

The Role of Health Technology Assessment in the Canadian Health Care System.

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CADTH

Importance of Regional and Global Collaboration



International Network of Agencies for Health Technology Assessment (INAHTA)

- 52 member agencies from 33 countries



Role of INAHTA

- A network of HTA agencies
- All member agencies:
 - are publicly funded and not-for-profit
 - assess health technologies to support national or regional health system decision making
- Provides a platform for member agencies to share knowledge and learn from each other
- Has partner relationships with WHO, HTAi, HTAsiaLink, and many others
- Questions? Visit the INAHTA website for contact information: www.inahta.org



Canada

36 million people

10 million km²



Canada's Health Care System

- 10 provinces, 3 territories
- Regulation of drugs and medical devices: Federal Government responsibility
- Delivery of health care: Provincial/Territorial Government responsibility



Universal public coverage for hospital and physician services, including in-patient drugs, medical devices and procedures.

Health Care Spending in Canada

- **Total health expenditure (2016) projected to be \$228.1 billion**
 - \$6,299 per person
 - 11.1% of Gross Domestic Product (GDP)
- **Major expenditure areas:**
 - Hospitals (29.5%)
 - Prescribed drugs (13.6%)
 - Doctors (15.3%)

Spending on Prescription Drugs

- 19 public drug plans in Canada (6 Federal, 3 Territorial, 10 Provincial)
 - CADTH supports all except Quebec
- Prescription drug spending in Canada¹
 - Public drug plans: 42.6%;
 - Private insurance plans: 35.2%
 - Individuals with no public or private insurance: 22.2%



¹Canadian Institute for Health Information. *Prescribed Drug Spending in Canada, 2016: A Focus on Public Drug Programs*. Ottawa, ON: CIHI; 2016.

CADTH

is an independent, not-for-profit organization responsible for providing Canada's health care decision-makers with objective evidence about the optimal use of drugs and medical devices.

About CADTH

- Private, not-for-profit corporation.
- Funded by federal, provincial, and territorial governments.
- Conducts health technology assessments (HTA) on drugs, medical devices, diagnostics, clinical interventions.
- 200 employees based in Ottawa and Toronto.
- Advisory and expert committees, numerous contractors.
- Partners with other HTA organizations in Canada.
- Active involvement in the global HTA community.

Our Programs and Services



DRUG REIMBURSEMENT RECOMMENDATIONS

- CADTH Common Drug Review (CDR)
- CADTH pan-Canadian Oncology Drug Review (pCODR)



HEALTH TECHNOLOGY MANAGEMENT PROGRAM

- Rapid Response Service
- Health Technology Assessment Service
- Optimal Use Service
- Environmental Scanning
- Horizon Scanning



OTHER PROGRAMS AND SERVICES

- Scientific Advice



KNOWLEDGE MOBILIZATION AND LIAISON OFFICERS

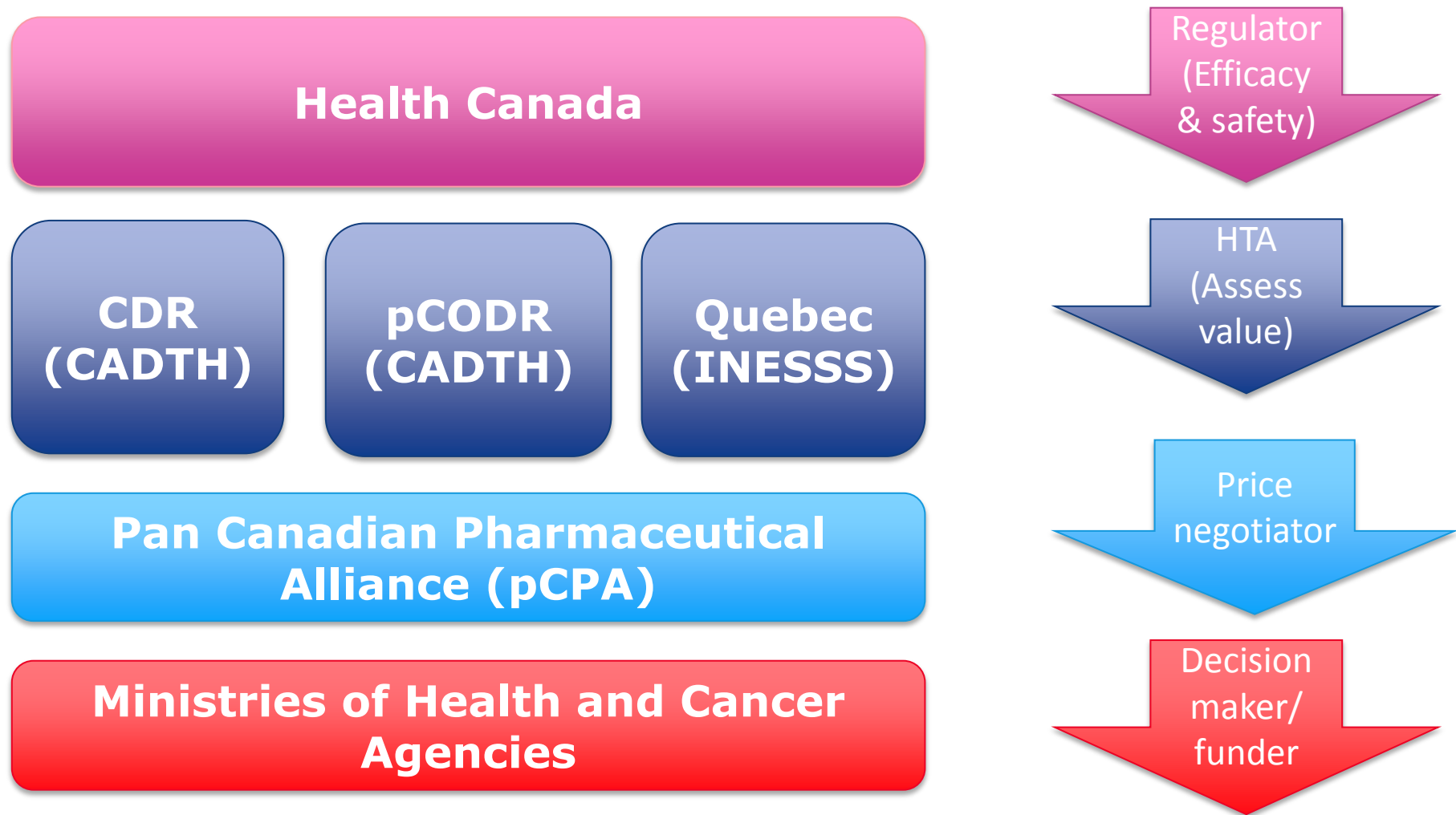
- Located in jurisdictions across Canada
- Understand the needs and priorities of local decision-makers
- Provide advice and tools to help turn evidence into policy and practice



