

**HEALTH TECHNOLOGY EXPERT REVIEW PANEL**

# Process for Developing Recommendations

**NOVEMBER 2015**

**VERSION 1.0**

# 1. Mandate

The mandate of CADTH's [Health Technology Expert Review Panel](#) (HTERP) is advisory in nature and is to participate in the development of guidance or recommendations for CADTH projects on medical devices, diagnostic tests, and medical, dental, or surgical procedures and programs.

The approach of HTERP is evidence-based and uses a multi-criteria framework ([Appendix](#)) that considers the strength and quality of available clinical evidence, the strength and quality of available economic information, current practices and resource utilization patterns, and other factors including, but not limited to, ethical, environmental, legal, and societal impacts.

## 2. Responsibilities

- Provide feedback on draft reports, including scoping briefs, protocols, and health technology assessments.
- Develop recommendations on the appropriate use (adoption, disinvestment, replacement) of a health technology.

More details regarding the mandate and membership of HTERP can be found in the [Terms of Reference](#).

## 3. Meetings

HTERP meets in person approximately four times per year, with teleconferences held as needed. At each meeting, members are asked verbally to declare any new or changes to existing conflicts of interest. For each meeting, draft minutes are prepared by CADTH and reviewed by the Chair. Minutes are considered final upon approval by two members at the next HTERP meeting.

## 4. Process

### 4.1 Topic Identification and Scoping

The medical devices portfolio at CADTH includes medical devices; diagnostic tests; medical,<sup>1</sup> dental, or surgical procedures; and programs. Topics are identified by multiple sources (including CADTH customers or CADTH Liaison Officers). Once identified, a topic is assessed for appropriateness and scoped for prioritization by CADTH. Appropriate topics are those that include a health technology with a patient-related health outcome, and those that require evidence for coverage, policy, or practice decisions. Scoping briefs are prepared on topics that fit these criteria, and include information about the clinical, economic, and population impacts, as well as jurisdictional interest, equity, policy issues, and other relevant information. Based on the information in the scoping brief and input from CADTH, HTERP, and other experts, topics are then prioritized by CADTH. The full process for [topic prioritization](#) can be found on the CADTH website.

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<sup>1</sup>Medical procedures could include medical imaging, predictive testing, or other medical procedures involving a health technology not included in the other categories.

## 4.2 Evidence Review

Once a topic is prioritized, the research team develops the protocol for the review. The research team uses the scoping brief and policy issues identified in the brief to develop the research questions and analysis plan for the protocol. The protocol is then reviewed by external experts and methodologists, and by HTERP members, and the approved protocol is posted on the CADTH website and registered with PROSPERO.

A CADTH research team conducts the evidence review based on the protocol. The evidence review includes a clinical review, an economic review, and a review of additional factors included in the HTERP deliberative framework, such as ethical, legal, and social implications, and patient preferences. Patient input may also be sought depending on the topic, and may include input into the scope of the project, information on patient experiences, and validation of clinical outcomes. Feedback on the evidence review is sought from external peer reviewers, methodologists, HTERP members, and stakeholders. The final evidence report is then posted on the CADTH website.

## 4.3 Development of Recommendations

Following initial discussions of the evidence, HTERP begins developing recommendations, considering the audience for the recommendation, the type of decision required, the evidence, and any considerations for implementation. The recommendation report includes background information, the recommendation, the rationale for the recommendation, and any implementation considerations. Recommendations are typically developed at an in-person HTERP meeting and are based on consensus. Recommendations can include selection of the appropriate population for use of the technology, the optimal use of the technology, or recommendations to fund, provide, or discontinue use of a technology. Evidence gaps are also identified in the recommendation to suggest conduct of primary research.

If consensus cannot be reached, recommendations are voted on by secret ballot, and the Chair has the deciding vote in the case of a tie. A quorum of five core members and three expert members is required for all matters related to recommendations. Once the recommendations are drafted, they are posted for stakeholder feedback on the CADTH website. All feedback is addressed, and the recommendations are then finalized and posted on the CADTH website.

## 4.4 Knowledge Mobilization

Knowledge mobilization efforts are topic-specific and customized to maximize impact of project work. A short summary of the project with key messages may be created by knowledge mobilization staff to encourage dissemination of the information. Key messages are actionable statements that address the gap between HTERP recommendations and current practice. Review by HTERP members may be requested prior to finalizing.

