Collaborative HTA: The Whole is Greater than the Sum of its Parts

CADTH SYMPOSIUM 2018

HQO: Nancy Sikich, Andree Mitchell, Sarah McDowell, Vivian Ng

CADTH: Lesley Dunfield, Laura Weeks, Gino De Angelis, Bernice Tsoi



CADTH

Panel outline

- Pan-Canadian HTA Collaborative
- Harmonized principals
- Process overview and alignment
- Clinical overview
- Economic overview
- Conclusions and discussion





Pan-Canadian HTA Collaborative

- Formed in 2011
- Share best practices, minimize duplication of effort
- Contribute to joint initiatives
- Foster collaboration among regional HTA producers
- Improve the development and use of HTA
 - Improve patient outcomes
 - Improve health system sustainability







Pan-Canadian HTA Collaborative

- Steering committee of senior executives from:
 - Health Quality Ontario (HQO)
 - Institut National d'Excellence en Santé et en Services Sociaux (INESSS)
 - Institute of Health Economics (IHE)
 - British Columbia Health Technology Review (BC-HTR)
 - CADTH
- Identifies strategic priorities of the Collaborative
- Operations committee oversees formation and functioning of the working groups
- Secretariat support CADTH







Pan-Canadian HTA Collaborative

- Priority topics:
 - Share topics under consideration and projects in progress
 - Harmonized principals of HTA conduct
 - Process harmonization and collaborative opportunities
 - Horizon scanning







Harmonized HTA Methods

Objective

To identify and document harmonized methodological principles for the assessment of medical devices, diagnostic tests, and surgical procedures across the pan-Canadian HTA organizations

Why

- Minimize methodological differences
- Enhance inter-organizational use of HTA work
- Reduce duplication based on methodological differences











Methods

- Four working groups covering methodological topics:
 - Literature searching
 - Clinical systematic review
 - Economic analyses
 - Patient engagement
- At least one member from each agency per working group
- Draft statements written using sources of good practice
- Each organization surveyed about draft statements
- Consultation including email, teleconferences and in-person meeting











Results

- Harmonized (draft for consultation)
 - 13 literature searching statements
 - 24 clinical systematic review statements
 - 32 economic analysis statements
- Under development
 - Patient engagement statements











Literature Searching

- 3. The literature search strategies are developed, executed, and documented by medical librarians/information specialists/conseillers(ères) en information scientifique in consultation with the HTA team.
- 9. It is recommended that the final search strategy for at least one database is peer-reviewed before final execution using the Peer Review of Electronic Search Strategies (PRESS) Checklist.

Key discussion areas: databases to search, date and language limits, grey literature searching, peer review, updating search results, authorship











Clinical Systematic Review

- 6. The inclusion and exclusion criteria for selection of eligible citations and full-text publications are developed a priori and are explicitly stated for each research question according to the population (P), intervention (I), comparators (C), outcomes (O), study design, and publication characteristics.
- 13. Where insufficient information is provided within a study report to extract sufficient outcome data, attempts should be made to contact the study authors for clarification, and the results of this exercise should be reported. If study authors are not contacted, a rationale should be provided.

Key areas for discussion: protocol or clinical review plan, definition of the research question, contacting study authors, use of software, assessing quality of evidence, single vs. double review











Economic Analyses

- 2. Research questions should be defined for each of the components of the economic assessment included. The questions should be consistent with the clinical review question and policy question under consideration.
- 10. The perspective of the primary economic evaluation should reflect the scope of the decision problem. Often, this reflects the perspective of a publicly funded health system, although, other perspectives may be undertaken (e.g. society, patient, hospital).

