CADTH SUMMIT SERIES

RAPID REVIEW SUMMIT:
THEN, NOW, AND IN THE FUTURE

Vancouver, British Columbia
February 3 and 4, 2015

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The Summit in Brief

The Rapid Review Summit: Then, Now and in the Future was a day-and-a-half meeting of national and international researchers, knowledge users, and decision-makers hosted by CADTH, in partnership with the British Columbia Ministry of Health, the Centre for Clinical Epidemiology & Evaluation (C2E2), the Ottawa Hospital Research Institute, and the University of Pennsylvania. Approximately 150 participants attended, best characterized as knowledge producers and users of rapid reviews from a wide range of research and practice settings across Canada and internationally.

The purpose of the Summit was to focus on the evolving role of rapid reviews to support informed health care policy and clinical decision-making, including the uptake and use of health technology assessment (HTA). The Summit was guided by four objectives:

- to share information among health care decision-makers and providers, rapid review producers, and representatives from organizations interested in rapid reviews
- to facilitate discussions concerning the applications and production of rapid reviews
- to initiate the development of a priority research agenda to continue to advance the science of rapid reviews
- to contribute to the ongoing development of a community of practice for rapid reviews.

The Summit program was structured and facilitated to achieve an exchange of perspectives on rapid reviews, building on shared expertise and leading practice. Participants discussed what rapid reviews are; how they compare with systematic reviews; the use and dissemination of rapid reviews, including appropriateness and associated risks; and current research and priorities for a research agenda.

The exchanges among international experts in health care fields (including public health and HTA) and decision-makers (requestors and users of rapid reviews) reinforced that the rapid review research approach is an effective and timely way to source evidence to support health policy and practice decisions. There was broad consensus on the need to formally define various types of rapid reviews, to build a taxonomy, and to outline methods and approaches for dissemination and publication in order to achieve product consistency and quality. In the final session of the meeting, participants worked in groups to identify research ideas for a rapid review research priority agenda. Ideas were synthesized into seven main categories for future consideration by the Summit Planning Committee to support the community of practice advancing the science of rapid reviews.

Two documents will be produced as outcomes of the Summit. The first is this public report that provides presentation summaries and a synthesis of the discussions; it will be shared widely with participants, key stakeholders, and others. The second is a report targeted for general publication to help disseminate Summit proceedings and emerging propositions for future research. The CADTH Summit Secretariat will collaborate with the Summit Planning Committee to oversee the development and publication of both of these documents.

Introduction

The Rapid Review Summit: Then, Now, and in the Future took place February 3 and 4, 2015 in Vancouver. The purpose was to focus on the evolving role of rapid reviews to support informed health care policy and clinical decision-making, including the uptake and use of health technology assessments (HTAs). The Summit attracted approximately 150 participants best characterized as knowledge producers and users of rapid reviews, from a wide range of research and practice settings across Canada and internationally.

The Rapid Review Summit objectives were to:
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- facilitate discussions concerning the applications and production of rapid reviews
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- contribute to the ongoing development of a community of practice for rapid reviews.

Two reports will be prepared as a result of the Summit. This public report is written for Summit participants, rapid review producers, health care decision-makers and providers, and others interested in rapid reviews for sharing knowledge and experiences. The public report summarizes the presenters' main points and provides a synthesis of plenary discussions. It is organized chronologically according to the Summit's program (Appendix 1).

The second report will be prepared by the Summit Secretariat and the Summit Planning Committee in the weeks following the Summit, and is targeted for later publication in a peer-reviewed journal.

Welcome and Opening Remarks

Dr. Craig Mitton (member of the Summit Planning Committee; Professor, Senior Scientist, and Director of the Centre for Clinical Epidemiology & Evaluation [C2E2] at the University of British Columbia) provided a warm welcome to Canadian and international Summit participants.

Dr. Mitton aligned the Summit's purpose as it pertains to the evolving role of rapid reviews with CADTH's leadership role in health technology and CADTH's strategic imperative to "positively influence health decision-making."[1] He also acknowledged the Summit's complementarity to the Centre's academic function to "generate high-quality health research" that "informs and guides health policy and practice."[2]

In communicating the Summit's main purpose, Dr. Mitton noted the competing requirements — in terms of context and time — between knowledge producers and knowledge users. Knowledge users require the timely provision of an evidence base to inform decisions. Evidence producers, cognizant of increased scrutiny within the research field, are intent on advancing the science of rapid reviews to ensure methodological consistency and rigour in the production of knowledge products.

Summit Process Overview

Facilitator Dorothy Strachan supported the Summit aim of harnessing participant knowledge, expertise, and perspectives on rapid reviews. The spirit of the Chatham House Rule[3] was presented to encourage full and candid engagement. The Summit program was reviewed and participants were asked to keep track of questions to inform the priority research agenda that would be considered through group work. Ms. Strachan spoke of the Summit as part of a larger process, indicating the meeting results would go back to Planning Committee members who will consider next steps to support the community of practice advancing the HTA field.

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[1] Excerpt from the *CADTH 2015-2018 Strategic Plan*: *Informing Choices in a New Era of Health Care in Canada*. Ottawa: CADTH; 2015. Accessible at http://www.cadth.ca/media/corporate/planning_documents/2015-2018_Strat_Plan_e.pdf.