Implementation support tools (such as one-page summaries to support dissemination, decision aid tools for health care providers, or plain language pamphlets), often including appropriate key messages and specific to targeted populations (e.g., policy-makers, administrators, health care practitioners, patients) may be developed as part of the knowledge mobilization strategy and by request from CADTH customers. Feedback and suggestions are sought from HTERP members.

Knowledge mobilization efforts and implementation support often continue well after recommendations are made.

# APPENDIX 1: HEALTH TECHNOLOGY EXPERT REVIEW PANEL DELIBERATIVE FRAMEWORK

TABLE 1: HEALTH TECHNOLOGY EXPERT REVIEW PANEL DELIBERATIVE FRAMEWORK

Framework Domain	Examples of Information/ Element(s)	Possible HTERP Discussion Question(s)
<b>Background/ context</b>	<ul style="list-style-type: none"> <li>Audience; issue and policy question(s)</li> </ul>	<ul style="list-style-type: none"> <li>Who requested this assessment?</li> <li>Why?</li> </ul>
<b>Need</b>	<ul style="list-style-type: none"> <li>Background on health condition</li> <li>Size of affected population</li> </ul>	<ul style="list-style-type: none"> <li>What condition does this health technology address?</li> <li>How many patients could potentially be affected?</li> </ul>
	<ul style="list-style-type: none"> <li>Availability of alternatives</li> </ul>	<ul style="list-style-type: none"> <li>Are there existing therapeutic/diagnostic technologies that address the same problem?</li> </ul>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>Efficacy</li> <li>Clinical effectiveness</li> <li>Impact on patient-centred outcomes</li> <li>Impact on clinical management</li> <li>Non-health benefits (e.g., patient autonomy, dignity)</li> </ul>	<ul style="list-style-type: none"> <li>Has the clinical effectiveness of the candidate technology been established?</li> <li>Compared to what?</li> <li>What improvements does this technology purport to offer over others?</li> <li>What types of evidence is this based on?</li> <li>Are we aware of any better quality evidence likely to be produced in the near future?</li> <li>Are there any non-health benefits?</li> </ul>
<b>Harms</b>	<ul style="list-style-type: none"> <li>Safety</li> </ul>	<ul style="list-style-type: none"> <li>What is known about safety in absolute terms, and in comparison with the existing technologies?</li> <li>What types of evidence is this based on?</li> </ul>
<b>Patient preferences</b>	<ul style="list-style-type: none"> <li>Acceptability of health technology by the patient</li> </ul>	<ul style="list-style-type: none"> <li>How will it potentially affect patients and what are their opinions about the technology?</li> <li>How acceptable is it to patients?</li> </ul>
<b>Economic impact</b>	<ul style="list-style-type: none"> <li>Cost-effectiveness</li> <li>Infrastructure support costs</li> <li>Budget impact</li> </ul>	<ul style="list-style-type: none"> <li>What will the technology cost (including initial purchase price and consumables, maintenance, and training of personnel)?</li> <li>Is there evidence of value for money?</li> <li>How is value defined?</li> <li>What is the expected lifespan and total budget impact of the technology?</li> </ul>
<b>Implementation</b>	<ul style="list-style-type: none"> <li>Integration of technology into existing workflow</li> <li>Training/competency requirements</li> <li>Repair and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Have issues of implementation of the technology in a real-world health system environment been identified and addressed?</li> </ul>
<b>Legal</b>	<ul style="list-style-type: none"> <li>Legal impacts</li> </ul>	<ul style="list-style-type: none"> <li>Are there potential legal or regulatory aspects to the introduction and use of this technology?</li> </ul>
<b>Ethics</b>	<ul style="list-style-type: none"> <li>Consistent with Canadian ethical values</li> </ul>	<ul style="list-style-type: none"> <li>Are there potential issues of equity (access to particular populations, for example) with respect to introducing this technology?</li> <li>Are there any other ethical issues to consider?</li> </ul>
<b>Environmental impact</b>	<ul style="list-style-type: none"> <li>Environmental impact of health technology</li> </ul>	<ul style="list-style-type: none"> <li>What is the potential impact on the environment of this technology?</li> </ul>

Framework Domain	Examples of Information/ Element(s)	Possible HTERP Discussion Question(s)
<b>Other</b>		<ul style="list-style-type: none"> <li>• Are there particular questions with regards to professional fees that have been identified and addressed?</li> <li>• Does this candidate technology raise some particular questions that are not addressed by the above set of questions?</li> </ul>

HTERP = Health Technology Expert Review Panel.