Key areas for discussion: relevance of economic systematic review, minimum importance difference in QALYS/utilities, discount rate, adopting a common cost effectiveness threshold











Patient Engagement

Key areas for discussion

- Different approaches across the four agencies
- Harmonization of engagement principles vs methods
 - When and why vs how
- Weaving patient engagement throughout other harmonized statements









Next Steps

- Further refine based on diverse Collaborative input
 - Include new BC HTR partner
- Assess implementation potential through project collaborations
- Posting on each organization's website
- Maintain a "living" document
- Consider harmonization of other HTA practices, such as topic prioritization











Process alignment





Opportunities

- Maximizing efficiency and minimizing duplication in HTA production for CADTH and Health Quality Ontario
- Sharing and learning best practices in HTA process and project management

Challenges

- Aligning processes for HTA development between agencies
- Ensuring target audience needs for each agency are met through project scope definition
- Defining roles and responsibilities for each agency
- Balancing timelines between agencies and adjusting schedules





Two Scenarios

- Health Quality Ontario leads: project follows HQO process (with minor tweaks)
- CADTH leads: project follows CADTH process (with minor tweaks)





Project Charter

- Developed jointly by the management teams of CADTH and HQO
- Defines the objective and terms of engagement of the partnership
- Specifies what is in and out of scope
- Provides an agreed-to approach for aligning processes and timelines
 - Accommodate HTERP and OHTAC meetings
 - Align public feedback postings for deliverables
- Defines roles and responsibilities
- Determine which HTA components will be conducted and by whom





Project Sponsors

- Vice-President of Medical Devices and Clinical Interventions, CADTH
- Vice-President, Evidence Development and Standards, HQO
- Provide approval and champion the project at the executive level

Project Leadership

- Director, HTA & Program Development, CADTH
- Director, HTA & Rapid Response, CADTH
- HTA Director, HQO
- Share responsibility for the ultimate delivery of the project, support and direct the operational activities of the project team, and secure project resources

Project Ownership

- Manager, Clinical Research, CADTH Manager, Clinical Research &
- Manager, Operations, HQO
- Provides oversight and support to the entire project team





Roles

CADTH	HQO
Project management officer Project management specialist	Operations manager Business analyst Project manager
Manager, Clinical Research Clinical research officer Clinical research assistant	Manager, Clinical Reviews Clinical epidemiologist
Patient engagement officer Qualitative research officer	Senior program analyst, Patient, Caregiver and Public Engagement
Manager, Health Economics Health economist	Manager, Economic Evaluations Health economist
Research information specialist	Medical librarian
Scientific advisor	





Determining Which HTA Components Will Be Conducted

Benefits & Harms



Economic Impact



Patient Preferences



Ethics



<u>Legal</u>



Clinical Context/Need

Environmental Impact **Implementation**







CADTH's Perspective (CADTH leading)

Examples of Collaboration

Clinical Review	 Act as second reviewer during data extraction and verification, and also for the quality assessment of included studies from the clinical evidence review (HQO)
Economic Evaluation	 Peer-review HQO's economic project plan (CADTH) Perform technical review of HQO's budget impact analysis (CADTH) Peer-review the economic model (HQO) Validate and test the economic model (HQO)
Patient Preferences and Experiences Review	 Provide feedback and advise on CADTH patient engagement plan (HQO)
Literature Reviews and External Feedback	 Develop literature search strategy and conduct literature searches (CADTH) Act as a peer reviewer of literature search strategies (HQO) Post links to the CADTH website during the feedback phase for the draft HTA (HQO)





CADTH's Perspective (HQO leading)

