Supporting the Use of Health Technology Assessments by Decision-Makers

Appuyer l'utilisation des évaluations des technologies de la santé chez les décideurs

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Abstract

A perceived gap exists in how well Canadian health technology assessment (HTA) producers are supporting the use of their HTAs by decision-makers. The authors propose that the newly released HTA Database Canadian search interface incorporate structured decision-relevant summaries of HTAs that would be developed by participating Canadian HTA organizations. The registry would serve as a "one-stop shop" by including HTA reports along with their structured summaries in a format that better meets decision-makers' needs. The Health Technology Analysis Exchange – a Canadian network of publicly funded HTA producers – is well-positioned to undertake this work and would welcome input about both the idea and its execution.

Résumé

On semble percevoir une certaine lacune au Canada dans la façon dont ceux qui préparent les évaluations des technologies de la santé (ETS) appuient l'utilisation de celles-ci chez les décideurs. Les auteurs proposent d'intégrer des résumés structurés pertinents pour la prise de décision dans la nouvelle interface de recherche de la base de données canadienne des ETS, résumés qui seraient préparés par les organismes d'ETS canadiens participants. Ce répertoire servirait de « guichet unique » en comprenant les rapports d'ETS ainsi que des résumés structurés dans un format qui conviendrait davantage aux besoins des décideurs. L'Échange sur les technologies de la santé – un réseau canadien d'organismes d'ETS financés par des sources publiques – serait bien placé pour entreprendre ce travail et souhaite recueillir les commentaires sur cette idée et sa mise en œuvre.

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THE USE OF HIGH-QUALITY EVIDENCE FOR POLICY AND MANAGERIAL DECISION-making can be a challenge due to the relationships between knowledge creators (i.e., researchers) and knowledge users (i.e., decision-makers). Challenges exist in part due to the limited communication and a lack of a linkage infrastructure between both parties. Health technology assessment (HTA) producers have developed sophisticated methods for creating knowledge. HTAs, however, may sit unused or, when retrieved, fail to highlight decision-relevant information. A perceived gap exists in how well HTA producers are supporting the use of the HTAs they prepare. We propose that the newly released HTA Database Canadian search interface incorporate structured decision-relevant summaries prepared at the national, provincial/territorial, regional and organizational level in Canada (Pan-Canadian HTA Collaborative 2015). The resulting "one-stop shop" would be a key enabler in efforts to ensure that decision-makers have easy, timely access to research evidence that is provided in a consistent user-friendly format.

In 2014, HTA producers in Alberta, Ontario and Quebec, and the Canadian Agency for Drugs and Technologies in Health (CADTH), partnered with the National Institute for

Health Research's Centre for Reviews and Dissemination to develop a single repository and search tool for Canadian HTA reports within the HTA database. Each participating HTA organization contributes to the database. The HTA Database Canadian search interface was designed to be a go-to source for Canadian HTA users by incorporating links to full HTA reports and a bilingual and flexible search interface. As more Canadian HTA organizations participate in this initiative, a natural extension to the database would be the addition of decision-relevant summaries for each HTA report (Pan-Canadian HTA Collaborative 2015).

Decision-makers frequently access HTAs prepared outside their context and need to customize this knowledge to inform their particular situations, including the availability of resources, program capacity and competencies of staff. HTA report adaptation is especially relevant in Canada, given our decentralized healthcare system and the variety of organizations involved in decisions about technology. An environmental scan identified several studies of structured decision-relevant summaries that would make it easier for decision-makers in a particular setting to adapt research syntheses from another setting, but so far this has not been operationalized for the field of HTA in Canada (Beynon et al. 2012; Lavis et al. 2009; Lavis et al. 2010; Lavis et al. 2013). Structured decision-relevant summaries of existing HTAs would make it easier to pull key information into their own decision frameworks and then focus on adding the context-specific information that they need to make an informed decision. The user-friendly summaries are as relevant to "generic" CADTH HTAs as they are to a highly contextualized HTA from a hospital or other local organization.

Two types of preparatory work on structured decision-relevant summaries have already been undertaken to pave the way for implementation in the area of HTA. First, Lavis et al. developed structured summary and relevance-assessment prototypes for HTAs using input from 29 Canadian and British managers and policy makers (Lavis et al. 2010). Semi-structured telephone interviews with 19 Canadian study participants indicated support for an HTA summary, and five suggestions emerged from their responses to improve the structured summary prototypes (Table 1).

