

# Health Technology Assessment and Personalized Medicine



Dedicated to your information and advancement.

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*DIA Conference on Personalized Medicine  
October 16, 2009, Toronto, ON*

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# What do Decision Makers Need?

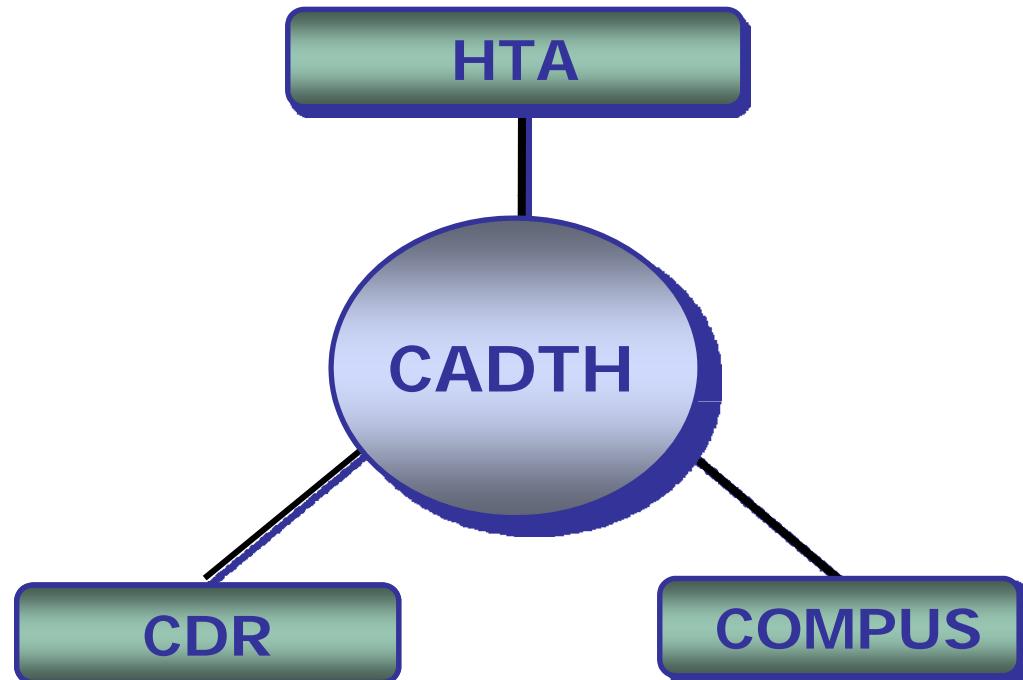
- **Independent, rigorously derived evidence based information**
- **Relevance – answering the real policy questions**
- **Messaging – concise, understandable**
- **Context around decisions – social, legal, ethical, political, patient, public**
- **Support to interpret and apply the information**

## 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

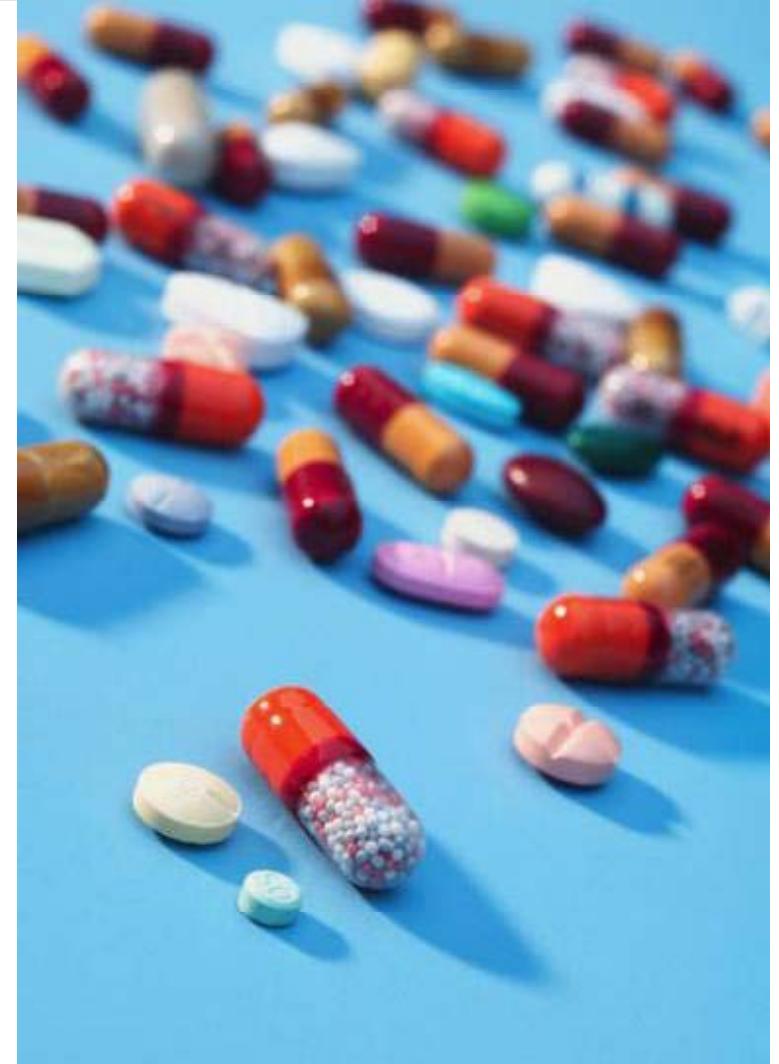
- **Evidence on long term use**
- **Population safety issues**
- **Information relating to drug interactions**
- **Information on the full target population**
- **Comparisons to existing therapies**
- **Information informing appropriate utilization**
- **An economic evaluation**

# 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



[www.cadth.ca](http://www.cadth.ca)