[2] The mission and vision for the *Centre for Clinical Epidemiology & Evaluation (C2E2)* are accessible at http://c2e2.ca/about.

[3] *Chatham House Rule.* London: Chatham House, The Royal Institute of International Affairs. Accessible at http://www.chathamhouse.org/about/chatham-house-rule

Rapid Reviews and Their Impact on Future Directions for Health Technology Assessment

In her keynote address, Vivian Coates (Vice President of Information Services and Health Technology Assessment for the ECRI Institute[4]) shared insights gained from ECRI's 18 years of experience in the development of rapid reviews. ECRI's move to rapid review development was motivated by the heightened use and introduction of technology-based health services and products. The increased demand for HTAs, along with client requirements for faster information delivery, informed ECRI's shift to focused, narrower HTAs based on rapid review results. Ms. Coates also emphasized that rapid reviews are often used to provide updates to full HTAs and/or systematic reviews.

As one of its major activities, ECRI approaches rapid reviews as requiring "systematic, replicable, and transparent processes." While rapid reviews are frequently requested in the absence of robust evidence for HTAs, ECRI supports the commitment to update or replace rapid reviews with HTAs once a body of evidence has accumulated.

Compared with full HTAs and systematic reviews, rapid reviews take much less time to produce at ECRI. They are narrower in scope, minimize or eliminate external review, and do not include meta-analysis. ECRI has developed three approaches to rapid reviews with varied levels of synthesis and timelines: emerging technology reports that take from three to five months to produce (20 per year); hotline responses that take from 10 to 20 days (100 per year); and product briefs that take five to 15 days (200 per year).

Noting how the field is evolving with requests for products increasing, Ms. Coates highlighted the need for infrastructure to respond to growing demand. Essential elements include a team of master's-prepared librarians trained with skills specific to rapid review searches, high-level staff to engage clients and to author reviews, and staff with topic expertise to review reports and craft expert opinion statements. The process of developing rapid reviews is guided by written protocols and guidance documents to ensure replicability and transparency. Given accelerated production timelines, a workflow tracking system assists with tracking the process.

In her conclusion, Ms. Coates acknowledged that demand for systematic reviews will likely decrease, while demand for rapid reviews will likely increase to support urgent decision-making in a timely and less resource-intensive manner. Notwithstanding, she asserted that full HTAs and systematic reviews are necessary to determine comparative effectiveness

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[4] Formerly the Emergency Care Research Institute, ECRI Institute is a non-profit organization dedicated to improving patient care through applied scientific research to discern the best medical procedures, devices, drugs, and processes. See *About the ECRI Institute*. Plymouth Meeting (PA): ECRI Institute. Accessible at: https://www.ecri.org/about/pages/default.aspx

(particularly when a body of evidence is significant enough to evaluate topics) and comprise essential inclusion criteria for guidelines set by the National Guideline Clearinghouse.[5]

Plenary Discussion

Ms. Coates responded to a number of questions in plenary, sharing her experience and perspective on ECRI's rapid review methods. Areas of focus included:

- Limitations of evidence base: The "perishability" of the evidence in rapid reviews will call for updates and revisions as further relevant evidence is published. ECRI sets up automated searches that identify requests from clients, manufacturers' notices of updates, and regulatory changes that could trigger the need for updates.
- Production timelines: Time frames for the production of rapid reviews range from three or more days (depending on client needs and timelines) to more in-depth rapid reviews that involve other stages, including internal reviews. This can take up to three to four months.
- The question of "ever saying no" to conducting HTAs: ECRI does not reject requests; however, staff will work to focus a topic and negotiate acceptable timelines with prospective clients.
- Managing expectations: Ms. Coates noted the need for greater client education about the scope and limitations of rapid reviews, even though their availability on the ECRI website enables client familiarization with these products. Clarifying the research questions and the scope of the review is essential, as some requests present challenging questions unrealistic for a rapid review. She also reinforced the fact that conclusions are non–evidence-based, as critical appraisal of evidence is not undertaken with rapid reviews.
- Content expertise and authorship: The production timeline for rapid reviews does not allow for engaging external content experts. ECRI has 400 full-time staff, some of whom previously authored systematic reviews on specific topics, so expertise generally comes from within. Rapid reviews developed by ECRI employees are published within the Health Technology Assessment Information Service and given institutional authorship.
- Consumer and patient groups: While the majority of work undertaken by ECRI is funded by health professionals and the health industry, questions raised by foundations and the public to address patient-related issues are also addressed (for example, a rapid review developed for a bulimia foundation was translated into a highly used patient and family guide).[6] If ECRI comes across a finding it feels should be shared with the public, it will do so selectively, recognizing that findings need to be translated into a format that is meaningful for the public.
- Risks associated with accessing the right evidence, and gaps in evidence: ECRI does the best it can, keeping in mind the associated risks of rapid reviews. ECRI searches for and

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[5] *National Guideline Clearinghouse (NGC) inclusion* criteria. Rockville (MD): AHQR. Accessible at: http://www.guideline.gov/about/inclusion-criteria.aspx *FAQs on NGC's revised inclusion criteria* are accessible at: http://www.guideline.gov/faq.aspx.

[6] *Bulimia Nervosa Resource Guide for Family and Friends*. Plymouth Meeting (PA): ECRI Institute; 2015. Accessible at: http://www.bulimiaguide.org/. ECRI developed the guide with funding by the Hilda and Preston Davis Foundation.

reviews published data through many lenses, including what is funded for study, what is published, and coding and library classifications. If ECRI does not see published evidence to support claims that have been made (e.g., a new procedure or device that a hospital is under pressure to adopt), that is considered a gap in the evidence.

