS OF THE PRIMARY KNOWLEDGE USER

Message and methodological approach must be tailored for the knowledge user

TRADITIONAL OR ACADEMIC APPROACHES TO DISSEMINATION
KEY MESSAGE #4

Relevant reporting guidelines should be used in the development of rapid review reports, to ensure comprehensive and transparent documentation of the rapid review process.
## KEY MESSAGE #4

<table>
<thead>
<tr>
<th>Category</th>
<th>Items to consider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol</td>
<td>Was a protocol used?</td>
</tr>
<tr>
<td></td>
<td>If so, was the protocol made public, published in a journal, and/or registered (if so, provide reference and/or registration number, or link to protocol)?</td>
</tr>
<tr>
<td>Overall scope</td>
<td>Was the scope limited in any way?</td>
</tr>
<tr>
<td></td>
<td>Were there a limited number of research or policy questions?</td>
</tr>
<tr>
<td></td>
<td>Were the research questions of limited type (e.g. effectiveness only, specific populations)?</td>
</tr>
<tr>
<td></td>
<td>Was the number of included studies limited?</td>
</tr>
<tr>
<td>Comprehensiveness</td>
<td>Was the search strategy limited in any way (e.g. number of databases, grey literature, date, setting, language)?</td>
</tr>
<tr>
<td></td>
<td>Were there limits on the types of study designs included (e.g. existing systematic reviews, randomized controlled trials)?</td>
</tr>
<tr>
<td></td>
<td>Was textual analysis limited (e.g. no full-text review and/or limits on the number of items extracted)?</td>
</tr>
</tbody>
</table>
## KEY MESSAGE #4

<table>
<thead>
<tr>
<th>Category</th>
<th>Items to consider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigour and quality control</td>
<td>Was the process of dual study selection or dual data extraction modified or omitted?</td>
</tr>
<tr>
<td></td>
<td>Was the internal or external review of the final research report limited or omitted?</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Was the assessment of risk of bias or quality of evidence limited or omitted?</td>
</tr>
<tr>
<td></td>
<td>Was qualitative or quantitative analysis limited or omitted?</td>
</tr>
<tr>
<td>Other</td>
<td>When making statements about the findings of the rapid review, were the conclusions simplified or omitted?</td>
</tr>
<tr>
<td></td>
<td>Is it appropriate to provide a disclaimer and/or limitations section in context with your findings?</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

EDITORS
- Andrea C. Tricco
- Etienne V. Langlois
- Sharon E. Straus

SUPPORT
- Jesmin Antony
- Huda M. Ashoor
- Melissa Courvoisier
- Susan Le
CHAPTER 8: IMPROVING THE UPTAKE OF RAPID REVIEWS

Andrea C. Tricco, Roberta Cardoso, Sonia M. Thomas, Sanober S. Motiwala, Shannon Sullivan, Michael (Ryan) Kealey, Brenda Hemmelgarn, Mathieu Ouimet, Laure Perrier, Sharon E. Straus
LEARNING OBJECTIVES

- Present barriers and facilitators to the use of rapid reviews and methods to facilitate increased uptake by policy-makers and health systems managers.
KEY MESSAGE #1

Although rapid reviews can be helpful for health care decision-making, policy-makers and health systems managers do not always commission and use rapid reviews to inform their decisions due to a number of barriers.
KEY MESSAGE #1

Barriers:

- belief that results of rapid reviews are not useful or valid;
- lack of understanding about how to identify and access relevant rapid reviews;
- inability to assess or interpret rapid reviews;
- organizational resistance to implementing new evidence;
- lack of understanding about what evidence is required and how it can be used to influence and constitute policy.
KEY MESSAGE #2

Researchers can facilitate the uptake of rapid reviews by developing partnerships with policy-makers or health systems managers, and providing education about the validity and applicability of rapid review results, as well as how to identify rapid reviews, and assess and interpret findings.
KEY MESSAGE #2

- Facilitate uptake of reviews
  - Develop partnerships with policy-makers or health systems managers
  - Provide education about the validity and applicability of rapid review results
  - Provide education on how to identify rapid reviews
  - Provide education on how to assess and interpret findings
KEY MESSAGE #3

The following elements in a rapid review report will promote uptake:

1. a section on policy implications;
2. a focus on the results and interpretation (with less emphasis on the methods);
3. a summary of the study results using a standardized format (e.g. summary-of-findings tables);
4. targeting messages to key audiences and ensuring that the results are tailored to the knowledge user of the review;
5. consistent reporting of effect sizes (for quantitative reviews, such as those that include a meta-analysis or statistical combination of multiple studies).
KEY MESSAGE #3

To promote uptake, the following elements should be included in the content of a rapid review report:

1. **Section on Policy Implications**
2. **Focus on the Results and Interpretation**
3. **Summary of the Study Results Using a Standardized Format**
4. **Target Messages to Key Audiences. Ensure that the results are tailored to the knowledge users**
5. **Consistent Reporting of Effect Sizes**
KEY MESSAGE #4

In terms of formatting a rapid review report, the following aspects will promote uptake: preparing a one-page plain-language summary (i.e. research brief) that includes key messages and the publication date (to indicate how recently the review was performed); using white space to break up dense text; and providing simple one-page tables.
KEY MESSAGE #4

CONSIDER THE FOLLOWING ASPECTS IN FORMATTING A RAPID REVIEW TO PROMOTE UPTAKE

PREPARE A 1-PAGE, PLAIN-LANGUAGE SUMMARY

INCLUDE KEY MESSAGES AND PUBLICATION DATE

PROVIDE SIMPLE 1-PAGE TABLES

USE WHITE SPACE TO BREAK UP DENSE TEXT
ACKNOWLEDGEMENTS

EDITORS
➢ Andrea C. Tricco
➢ Etienne V. Langlois
➢ Sharon E. Straus

SUPPORT
➢ Jesmin Antony
➢ Huda M. Ashoor
➢ Melissa Courvoisier
➢ Susan Le