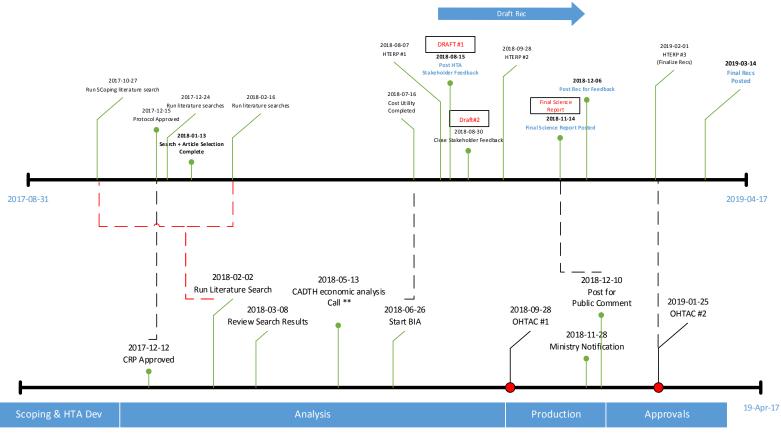
Examples of Collaboration

Clinical Review	 Acting as second reviewer during data extraction and verification, and also for the quality assessment of included studies from the clinical evidence review (CADTH)
Economic Evaluation	 Peer-review HQO's Economic Project Plan (HQO) Perform technical review of HQO's budget impact analysis (HQO Peer review the economic model (CADTH) Validate and test of economic model (CADTH)
Patient Preferences and Experiences Review	 Provide feedback and advise on HQO Patient Engagement plan (CADTH)
Literature Reviews and External Feedback	 Develop literature search strategy and conduct literature searches (HQO for clinical and eco; CADTH for qualitative) Acting as a peer reviewer of literature search strategies (CADTH) Post links to the HQO website during the feedback phase for the draft HTA (CADTH)





Process Alignment: CADTH vs. HQO







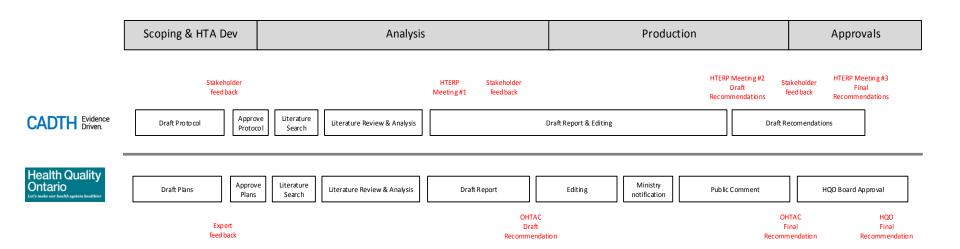
What Did We Do?

Meetings	Purpose	Timing	Attendance
Status update team meetings	Project owner and team to provide a project update and allow team members to discuss issues/concerns	Biweekly	section leads (primary reviewers) and project managers
Project management meetings	Discuss timelines, milestones, and process as project progresses	Biweekly	project owner, operations manager and project managers
Director/ management meetings	Discuss decision-making	Monthly (if needed)	directors, operations manager, project owner, project managers





Now we are lined up!







Example: ICBT HTA Timelines

Timeline	HQO	CADTH
June 14–15, 2018	HQO team presents findings	HTERP meeting #1: Present
	to HTERP	final findings
June 29, 2018	OHTAC meeting #1: Present	CADTH team attends OHTAC
	findings to OHTAC	via teleconference
Sept 11–12, 2018		HTERP meeting #2: Draft
		recommendations
October 2018	Post HTA for feedback	Post HTA for feedback
November 30, 2018	OHTAC meeting #2: Present	CADTH team attends OHTAC
	public comments to finalize	via teleconference
	recommendation	
December 4-5, 2018	HQO team presents final	HTERP meeting #3: Final
	recommendation to HTERP	recommendations
January 2019	HQO board meeting	
February 2019	Final posting	Final posting





Identified Risks Prior to Project Initiation

Potential Risks	Phase/ Category	Lead
New working relationship	Scope, schedule, deliverables	HQO and CADTH directors and managers
Scheduling and timeline conflicts	Schedule	HQO project manager and senior business analyst
Aligning process (governance)	Process	HQO and CADTH directors and managers
Partnership and leadership challenges	Schedule, deliverables	HQO and CADTH directors and vice-presidents





Opportunities and Next Steps

- Develop a clear understanding between CADTH and HQO on:
 - Which HTAs should be collaborative?
 - Which parts of the process are essential for developing a product that meets the decision-making needs of each agency?
 - Is there value in greater integration?
- Remain agile and flexible as partnership evolves
- Build on successes and challenges from pilot projects
- Ultimately, reduce duplication and improve efficiency of producing HTAs across Canada