- Formatting and packaging: ECRI has evolved style guides and templates to guide the formatting and production of reports.
- Accuracy: An external, voluntary audit committee convenes twice a year at ECRI. Reports, including rapid reviews, are selected and reviewed for accuracy. ECRI recently published an article in *Health Affairs* on its experience with forecasting health care technologies, noting 75% accuracy in prediction rate on cases examined.

Rapid Review Programs: Perspectives and Practices From Around the World

Julie Polisena (Clinical Research Manager, CADTH) and Chris Kamel (Clinical Research Manager, CADTH) presented findings from an environmental scan of rapid review processes and methods. The study followed an open Rapid Review Methods Discussion at the 2013 Cochrane Colloquium in Quebec City attended by 40 registrants representing academia, government, research institutions, not-for-profit organizations, and the Cochrane Collaboration. The findings have been published in an open access journal, *Systematic Reviews Journal*. [7]

Applying targeted and snowballing sampling techniques, the study authors invited Colloquium participants to participate and assist with identifying additional programs for engagement. Study participants were asked to share details about their definitions of rapid reviews and further methods and processes central to their rapid review programs.

Twenty-nine rapid review programs representing academia, government, research institutions, and not-for-profits from Canada and other countries shared information about their applied definitions of rapid reviews, types of reports generated, topic selection, report development, dissemination and publication, and client and funder education as a basis for comparison and interpretation.

Ms. Polisena and Mr. Kamel noted the study limitations yet indicated that the resulting descriptive analysis represented "a comprehensive attempt to characterize a broad spectrum of rapid review programs and their respective methods." They reported that there is no "one-size-fits-all" approach to rapid reviews. While the field of rapid review production is relatively new with no standard definitions, rapid review methods and timelines are informed by HTA and systematic review methods, and are generally tailored to the needs of requestors.

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[7] Polisena J, Garritty C, Kamel C, Stevens A, Abou-Setta AM. Rapid review programs to support health care and policy decision making: a descriptive analysis of processes and methods. *Systematic Reviews* 2015, **4**:26.

With decision-makers increasingly seeking evidence to inform policy-making, access to high-quality evidence is needed to inform decisions. With this in mind, the study was instructive in identifying areas for future research, including the development of metrics to assist in determining the impact of rapid reviews on decision-making, policy debate, cost savings, and harm reduction. A taxonomy of the types of rapid reviews and methodologies that outlines strengths, limitations, and risks associated with bias is needed, as is comparative research of the methods used in developing rapid reviews with the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) reporting guidelines and A Measurement Tool to Assess Systematic Reviews (AMSTAR) quality assessment checklist. Further, tools and resources (guidelines, templates) are required to facilitate the development process, as well as reporting and dissemination of reviews.

Plenary Discussion

As the plenary discussion commenced, more than half of those present expressed an interest in rapid reviews to support health system evidence. Participants from a number of organizations, including the Bruyère Research Institute, World Health Organization (WHO), University of Pennsylvania, and Elsevier Publishing House identified organizations and institutions involved in rapid reviews to synthesize evidence for clinical decision-making.

Should there be an opportunity to extend this environmental scan, the authors suggested they might explore a number of HTA agencies and institutions as well as non-HTA agencies. The WHO has commissioned such work, using similar methods along with crowd sourcing. This work is in its final stages of manuscript preparation and may be available in approximately three months.

The discussion of how rapid reviews can be considered credible without a critical review focused on the importance of research integrity and rigour, which can serve as a basis to refrain from developing conclusions in the absence of sufficient evidence.

Reception to Celebrate CADTH's 10-Year Anniversary of Rapid Response Service

Dr. Michelle Mujoomdar (Assistant Chief Scientist, CADTH) welcomed participants to the opening reception and poster exhibition at the end of the first day of the Rapid Review Summit. She noted the Summit as CADTH's second in a series of activities designed to highlight the evolving role of HTA and bring together evidence producers and users to continue to advance the science.

Dr. Mujoomdar acknowledged the timeliness of the Rapid Review Summit, given the growing imperative worldwide for reliable ways to deliver evidence-based information to decision-makers in a timely manner. She also acknowledge the 10th Anniversary of CADTH's Rapid Response Service as the organization's fastest and most flexible service that, to date, has completed close to 3,000 Rapid Reviews that have informed decisions about the appropriate use of health technologies.

CADTH's Rapid Response Service has been shown through evaluations to be a model for meeting decision-maker needs and to have inspired programs around the world. She credited the program's practical approach that focuses on policy and practice issues to support real-life decision-making, an asset favourably recognized by users.

Dr. Mujoomdar acknowledged a number of CADTH staff members who have been involved in the Rapid Review Summit as managers, researchers, and liaison officers, all of whom have played significant roles advancing the program and its connections with decision-makers.

Rapid Reviews Versus Systematic Reviews: What is the Difference?

The purpose of this session was to:
- discuss the difference between rapid reviews and systematic reviews
- present a framework for rapid review methods in terms of feasibility, timeliness, comprehensiveness, and risk of bias for each rapid review
- select two general rapid review approaches for testing purposes.

