The Institute of Health Economics (IHE)

An Alberta-based research organization, the IHE conducts studies in health economics and health technology assessment to support evidence-informed health policy and practice.

Health Technology Assessment international

An International Society for the Promotion of Health Technology Assessment

The global scientific and professional society for all who produce and use HTA.

9th HTAi Annual Meeting

HTAi 2012: HTA for Integrated Care in a Patient-Centered System
June 23-27, 2012 • Bilbao, Spain

Promoting HTA for evidence-informed decision making on health technology use & innovation.

Other major activities

- HTAi Policy Forum
- Policy dialogues for senior leaders
- International Journal of Technology Assessment in Health Care
- Working groups, scholarships, and more

www.htai.org
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THANK YOU TO OUR SPONSORS

We gratefully acknowledge the contribution of our sponsors to the success of the 2012 CADTH Symposium. This event could not continue to grow and improve without you!

GOLD SPONSORS

INSTITUTE OF HEALTH ECONOMICS
ALBERTA CANADA

BRONZE SPONSOR

We would also like to acknowledge the support of our funders. CADTH’s activities, programs, and services, including the CADTH Symposium, are made possible through financial contributions from Health Canada and the governments of:

- Alberta
- British Columbia
- Prince Edward Island
- Manitoba
- New Brunswick
- Nova Scotia
- Nunavut
- Ontario
- Saskatchewan
- Newfoundland and Labrador
- Northwest Territories
- Yukon
Welcome to the 2012 CADTH Symposium — the eighth national forum organized by the Canadian Agency for Drugs and Technologies in Health (CADTH). It brings together producers and users of evidence-based information on drugs and other health technologies in Canada for productive discussions and information sharing.

This year’s theme is Evidence Matters: Outcomes, Efficiency, Impact. Health care decision-makers in Canada operate in an increasingly complex environment that has steadily intensified the challenge of adding value to the system while managing overall health care costs. As policy-makers, planners, and health care professionals look for ways to bend the health care cost curve, the need for credible, independent, evidence-based information could not be greater.

The Symposium content will build on the premise that today, more than ever, evidence matters. It features 11 workshops, 32 concurrent sessions, and more than 50 scientific posters on topics ranging from robot-assisted surgeries and value-based pricing for pharmaceuticals to influencing clinician behaviour and using evidence to provide value for money.

During the opening plenary, a panel of Deputy Ministers of Health will talk about the issues and pressures they face in their jurisdictions, and the evidence-based approaches they are using to address their challenges. Tuesday morning will begin an exploration of how non-drug technologies are managed in Canada and will provide some thoughts about how we can improve the uptake and appropriate use of diagnostics, and medical, dental, and surgical devices and procedures. For the closing plenary on Tuesday afternoon, the focus will shift to pharmaceutical policy in Canada.

I also hope you will take full advantage of the many informal networking opportunities at the Symposium, including the Welcome Reception and Scientific Poster Exhibition on Sunday evening, the networking reception on Monday evening, and the Awards Luncheon on Tuesday.

The continued strength and quality of the Symposium depends entirely on contributions from all sectors — government, regulatory bodies, health authorities, health care providers, academics, patient groups, industry, and HTA and drug review agencies. Thank you for your interest and participation.

I hope that you find the discussions and networking opportunities productive and rewarding.

Dr. Brian O'Rourke
President and CEO
Canadian Agency for Drugs and Technologies in Health
# Program at a Glance

**Sunday, April 15, 2012**

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<tr>
<th>Time</th>
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<tr>
<td>0800 – 1900</td>
<td>Registration Desk Open — Confederation Foyer — 4th Floor</td>
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<tr>
<td>0800 – 0900</td>
<td>Morning Workshop Registration — Confederation Foyer — 4th Floor</td>
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<tr>
<td>0900 – 1200</td>
<td>Workshop AM-1:</td>
<td>Brendalynn Ens, Dr. Sarah Jennings, Chris Kamel</td>
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<td>Critical Appraisal 101: Evidence Appraisal for Non-Researchers</td>
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<td>Workshop AM-2:</td>
<td>Dr. David Moher, Dr. Edward Mills, Dr. George Wells, Dr. Sharon Straus, Dr. Joseph Beyene</td>
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<td>Network Meta-analysis: The Basics</td>
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<td>Workshop AM-3:</td>
<td>Emmanuel Nkansah, Caitlyn Ford, Nina Frey, Connie Crosby</td>
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<td>Keeping Ahead of the Curve: Web Tools for Health Information</td>
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<td>Workshop AM-4:</td>
<td>Tamara Rader, Erin Ueffing</td>
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<td>Evidence Matters: Asking the Questions and Finding the Evidence for Systematic Reviews</td>
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<td>Workshop AM-5:</td>
<td>Dr. Martin Reed</td>
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<td>Assessing Evidence for Diagnostic Imaging in Clinical Practice Guidelines</td>
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<td>Workshop AM-6:</td>
<td>Dr. Fiona Clement, Dr. Braden Manns, Lianne Barnie</td>
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<td></td>
<td>International Drug Reimbursement Decision-Making Processes: Lessons for Canada</td>
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<td>1200 – 1300</td>
<td>Afternoon Workshop Registration — Confederation Foyer — 4th Floor</td>
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<tr>
<td>1300 – 1600</td>
<td>Workshop PM-1:</td>
<td>Dr. Fiona Clement, Dr. Tom Noseworthy, Dr. Adam Elshaug, Dr. Peter Littlejohns, Joan Berezanski</td>
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<tr>
<td></td>
<td>Health Technology Reassessment: Promoting Value and Evidence-Based Practice</td>
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<td>Workshop PM-2:</td>
<td>Karen Lee, Dr. Scott Klarenbach</td>
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<td>Common Issues and Pitfalls with Economic Analyses — Implementing Economic Evaluations in Practice</td>
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<td>Workshop PM-3:</td>
<td>Erin Ueffing, Eileen Vilis, Nancy Santesso</td>
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<td>Evidence Matters: Presenting and Communicating the Evidence in Systematic Reviews</td>
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<td>Workshop PM-4:</td>
<td>Dr. Edward Mills, Dr. David Moher, Dr. Kristian Thorlund</td>
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<td></td>
<td>Advanced Issues in Multiple Treatment Comparison Meta-analysis</td>
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<td>Workshop PM-5:</td>
<td>Dr. Beverley Shea, Dr. George Wells, Dr. David Henry, Dr. Vijay Shukla</td>
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<td></td>
<td>A Measurement Tool to Assess the Methodological Quality of Systematic Reviews (AMSTAR)</td>
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<td>1700 – 1900</td>
<td>Welcome Reception and Scientific Poster Exhibition — Governor General I/II — 4th Floor</td>
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## Monday, April 16, 2012