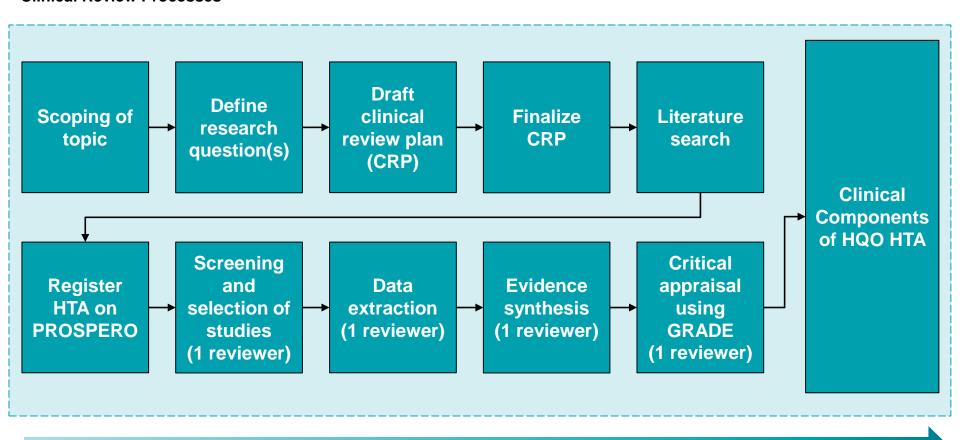
Clinical overview





HQO

Clinical Review Processes



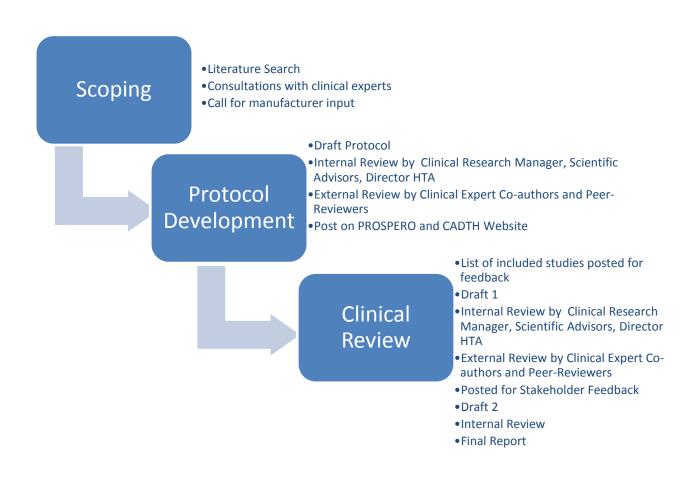
Consultation with Ontario Ministry of Health and Long-Term Care

Consultation with Ontario clinical experts & manufacturers

Consultation with health economist colleagues











CADTH Clinical Systematic Review Methods

Peer reviewed,

literature
search

MEDLINE, Embase,
Cochrane Central,
CINAHL, and
PubMed

Study selection

Predefined eligibility criteria

Double citation screening

<u>Data</u> extraction

Study and patient characteristics, outcome data, in duplicate

Quality appraisal

Validated tool, in duplicate <u>Data</u> Analysis

Quantitative or Narrative Synthesis





Advantages

- Opportunity for peer review of our plans/protocols
- Opportunity to learn from colleagues
- Reduce duplication and improve human resource efficiency
- Opportunity to make connections with experts outside of Ontario
- Harmonized statements provide a foundation for shared work





Challenges

- Differences in processes and timelines:
 - Protocols/plans, posting of list of included studies, public posting of HTA and commenting period
- Logistics of double reviewing
- More employees and experts involved:
 - Longer timelines may be needed
 - Logistics of project teams and meetings





Opportunities

- Building upon the foundation laid out by the pan-Canadian harmonized statements we can work to synchronize our clinical methods, processes and timelines
- Continue sharing our work to improve systematic reviews and evidence syntheses of the clinical literature