Dr. Andrea Tricco (Scientist, Li Ka Shing Knowledge Institute, St. Michael's Hospital) led a discussion in collaboration with Institute colleagues Jesmin Antony (Research Coordinator) and Dr. Sharon E. Straus (Scientist). The aim was to discuss the difference between rapid reviews and systematic reviews, present results from three methods projects on rapid reviews, and, through an interactive process with participants, select two general rapid review

approaches to be tested in a future diagnostic study outlining the differences between rapid reviews and systematic reviews.

Dr. Tricco cited the Cochrane Collaboration definition[8] that states, "a systematic review uses systematic and explicit methods to identify, select, critically appraise, and extract and analyze data from relevant research." With reference to the PRISMA-P statement,[9] she noted that systematic reviews are usually resource-intensive and undertaken in several steps conducted by two reviewers independently.

While no formal definition exists, Dr. Tricco stated that 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."[10]

Ms. Antony shared conclusions on research aimed at updating two previous systematic reviews (Ganann 2010; Watt 2008[11]) on rapid review methods. Undertaken by two reviewers independently, 3,393 rapid review citations were identified through a search of multiple electronic databases and a sample of grey literature. Of these, 101 were reviewed as part of the study. Study findings concurred with previous observations: little consistency exists in this field with a number of approaches used in rapid reviews; methods are frequently not well reported; and a prospective comparative study of rapid and systematic reviews results has not been undertaken.

In another study, organizations conducting rapid reviews were surveyed; of the 63 organizations contacted, 38 responded. The findings illustrated a one- to 12-week period for conducting rapid reviews. Approaches to support streamlining the process included a solo reviewer who draws from previous reviews, assigns deadlines for searchers, includes published materials only, and reports using a narrative format.

Dr. Tricco introduced findings from an early phase of a current study that aims to select a rapid review approach to be tested through a consensus-building exercise. The study, called DARTS (Diagnostic Accuracy of Rapid reviews compared To Systematic reviews), requests participants to rank their six most frequently used rapid review approaches based on

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[8] Higgins JPT, Green S (editors). *Cochrane Handbook for Systematic Reviews of Interventions* Version 5.1.0 [updated March 2011]. The Cochrane Collaboration, 2011. Accessible at: www.cochrane-handbook.org.

[9] PRISMA-P is the Preferred Reporting Items for Systematic reviews and Meta-Analyses for Protocols, a 17-item checklist intended to assist with the development and reporting of a 'robust protocol for the systematic review'. See *PROSPERO –References and resources*. York(UK); Centre for Review and Dissemination. Accessible at: http://www.crd.york.ac.uk/PROSPERO/.

[10] Khangura S, Konnyu K, Cushman R, Grimshaw J, Moher D. Evidence Summaries: the evolution of a rapid review approach. *Syst Rev* 2012 Feb 10;1:10.

[11] Ganann R, Ciliska D, Thomas H. Expediting systematic reviews: methods and implications of rapid reviews. *Implement Sci* 2010; 5:56.
Watt A, Cameron A, Sturm L, Lathlean T, Babidge W, Blamey S, Facey K, Hailey D, Norderhaug I, Maddern G. Rapid reviews versus full systematic reviews: an inventory of current methods and practice in health technology assessment. *Int J Technol Assess Health Care* 2008; 24:133-139.

feasibility, timeliness, comprehensiveness, and risk of bias. While this research is ongoing, its ultimate goal is to contribute to a definition for rapid review, and identify and describe methods and approaches for rapid reviews.

Plenary Discussion

A discussion ensued on the need for a comparative evaluation of the impact systematic reviews and rapid reviews have on influencing policy decisions. Dr. Hartling (University of Alberta) was invited to provide information about a recently released white paper that categorized a range of rapid review products. A follow-up study is under way that explores policy-makers' experiences with rapid reviews, how rapid reviews are being used, policy-makers' perceptions of the risks and trade-offs, and how those risks and trade-offs are handled.

When asked about measuring and reporting on bias with rapid reviews, Dr. Tricco noted the importance of research that explores accuracies and the range and extent of bias, along with other components. She noted it would be advantageous to find ways to conduct systematic reviews more quickly and efficiently, without jeopardizing the quality of results.

The observation was shared that although research is under way to explore the impact of these two knowledge synthesis tools on decision-making, it is difficult to establish a correlation given the many factors that influence government decisions.

A question arose about whether key informants are normally interviewed as part of rapid review development, considering the opportunity it presents to access information about grey literature. Dr. Tricco stated that while this is not formally undertaken with rapid reviews, contact with experts who hold knowledge of other studies and insights into methods may occur. An integrated knowledge translation approach is part of systematic reviews that engages policy-makers at different stages of study design and interpretation.

Following the discussion, participants were engaged in an online voting exercise, led by Dr. Tricco, Dr. Strauss, and Ms. Antony, to select two approaches for testing purposes.

Panel: Applications and Appropriateness of Rapid Reviews

The purpose of this session and panel discussion moderated by Jeannette Smith (Liaison Officer, Federal Programs and Nunavut, CADTH) was to:
- describe how decision-makers are using rapid reviews to inform their decision-making
- discuss the expectations of health care decision-makers with the use of rapid reviews in their contexts
- explore the appropriateness and risks related to rapid reviews in supporting informed decision-making and developing clinical practice guidelines.