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<th>Time</th>
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<td>Registration Desk Open</td>
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<td>0745 – 0845</td>
<td>Breakfast</td>
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<td>0845 – 0915</td>
<td>Official Opening</td>
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<tr>
<td>0915 – 1030</td>
<td>Opening Plenary Session:</td>
<td>Kevin McNamara, Glenda Yeates, Dr. Terrence Sullivan</td>
<td>Confederation Ballroom 4th Floor</td>
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<td></td>
<td>Evidence Matters: Outcomes, Efficiency, Impact</td>
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<td>1030 – 1100</td>
<td>Refreshment Break</td>
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<td>Confederation Foyer 4th Floor</td>
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<td>1100 – 1230</td>
<td>Concurrent Session A1:</td>
<td>Joan Berezanski, Dr. Tom Noseworthy, Dr. Devidas Menon, Dr. Richard Wedge, Patrick Morin</td>
<td>Governor General I 4th Floor</td>
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<td></td>
<td>Addressing Health Technology Policy Issues: The Canadian Way</td>
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<td>Concurrent Session A2:</td>
<td>Dr. David Gardner, Dr. James McCormack, Dr. Mike Evans, Dr. Michael Allen, Dr. Mike Kolber</td>
<td>Ontario 3rd Floor</td>
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<td>Innovations in Therapeutics Continuing Education Knowledge Translation</td>
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<td>Concurrent Session A3:</td>
<td>Maggie Keresteci, Dr. Bill Evans, Dr. Verna Mai, Rami Rahal, Bernadette MacDonald</td>
<td>Les Saisons 3rd Floor</td>
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<td>Leveraging a National Approach to Achieve Excellence Throughout Canada’s Cancer Control Continuum</td>
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<td>Concurrent Session A4:</td>
<td>Dr. Gillian Mulvale, Don Husereau, Dr. Mark McLeod, Dr. Adam Elshaug</td>
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<td>Aligning Value with the Price of Provider Fees through HTA: A Feasible Option in Canada?</td>
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<td>Concurrent Session A5:</td>
<td>Lynda McGahan, Dr. Paule Poulin, Dr. Trevor Schuler, Dr. Janice Mann, Michel Boucher, Dr. Nina Buscemi</td>
<td>Quebec 4th Floor</td>
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<td>Case Studies: From Evidence to Impact</td>
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<td>Elaine MacPhail, Dr. Karen Facey, Dr. Robert Peterson, Larry Broadfield</td>
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<td>The Challenge of Integrating Patient Evidence and Values in HTA</td>
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<td><strong>Concurrent Session A7:</strong></td>
<td>• Dr. Jeffrey Hoch</td>
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<td>Administrative Data for Health</td>
<td>• Dr. Murray Krahn</td>
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<td></td>
<td>Technology Assessment: Data and Methodological</td>
<td>• Dr. Nicole Mittmann</td>
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<td>Issues Related to Outcomes, Efficiency, and</td>
<td>• Dr. Harindra Wijeysundera</td>
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<td><strong>1330</strong> Lunch</td>
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<td>1330 –</td>
<td><strong>Concurrent Oral Session B1:</strong></td>
<td>• Larissa Shamseer</td>
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<td>1500</td>
<td>Methodology</td>
<td>• Dr. David Moher</td>
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<td>• Dr. Edward Mills</td>
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<td>• Dr. Nick Bansback</td>
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<td>• Dr. Kristian Thorlund</td>
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<td>• Ashley Jaksa</td>
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<td>1330 –</td>
<td><strong>Concurrent Oral Session B2:</strong></td>
<td>• Ghislaine Mathieu</td>
<td>Ontario</td>
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<tr>
<td>1500</td>
<td>Policy Issues</td>
<td>• Jamie Daw</td>
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<td>• Dr. Mahmood Zarrabi</td>
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<td>• Dr. Thach Lang</td>
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<td>1330 –</td>
<td><strong>Concurrent Oral Session B3:</strong></td>
<td>• Pablo Navarro</td>
<td>Quebec</td>
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<tr>
<td>1500</td>
<td>Evidence-Based Policy</td>
<td>• Jean Hai Ein Yong</td>
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<td>• Raymond Fong</td>
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<td>• Dr. Thien Huynh</td>
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<td>1330 –</td>
<td><strong>Concurrent Oral Session B4:</strong></td>
<td>• Lisa Masucci</td>
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<tr>
<td>1500</td>
<td>Health Economics</td>
<td>• Mike Paulden</td>
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<td>• Dr. Wanruudee Isaranuwatchai</td>
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<td>1330 –</td>
<td><strong>Concurrent Oral Session B5:</strong></td>
<td>• Harold Boudreau</td>
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<tr>
<td>1500</td>
<td>Cardiovascular</td>
<td>• Julian Nam</td>
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<td>• Andrew Portolesi</td>
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<td>• Dr. Gabrielle van der Velde</td>
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<td>1330 –</td>
<td><strong>Concurrent Oral Session B6:</strong></td>
<td>• Holly Glennie</td>
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<td>1500</td>
<td>Impact</td>
<td>• Rhonda Boudreau</td>
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<td>• Kyle Trenwith</td>
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<td>• Dr. Tara Gomes</td>
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<td>1330 –</td>
<td><strong>Concurrent Oral Session B7:</strong></td>
<td>• Dr. Pierre Pluye</td>
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<tr>
<td>1500</td>
<td>Influencing Clinician Behaviour</td>
<td>• Dr. Michael Allen</td>
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<td>• Dr. Kelly Grindrod</td>
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<td>1330 –</td>
<td><strong>Refreshment Break</strong></td>
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<tr>
<td>1530 – 1700</td>
<td><strong>Concurrent Session C1:</strong> Health Technology Assessment in Alberta: Continuing the Journey</td>
<td>Rosmin Esmail, Joan Berezanski, Dr. Paule Poulin, Dr. Don Juzwishin</td>
<td>Les Saisons 3rd Floor</td>
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<td><strong>Concurrent Session C2:</strong> Conflict of Interest Policies: Current and Future Controversies</td>
<td>Dr. Anne Holbrook, Chander Sehgal, Marc Jolicoeur, Alain Boisvert</td>
<td>Governor General I 4th Floor</td>
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<td><strong>Concurrent Session C3:</strong> Using the Cancer Risk Management Model to Support Cancer Control Policy Decision-Making in Canada</td>
<td>Dr. Michael C. Wolfson, Dr. Jeffrey Hoch, Dr. Hla-Hla (Rosie) Thein, Dr. Sonya Cressman, Luciano Ieraci</td>
<td>Provinces II 4th Floor</td>
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<td><strong>Concurrent Session C4:</strong> Evidence Assessment in Drug Reviews: Current State, Challenges, and What’s Ahead</td>
<td>Karen Lee, Dr. Scott Klarenbach, Dr. Adil Virani, Dr. Vijay Shukla, Dr. Trevor Richter</td>
<td>Governor General II 4th Floor</td>
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<td><strong>Concurrent Session C5:</strong> Who Does What? Understanding Drug Safety Evidence at the Global and National Level</td>
<td>Dr. Ebele Ola, Dr. Amrit Ray, Kimby Barton, Dr. Sarah Frise, Dr. Diane Forbes</td>
<td>Ontario 3rd Floor</td>
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<td><strong>Concurrent Session C6:</strong> It Takes a Village: Optimizing Drug-Related Health Outcomes and Cost-Effective Use</td>
<td>Dr. Tarun Ahuja, Dr. Janice Mann, Dr. Richard Williams, Dr. Lisa Dolovich, Bernard Gauthier</td>
<td>Provinces I 4th Floor</td>
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<td>1700 – 1830</td>
<td><strong>Networking Reception</strong></td>
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## 2012 CADTH Symposium
**Evidence Matters: Outcomes, Efficiency, Impact**

### Tuesday, April 17, 2012

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<td>0730–1630</td>
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<td>0730–0830</td>
<td>Breakfast</td>
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<td>Confederation Ballroom 4th Floor</td>
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<td>0830–0945</td>
<td>Plenary Session: Left to Their Own Devices: Are We Paying Enough Attention to Medical Technology?</td>
<td>Dr. Patrick Lee Ergina, Dr. Karen Facey, Brian Lewis, Dr. Devidas Menon, Dr. Tom Noseworthy</td>
<td>Confederation Ballroom 4th Floor</td>
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<td>0945–1015</td>
<td>Refreshment Break</td>
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<tr>
<td>1015–1145</td>
<td>Concurrent Oral Session D1: Methodology</td>
<td>Dr. Edward Mills, Mike Paulden, Angela Rocchi</td>
<td>Governor General I 4th Floor</td>
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<td>Concurrent Oral Session D2: Policy Issues</td>
<td>Dr. Steve Morgan, Francisco Caballero, Dr. Ana Johnson</td>
<td>Governor General II 4th Floor</td>
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<td>Concurrent Oral Session D3: Cancer</td>
<td>Dr. Steve Simpson, Dr. Jeffrey Hoch, Sarah Benn, Dr. Shawn Bugden</td>
<td>Provinces II 4th Floor</td>
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<td>Concurrent Oral Session D4: Patient Engagement/Public Perspectives</td>
<td>Dr. Durhane Wong-Rieger, Dr. Stuart Peacock, Sarah Berglas, Elaine MacPhail</td>
<td>Provinces I 4th Floor</td>
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<td>Concurrent Oral Session D5: Efficiency</td>
<td>Neale Smith, Dr. Michelle Mujoomdar, Dr. Katerina Gapanenko</td>
<td>Ontario 3rd Floor</td>
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<td>Concurrent Oral Session D6: Collaboration and Networks</td>
<td>David Li Tang, Karen Lee, Dr. Vijay Shukla, Ken Bond</td>
<td>Les Saisons 3rd Floor</td>
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<tr>
<td>1145–1315</td>
<td>Awards Luncheon</td>
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Tuesday, April 17, 2012 (cont’d)