TABLE 1. Suggestions to improve structured HTA summaries (Lavis et al. 2010)

Summary element	Description
Format	Headings to make it easier for decision-makers to scan for relevant information
Quality assessment	An appraisal of the HTA report using a validated tool
Summary sections	Sections with clear headings and explicit goals
Language	Short plain-language summary with key messages up front
Previous or HTA reports in progress	A listing of previously completed HTA reports or those in progress

HTA = Health technology assessment

Second, the Health Technology Analysis Exchange, a network of HTA producers across the nation established in accordance with Canada's Health Technology Strategy 1.0 (Health

Technology Assessment Task Group and on behalf of the Federal/Provincial/Territorial Advisory Committee on Information and Emerging Technologies 2004; Canadian Agency for Drugs and Technologies in Health 2014), organized an exploratory workshop in 2013. This workshop focused on decision-relevant criteria for health technologies, with input from HTA producers in Alberta, Ontario and Quebec and from the Evidence and Value: Impact on Decision Making (EVIDEM) Collaboration (EVIDEM Collaboration 2014) and using two reports produced by CADTH as test cases. In relation to the structure of the brief, the participants readily agreed that the recommendation and alternatives should be presented at the top of the brief, as decision-makers typically are interested in the "bottom line." Additional elements to be included in the brief, for decision-makers who seek additional information, are the context, methods and evidence based on EVIDEM's top five criteria, and the contextualization of available evidence (Table 2). Several Exchange members also participate in the HTA Database Canadian search interface. As the Exchange encompasses both HTA producers and users across Canada, we propose that its members fill this key gap in the Canadian landscape.

TABLE 2. HTA decision-relevant summary template

Header	Description
Recommendation	• Preferred alternative • Reason(s) for recommendations

Alternatives	• Pros and cons of each alternative
	• Feasibility of implementation/operational consideration
	  Implementation strategies for each alternative
	  Ethical/legal considerations
	  Risk assessment and risk mitigation of alternatives

Context	• Prevalence
	• National status (tabular format, by province or health authority)
	• Stakeholder perspective (medical and patient association and public consultations)
	  What are the issues?
	  What are the contributions to controversy?
	  What is known about the intervention(s)? Alternatively, what is not known about the intervention?

Methods	• HTA • Stakeholder consultation process
Evidence (based on EVIDEM's Top 5)	• Efficacy/effectiveness • Safety/tolerability • Severity of disease • Impact of healthcare costs (incremental cost-effectiveness) • Quality/uncertainty of evidence
Contextualization of available evidence	Self-explanatory

EVIDEM = Evidence and Value: Impact on Decision Making; HTA = health technology assessment.

The proposal we would like to advance is for a one-stop shop, having all structured decision-relevant summaries from across Canada available in one place, that would address the first of three factors that have been shown to influence the use of evidence in policy making, namely, timing or timeliness (Lavis et al. 2010). Decision-makers need to rapidly

identify what has already been learned about a technology of interest and then adapt this knowledge for their own setting. HTA producers and funders, on the other hand, could use the one-stop shop to identify gaps in the available inventory of HTAs. A subsidiary benefit for HTA producers arises from the primary objective of meeting the needs of policy makers. The registry also would allow decision-makers to access and review HTAs in a timely manner. Previous research has shown that timeliness and discussions between policy makers and researchers can positively impact the use of evidence in decision-making (Moat and Lavis 2011).

Health Systems Evidence is an example of a repository of systematic reviews and economic evaluations on the subjects of governance, financial and delivery arrangements within health systems, as well as the implementation strategies that can support change in health systems (McMaster University 2014). It uses a variety of approaches to ensure comprehensiveness and provides links to structured decision-relevant summaries and full-text reports when freely available (as a way to lead traffic to the sites of the evidence producers) in Canada's both official languages (as well as five others). Similar Canadian and international initiatives that have been developed or are under way include AdHopHTA, Decision Aid Library Inventory and Evidence-Informed Healthcare Renewal Portal, which is a subportal within Health Systems Evidence.

We provisionally propose to develop and test a prototype for structured decision-relevant summaries based on the original prototypes and suggestions for improvement outlined by Lavis et al. and the recommendations from the 2013 workshop, and to use Health Systems Evidence and other complementary databases to garner ideas to expand on the new repository to include decision-relevant summaries. To help frame this initiative, we would apply a framework that encompasses the push, pull and exchange concepts (Gagnon 2009). More specifically, the HTA database and structured summaries would facilitate "user pull" by decision-makers. We also plan to explore the feasibility of building in RSS technology or e-mail alerts that would automatically "push" summaries to decision-makers on topics of interest. Finally, the HTA database can simplify exchange among HTA producers and decision-makers around topics of shared interest. To measure the success for this initiative, we plan to use indicators such as the frequency with which the decision-relevant summaries are accessed, the time spent in the HTA database to view the summaries and the number of subscribers to the RSS feed, as well as through periodic surveys self-reports of user satisfaction with and the perceived usefulness of the HTA database and summaries. The survey also can inquire about the frequency and results of exchanges between HTA producers and decision-makers and about the impact of HTA reports and decision-relevant summaries on decision-making. Comments on any aspects of our proposal can be sent to requests@cadth.ca.

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