

Transforming How We
Manage Health Technologies
in Support of Better Health,
Better Patient Experience,
and Better Value

Health care costs an estimated \$242 billion annually in Canada, consuming an average of 37% of provincial and territorial budgets. Neither statistic is meaningful in itself; the key issue is value for money. Put simply, we can spend these vast amounts wisely to improve health outcomes and quality of life, or we can waste billions on inappropriate, needlessly expensive, or minimally effective health care. Like every other wealthy country, Canada has a huge opportunity to get better value from health care spending. Quality experts estimate that as much as 30% of health care is either useless or harmful. Physicians have identified hundreds of overused tests and interventions through the Choosing Wisely campaign. Adverse drug reactions kill thousands of people and account for a fifth of seniors' admissions to hospital.

Canadians deserve excellent health care, and contemporary health care is heavily dependent on drugs, medical devices, diagnostic testing, and other clinical interventions. Indeed, health technologies drive a great deal of health care spending. Disruptive technologies, such as mobile monitoring, artificial intelligence, robotics, and 3-D printers, are double-edged swords. They both stir up hopes for breakthroughs in the ability to improve health, and they create major new demands for increased spending. Even if they prove to be genuinely effective, the increasing array of new health technologies, such as niche drugs for treating cancers and rare diseases and the imminent launch of gene therapies, will carry a fearsome price tag.

The challenge for decision-makers is not new, but the scale and the pace are unprecedented. Which innovations should we buy? What price should we pay, what quantities should we deploy, and how do we foster appropriate use? The choice is stark: either sound public policy and evidence-based assessment will govern the adoption and deployment of existing and new technologies, or the forces of innovation and marketing will dominate health care decision-making and dictate the allocation of resources.

The stakes are huge.



CADTH exists to support evidence-based, coherent, fair, and transparent decisions on the adoption and use of health technology. For almost 30 years, we have aspired to help policy-makers, clinicians, and patients make better decisions about the use of medical, dental, and surgical devices, procedures, and programs; pharmaceuticals; and diagnostic tests. We have become experts at objective assessment and evaluation. But, as with all good evidence about health care effectiveness and efficiency, there is a huge gap between what we know and what we do. We, and others, have assumed that if we produce the evidence, it will drive decision-making. That assumption is overly optimistic. It is of course necessary to do high-quality, timely, and comprehensive health technology assessment, but it is insufficient to ensure sound and defensible decision-making. Health technology assessment is essential; health technology management is the next frontier.

CADTH has to change to increase its contribution to the public interest. This document advances a three-year strategic direction informed by conversations with health system leaders, a comprehensive literature review, and focus groups with customers. The pursuit of the following three, high-level goals will support CADTH's transition from a health technology assessment agency to a health technology management enterprise:

- 1. Close the gap between evidence, policy, and practice.
- Adopt a life-cycle approach to health technology assessment.
- 3. Anticipate health system and technology trends, and develop agile management strategies.

Health technology management requires assessment at all phases of the technology life cycle, increased collaboration and engagement, and comprehensive implementation support. All three are essential to the primary goal and principal success criterion: impact. To achieve our strategic goals, CADTH will lead, convene, connect, and collaborate to act on the shared priorities of our funders and partners. We will be the central hub that coordinates priority-setting, efficiently produces assessments in partnership with other health technology assessment producers, and promotes the development of effective management strategies.

This proposed transition has enormous potential to meet the needs of an increasingly fast-moving and complex sector. The CADTH team is passionately committed to enhancing our capacities and realizing these ambitions.



Mission

CADTH consistently delivers credible scientific evidence and management strategies that enable the appropriate use of health technologies.

Vision

Canada has a world-class system for assessing and managing health technologies to achieve better outcomes and value for Canadians.



Values

Based on its culture and vision, CADTH has adopted four values organization-wide. These foundational values guide CADTH decision-making and activities at all levels.



Excellence

CADTH is trustworthy, delivers what it promises, and exceeds expectations by focusing on impact to drive better health, better patient experience, and better value for Canadians.



Responsiveness

CADTH understands and meets the needs of its customers in a timely fashion.



Collaboration

CADTH creates and nurtures partnerships with those who produce, acquire, deploy, and use health care technologies to promote their appropriate use.



Transparency

CADTH makes timely and user-friendly information about its programs, processes, and performance widely available, with a special emphasis on engaging key stakeholders.