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<th>Time</th>
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| 1315 – 1445| Concurrent Session E1: The pan-Canadian Oncology Drug Review (pCODR): An Enhanced Approach to Evidence-Based, Cancer Drug Policy Decision-Making, or Just Another Acronym? | • Dr. Allan Grill  
• Dr. Mona Sabharwal  
• Scott Livingstone | Ontario 3rd Floor |
|            | **Concurrent Session E2:** Coverage with Evidence Development in Canada | • Dr. Robert Peterson  
• David K. Lee  
• Dr. Devidas Menon  
• Lucie Robitaille  
• Nancy McColl | Governor General I 4th Floor |
|            | **Concurrent Session E3:** Value-Based Pricing of Pharmaceuticals: Is a Pan-Canadian Approach Feasible? | • Stephen Samis  
• Don Husereau  
• Dr. Karl Claxton  
• Brent Fraser  
• Mark Ferdinand | Governor General II 4th Floor |
|            | **Concurrent Session E4:** Opportunities for HTA Collaboration over the Continuum of a Technology’s Life Cycle | • Dr. Bernard Prigent  
• Dr. Tammy Clifford  
• Dr. Nick Bansback  
• Dr. Murray Krahn | Provinces I 4th Floor |
|            | **Concurrent Session E5:** Turning a Big Ship: Shifting Attitudes and Approaches to Self-Monitoring of Blood Glucose in Type 2 Diabetes | • Judy McPhee  
• Peggy Dunbar  
• Dr. Suzanne Taylor  
• Dr. Robyn Houlden  
• Lori Berard | Les Saisons 3rd Floor |
|            | **Concurrent Session E6:** Big Ideas for HTA | • David Ames  
• Dr. Stirling Bryan  
• Dr. Reiner Banken  
• Professor Ron Goeree  
• Dr. Janet Martin  
• Matthew Brougham | Provinces II 4th Floor |
| 1445 – 1500| Refreshment Break | | Confederation Foyer 4th Floor |
| 1500 – 1615| Closing Plenary Session Pharmaceutical Policy in Canada: Do We Have the Right Prescription? | • Deborah Brown  
• Dr. Steve Morgan  
• Dr. Sean Tunis  
• Kevin Wilson  
• Dr. David A. Henry | Confederation Ballroom 4th Floor |
| 1615 – 1630| Official Closing | | Confederation Ballroom 4th Floor |
Special Events

WELCOME RECEPTION AND SCIENTIFIC POSTER EXHIBITION

**Sunday, April 15**
**1700 – 1900**
Westin Hotel Ottawa
Governor General Room I/II
4th Floor

The Welcome Reception features scientific posters from across Canada and the opportunity to meet and talk with the authors about their work. A cash bar and light snacks will be available.

NETWORKING RECEPTION

**Monday, April 16**
**1700 – 1830**
Westin Hotel Ottawa
Confederation Foyer
4th Floor

Join other Symposium attendees to relax and network after the first day of sessions. Meet up with colleagues before heading for dinner in the city. A cash bar and light snacks will be available.

THE DR. JILL M. SANDERS AWARD OF EXCELLENCE AND POSTER AWARDS PRESENTATIONS

**Tuesday, April 17**
**1145 – 1315**
Awards Luncheon
Westin Hotel Ottawa
Confederation Ballroom
4th Floor

Join us in honouring the 2012 recipient of the Dr. Jill M. Sanders Award of Excellence. This award is presented annually to honour an individual whose outstanding achievements have significantly advanced the field of health technology assessment and its use in Canada. The winners of our poster competition will also receive their awards at this luncheon.
Professor Ron Goeree Receives Dr. Jill M. Sanders Award of Excellence in HTA for 2012

Dr. Brian O’Rourke, President and CEO of the Canadian Agency for Drugs and Technologies in Health (CADTH), is pleased to announce that Ron Goeree, Director of the Programs for Assessment of Technology in Health (PATH) Research Institute and an associate professor at McMaster University, is the 2012 recipient of the Dr. Jill M. Sanders Award of Excellence in Health Technology Assessment (HTA).

“Professor Goeree is one of the pre-eminent HTA researchers and educators in the world,” said Dr. O’Rourke. “As Director of the PATH Research Institute, he has demonstrated the essential role health technology assessment can and should play in meeting the needs of health decision-makers. As an innovator, he helped pioneer the methodological framework for the field evaluation of non-drug technologies. As a dedicated professor and mentor, he has trained literally thousands of students, researchers, and decision-makers, making an immense contribution to the capacity in Canada to produce and use health technology assessment.”

Professor Goeree’s home base is the world-renowned Department of Clinical Epidemiology and Biostatistics at McMaster University. He was appointed Director of the PATH Research Institute of St. Joseph’s Healthcare Hamilton in 2006. He is also a member of the Centre for Evaluation of Medicines. He is involved in numerous research projects with the Ontario Ministry of Health and Long-Term Care, Health Quality Ontario, and CADTH, and has published extensively in the HTA field.

“I am honoured and thrilled to receive an award like this, recognizing lifetime achievement,” said Professor Goeree. “CADTH is a leader in HTA internationally and I am proud PATH has a formal long-term partnership with CADTH. On a personal note, I was also a huge admirer of Jill and her contributions to HTA in Canada and internationally, so this award is especially touching.”

The Dr. Jill M. Sanders Award will be presented to Professor Goeree during an Awards Luncheon at the 2012 CADTH Symposium in Ottawa, Ontario. The Luncheon will be held on Tuesday, April 17 from 11:45 a.m. to 1:15 p.m.

About the Dr. Jill M. Sanders Award

The Dr. Jill M. Sanders Award of Excellence in HTA was established by CADTH in 2010 to celebrate Canadian leadership and excellence in HTA by recognizing individuals whose outstanding achievements have made a significant and lasting contribution to health technology assessment in Canada. The award is named in honour of Dr. Jill M. Sanders, President and CEO of CADTH from 1987 to 2010. She passed away in February 2010 following a battle with cancer.

Previous recipients of the Dr. Jill M. Sanders Award are:

- Dr. Andreas Laupacis, Executive Director, Li Ka Shing Knowledge Institute, St. Michael’s Hospital, and Professor, Department of Medicine and Department of Health Policy, Management and Evaluation, University of Toronto (2010).
- Dr. Maurice McGregor, Honorary Physician and Chair of the Technology Assessment Unit of the McGill University Health Centre, and Professor Emeritus, McGill University (2011).
Workshops

Critical Appraisal 101: Evidence Appraisal for Non-Researchers

April 15, 2012
0900 – 1200

“Clinical trials show...”
“Data suggest...”
“A clinical practice guideline recommends...”
“Statistically significant results demonstrate...”

Health care professionals and decision-makers are bombarded with information and statements like this on a daily basis. Without a research background, how can we make sense of it all? Do you turn to others’ interpretations of the literature, but wonder if they are truly relevant to your setting? Do you wish you could assess clinical papers for yourself, but don’t know where to start or what questions to ask?

Join us for an introductory hands-on workshop that will enhance your knowledge and confidence to critically appraise a few of the most common types of research found in published journals. Geared to clinicians, policy-makers, and decision-makers needing quick assessment skills to evaluate scientific papers, this workshop will highlight the most important things to look for in:

• a systematic review or health technology assessment
• a clinical practice guideline
• a randomized controlled trial.

Small-group, interactive discussions as part of this workshop will help participants apply critical appraisal skills to sample papers. This session will appeal to policy- and decision-makers, health care professionals, patient advocates, or anyone who wants to gain introductory comfort in interpreting medical literature.

Educational Objectives: Participants will appreciate the importance of critical appraisal, understand potential sources of bias in published literature, and learn practical methods for evaluating some of the most common types of publications.

Level: Introductory

Presenters: Brendalynn Ens, Liaison Officer — Saskatchewan; Dr. Sarah Jennings, Knowledge Exchange Officer; and Chris Kamel, Manager — Clinical Research, Canadian Agency for Drugs and Technologies in Health
Network Meta-analysis: The Basics

New methods of evaluating the relative safety and effectiveness of competing interventions may provide unique opportunities for comparative effectiveness research. As the utility of meta-analysis grows in popularity, so too does it grow in the complexity of methods and questions that it aims to answer. An increasingly common challenge for decision-makers is to infer which of several competing interventions is likely to be most effective and safe. This is particularly challenging when the interventions have not been directly evaluated in well-conducted randomized clinical trials. Recent methods to determine the comparative effectiveness and safety of interventions include the network, also called multiple treatment comparison meta-analysis, that provides sophisticated methods for quantitatively addressing indirect comparisons of several competing interventions.

This workshop will review the basic conceptual, methodological, and statistical elements of network meta-analysis. The workshop will also present approaches to end of query knowledge translation and integrated knowledge translation that systematic reviewers can consider when developing their protocols.

Educational Objective: A basic understanding of network meta-analysis.

Level: Introductory

Presenters: Dr. David Moher, Senior Scientist, Ottawa Hospital Research Institute, and Associate Professor, University of Ottawa; Dr. Edward Mills, Canada Research Chair/Associate Professor of Health Sciences, University of Ottawa; Dr. George Wells, Professor, University of Ottawa, and Director, Cardiovascular Research Methods Centre, University of Ottawa Heart Institute; Dr. Sharon Straus, Professor, University of Toronto; and Dr. Joseph Beyene, Professor, McMaster University

Keeping Ahead of the Curve: Web Tools for Health Information

To keep ahead of the curve, professionals in the field of health information must understand the value and opportunity that new web technologies provide, and must know how to use these tools strategically and efficiently. Tips and tricks for using online tools can save time by optimizing both information retrieval and information sharing. Geared to information specialists, health researchers, and knowledge management professionals, this workshop will teach participants new ways to search for and share health information, and offer perspective on the many ways to collaborate with others around the world.

