

TOPIC IDENTIFICATION AND PRIORITIZATION PROCESS

Health Technology
Assessment and
Optimal Use: Medical
Devices; Diagnostic
Tests; Medical,
Surgical, and Dental
Procedures

NOVEMBER 2015

VERSION 1.0

1. Topic Identification

Topic suggestions for Health Technology Assessment (HTA) or Optimal Use (OU) reports come from a variety of sources. Interested individuals or entities can submit topics for consideration via www.cadth.ca or the CADTH Liaison Officers. CADTH also uses its Horizon Scanning and Rapid Response programs as inputs to the HTA/OU Topic Identification process, as well as priorities set by entities such as the Council of the Federation. HTAs are comprehensive assessments of the clinical, economic, and implementation considerations such as ethical, legal, and social issues, whereas OU reports are HTAs that include recommendations.

2. Topic Assessment

2.1 Stage 1

All suggested topics, regardless of source, are added to a master list. In the first stage of assessment, CADTH reviews each topic suggestion to ensure that it fits within CADTH's mandate. All topics that involve a medical device; diagnostic test; or a medical, surgical, or dental procedure or program with direct patient-related health outcomes (such as clinical benefit or harm) fit CADTH's mandate and go to stage 2.

2.2 Stage 2

In stage 2, topics that meet CADTH's mandate are filtered for appropriateness, using the criteria reported in Table 1. Additional information on the criteria and scoring is included in Appendix I.

TABLE 1: CRITERIA FOR ASSESSMENT OF APPROPRIATENESS OF A TOPIC

Criterion	Definition and Weight	Score	Score Definition
Duplication of effort	Is another organization undertaking a review or considering a review on the same topic?	3	No duplication foreseen
		2	Partial duplication is possible, which may allow brokering or collaboration
		1	Another organization is considering this topic
		0	Another organization is currently working on this topic
Need	How important is the policy, purchasing, or practice decision for which this evidence is needed?	3	Decision with substantial impact on patient care
		2	Decision with moderate impact on patient care
		1	Decision with limited impact on patient care
		0	No decision to be made in the foreseeable future, or decision with no impact on patient care
Stage of diffusion	Is the technology available in Canada?	3	Currently approved or in use in Canada
		2	Currently not approved or used in Canada, but likely to be approved or used in the next year
		1	Currently not approved or used, and unlikely to be approved or used in the next year
		0	Currently not approved or used and will not be considered for approval or use in the next year (i.e., not approved in any other countries)

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

Topics with a weighted score of 200 or higher move on to the topic prioritization list. Topics that do not meet this threshold may be considered for assessment by the Rapid Response or Horizon Scanning services, or maintained on the topic list for consideration during the next prioritization cycle.

3. Topic Prioritization

A scoping brief will be prepared by CADTH for all topics on the prioritization list. The scoping brief will outline the related policy issues and provide an overview of the existing evidence on the topic. Information obtained from the original requestor or a clinical expert on the topic may also be included. The existing evidence will be identified by conducting a Rapid Response reference list to identify existing HTAs, systematic reviews, meta-analyses, evidence-based guidelines, and primary studies if needed. In addition, the scoping brief will include evidence to assess the topic against a set of prioritization criteria (Table 2). Criteria include clinical impact, economic impact, population impact, jurisdictional interest, and equity. Additional information on the criteria and scoring is included in Appendix I.