Our evidence
is your evidence
cadth.ca



Drug Approval Process in Canada



CADTH Single Drug Review Programs

- **CADTH pan-Canadian Oncology Drug Review (pCODR)**
 - Clinical effectiveness and cost effectiveness review of all new cancer drugs and new indications
 - Recommendations by the CADTH pCODR Expert Review Committee
- **CADTH Common Drug Review (CDR)**
 - Clinical effectiveness and cost effectiveness review of all other drugs and new indications
 - Recommendations by the CADTH Canadian Drug Expert Committee

CADTH Multiple Drug Review Programs

- **Drug therapeutic class reviews (examples)**
 - Biologics for rheumatoid arthritis
 - Drugs for pulmonary arterial hypertension
 - Drugs for Chronic Hepatitis C Infection
 - Anti-Vascular Endothelial Growth Factor Drugs for Retinal Conditions
- **Optimal Use projects (examples)**
 - 2nd and 3rd line therapies for Type II diabetes
 - Appropriate Use of Interventions for Adults With Insomnia Disorder



CADTH Medical Device Programs

- **Health Technology Assessment Program (Reports with conclusions)**
 - Proton Beam Therapy for the Treatment of Cancer
 - Community Water Fluoridation Programs
- **Optimal Use Program (Provide recommendations and tools from an Expert Panel)**
 - Minimally invasive glaucoma surgery
 - Dialysis Modalities for the Treatment of End-Stage Kidney Disease
 - Interventions for Obstructive Sleep Apnea
- **Rapid Response Program**
 - 300-400 reports each year (drug and device)

Other CADTH Programs



- Horizon Scanning
- Environmental Scanning
- Scientific Advice Program
- Education, training, capacity-building

PROGRAMS AND SERVICES

KNOWLEDGE MOBILIZATION AND LIAISON OFFICERS

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From Health Technology Assessment (HTA) to Health Technology Management (HTM)

CADTH

Traditional Approach to HTA



Growing Trends – Pharmaceuticals

- **Biologics and biosimilars**
 - Interchangeability??
- **Cancer drugs**
 - A growing demand leading to a growing pipeline
 - High prices and uncertain value
- **Orphan and Ultra-Orphan Drugs**
 - **Weak** clinical evidence + extremely **high** prices = uncertainty and **questionable value**
- **Chimeric Antigen Receptor T cells (CAR-T)**
 - CAR-T treatments are being characterised to the public as miraculous, and game-changers.
 - *Promise and Complexities of a \$475,000 drug: FDA Approval of Tisagenlecleucel (JAMA Sep 20, 2017)*



Growing Trends – Medical Devices

- **Disruptive technologies**
 - 3D printing, advances in prosthetics
- **Remote monitoring, smart sensors**
 - Patient empowerment, mobile devices, telehealth
 - Direct to consumer devices – Apple watch, Fit-Bit, apps, etc.
 - Greater focus on home and community care
- **Artificial intelligence**
 - Radiology, cardiology, dermatology
- **Advanced diagnostics and surgical techniques**
 - Tricorder-like devices
 - Robotic surgery, minimally-invasive surgery



HTA Requires an Increased Application of Other Factors

- Alignment with regulators
- Ethical, legal, and social issues
- Environmental concerns
- Implementation considerations contextualized to the region in question