Kevin Samra (Director of Strategic Projects Branch, British Columbia Ministry of Health) acknowledged the importance of evidence to guide clinical decisions and safety. He recognized the merits of HTAs and systematic reviews, yet pointed to the required development time and the extent to which ongoing publication introduces the risk of research findings being outdated and perceived as less relevant once produced.

Mr. Samra noted that while rapid reviews are an instrumental part of decision-making, they form only one part of the business case within a health environment and context that includes varied perspectives and pressures that need to be considered and managed. Decision-makers want timely information, given the imperative for agility in addressing patient and system issues, and ultimately "doing no harm." The appropriateness and risks associated with decisions need to be monitored and evaluated retrospectively. He acknowledged CADTH's capacity for providing quality support.

Dr. Janet Joy (Director of Innovation and Evaluation, Vancouver Coastal Health) acknowledged her role working with decision-makers who require information but reinforced that, while important, evidence is a "small piece of what needs to be taken into account." She concurred that the relatively significant length of time needed to prepare systematic reviews does present challenges.

In advance of the Summit, Dr. Joy conducted an informal survey of approximately 40 health practitioners, technicians, purchasers, and planners to explore their familiarity and use of CADTH's Rapid Response Service. She learned that only half knew about the service, with pharmacists and nurses using it the most. She categorized three types of users: those who have used the service only once, those who may not have used the service yet encourage others to do so, and those not aware of the service yet who read and circulate reports.

Dr. Craig Umscheid (Assistant Professor of Medicine and Epidemiology, University of Pennsylvania Perelman School of Medicine; Director of the Center for Evidence-Based Practice at the University of Pennsylvania Health System; Senior Associate Director of the ECRI – Penn

AHRQ[12] Evidence-Based Practice Center) was asked to speak from a provider perspective on how rapid reviews are being used in the Pennsylvania health care system.

Dr. Umscheid highlighted the Center's mission to support quality, safety, and value of patient care through evidence-based practice and spoke of the integral role rapid reviews play in informing clinical practice, policy, and purchasing and formulary decisions. He said the Center for Evidence-Based Practice (CEP) exists as "one of the few academically based centers in the United States with internal and external funding" to support clinical decision-making. It is structured and staffed to service the needs of the entire health care system, including acute care hospitals, outpatient clinics, rehabilitation centers, and home care within the system. Rapid reviews respond to the needs of these domains, with the majority of requests originating in clinical practice areas. The focus is largely on drugs, devices, equipment and supplies, and care processes. The Center now produces 30 to 40 reports annually, with production time averaging eight to 12 weeks. All reports are posted on the Center's website, with more than 100 indexed in the Cochrane HTA database. The Center also evaluates and prioritizes new clinical decision support (CDS) proposals, develops and deploys CDS interventions, and catalogues and evaluates implemented interventions.

Dr. Susan L. Norris (Guidelines Review Committee Secretariat, WHO Press, WHO) spoke of WHO's work developing terminology and processes related to guideline development.[13] Over the past eight years, 171 published WHO guidelines have been approved by the Guideline Review Committee (GRC). Dr. Norris outlined four types of guidelines used by the WHO: systematic reviews (based upon a full guideline development process that takes from six months to two years), consolidated reviews (include GRC-approved recommendations), rapid advice guidelines (an abbreviated process of one to three months), and interim reviews (a protocol that is narrow in scope with a short shelf-life).

Experiences with rapid advice and interim guidelines were highlighted, given their importance advising member states facing public health emergencies. Most recently, both approaches were used to explore evidence to support decisions related to personal protective equipment (PPE) used by health providers responding to the Ebola outbreak in West Africa.

The WHO is currently developing the processes and methods for rapid advice guidelines (RAG). The nine steps — from the point of determining the need for a RAG to its publication — were itemized and applied to bringing evidence to support PPE guidelines. Lessons from the recent Ebola experience will assist with fine-tuning RAG methods development. For example, questions arose about how to evaluate and adapt off-the-shelf guidelines, how to determine when new RAGs are indicated, what processes can and cannot be cut or abbreviated, what the

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[12] *ECRI Institute – Penn Medicine, Evidence-based Practice Center (EPC).* Designated by the Agency for Healthcare Research and Quality. https://www.ecri.org/about/Pages/Evidence-based-Practice-Center.aspx
[13] *WHO Handbook for Guideline Development.* Geneva: WHO; 2012. Accessible at: http://apps.who.int/iris/bitstream/10665/75146/1/9789241548441_eng.pdf.

essential steps are given different timeframes, approaches to developing guidelines very quickly (overnight and within days), the role of the GRC in emergency guidelines, and evaluating whether RAGs impact policy and/or health outcomes.

Plenary Discussion

Participants initiated this discussion with comments about tensions that exist in many settings between the evidence base and the experience base of health care professionals. Presenters reinforced the complexity of non–evidence-informed factors (expertise, values, and interests) that influence decision-making. One presenter noted there is a shift in the health care system from "what is the matter with you?" to "what matters to you?", which calls for highlighting known evidence to inform opinions. All presenters concurred that the evidence is only one factor that influences the decision-making process, yet high-level leadership is necessary to support evidence-informed policy and practice.

Approaches to addressing conflicts of interest were discussed, noting the imperative of guidelines calling for the declaration of conflicting interests. Also noted were the risks associated with corporate interests playing a heavy hand in influencing decisions contrary to evidence. This reality presents a risk of "going backwards with what has been accomplished."