Part 1: Google Custom Search

CADTH information specialists assessed the reliability of Google Custom Search and found that it could save time without compromising quality. They will share their experience and participants will learn when and how to use this tool effectively. Other helpful Google tools will also be discussed.
Part 2: Social Media
Discussion on the advantages of using social media tools, and how health care organizations may effectively benefit from their utilization. Our presenter is a writer, blogger, teacher, and speaker. She is winner of The iSchool Institute Award for Outstanding Teaching 2010-2011 for her continuing education courses on social media at the University of Toronto’s Faculty of Information.

Learning Objectives: Learn how to use Google Custom Search to conduct tailored searches of a collection of websites; appreciate the importance of social media tools such as Twitter, blogs, news feeds, and podcasts; and explore how you can use social media to maximize impact for your organization.

Presenters: Emmanuel Nkansah, Caitlyn Ford, and Nina Frey, Information Specialists, Canadian Agency for Drugs and Technologies in Health; Connie Crosby, Principal, Crosby Group Consulting
(Twitter: @conniecrosby and @crosbygroup)

Evidence Matters: Asking the Questions and Finding the Evidence for Systematic Reviews
Producing reliable, relevant evidence in systematic reviews begins with asking the right question. With a clear and specific question, authors have a strong base on which to build a rigorous search strategy. This introductory workshop will address the following topics:

1. How to formulate a search strategy from an answerable question
This workshop will help participants understand the key components of a research question, known as PICO (population, intervention, comparison, and outcomes). Presenters will demonstrate the “building block” method to show how those components can be translated into search terms and strategies.

2. Where to search for studies
We will discuss techniques for identifying and comparing the best resources for your question. The decision to include varied sources of evidence, such as trial registers and unpublished literature, will be explored, along with considerations in choosing appropriate databases for searching.

3. How to search efficiently
We will discuss sensitivity versus precision, Boolean operators, and controlled vocabulary versus natural language searching. A discussion of search filters (to identify papers with particular study designs) will help participants decide which filter (if any) is appropriate to their question.

4. What to do with the results
We will discuss best practices in organizing and managing search results from multiple sources, and the importance of documenting and reporting the search process. The workshop will combine presentations and interactive sessions so that participants have the opportunity to develop their skills. They will develop research questions through small-group discussions, allowing experiences and perspectives to be shared.
Educational Objective: Participants will learn how to ask answerable, relevant questions to be addressed with systematic reviews. They will discuss finding the evidence to answer their questions, and learn about appropriate search strategies.

Level: Introductory

Presenters: Tamara Rader, Trials Search Coordinator, Cochrane Musculoskeletal Review Group, and Erin Ueffing, Education Coordinator, Canadian Cochrane Centre

Assessing Evidence for Diagnostic Imaging in Clinical Practice Guidelines

April 15, 2012 0900 – 1200

Accuracy is usually the primary criterion that is used to evaluate evidence for diagnostic imaging (DI) as part of clinical practice guidelines (CPGs). However, there are significant difficulties in determining the true accuracy of DI examinations, primarily because of the difficulty of defining an appropriate reference standard. Most evidence grading systems rate randomized control trials as the highest level of evidence. However, it is also difficult to design these for the assessment of routine DI, primarily because of the long management course between the DI intervention and the patient outcome. The concept of Levels of Efficacy for Diagnostic Imaging offers a useful approach to assessing the role of DI for CPGs. There will be an introductory discussion of these issues. Attendees will then be given an opportunity to discuss the appropriate method of assessing the role of DI in a CPG for some common clinical conditions. We will then examine how this has actually been done in some current CPGs and discuss how the level of evidence should be graded.

Educational Objective: To understand the complexity of developing and evaluating evidence for the role of diagnostic imaging in clinical practice guidelines and to introduce the concept of levels of efficacy.

Level: Intermediate

Presenter: Dr. Martin Reed, Chair, Guidelines Working Group, Canadian Association of Radiologists

International Drug Reimbursement Decision-Making Processes: Lessons for Canada

April 15, 2012 0900 – 1200

Controlling drug costs while maximizing health benefits is necessary to sustain publicly funded drug plans. Internationally, countries have adopted different models of funding, financial distribution, and governance and different processes to review new drugs for coverage in an attempt to create sustainable publicly funded drug plans. Changes to existing publicly funded drug plans in Canada could be informed by the processes used in other Organisation for Economic Co-operation and Development (OECD) countries, including exploring the use of differential copayments, generic drug substitution, and prescribing rules, as well as the specifics of how new drugs are reviewed for consideration of inclusion within publicly funded formularies (including the use of health technology assessment, the formal consideration of cost, price negotiation, and the use of expert committees). This workshop will present an overview of the drug reimbursement systems and decision-making processes used.
within the OECD countries. The characteristics of health care systems, the details relating to outpatient drug coverage within each country, and the specifics of the drug reimbursement decision-making systems will be discussed. The various approaches will be critically appraised to assess the potential advantages and disadvantages of each system, including whether the system characteristics could be adapted for implementation within a Canadian context. The workshop will end with an open discussion to identify further information and research required to inform policy development.

**Educational Objectives:**
1. To understand the drug reimbursement decision processes adopted within the OECD nations, including system and individual-level characteristics designed to improve drug use and constrain drug costs.
2. To appraise the potential advantages and disadvantages of the drug reimbursement decision processes in place internationally to assess the feasibility and possible implementation of specific features within Canada.
3. To identify further information required to inform policy development within the Canadian context.

**Level:** Introductory.

**Presenters:** Dr. Fiona Clement, Assistant Professor, Dr. Braden Manns, Associate Professor, and Lianne Barnieh, Post-doctoral Fellow, University of Calgary

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**Health Technology Reassessment: Promoting Value and Evidence-Based Practice**

**April 15, 2012**

**1300 – 1600**

Health technology reassessment and reinvestment (HTRR) is an important tool for improving public health while promoting financial sustainability. Health technology reassessment is a multidisciplinary process of evaluating the clinical, ethical, social, and economic impact of a technology that is already in use. Technology reassessments may result in the removal of a technology from practice, a change in the scope of use, or no change. Informed by the reassessment process, funds may be reinvested in more efficacious health technologies. The goal of HTRR is to ensure technologies in clinical practice are based on up-to-date research and have been critically and fairly evaluated to promote optimal health care for the best value.

This half-day workshop will provide participants with an overview of HTRR. It will introduce the theory, challenges, and benefits of HTRR and will summarize current and past HTRR initiatives. A significant focus of this workshop will be on the potential impact that HTRR could have on the Canadian health care system. This workshop will conclude with the presentation of a framework for implementing HTRR in the Canadian context.

**Educational Objective:** To understand the concept of health technology reassessment and reinvestment; to develop awareness of current and past HTRR initiatives; and to learn a framework for carrying out HTRR in a Canadian context.

**Level:** Introductory

**Presenters:** Dr. Fiona Clement, Assistant Professor, and Dr. Tom Noseworthy, Professor, University of Calgary; Dr. Adam Elshaug, Senior Lecturer, University of Adelaide; Dr. Peter Littlejohns, Kings College, London, UK; Joan Berezanski, Executive Director — Clinical Advisory and Research Branch, Alberta Health and Wellness
Common Issues and Pitfalls with Economic Analyses — Implementing Economic Evaluations in Practice

With the pressures of cost containment mounting, the need to consider the cost-effectiveness of health care interventions when making funding decisions is critical. To use economic information optimally, it is imperative to be able to assess whether the evaluation adhered to best practices and principles, to assess the validity of the results. This workshop will go over basic principles of health economics; present current best practices for conducting economic evaluations (such as the CADTH Guidelines for the Economic Evaluation of Health Technologies); go over some of the common issues and pitfalls encountered when conducting and interpreting economic analyses; and go over case studies, to provide examples of how to identify these issues. Participants will critically appraise economic evaluations selected for this exercise based on the principles presented in the workshop, and discuss how to identify issues and whether they can be addressed. For example, the relevance of the comparator(s), appropriate use of data sources, justification for the assumptions used, the geographic transferability of the study, and the adequacy of the assessment of uncertainty will be considered. From this, the group will discuss the potential impact of relying on the results to make decisions. The group will further discuss what other tools could be used when all the information of interest has not been provided in an economic evaluation.