HTA Needs greater involvement of Stakeholders



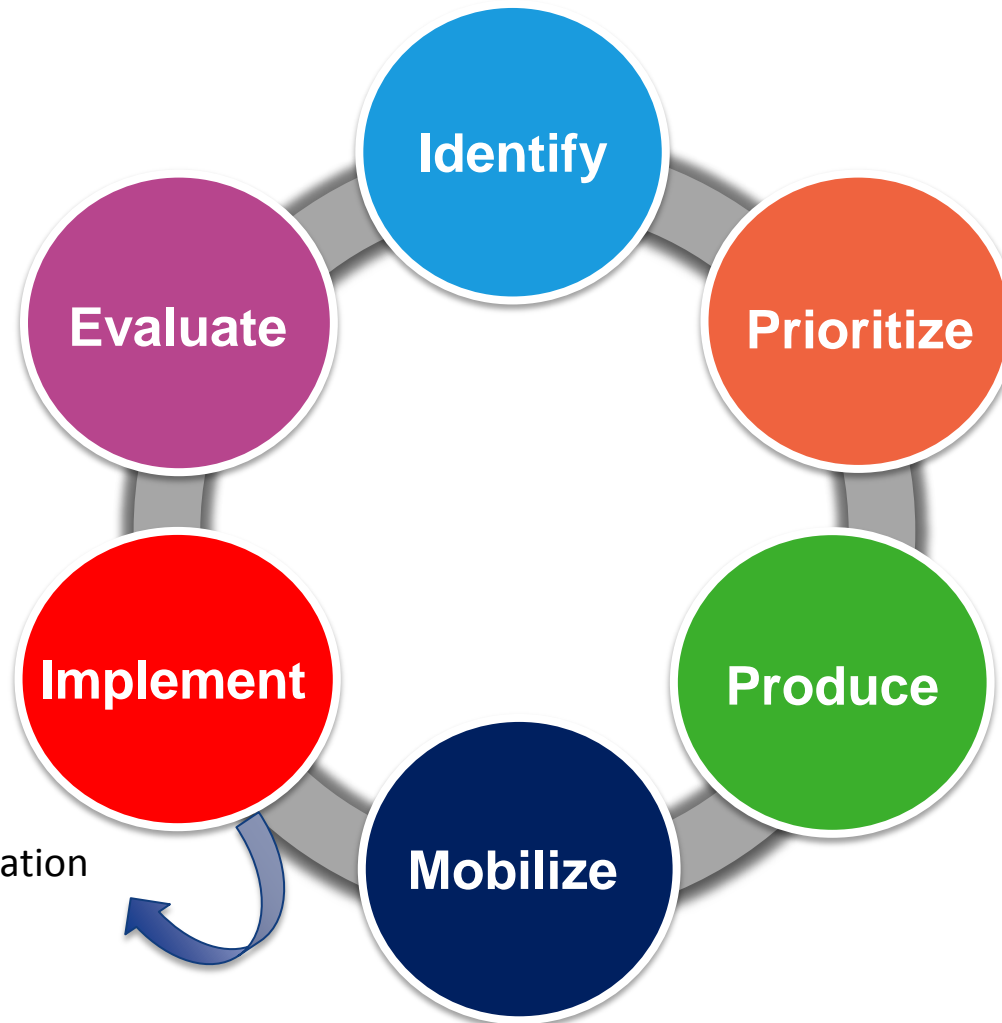
HTA Needs to Address Payer Concerns about Affordability

- Value frameworks
- Prioritization
- Tiered formularies
- Innovative pricing models
- Joint price negotiation
- Risk sharing agreements
- Budget Impact Analysis
- Transparency



Going beyond Cost-Effectiveness

Moving from Health Technology **Assessment** to Health Technology **Management**



❑ CADTH implementation support teams

Health Technology Management

1. Governance and priority setting

Expanding the breadth and scope of reviews; focus on unique needs of certain groups; creating a structured prioritization process; horizon scanning

2. Assessment throughout the product lifecycle

Scientific advice; real-world evidence; reassessments; disinvestment

3. Strengthening the evidence to action connection

Policy options; implementation support; enhanced clinician and patient engagement

4. Measuring impact and improving value for money

Enhanced analytics and report generation; performance measurement

Lessons Learned from Canada

1. Focus on the customer

- Provide a service not a report
- Help make your health care system smarter

2. Create principles for success

- Relevance + timeliness + quality = IMPACT

3. Changing policy and behaviour takes time

- Be patient and be persistent

4. Involve stakeholders in a meaningful way

- Patients, clinicians, industry

5. Move to a Health Technology Management approach

- Employ a lifecycle approach
- Strengthen the evidence-to-action connection

2018 is going to be a big
year for HTA in Canada

Halifax, NS

2018 CADTH Symposium

April 15 to 17, 2018

cadth.ca/symposium2018

Vancouver, BC

HTAi 2018 Annual Meeting

June 1 to 5, 2018

htai.org

Two world class Health Technology
Assessment conferences — one on the
west coast, one on the east coast.

CADTH Evidence
Driven.



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