

Health Technology Assessment and Personalized Medicine



Dedicated to your information and advancement.

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What do Decision Makers Need?

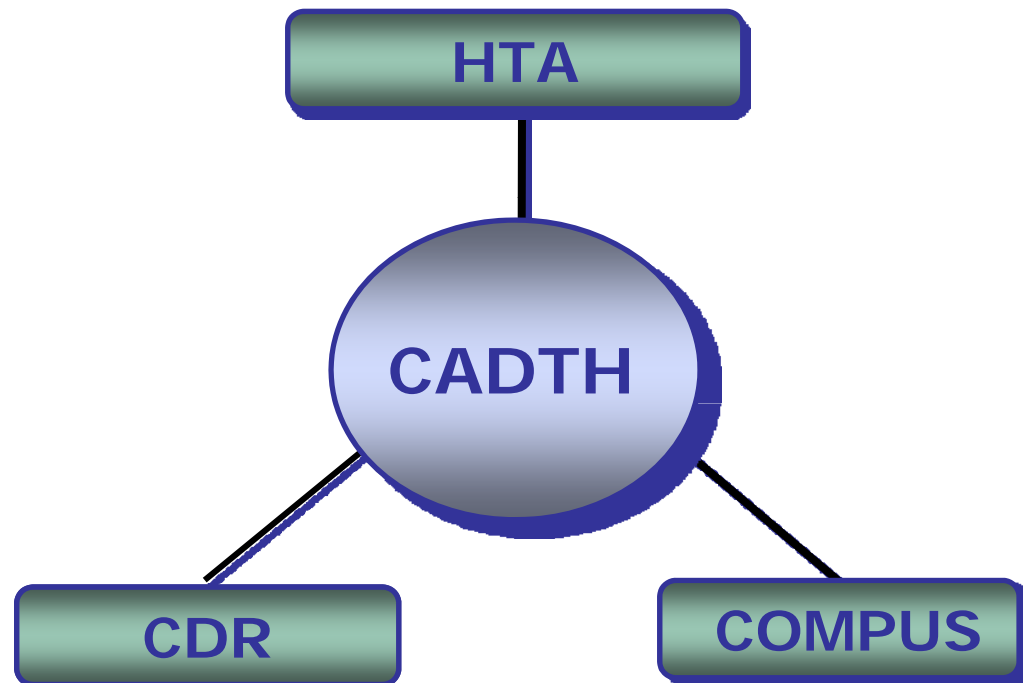
- **Independent, rigorously derived evidence based information**
- **Relevance – answering the real policy questions**
- **Messaging – concise, understandable**
- **Context around decisions – social, legal, ethical, political, patient, public**
- **Support to interpret and apply the information**

About CADTH

- **Canadian HTA agency founded in 1989**
- **Not part of government**
- **Private, not-for-profit organization**
- **Funded by Health Canada, the provinces and territories**

CADTH Science Programs

- Health Technology Assessment (HTA)
- Common Drug Review (CDR)
- Canadian Optimal Medication Prescribing and Utilization Service (COMPUS)



CADTH HTA Program

- **Provides high quality information about the clinical effectiveness and cost-effectiveness of health technologies including drugs**
- **Resources allocated ~ 50% to drug and 50% to non-drug areas**
- **Range of products tailored to the needs of health policy decision makers**
 - Inquiry service – response 24 hours to 30 days
 - Rapid Reviews – 4 months
 - Full HTAs – 4 to 9 months

CADTH Common Drug Review

➤ **A national process for:**

- conducting objective, rigorous, and timely clinical and pharmacoeconomic reviews
- providing formulary listing recommendations



➤ **Formulary decisions are made by the publicly funded drug plans (the payers)**

Canadian Optimal Medication Prescribing and Utilization Service (COMPUS)

- **Evidence-based information about best practices related to drug prescribing and use**
- **Advice, tools and proven strategies to help health care providers, policy makers and consumers use this information to facilitate change**
- **Creates an awareness and culture of best practices**

**Topic Areas to Date:
Proton pump inhibitors
Diabetes management**

The Market Access Continuum

- **Medicines Regulation**
 - Quality, safety and efficacy
- **Health Technology Assessment**
 - Clinical Effectiveness
 - Cost Effectiveness
- **Payers**
 - Budget impact, risk sharing, pricing agreements

What HTA Bodies Need

- Evidence on long term use
- Population safety issues
- Information relating to drug interactions
- Information on the full target population
- Comparisons to existing therapies
- Information informing appropriate utilization
- An economic evaluation

HTA and Payer Challenges

- **Regulatory versus HTA requirements**
 - Efficacy versus effectiveness
 - Comparator data and data on long term use
 - Effectiveness in sub-populations and the “real world”
- **Incremental benefit does not always support the additional cost**
 - Budgetary impact, appropriate utilization
- **Information gaps and uncertainty**
- **Resource challenges**

Typical Drug Review Challenges

- Definition of “first in class” drugs
- Use of surrogate endpoints
- Drugs with limited evidence
- Drugs with high cost-effectiveness ratios
- Use of appropriate comparators versus indirect comparisons
- Drug costs – What price to use?



Finding the Right Balance

**Improved
clinical
outcomes**



**Increased
costs**

CADTH View of Personalized Medicine

- Restricted to the health technology components
- Health technology is defined as:
“Any intervention that may be used to promote health, to prevent, diagnose or treat a disease or for rehabilitation or long-term care.”
- Health technologies for personalized medicine:
 - Pharmaceuticals
 - Diagnostic tests
 - Medical Imaging

CADTH View of Personalized Medicine

- **Medical imaging, pharmacogenomics, biomarkers are simply pieces of the diagnostic puzzle**
- **Must consider sub-groups in the economic evaluation**
 - Sub-groups must be practice and policy relevant
- **Payers will likely apply existing HTA and reimbursement frameworks**
- **Clinical and cost effectiveness in comparison to standard therapies will still be required**

CADTH View of Personalized Medicine

Globally, the pricing and reimbursement environment is focused on *proof of value*

HTA and Personalized Medicine

- **Personalized medicine may or may not involve technology decisions**
- **Existing technology assessment frameworks are well-suited to these types of decisions**
- **Economics is only one piece of the puzzle**

Will the benefits of personalized medicine support the costs?

For More Information



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