Strategic Goal

Close the Gap Between Evidence, Policy, and Practice

Optimal technology use is rare. There is significant variability in the uptake of health technology assessment recommendations at the policy level compared with clinical practice, and gaps in the resources and capacity required to make better use of evidence. Used effectively and efficiently, health technologies contribute to better health outcomes and deliver good value for money. But they can also be misused and overused, resulting in harm to patients and consuming valuable resources that could be better deployed elsewhere. It has proven difficult to confine technologies to their cost-effective applications. CADTH has successfully implemented collaborative pan-Canadian programs such as the CADTH Common Drug Review and the CADTH pan-Canadian Oncology Drug Review, the result of which is better and more consistent official policy. The challenge lies elsewhere: it is the inability to eliminate the gap between appropriate use and actual use on the ground.

The main problems are unwarranted variations in practice, usage creep, misaligned incentives, and the use of technologies in circumstances where they are unlikely to deliver value. To address these challenges, CADTH needs to build upon its success with health technology assessment and introduce a more comprehensive health technology management approach. We will engage in a forensic analysis on why sound evidence is ignored or contradicted by policy and in practice. We will continue to place more emphasis on our efforts to enable the mobilization, uptake, and implementation of evidence-informed practices at the policy level and the practice level. We will engage our partners to identify or co-create strategies to improve the pan-Canadian management of drugs and other health technologies, and we are well-positioned to play a stronger role in promoting further collaboration across provincial and territorial borders.



Objective 1

Provide customized implementation support

Recognizing that the application of evidence occurs in multiple settings, CADTH will pursue an approach to implementation support that addresses the needs of decision-makers at all levels of the health system. We will grow our policy expertise to complement existing health system capacity. In consultation with Ministry officials, we will embed resources within the system to support local contextualization, engagement, integration, and policy implementation. These supports will be tailored to health system contexts, needs, and preferences.

We will expand the breadth and scope of our reviews to take into account factors beyond effectiveness and cost-effectiveness that affect policy and practice, reflecting the unique needs and circumstances in different parts of the country. Our assessments will increasingly incorporate patient experiences and values; analyze the impact of health technology on infrastructure, the environment, health human resources, and scopes of practice; and take into consideration other important implementation factors. We will also consult with Ministry officials and community representatives to better identify the needs of and potential impacts on Indigenous communities, as well as rural, remote, and northern areas.





Objective 2

Strengthen engagement with patients, clinicians, and other stakeholders

Once a technology is approved and acquired, clinicians decide how and how often it is used. That is why CADTH has worked hard to nurture and grow relationships with clinicians and clinician groups. To make a greater impact on larger numbers of clinicians, CADTH will partner with professional societies and regulators who are well-positioned to promote evidence-based care pathways. We will convene forums for clinicians to engage with experts to discuss their own practice patterns and experiences, with a view to creating momentum and strategies for improvement. We will co-produce and promote tools and guidance documents to improve prescribing and promote the appropriate use of drugs, devices, and clinical interventions. Working with other health-oriented organizations, CADTH will pursue opportunities to embed messaging and decision-support tools into clinician workflow and information systems.

It is especially important to put patients at the centre of decision-making processes and build capacity for their effective participation. CADTH is committed to involving patients in our processes, from priority-setting through to final recommendations and advice, and we will continue to evolve and expand our support to patient groups in developing their capacity to be confident partners. As a first commitment, CADTH will create a patient advisory committee with broad representation from the patient community.

We will continue to make strides in advancing the transparency of our review processes for patients, clinicians, and other stakeholders. We will create additional opportunities to interact with innovators, researchers, and other health organizations. CADTH recognizes that it plays an important and influential role in the global health technology assessment community and it will continue to engage with international partners, networks, patient alliances, and academic centres to advance the methods, principles, and practices of health technology assessment and implementation science.



Objective 3

Enhance analytics and performance measurements

CADTH has an obligation to get good value from the money it spends, which depends in large measure on its capacity to help the health care system get better returns on its investments. This will require a combination of conceptual work and health information system redesign. CADTH will work with partners to develop more outcomes-based performance indicators, create an information system that supports sound decision-making, and make it easier for people working in the system to customize and produce analyses and reports in real time to meet their own needs. CADTH will enhance its analytics capability to produce reports in user-friendly formats integrated with decision-support systems embedded in electronic health records. The true costs and benefits of technology adoption become known only over time, and the full chart of accounts can rarely be specified at the beginning of the life cycle. CADTH will develop more sophisticated and accurate modelling so that decision-makers can anticipate the nature and impact of adoption over time.