TABLE 2: CRITERIA AND SCORING FOR TOPIC PRIORITIZATION

Criterion	Definition and Weight	Score	Score Definition
Clinical Impact	Potential for the technology to have an impact on patient-related health outcomes (benefits and harms) 25	3	Major potential improvement in clinical outcomes
		2	Moderate potential improvement in clinical outcomes
		1	Little potential improvement in clinical outcomes
		0	No expected change in clinical outcomes
Budget Impact	Impact of the technology on health care spending 25	3	Major cost savings or expense (> \$50 M)
		2	moderate cost savings or expense (> \$10 M to \$50 M)
		1	Limited cost savings or expense (\$1 M to \$10 M)
		0	No cost savings or expense (< \$1 M)
Population	The size of the population that would be affected by the technology 15	3	Affects 5% or more
impact		2	Affects from 1% to < 5%
		1	Affects from 0.05% to < 1%
		0	Affects < 0.05%
Jurisdictional	The number ^a of provincial, territorial, or federal programs with a CADTH customer (such as hospital, regional health authority, or Ministry of Health) facing a decision on the technology, and which could use the HTA to inform a decision or change	3	Interest from ≥ 7 jurisdictions
interest		2	Interest from 5 or 6 jurisdictions
		1	Interest from 2 to 4 provincial jurisdictions
		0	Interest from < 2 jurisdictions
	20		
Equity	The technology has the potential to introduce, increase, or decrease equity in health status	3	Major potential to affect equity in health status
		2	Moderate potential to affect equity in health status
		1	Minor potential to affect equity in health status
		0	Will not affect equity in health status

HTA = health technology assessment; M = million.

^a Indicates the provincial, territorial, or federal program with any interested CADTH customer. For example: if British Columbia has 3 hospitals interested, it is scored as 1 jurisdiction.

The scoping brief will be used to score the topics under consideration. Weighted scores will be calculated and used to rank the topics. Scoring of new topics will be done on a quarterly basis. The ranked list will be shared with the CADTH Executive, CADTH committees, CADTH Liaison Officers, and other relevant groups, such as members of the Pan-Canadian Collaborative, and will be posted on the CADTH website.

The final decision about the HTA/OU topics to be undertaken by CADTH will be done quarterly and is based on the ranked list, the resource needs for the topics, and CADTH's capacity. OU reports will be written on those topics that require an HTA with recommendations. Topics not initiated as an HTA may be considered for an alternative CADTH product, such as Rapid Response, or remain on the list for the next prioritization cycle. Updated information may be included on a topic for the next prioritization cycle. If at any time a topic that is on the prioritized list is deemed inappropriate (e.g., obsolete, or another producer completed the topic), it can be dropped from the list with documentation of the rationale.

APPENDIX I: ADDITIONAL INFORMATION ABOUT THE CRITERIA AND SCORING

Appropriateness Criteria

Duplication of effort — Ensure CADTH is not duplicating work conducted by other agencies or organizations. If there is a recent, high-quality review that can support the request, this may be a project appropriate for brokering.

Need — Ensure the Health Technology Assessment (HTA) or Optimal Use (OU) is needed to inform a decision about a technology. Requests not received directly from decision-makers will require validation of clinical need with appropriate individuals.

Stage of diffusion — Ensure the technology is approved (device or test) or in use (procedure) in Canada, as technologies not in use or available may be inappropriate for assessment at this time (consider at a future time).

Prioritization Criteria

Clinical impact — Technologies that may directly affect patient mortality would receive a score of 3 for this criterion, whereas technologies with an intermediate outcome (such as influencing treatment decisions) may receive a lower score. The information to assess clinical impact is obtained from the information identified in the scoping brief.

Economic impact — Technologies with the potential to save or cost the health care system significantly (greater than \$50 million) will receive the highest score. CADTH's health economists provide input into this criterion, with the information identified in the scoping brief.

Population impact — Technologies that affect a large percentage of the population (at least 5% of the population) will score high on this criterion. The criterion assesses the impact on the total population, as opposed to the population with a specific condition or who may use or receive the technology.

Jurisdictional interest — The number of jurisdictions (including federal programs) that have at least one CADTH customer interested in the HTA, and may use the HTA for decision-making, is used to score this criterion. CADTH customers include decision-makers in the publicly funded health care system, such as hospital, regional health authorities, and Ministries of Health. HTAs require pan-Canadian interest and potential for use and therefore, the highest score for this criterion is given to topics that draw interest from more than seven jurisdictions.

Equity — Technologies that have the potential to affect equity (such as access to health care), and therefore affect health status, are scored highest, such as point-of-care devices that can be used in rural setting (improve access to testing) or specialized technologies in major centres (reduce access to the technology, as only the population in these centres may have access).