The value of including patient and stakeholder experiences in the development of rapid reviews was explored, given the importance of personal experience informing approaches. Presenters acknowledged the relevance, yet were uncertain about how this could be accomplished given the timelines, scope, and focus of rapid reviews. The difference between the research synthesis requestor and the reviewer was noted, in that rapid reviews are generally centred on the needs of a specific requestor who is often immersed in a policy or clinical area, whereas the robustness and quality of systematic reviews are the primary focus of reviewers.

The challenges of managing broad input that may include bias and conflicts of interest were raised. Presenters concurred that process transparency is key and is enabled through broad inclusiveness including the public, and advocacy and interest groups.

Presenters responded to a suggestion about working with top leadership to provide modelling that supports approaches to rapid review use and implementation. Product development time pressures that may seem unrealistic were also discussed. The extent to which public health emergencies place heightened pressure for evidence in a timely manner was acknowledged, as was the importance of being transparent about the risks associated with accelerated responses. Educating leaders to understand and appreciate the strengths and limitations of unrealistic timelines as well as related ethical and moral dilemmas is essential.

Publishing Rapid Reviews: Risks and Opportunities

The purpose of this session was to highlight the risks and opportunities of publishing evidence-based reports, including rapid reviews.

Dr. Lesley Stewart (Director of the Centre for Reviews and Dissemination [CRD], University of York; National Institute for Health Research [NIHR] Senior Investigator; Editor-in-Chief, *Systematic Reviews Journal*) was invited to speak about publishing rapid reviews. Dr. Stewart described a recent scoping study of 13 rapid reviews that identified different categories of approach, including: scoping studies (critical appraisal of key studies), evidence bulletins, summaries, and briefings (that examined existing systematic reviews), reviews of reviews (descriptive/analytic), and rapid systematic reviews (expedited process and methods).

The terminology used for rapid reviews varies with the timeline for production, ranging from six weeks to 15 months (with a median of six months). Terms include rapid systematic review, rapid evidence review, rapid evidence assessment, rapid synthesis, and rapid realist review. Approaches to dissemination were an optional part of Dr. Stewart's scoping study; seven rapid reviews were disseminated through journal articles, two circulated directly to decision-makers, and one was delivered as a conference presentation. These findings were somewhat comparative with an informal comparison of 10 PROSPERO reviews that did not have "rapid" in the title.

Dr. Stewart noted that "good scientific endeavour" in rapid reviews is built around transparency and accountability. The purpose for publishing — either formally through peer-reviewed journals or informally using social media, websites, and other means — supports academic credit with the opportunity for peer review and input, and knowledge transfer and translation, while helping to avoid unintended duplication and waste.

Dr. Stewart outlined the pros and cons for publishing in academic journals and informally. She suggested following PRISMA guidelines, explaining the rationale for using a "rapid" approach, and paying close attention to detailing the methods used, including deviations from accepted systematic review processes. Similar to systematic reviews, the rationale for registering rapid reviews is to achieve transparency and avoid unintended duplication.

Dr. David Moher (Senior Scientist – Clinical Epidemiology, Ottawa Hospital Research Institute; Associate Professor, Department of Epidemiology and Community Medicine, Faculty of Medicine, University of Ottawa; Editor-in-Chief, *Systematic Reviews Journal*) was asked to speak about whether there is a need for rapid review reporting guidelines and whether PRISMA-P is useful in generating rapid review protocols. In describing a rationale for the development of reporting guidelines, Dr. Moher noted that rapid review publication findings illustrate an increased interest and production of rapid reviews by multiple agencies and institutions. A recent *Systematic Reviews Journal* series on rapid reviews was accessed more than 8,000

times. Notwithstanding, the publication record is not as good for rapid reviews, leading to considerable, avoidable duplication and waste. He stated that inconsistency in reporting is also prevalent, as was demonstrated in a recently published systematic review[14] that examined 150 meta-analyses of randomized surgical intervention trials published between January 2010 and June 2011.

While there is broad agreement as to what constitutes a systematic review, Dr. Moher suggested a barrier to the development of rapid review reporting guidelines is the lack of consistent terminology and methods. He reinforced that guidelines are needed in the form of a reporting checklist, flow diagram, or "an explicit text to guide authors in reporting a specific type of research, developed using explicit methodology."

He proposed several steps for the development of rapid review reporting guidelines, including:
- a literature review of published articles aimed at identifying evidence relevant to the quality of reporting
- seeking perspectives of providers and patients through a Delphi exercise
- convening a meeting to support the development of a checklist and flow diagram
- piloting the checklist
- preparing for publication (with the recommendation to disseminate widely through multiple journals, particularly open access journals).

Subsequent development of a tool kit might include approaches to formatting that could evolve over time.

Plenary Discussion
There was interest in exploring approaches to posting rapid reviews on PROSPERO as a means of widely disseminating findings. Dr. Moher noted the regulatory role in advancing protocol registration, citing the example of the NIHR, which withholds final funding until systematic reviews have been registered in PROSPERO.

Information dissemination is important and is different from publishing work. To publicize rapid review information, there are many sites that extend beyond organizational websites (e.g., Elsevier and the HTA website). Cost could form a barrier to publication; for example, the fee for the *Systematic Review Journal* is US$2,450. Notwithstanding cost, Dr. Moher stated that there "needs to be a dialogue about how we can get work published" given the importance of sharing findings and reducing duplication and waste.