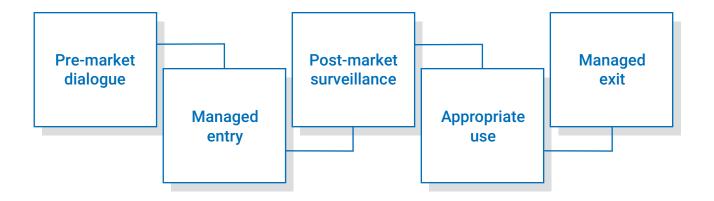
Strategic Goal

Adopt a Life-Cycle Approach to Health Technology Assessment

CADTH and other health technology assessment agencies have traditionally focused their assessments on new drugs and technologies at their point of adoption, and many such decisions are made with considerable uncertainty. In fact, decision-making about technology has been largely binary: it is either approved or not, or bought or not. Quality and efficiency are not just a function of whether a technology is available; it is equally important to manage how, how often, and how well the technology is used.

To ensure the ongoing validity of its work, CADTH must support decisions at all phases of the technology life cycle, from pre-market to adoption, to actual use in real-world settings, through to disinvestment and decommissioning. We need greatly expanded and continuous evaluative capacity to ensure the system effectively manages the entry, ongoing use, and exit of technologies. Success will depend on behaviour change at multiple levels, supported by working closely with Health Canada regulatory officials in the pre-market and post-market space.

Life-Cycle Approach to Health Technology Assessment







Objective 4

Align drug and medical device review processes with federal, provincial, and territorial priorities throughout all phases of the technology life cycle

CADTH will work with federal, provincial, and territorial officials to develop new approaches or modify existing practices for drug and technology reviews. This will involve conducting joint work with Health Canada regulatory staff, such as horizon scanning and scientific advice, co-developing an approach to system-wide prioritization, conducting select reviews in parallel with the regulator, and advancing the scientific methodology for regulatory reviews and health technology assessments across the entire life cycle of technologies. We will work with Health Canada officials to help re-engineer their Special Access Program to better meet patient and health system need, and to gauge clinician interest in drugs and devices not yet licenced for use. Prioritization to better meet patient and system needs, and alignment with regulatory processes, are crucial to advancing better management of health technologies within federal, provincial, and territorial health systems, and the appropriate use of technologies in clinical practice.



Objective 5

Implement programs for reassessment and disinvestment

Many decisions about health technologies are made with considerable uncertainty at product launch. CADTH will establish guidelines and processes for the reassessment of drugs, devices, and interventions already in use within the health system. This will allow for new recommendations to be made, facilitate adjustments to pricing and practice guidelines, and promote disinvestment in technologies that provide low value to Canadians. To be effective, this will require a coherent mechanism for identifying technologies amenable to reassessment, and will rely, in part, on the use of additional evidence sources such as observational data, administrative data, and other elements of real-world experience.

In collaboration with health ministries, academia, clinicians, patients, industry, and other pan-Canadian health organizations, CADTH will co-develop a framework for the collection of information on real-world technology use to enable reassessments informed by relevant, context-specific data. This forensic analysis of technology use in real-world settings will foster a better understanding of how decisions are being made at the policy and practice levels, and advance the development and implementation of policies and guidelines that promote appropriate use.



Objective 6

Advance initiatives across the health technology life cycle that will improve access, appropriate use, and affordability

CADTH works alongside federal, provincial, and territorial governments and other key stakeholders to collectively ensure the optimal use of resources in the management of drugs, medical devices, and clinical interventions. The time is right for CADTH to take a lead role in channelling the energies of all partners toward the achievement of the common goals of improved accessibility, affordability, and appropriate use. Through the development of a prioritization framework and parallel review processes with Health Canada, CADTH will facilitate faster access to drugs and devices that offer significant benefits to patients and value to the health system. Concurrently, CADTH will place significant emphasis on initiatives that drive the appropriate use of technologies. CADTH will enhance support to the Patented Medicine Prices Review Board and the pan-Canadian Pharmaceutical Alliance to improve the affordability of prescription drugs.

CADTH will support initiatives for the evidence-based procurement of medical devices that are already under way at the government ministry, regional health authority, and hospital levels. We will enhance our recommendations framework to incorporate considerations related to value-based procurement, and develop partnerships with shared-service and group-purchasing organizations.

To better reflect the circumstances in which decisions are made, CADTH will introduce a framework for assessments that addresses care pathways composed of multiple drugs, devices, and interventions. Such assessments could be specific to an episode of care or to a particular disease state.