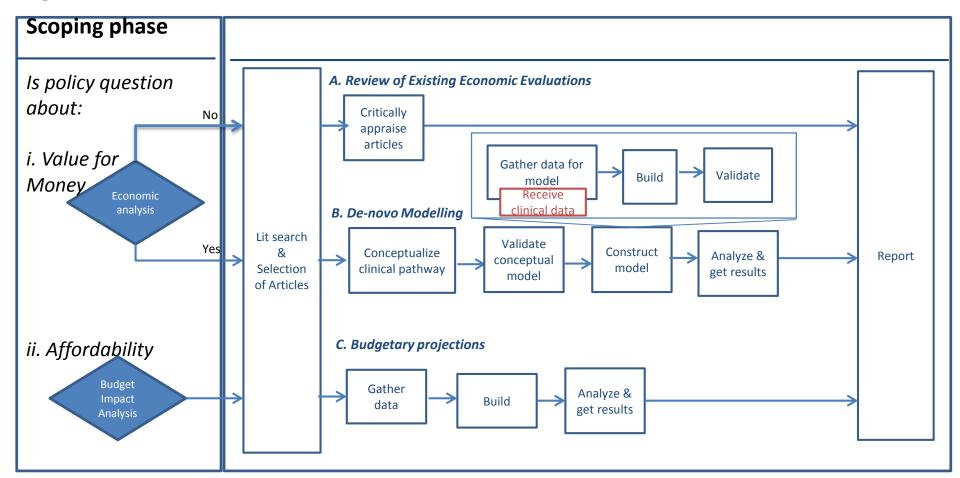
Economic overview





CADTH

Research & Development Phase

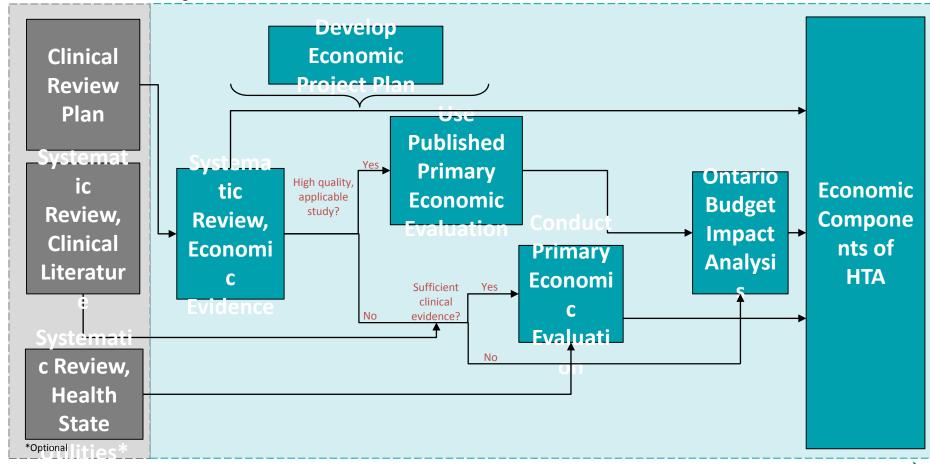






HQO





Consultation with Ontario Ministry of Health and Long-Term Care

Consultation with Ontario clinical/economic experts





Ongoing projects

 Internet CBT (HQO lead), Minimally Invasive Glaucoma Surgery (CADTH lead)

Advantages

- Effective collaboration results in:
 - Greater efficiency in HTA production
 - No duplication of economic analyses in a resource limited setting
- External peer-review and/or peer support
- Larger target audience and potentially stronger impact
- Great opportunity for learning and development via the sharing of each other's practices, perspectives and experiences
- Leverage knowledge and skills across organizations and Canada





Challenges

- Economic analysis is context specific:
 - Setting/Perspective
 - e.g., Budget impact analysis: Ontario vs. Canadian
 - Comparators
- Different timelines and processes:
 - Protocols/plans, public posting and commenting
- More employees and experts involved:
 - Longer timelines may be needed
 - Project teams: who to include on emails and meetings
- HTA findings evaluated by different committees (HTERP/OHTAC)
- Potential differences in funding recommendations despite similar set of evidence





Opportunities and Next Steps

- Develop consistency on determining:
 - Which HTAs should be collaborative?
 - Which HTA components are required for decision making?
 - Is there value of greater integration?
- Harmonized statements provide a foundation in which to work
- Synchronize our economic methods, processes and timelines
- Remain agile and flexible as partnership evolves
- Build on successes and challenges from pilot projects
- Continue sharing our work to improve economic evaluations and the implementation of recommended technologies in Ontario and across Canada
- Ultimately, reduce duplication and improve efficiency of producing economic evidence to support decision making





Discussion and questions