Educational Objective: To review basic principles of economic evaluations; understand some of the common issues and pitfalls encountered when conducting an economic evaluation; and how to identify these issues when appraising economic evaluations to best apply the evidence for decision-making.

Level: Intermediate

Presenters: Karen Lee, Director — Health Economics, Canadian Agency for Drugs and Technologies in Health, and Dr. Scott Klarenbach (Associate Professor and Clinician Scientist — Department of Medicine, Division of Nephrology), University of Alberta in Edmonton

Evidence Matters: Presenting and Communicating the Evidence in Systematic Reviews

Systematic reviews and health technology assessments synthesize the results from individual studies about the effects of health care interventions. Policy-makers, practitioners, guideline developers, and other end-users must be able to understand the results from systematic reviews if the results are to have an impact. The Cochrane Collaboration has developed a variety of tools to make systematic review evidence more succinct and clear within the reviews themselves and to communicate the evidence. For example, Summary of Findings (SoF) tables summarize and present the results and quality of the evidence from a review. Plain Language Summaries, which are based on SoFs, also provide the conclusions of the review, but do so in language that is easily understood by health care consumers. Beyond the review text, new knowledge translation strategies, such as journal clubs and podcasts, are being developed to offer review evidence in different formats for a variety of stakeholders.
In this advanced workshop, participants will learn about these products through presentations, hands-on work, and demonstrations. Participants will have the opportunity to create an SoF table using a Cochrane review in small groups and experiment with how it can be used to create other tools for dissemination.

**Educational Objective:** In this advanced workshop, participants will learn new Cochrane methods for presenting results in reviews, such as Summary of Findings tables (GRADE). They will learn about new knowledge translation tools.

**Level:** Advanced

**Presenters:** Erin Ueffing, Education Coordinator, and Eileen Vilis, Knowledge Broker, Canadian Cochrane Centre; and Nancy Santesso, Research Coordinator, University of Ottawa

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**PM – 4**

**April 15, 2012**

**1300 – 1600**

**Advanced Issues in Multiple Treatment Comparison Meta-Analysis**

Multiple treatment comparison meta-analyses (MTCs) have become increasingly popular over the past years to permit inferences into the relative effects of different drugs that have not been compared against each other. However, MTCs are statistically and conceptually more challenging than pairwise meta-analyses, and in many situations, the data available for MTCs present modelling challenges, and the more widely used MTC approaches may be suboptimal. This has led to widespread inefficiencies in MTC applications and interpretations.

Three situations, in particular, are important challenges for the accurate conduct of MTCs: 1. In many situations, clinicians and decision-makers are interested in the effects of drugs that have not been compared in combination with each other (e.g., drug A plus drug B). We call this “additive effects” and it reflects how much of clinical medicine is practiced. 2. In many situations, the degrees of heterogeneity within each of the considered treatment comparisons differs substantially. The typical MTC approach assumes the degree of heterogeneity is equal for all comparisons, as this simplifies the statistical model-building. However, violations of this assumption occur frequently and cause credible intervals to become artificially inflated, thus providing a basis for inappropriate policy-making. 3. Finally, when MTCs are conducted in a Bayesian framework, the above two issues necessitate the use of prior distributions. The conventionally employed non-informative priors are frequently inefficient. Alternative non-informative or semi-informative may be more appropriate in most scenarios.

**Educational Objective:** To provide participants with an introduction to advanced approaches for modelling the effects of treatments combined (additive effects), heterogeneity across treatment comparisons, and making proper use of prior distributions.

**Level:** Intermediate

**Presenters:** Dr. Edward Mills, Canada Research Chair/Associate Professor of Health Sciences Institute, and Dr. David Moher, Senior Scientist Ottawa Hospital Research and Associate Professor, University of Ottawa; and Dr. Kristian Thorlund, Assistant Professor, McMaster University
A Measurement Tool to Assess the Methodological Quality of Systematic Reviews (AMSTAR)

AMSTAR is a quality assessment instrument that is widely used for assessing the methodological quality of systematic reviews of randomized controlled trials (RCTs). Although it was developed and validated using RCTs, more than half of the published systematic reviews now include non-randomized studies (NRSs), and many of these reviews of disease associations and treatment effects cover topics that are of considerable significance to clinicians and policy-makers. AMSTAR is being used to assess the quality of reviews that include NRSs. However, it is clear that some reviewers are unaware of the limitations of the instrument when used for this purpose.

At the workshop, we will lead a discussion of the methodological challenges in assessing the quality of systematic reviews of both RCTs and NRSs. We will examine the limitations of the current AMSTAR instrument and discuss what elements will need to be included in further developments of AMSTAR to accommodate NRSs. The workshop will start with a presentation and discussion of the methodological challenges in the evaluation of systematic reviews of both RCTs and NRSs. This will be followed by small-group sessions in which participants will be presented with systematic reviews that include RCTs and/or NRSs and will have an opportunity to use AMSTAR to perform an assessment of their methodological quality. The small groups will then report their experiences in a plenary session and discuss their experience with AMSTAR and what elements might be improved in the current AMSTAR instrument.

**Educational Objective:** Understand the factors that determine whether a systematic review has been planned and executed to high standards; and understand how to apply a simple quality assessment instrument for systematic reviews — AMSTAR.

**Level:** Intermediate

**Presenters:** Dr. Beverley Shea, Senior Researcher, CIET; Dr. George Wells, Professor, University of Ottawa, and Director, Cardiovascular Research Methods Centre, University of Ottawa Heart Institute; Dr. David Henry, CEO, Institute for Clinical Evaluative Sciences (ICES); and Dr. Vijay Shukla, Scientific Advisor, Canadian Agency for Drugs and Technologies in Health
2012 CADTH Symposium
Evidence Matters: Outcomes, Efficiency, Impact

Plenary Sessions

Official Opening
April 16, 2012
0845 – 0915
Dr. Brian O’Rourke, President and CEO of the Canadian Agency for Drugs and Technologies in Health, will welcome Symposium participants, describe some of the Symposium highlights, and outline anticipated outcomes.

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Evidence Matters: Outcomes, Efficiency, Impact
April 16, 2012
0915 – 1030
Plenary speakers will outline the challenges facing the health system in Canada and share perspectives about the role of evidence in supporting the optimal use of drugs and other health technologies, increasing the efficiency of health service delivery, and delivering impacts that strengthen patient outcomes and health system sustainability.

Kevin McNamara is Deputy Minister of Health. He was previously Chief Executive Officer of South Shore Health. Throughout his career, Kevin has played a strategic role, effecting change in several organizations. As Deputy Minister of Nova Scotia’s Department of Environment and Labour, he served as a member of the government’s executive team, providing advice to the Premier, Cabinet, and Ministers. Prior to this, he served as Vice-President of Human Resources for the Queen Elizabeth II Health Sciences Centre in Halifax, where he was a key member of the senior leadership team. Kevin was a key player in the creation of the Cobequid Multi Service Centre, the first free-standing emergency health centre in North America. He served as Executive Director and was instrumental in the facility planning and construction, in addition to recruiting community volunteers and operating a capital fundraising campaign that raised $1 million. Kevin continues to be active in the community and is currently a Board member of the LaHave River Salmon Association.

Glenda Yeates was appointed Deputy Minister of Health Canada in April 2010, after serving as Associate Deputy Minister of Health Canada since May of 2009. Prior to this appointment, Ms. Yeates served as President and Chief Executive Officer of the Canadian Institute for Health Information (2004 to 2009), Deputy Minister of Health in Saskatchewan (1999 to 2004), and as Saskatchewan Deputy Minister of Social Services (1997 to 1999). She held various Assistant and Associate Deputy Minister positions in Saskatchewan Health, and a number of senior posts in the Saskatchewan Department of Finance. Ms. Yeates has served in the past as a board member for Carleton University, the Ontario Change Foundation, and the Canadian Health Services Research Foundation. She is currently serving on the Board of the Public Policy Forum.
Moderator — Dr. Terrence Sullivan is the former President and Chief Executive Officer of Cancer Care Ontario, a position he occupied for 10 years. From 1993 to 2001, Dr. Sullivan held the position of President of the Institute for Work & Health — a private, not-for-profit Institute affiliated with the University of Toronto, which he developed into North America’s leading research centre on work-related injury. Dr. Sullivan has held senior roles in the Ontario Ministries of Health, Intergovernmental Affairs, and the Cabinet Office. He served as Executive Director of the Premier’s Council on Health Strategy for two successive First Ministers of Ontario, including serving as Deputy Minister. Dr. Sullivan is an active behavioural scientist with research and practice interests in cancer prevention and health systems performance. He holds faculty appointments in the Department of Health Policy, Management and Evaluation and the Dalla Lana School of Public Health at the University of Toronto. His current voluntary commitments include acting as Vice-Chair of the Ontario Agency for Health Protection and Promotion. Previous Board experience includes the Canadian Partnership Against Cancer, the Canadian Association of Provincial Cancer Agencies, the Ontario Institute for Cancer Research, AllerGen’s Institute for Clinical Evaluative Sciences, and the University Health Network.