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[14] Adie S, Ma D, Harris IA, Naylor JM, Craig JC. Quality of Conduct and Reporting of Meta-analyses of Surgical Interventions. *Ann Surg* 2015;261(4):685-94.

Mind the Gap: Initiating the Development of a Priority Research Agenda for Rapid Reviews

The purpose of this session was to:
- highlight ongoing rapid review research initiatives
- initiate the development of a rapid review research priority agenda.

Chantelle Garritty (Senior Program Manager, Knowledge Synthesis Group, Ottawa Hospital Research Institute) was asked to highlight current rapid review research initiatives with a focus on emerging issues due to the production of more rapid reviews. The Institute's work on rapid reviews dates to 2009 with a Canadian Institutes for Health Research "knowledge to action" grant undertaken in partnership with the Local Health Integrated Network (LHIN). Setting up a "knowledge intelligence service" to support the LHIN with policy, implementation, and practice decisions, the team developed 18 rapid evidence summaries in response to questions posed by LHIN.

Since first published several years ago, the types of systematic reviews developed by the Institute have expanded and been refined. Efforts are under way to characterize the different types of rapid reviews being produced and to explore further areas of research to strengthen methods that might be shared using e-learning tools and resource tool kits. Further areas of development include examining a global sample of recently completed, published, and unpublished rapid reviews to discern reporting characteristics that can be mapped to systematic review best practices. Capturing and cataloguing various characteristics of rapid review formats is also an area of interest, as is determining the use of rapid reviews by research and funding agencies to assist with identifying knowledge gaps, setting priorities, and ensuring appropriate use of funding dollars.

In addition, a recently established working group of the Guidelines International Network will work to develop guidelines for producing rapid reviews in accelerated time frames. Efforts to establish a rapid review methods group with the Cochrane Collaboration is also under way. The core functions of the collaboration would include providing training and support, tracking research in this area, and serving as a discussion forum to support further collaboration amongst interested parties.

Dr. Jeanne Marie Guise (Director, Institute for Patient-Centered Comparative Effectiveness; Associate Director of the Scientific Resource Center for AHRQ's Effective Health Care Program) spoke about the Institute's work with rapid reviews. Established in 1997, the 13 evidence-based practice centres across the United States conduct research on evidence synthesis methodologies and develop evidence reports and HTAs to support requests by professional groups, health plans, insurers, employers, patient groups, and the public. Products developed for the Veteran Affairs program primarily inform the development of research agendas and health systems policy initiatives. Research objectives in 2014-2015 have focused on the methods and context for the production of rapid reviews and on end-user

perspectives, with the aim of building insights into the strengths and limitations of rapid reviews.

Dr. Guise identified various types of rapid reviews (based on the extent of literature review, evidence of synthesis, and timelines) that have been compared with systematic reviews with similar observations. Rapid reviews were described as performing "a synthesis (qualitative, quantitative, or both) to provide the end-user with an answer about the direction and possibly the strength of the evidence." Dr. Guise noted that her organization is relatively new to rapid reviews, and thus is in the process of developing its methodology. Most rapid reviews are developed within three to four months, and perform a qualitative synthesis that provides an answer about direction and strength of evidence. The methods for accelerated review are topic-dependent, yet include "careful scoping, restricted extraction, and flexible quality control processes." All reports are posted on the Internet and may include dissemination through other websites and publications in journals.

Plenary Discussion
Participants discussed the extent to which a rapid review database could be a significant asset for improving access to existing work while reducing duplication. Questions related to the type of infrastructure, proprietary considerations, current terminology inconsistencies, and management were highlighted as needing further consideration.

Proposed Research Project Ideas: Group Work

Participants worked together in small groups to identify ideas for a rapid review research priority agenda. Group members were asked to share ideas, identify similarities and areas of overlap, and then submit their top suggestions.

A total of 50 ideas were submitted by the 11 groups. Ideas were listed in a table and reviewed to identify core concepts, key elements, and similarities. They were checked against the ideas submitted and refined where needed. The ideas were then grouped into seven main thematic areas:

- Theory and Taxonomy
- Methods and Application
- Comparison and Contrast with Systematic Review
- Evaluation of Use
- Database
- Influencing Practice
- Tools and Guideline Development

The Summit Secretariat and Summit Planning Committee will review the submitted ideas to consider next steps. In addition, a discussion paper is being developed for publication in a peer-reviewed journal that will support the dissemination of Summit proceedings and include references to the emerging propositions for future research.

Closing Remarks

In her closing remarks, Julie Polisena thanked presenters and participants for their rich contributions and the high level of engagement that signalled expanding interest in a community of practice to advance the science of rapid reviews. She reminded participants that two reports would be developed: a public report and a paper for publication. Finally, she acknowledged the work of the Summit Planning Committee, the facilitator, and the CADTH Secretariat for their planning support and participation.

APPENDIX 1: SUMMIT PROGRAM

Hosted by the Canadian Agency for Drugs and Technologies in Health, in partnership with the British Columbia Ministry of Health, the University of British Columbia Centre for Clinical Epidemiology and Evaluation, the Ottawa Hospital Research Institute, and the University of Pennsylvania.

PURPOSE:
This two-day summit will focus on the evolving role of rapid reviews to support informed health care policy and clinical decision-making, including the uptake and use of health technology assessments.