CADTH will reinforce government efforts to strengthen the management of drugs and devices at the system level, such as the development of common, evidence-based formularies and other options that contribute to a more coordinated and consistent management of drugs, diagnostics, and medical devices in Canada. CADTH will work collaboratively with government health ministries, health regions, and hospitals to facilitate the development and use of common evidence-based frameworks as an initial step toward harmonizing hospital drug formularies with formularies that are accessible in community settings.





Strategic Goal

Anticipate Health System and Technology Trends, and Develop Agile Management Strategies

Health technologies are more disruptive and fast-moving than health care needs, which tend to evolve slowly. Most of the increase in health care spending is attributable to a combination of higher prices and more intensive services for specific conditions. The ability of clinicians, patients, organizations, and governments to make prudent decisions about innovation and its deployment is fundamental to obtaining good value for money in health care.

Decisions are better when there is time to consider circumstances and options before the pressures for immediate action intensify. Therefore, CADTH will expand its efforts to anticipate and describe the innovation horizon, assess potential implications, and lead deliberative exercises to develop sound adaptive strategies to better prepare our health system for the future.



Objective 7

Advance initiatives that anticipate, influence, and manage technological advancement and health system evolution

Traditionally, decisions about the adoption of new drugs, devices, and interventions occur in response to the entry of products into the market and to pressure from stakeholder groups. To realize the greatest return on the investment of public funds, decisions about health technologies should be driven by system needs. CADTH will expand and evolve its horizon-scanning function to improve the early identification of emerging, potentially high impact, and disruptive technologies. This upstream surveillance provides early awareness, better enables the health system to prepare for future decisions, and informs the CADTH priority-setting process. Through our expanded Scientific Advice Program, we will provide technical advice to individual companies about the design of clinical trials so that the evidence generated meets the needs of decision-makers.

"Selecting topics where assessment would provide the most value to the health system is critical to the achievement of an improved health system."





Objective 8

Focus on health technologies that have the most potential to meet patient and health system needs

Value for money is an enormous challenge in contemporary health care. CADTH can assess, monitor, and evaluate only a fraction of the drugs, devices, and interventions that compete for space in the health care system. Selecting topics where assessment would provide the most value to the health system is critical to the achievement of an improved health system. To that end, CADTH will implement a more rigorous, inclusive, and disciplined priority-setting process that assesses the prospects for impact, given the realities of policies and practices in various settings.

Armed with health system intelligence and a more structured priority-setting process, CADTH will play a pivotal role in proactively influencing innovation by sending signals to industry regarding the areas of greatest need for patients and the broader health care system. When private-sector research and development strategies align better with public priorities, tensions between innovators and purchasers diminish and the prospects for greater value for money improve.

"We will collaborate with our partners to develop common, efficient approaches to measuring outcomes."



Objective 9

Align CADTH efforts and investments with federal, provincial, and territorial priorities for health improvement

CADTH will develop programs and processes that reflect our commitment to advancing priorities of the health system, such as improving mental health and addictions services, home and community care, services for seniors, and the provision of care for Indigenous populations and Canadians living in rural and remote areas. CADTH will also maintain an eye on the future by instituting practices that identify emerging priorities, and we will adapt our programs, products, and services in anticipation of future health system needs.



Measuring Progress

Performance measurement at CADTH is guided by our Impact and Evaluation Framework, which allows for the collection of both qualitative and quantitative data throughout the year. The information collected through the framework serves as an indicator of the extent to which CADTH has been able to exert influence and effect change in support of its mandate. We will collaborate with our partners to develop common, efficient approaches to measuring outcomes. In the interest of transparency, and to proactively demonstrate our value, we have already begun and will continue to make information about our performance more available.

CADTH has built procedures into its planning processes for monitoring and modifying elements of this strategic plan to reflect changes in the priorities of our funders, the external environment, or the organization. The CADTH Board of Directors has a critical role to play in reviewing progress and ensuring the goals and objectives described in this strategic plan meet customer needs and remain relevant and appropriate to achieving the mission and vision of the organization.

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CADTH Evidence Driven.

ABOUT CADTH

Ce document est également disponible en français.

CADTH is an independent, not-for-profit organization responsible for providing Canada's

health care decision-makers with objective evidence to help make informed decisions about the optimal use of drugs and medical devices in our health care system.

CADTH receives funding from Canada's federal, provincial, and territorial governments, with the exception of Quebec.