Left to Their Own Devices: Are We Paying Enough Attention to Medical Technology?

April 17, 2012
0830 – 0945

Like pharmaceuticals, medical devices and other non-drug technologies are essential to the Canadian health system, playing a crucial role in the diagnosis, prevention, and treatment of illness, disease, and injury. Maximizing the impact of these technologies can be even more challenging than it is for drugs. For instance, the overwhelming majority of new technologies licensed annually for the Canadian health market are non-drug. In addition, Canada’s delegated approach to health care delivery means that decisions about the adoption and use of non-drug technologies are made throughout the system — from the ministry level to health authorities to individual hospitals and other care facilities. This session will explore the way Canada manages medical devices and other non-drug technologies from regulation to obsolescence and provide some thought-provoking insights into how to improve the uptake and appropriate use of non-drug technologies that improve patient outcomes and health system efficiency while preventing the uptake of technologies of marginal value.

Dr. Patrick Lee Ergina — A native of San Francisco, Pat Ergina received Bachelor degrees in Philosophy and Biology from the University of San Francisco and went on to the University of California for concurrent degrees in Medicine and Public Health (MD-UCSD; MPH-UC Berkeley). He completed an Internal Medicine residency at the University of Hawaii, and at McGill University completed a General Surgery residency, a Cardiovascular and Thoracic Surgery residency, and a Cardiac Transplantation fellowship. He is American Board-certified in Internal Medicine, General Surgery, and Thoracic Surgery. He has been part of the McGill University Health Centre faculty since 1993 as an Assistant Professor of Surgery. Dr. Ergina is a Fellow of the Royal College of Physicians and Surgeons of Canada, the American College of Surgeons, and the American College of Physicians.
**2012 CADTH Symposium**

**Evidence Matters: Outcomes, Efficiency, Impact**

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**Dr. Karen Facey** is a Chartered Statistician and Member of the Faculty of Public Health. She is a member of the Scottish Health Technologies Group, which provides advice on all non-drug technologies to Scottish health boards, and a member of the UK Committee on the Safety of Devices. She is a Non-Executive Director on two Scottish health boards and consults internationally on a range of issues related to health technology assessment.

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**Brian Lewis** is the President and CEO of MEDEC, the Canadian association for the medical technology industry and diagnostic companies across Canada. Prior to joining MEDEC in 2012, Brian worked for Genzyme Canada from May 2005 to Dec 2012 as General Manager, where he was responsible for strategic direction and operations. He brought extensive leadership experience to Genzyme, having held progressive management positions at Hoechst Marion Roussel, Serono, and AstraZeneca Canada. Brian has a Bachelor of Science in Human Kinetics from the University of Guelph and a Bachelor of Business Administration from York University.

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**Dr. Devidas Menon** is currently Professor, Health Policy and Management, School of Public Health, University of Alberta. In the past, he has held the positions of founding Executive Director of CCOHTA (precursor to CADTH), and Executive Director and Chief Executive Director of the Institute of Health Economics. He has served on the Executive Committee of the International Society for Health Technology Assessment, the International Network of Agencies for Health Technology Assessment (INAHTA), and Health Technology Assessment international (HTAi). He was also President of the Canadian Association for Population Therapeutics. Currently, Dr. Menon’s research program is funded by two Emerging Team Grants from the Canadian Institutes of Health Research (CIHR) and the government of Alberta. Dr. Menon has taught health policy and health technology assessment to graduate students at the University of Alberta. He was appointed recently as the Chair of CADTH’s new Expert Review Panel for non-drug technologies.

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**Moderator — Dr. Tom Noseworthy** is Professor of Health Policy and Management, Department of Community Health Sciences and Institute for Public Health, University of Calgary. He is the former head of that department and inaugural Co-Director of that institute. Dr. Noseworthy is a physician, with specialty certification in the Royal College of Physicians and Surgeons of Canada, the American Colleges of Physicians, American College of Chest Physicians, and American College of Critical Care Medicine. Dr. Noseworthy is the former Vice-President Medical Services and CEO of the Royal Alexandra Hospitals, Edmonton, and Chair of the Department of Public Health Sciences, Faculty of Medicine and Dentistry, University of Alberta. He holds a Master of Science in Experimental Medicine from the University of Alberta, and a Master of Public Health — Health Policy and Management from Harvard University. Dr. Noseworthy joined Alberta Health Services in January 2012 as Associate Chief Medical Officer, Strategic Clinical Networks and Clinical Care Pathways.
Pharmaceutical Policy in Canada: Do We Have the Right Prescription?

Health care spending continues to rise faster than inflation and population growth, and one of the major cost drivers is spending on pharmaceuticals. Retail sales of drugs are projected to have reached $32 billion in 2011. The Closing Plenary will look at the development and implementation of pharmaceutical policy in Canada and gauge its effectiveness in capturing the benefits of pharmaceuticals while getting the greatest possible impact for every dollar spent. How are drug plan decisions made? Are genomics and personalized medicine increasing the complexity of decision-making? What does the future hold?

Deborah Brown is the Canadian President of EMD Inc. (Canada), an affiliate of the Merck Serono division of Merck KGaA and Chair of the RX&D Board. Her career has included positions in regulatory affairs, biometrics, sales management, research, marketing, and general management. She completed undergraduate and graduate studies in Science and Business from the Universities of Guelph, McMaster, and the Ivey School of Business. Deborah has led the launch of several leading biologic products in both the US and Canada. In her current capacity as President of EMD Inc. (Canada), she oversees one of Canada’s most successful commercial biotechnology companies, with sales exceeding $110 million in three major therapeutic areas. She has been an active member of several patient and professional associations, including the board of BIOTECanada and the board of Rx&D.

Dr. Steve Morgan is an Associate Professor and Associate Director of the Centre for Health Services and Policy Research at the University of British Columbia. An expert in pharmaceutical policy, Dr. Morgan combines quantitative health services research with comparative policy analysis to help identify policies that achieve balance between three sometimes-competing goals: providing equitable access to necessary care, managing health expenditures, and promoting valued innovation. He earned degrees in Economics from the University of Western Ontario, Queen’s University, and the University of British Columbia, and received post-doctoral training at McMaster University. Dr. Morgan is a recipient of career awards from the Canadian Institutes of Health Research and the Michael Smith Foundation for Health Research; an alumnus of Harkness Fellowships in Health Care Policy and Practice; and a former Labelle Lecturer in Health Services Research.
Dr. Sean Tunis is the Founder and Director of the Center for Medical Technology Policy (CMTP) in Baltimore, Maryland. CMTP’s main objective is to improve the quality, relevance, and efficiency of clinical research by providing a neutral forum for collaboration among experts, stakeholders, and decision-makers. Dr. Tunis was a member of the Institute of Medicine Committee on Initial National Priorities for Comparative Effectiveness Research. He advises a wide range of domestic and international public and private health care organizations on issues of comparative effectiveness, evidence-based medicine, clinical research, reimbursement, and health technology policy. Dr. Tunis trained in Internal Medicine and Emergency Medicine at the University of California in Los Angeles and the University of Maryland, and holds adjunct faculty positions at the Center for Health Policy at Stanford University, the Department of Internal Medicine at the Johns Hopkins School of Medicine, and the Department of Surgery at the University of California at San Francisco.

Kevin Wilson is a graduate of the College of Pharmacy and Nutrition, University of Saskatchewan, and Queen’s School of Business, Queen’s University. After completing a residency in Hospital Pharmacy at Royal University Hospital in Saskatoon, he pursued a career in hospital pharmacy, primarily at Kingston General Hospital. Following several years in hospital pharmacy management, Mr. Wilson returned to Saskatchewan to join Saskatchewan Health. He has held a number of different positions in the pharmaceutical, extended benefit, and health policy areas within the Ministry. Currently, he is the Executive Director, Drug Plan and Extended Benefits Branch of the Ministry and is actively involved in a broad range of national pharmaceutical policy activities. He is a member of the pan-Canadian Oncology Drug Review (pCODR) Steering Committee and Chair of the Drug Policy Advisory Committee.