OBJECTIVES:
1. To share information among health care decision-makers and providers, rapid review producers, and representatives from organizations who are interested in rapid reviews
2. To facilitate discussions concerning the applications and production of rapid reviews
3. To initiate the development of a priority research agenda to continue to advance the science of rapid reviews
4. To contribute to the ongoing development of a community of practice for rapid reviews.

TUESDAY, FEBRUARY 3, 2015 – Plaza Ballroom

TIME	ACTIVITY	PRESENTERS
1300-1600	REGISTRATION DESK OPENS	
1400-1415	**Welcome and Opening Remarks**	**Dr. Craig Mitton,** Professor, Senior Scientist, and Director, Centre for Clinical Epidemiology & Evaluation,
1415-1430	**Summit Process Overview**	**Dorothy Strachan,** Partner, Strachan-Tomlinson
1430-1530	**Keynote Address: Rapid Reviews and their Impact on Future Directions for Health Technology Assessment** Plenary Discussion	**Ms. Vivian Coates,** Vice President, Information Services and Health Technology Assessment, ECRI Institute
1530-1615	**Rapid Review Programs: Perspectives and Practices from around the World** Plenary Discussion	**Ms. Julie Polisena,** Clinical Research Manager, CADTH **Mr. Chris Kamel,** Clinical Research Manager, CADTH
1615-1830	**Reception to celebrate CADTH's 10-Year Anniversary of Rapid Response Service and Poster Session** (Location: Stanley/Cypress Rooms)	**Dr. Michelle Mujoomdar,** Assistant Chief Scientist, CADTH

WEDNESDAY, FEBRUARY 4, 2015 – Plaza Ballroom

TIME	ACTIVITY	PRESENTERS
0700	**REGISTRATION DESK OPENS**	
0715-0815	**BUFFET BREAKFAST – Plaza Ballroom**	
0815-0830	**Agenda: review/preview; small group introductions**	**Dorothy Strachan,** Partner, Strachan-Tomlinson
0830-1000	**Rapid Reviews versus Systematic Reviews: What is the Difference?** • To discuss the difference between rapid reviews and systematic reviews • To present a framework for rapid review methods in terms of feasibility, timeliness, comprehensiveness, and risk of bias for each rapid review • To select two general rapid review approaches for testing	**Dr. Andrea C. Tricco,** Scientist, Li Ka Shing Knowledge Institute, St. Michael's Hospital **Co-presenters:** **Dr. Sharon E. Straus,** Scientist, Keenan Research Centre, Li Ka Shing Knowledge Institute, St. Michael's Hospital **Ms. Jesmin Antony,** Research Coordinator, Li Ka Shing Knowledge Institute, St. Michael's Hospital
1000-1030	**HEALTH BREAK**	
1030-1200	**Panel: Applications and Appropriateness of Rapid Reviews** • To describe how decision-makers are using rapid reviews to inform their decision-making • To discuss the expectations of health care decision-makers with the use of rapid reviews in their contexts • To explore the appropriateness and risks related to rapid reviews in supporting informed decision-making and developing clinical practice guidelines Plenary Discussion	**Moderator:** **Ms. Jeannette Smith,** Liaison Officer – Federal Programs and Nunavut, CADTH **Panelists:** **Dr. Janet Joy,** Director of Innovation and Evaluation, Vancouver Coastal Health **Mr. Kevin Samra,** Director, Strategic Projects Branch, BC Ministry of Health **Dr. Craig Umscheid,** Assistant Professor of Medicine and Epidemiology, University of Pennsylvania and Senior Associate Director, ECRI- Penn AHRQ Evidence-based Practice Center **Dr. Susan L. Norris,** Guidelines Review Committee Secretariat, WHO Press, World Health Organization

WEDNESDAY, FEBRUARY 4, 2015 – Plaza Ballroom

TIME	ACTIVITY	PRESENTERS
1200-1300	**LUNCH – Plaza Ballroom**	
1300-1400	**Publishing Rapid Reviews: Risks and Opportunities** • To highlight the risks and opportunities of publishing evidence-based reports, including rapid reviews Plenary Discussion	**Dr. Lesley Stewart,** Director of the Centre for Reviews and Dissemination (CRD), University of York. and National Institute for Health Research (NIHR) Senior Investigator, Editor-in-Chief, *Systematic Reviews Journal* **Dr. David Moher,** Senior Scientist-Clinical Epidemiology, Ottawa Hospital Research Institute and Associate Professor, Department of Epidemiology & Community Medicine, Faculty of Medicine, University of Ottawa; Editor-in-Chief, *Systematic Reviews Journal*
1400-1430	**HEALTH BREAK**	
1430-1530	**Mind the Gap: Initiating the Development of a Priority Research Agenda for Rapid Reviews** • To highlight ongoing rapid review research initiatives • To initiate the development of a rapid review research priority agenda Small Group Work	**Ms. Chantelle Garritty,** Senior Program Manager, Knowledge Synthesis Group, Ottawa Hospital Research Institute **Dr. Jeanne-Marie Guise,** Director, Institute for Patient-Centered Comparative Effectiveness and Associate Director of the Scientific Resource Center for AHRQ's Effective Health Care Program
1530-1600	**Closing Remarks**	**Ms. Julie Polisena,** Clinical Research Manager, CADTH