Moderator — Dr. David A. Henry is President and CEO of the Institute for Clinical Evaluative Sciences (ICES) in Toronto and Professor in the Department of Medicine at the University of Toronto, Canada. He is a physician with training in internal medicine, gastroenterology, and clinical pharmacology. Currently, his interests include the use of controlled observational designs using linked population health data sets to evaluate the benefits and harms of drugs, health systems performance, health services research, and health technology evaluation. He has extensive experience in pharmacoepidemiology and systematic review methodology. He has also worked in the field of pharmacoconomics and is the past chair of the Economics subcommittee of the Australian Pharmaceutical Benefits Advisory Committee. He was Director of the WHO Collaborating Centre for Training in Pharmacology and Rational Drug Use in Australia and still advises on the regulation and pricing of drugs in low- and middle-income countries.
A1  Concurrent Session A1 — Panel Discussion
Addressing Health Technology Policy Issues: The Canadian Way

Panellists: Joan Berezanski (Executive Director — Clinical Advisory and Research Branch), Alberta Health and Wellness; Dr. Tom Noseworthy (Professor), University of Calgary; Dr. Devidas Menon (Professor), University of Alberta; Dr. Richard Wedge (Executive Director — Medical Affairs), Health PEI; and Patrick Morin (Director — Innovation and Pricing Policy), Health Canada

Decision-making with respect to health care technologies (non-drugs) across Canada is a complex issue. The aim of this panel discussion is to provide an opportunity for a provocative discussion on the pan-Canadian collaboration, the Health Technology Strategy Policy Forum (PF). Questions and issues to be addressed during this frank panel discussion will be related to the challenges for the PF and how it is fulfilling its mandate. The PF is a federal, provincial, and territorial (F/P/T) coalition of interests for health technology policy. Their mandate is to provide the F/P/T jurisdictions with opportunities to share information and collaborate on health technology policy development. This includes providing strategic policy advice related to health technologies and services to CADTH; in particular, the identification of priority topics for the jurisdictions. In addition, information will be provided about the newly formed Health Technology Expert Review Panel (HTERP). The mandate of HTERP is advisory in nature and to participate in the development of guidance and/or recommendations for CADTH projects related to health technologies. Recommendations from HTERP will include the consideration of clinical and economic evidence, patterns in resource utilization, and other factors. Potential issues regarding implementation of these recommendations are also identified. The panel will also discuss how the PF and HTERP plan to work together to address Canadian health technology policy issues.

A2  Concurrent Session A2 — Panel Discussion
Innovations in Therapeutics Continuing Education Knowledge Translation

Panellists: Dr. David Gardner (Professor, Department of Psychiatry and College of Pharmacy) and Dr. Michael Allen (Director, Evidence-Based Programs), Dalhousie University; Dr. James McCormack (Professor — Pharmaceutical Sciences), University of British Columbia; Dr. Mike Evans (Associate Professor — Family Medicine), University of Toronto; Dr. Mike Kolber (Associate Professor), University of Alberta

Co-authors: Andrea Murphy (Associate Professor — Nursing), Jennifer Isenor (Assistant Professor — CPE), and Glenn Rodrigues (Coordinator — Pharmacy), Dalhousie University; Pam McLean-Veysey (Drug Information Pharmacist), CDHA

The purpose of this panel is to introduce and examine various non-traditional continuing education knowledge translation activities that target primary care practitioners. The components of Dalhousie University’s new KATIE Program will serve as a reference point. The KATIE program prioritizes evidence appraisal and the promotion of learner interaction, with emphasis on supporting practice change via direct learner interaction and the development of supportive tools. This program’s development and progress will be briefly described.
Panellists will briefly present their continuing education activities aimed at improving medication and other technology use in primary care. These will cover: 1) the use of podcasts that engagingly distill and critique research findings relevant to clinical decision-making (Therapeutics Education Collaboration, Vancouver, British Columbia); 2) the development of rapid-release evidence summaries for priority, contemporary clinical issues (Tools for Practice, Edmonton, Alberta); 3) the use of digital storytelling and video to engage learners (Dr. Mike program, Toronto, ON); and 4) academic detailing (Dalhousie Academic Detailing Service, Halifax, Nova Scotia). Taking advantage of the CADTH Rx for Change Database, panellists will comment on the evidence supporting their educational activities. They will also describe how their educational activities match the appraise, interact, apply elements of the KATIE program.

This session will provide an opportunity for both panellists and audience members to discuss innovations and perspectives that can facilitate improving KT interventions for continuing education activities. Given the broad explicit and tacit knowledge bases of both panellists and audience members, the session holds promise for rich sharing of resources and knowledge. The intended audience is knowledge translation professionals, policy-makers, health educators, and clinicians.

**Concurrent Session A3 — Panel Discussion**

**Leveraging a National Approach to Achieve Excellence Throughout Canada’s Cancer Control Continuum**

**April 16, 2012**

1100 – 1230

**Room:** Les Saisons

**Panellists:** Maggie Keresteci (Director, Quality Initiative Portfolio), Dr. Verna Mai (Chair — Screening), and Rami Rahal (Senior Lead — System Performance), Canadian Partnership Against Cancer; Dr. Bill Evans (CEO), Juravinski; Bernadette MacDonald (Vice-President), Accreditation Canada

**Co-authors:** Susan Fekete (Director, Screening) and Fei-Fei Liu (Manager, Cancer Risk Management), Canadian Partnership Against Cancer

With support from the cancer control field to focus on high-quality cancer care for Canadians, the role of the Canadian Partnership Against Cancer (CPAC) is to leverage a national approach that will stimulate system-wide change that will benefit Canadians who are affected by cancer. This national approach provides a unique opportunity for those in the cancer control system to learn from local successes, reduce redundancy, and increase efficiency, while making meaningful quality changes that will improve care. This session will share CPAC’s experience during the initial mandate in identifying models to get, analyze, and synthesize evidence through a collaborative and standardized approach, then facilitate action that contributes to system sustainability and improved outcomes, setting the stage for accelerated action in the upcoming mandate. Targeted audiences include, but are not limited to, federal and provincial cancer care policy-makers, cancer agency administrators, quality improvement practitioners, and clinicians. The session will present the models utilized and the outcomes to date in the context of:

- Gathering and assessing the evidence through an overview of the anticipatory science initiative
- Synthesizing and assessing evidence to identify opportunities for change through System Performance and Anticipatory Science
• Disseminating information that is actionable and can inform policy through System Performance and Cancer Risk Management Model
• Engaging “in the field” experts to develop action plans based on evidence through Quality Initiatives
• Facilitating action to implementation through case studies in radiation oncology and the development of standards in ambulatory chemotherapy.

A4
Concurrent Session A4 — Panel Discussion
Aligning Value with the Price of Provider Fees through HTA: A Feasible Option in Canada?

Panellists: Dr. Gillian Mulvale (Director — Applied Research and Policy Analysis), Canadian Health Services Research Foundation (CHSRF); Dr. Adam Elshaug (Hanson Institute Research Fellow and Senior Lecturer), University of Adelaide; Don Husereau (Adjunct Professor — Department of Epidemiology and Community Medicine), University of Ottawa; Dr. Mark McLeod (Former President), Ontario Medical Association

Physician providers are most often paid through fee-for-service arrangements — reimbursed directly by publicly funded insurers based on costs associated with the service. Choices made by providers regarding what mix of services to provide can greatly influence spending on both physician services and the associated hospital and technology expenditures needed to support service delivery. Currently, new provider fees are largely based on the cost of delivering the service, and do not usually consider the cost-effectiveness and other aspects of service value. This means providers have no signal to perform high-value services compared with low-value services. Aligning value with the price of provider fees is a relatively new approach to price-setting and follows the principles of value-based insurance design. Is it feasible to evaluate services to inform the price of provider fees? What are the current opportunities and challenges, given price-setting mechanisms for provider fees? Is this a new mechanism for disinvesting in low-value technologies?

This panel will share international insights, and the view from academia, government, and patient providers about the opportunities for value-based provider fees.

A5
Concurrent Session A5 — Case Studies: From Evidence to Impact
Preoperative Skin Antiseptics for Preventing Surgical Site Infections: From Knowledge Gaps, Evidence Synthesis, and Health Technology Assessment User Frameworks to Decision-Making

Panellists: Lynda McGahan (Research Officer), CADTH; Dr. Paule Poulin (Research Scientist — Health Technology & Innovation), Alberta Health Services; Dr. Trevor Schuler (Co-Chair of the Surgery Clinical Network — HTAI Satellite Committee), University of Alberta

While three main types of preoperative skin antiseptics are used to prevent surgical site infections, the current Canadian practice of antiseptic skin preparation varies across some jurisdictions. Recent evidence was systematically reviewed to evaluate the clinical
effectiveness of skin antiseptics and application techniques for preventing surgical site infections to help standardize care.

CADTH’s review of clinical evidence and guidelines reported that preoperative antiseptic showers prevent surgical site infections; however, further research is needed to determine the optimal preparation, number, and timing of applications. There is insufficient evidence to suggest that any one antiseptic solution or application technique is more effective than another. Disinfectants are often mixed with alcohol or water, making it difficult to form overall conclusions regarding active agents.

Systematic reviews provide comprehensive, evidence-based analyses of health technologies, but local decision-makers need to be able to contextualize this information within their health care setting. The results of the systematic review were integrated with local considerations using a systematic process, the health technology assessment (HTA) user framework, to facilitate evidence-based decision-making and implementation by a regional health authority.

This panel presentation will summarize the knowledge gaps in current practice and the results of a recent systematic review, provide insight on how the review was contextualized within a regional health care setting, and examine the impact on policy development. It will also explore the benefits of bringing together clinical experts, researchers, and local HTA decision-support programs to facilitate evidence-based decision-making within a regional health authority.

**Robot-Assisted Surgeries: A Project for CADTH, a Decision for Jurisdictions**

**Panellists:** Dr. Janice Mann (Knowledge Exchange Officer), Michel Boucher (Theme Lead), CADTH; Dr. Nina Buscemi (Manager — Health Technologies and Services Policy), Alberta Health and Wellness

Robotic surgery technology was recently introduced in Canada and the number of indications that can be treated with this approach is increasing. This technology was developed to facilitate minimally invasive surgeries and to assist with surgeries that would otherwise be difficult to perform using traditional open or laparoscopic approaches. Robot-assisted surgery may offer benefits to patients and the health care system, but the costs to acquire, maintain, and operate the robot are significant.

To develop a funding policy or make a purchasing decision, an understanding of the cost- and clinical effectiveness of robot-assisted surgery compared with open and laparoscopic procedures is needed. CADTH completed a health technology assessment (HTA) on robot-assisted surgery that found robot-assisted surgeries improve a number of short-term patient outcomes, but there is uncertainty about the clinical relevance of the size of these differences. Due to a scarcity of evidence, differences in long-term outcomes could not be demonstrated. Robot-assisted surgeries are more costly, requiring a significant investment. There are, however, strategies that can help to reduce costs and maximize cost-effective use of this technology.

Canadian jurisdictions are using this assessment in their policy analysis and decision process, illustrating the efficiency of looking at an issue from a pan-Canadian perspective, then applying the findings at the jurisdictional level.

This panel discussion, including representatives from CADTH and Alberta Health and Wellness, will demonstrate how a CADTH HTA project was developed with clients’ needs in mind and how clients are using the findings to inform policy development and decision-making.
Concurrent Session A6 — Panel Discussion

The Challenge of Integrating Patient Evidence and Values in HTA

Panellists: Elaine MacPhail (Senior Advisor), CADTH; Dr. Karen Facey (Chair — Health Technology Assessment international [HTAi] Interest Group on Patient/Citizen Involvement in HTA), HTAi; Dr. Robert Peterson (Executive Director — Drug Safety and Effectiveness Network), Canadian Institutes of Health Research, and Chair — Canadian Drug Expert Committee; and Larry Broadfield (Chair — Cancer Systemic Therapy Policy Committee), Cancer Care Nova Scotia

The involvement of patients and public citizens is recognized as an important feature of responsive and equitable health systems. This trend of involving patients and obtaining evidence submissions from them is being seen in health technology assessment (HTA) agencies around the world. While HTA agencies are very experienced and adept at analyzing and using quantitative evidence, the nature of patient and citizen input is often qualitative, addressing issues relating to the technology, the disease, or fundamental ethical issues of patient and consumer rights. HTA agencies are still trying to determine how to use patients’ perspectives on health experiences, values, beliefs, and expectations in technology assessments and balance these against consumer rights for a fair and equitable health service.

This panel will:

• Present how patients and the public are involved in HTA processes internationally, exploring their roles and barriers to effective engagement and challenges for HTA processes
• Explore the form of evidence that can be elicited from patients, including traditional and new sources
• Describe how robust evidence eliciting patients’ perspectives can be obtained and how patient consultation and participation can improve HTA decision-making
• Discuss challenges of including and using this information in making drug listing/coverage recommendations by advisory committees
• Share the experience of the Nova Scotia Cancer Systemic Therapy Policy Committee as an example of patient input and participation.

Concurrent Session A7 — Panel Discussion

Administrative Data for Health Technology Assessment: Data and Methodological Issues Related to Outcomes, Efficiency, and Impact

Panellists: Dr. Jeffrey Hoch (Co-Director — Canadian Centre for Applied Research in Cancer Control) and Dr. Murray Krahn (Director), Toronto Health Economics and Technology Assessment Collaborative (THETA); Dr. Nicole Mittmann (Director), Health Outcomes and PharmacoEconomic Research Centre (HOPE); Dr. Harindra Wijeysundera (Cardiologist), Sunnybrook Health Sciences Centre

Purpose: To provide updates on current research using administrative data for health technology assessment (HTA) and to highlight data and methodological issues related to outcomes, efficiency, and impact.
Method: This session will feature four case studies focused on generating data for HTA purposes. After the first two case studies, there will be a general discussion about using administrative data for HTAs. After the final two case studies, there will be a general discussion about analyzing administrative data for HTAs.

Results: The result of the presentations and discussions will a greater awareness of activities underway in Canada to use administrative data for HTA. In addition to the knowledge dissemination of who is doing what, there will also be a greater practical understanding of the strengths and limitations of using administrative data for HTA, based on the experiences of participants. Last but not least, the session will offer insights into fruitful areas for future methods research.

Conclusion: This session will provide a forum for productive discussion between parties committed to the use of evidence-based information and advice to inform policy, influence practice, and improve health. Our focus will be on the experience the panel and audience have gained while conducting “real-world” HTA in order to identify issues that limit the use or effectiveness of evidence-based advice and jointly work toward solutions. The session will provide education that will build the capacity.

B1 Concurrent Oral Session B1 — Methodology

Reporting Guidelines for Systematic Review Protocols

Presenting authors: Larissa Shamseer (Research Coordinator) and Dr. David Moher (Senior Scientist), Ottawa Hospital Research Institute, and (Associate Professor) University of Ottawa

Room: Governor General I

Co-authors: Professor Mike Clarke, University of Belfast; Davina Ghersi (Fellow), National Health and Medical Research Council; Professor Alessandro Liberati, University of Modena; Paul Shekelle (Director), Southern California Evidence-Based Practice Center, RAND Corporation

Twitter: @PRISMAStatement

Background: Systematic review (SR) protocols are seldom published (with some exceptions, such as the protocols for Cochrane reviews). Furthermore, for systematic reviewers interested in publishing their protocols, there is limited guidance currently. Where protocols are accessible, they show what was — and was not — planned for the review that might not be clearly understandable in published reports.

Objectives: To develop a guideline to aid authors when preparing and reporting SR protocols. This will extend the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses statement), to provide guidance for protocols (PRISMA-P).

Methods: Development of PRISMA-P followed the process for reporting guideline development designed by the EQUATOR (Enhancing the Quality and Transparency of Health Research) group. Potential checklist items were identified from the following sources: items from the new international register for systematic review protocols (PROSPERO), the PRISMA checklist, the Institute of Medicines’ Comparative Effectiveness Review Standards, and the upcoming SPIRIT (Standard Protocol Items Reported in Trials) checklist. In June 2011, 27 international experts met to discuss and debate a final set of items for the PRISMA-P checklist.
Results: The PRISMA-P checklist consists of 18 essential items that should be addressed by authors preparing reports of systematic review protocols.

Impact: The availability of a tool to help systematic reviewers create and report protocols will hopefully improve the quality of both protocols and the subsequent reviews. PRISMA-P may also make it easier for readers and peer reviewers to identify selective reporting biases, when present, in systematic reviews.

Multiple Treatment Meta-analyses in Rheumatoid Arthritis Can Provide Weak Inferences Due to Methodological Approaches

Presenting authors: Dr. Edward Mills, Canada Research Chair/Associate Professor of Health Sciences, University of Ottawa; Dr. Nick Bansback (Postdoctoral Fellow), University of British Columbia

Co-author: Dr. Kristian Thorlund (Assistant Professor), McMaster University

Rheumatoid arthritis drugs represent the largest allocation of provincial pharmaceutical budgets. The evolution of biologic response modifiers or biologics has created a highly competitive market. As a result, at least six different multiple treatment comparison (MTC) meta-analyses have been published, each with different conclusions and interpretations on the relative efficacy of individual biologics. This situation is largely due to inconsistencies in the conduct of the analyses, and possibly due to choices that increase the effect sizes of specific drugs.

Methods: We examine the appropriateness of the techniques used by each of the analyses and assess likely forms of bias within the evaluations.

Results: We report on the findings of six different MTC analyses. We found large heterogeneity in the choice of trials to include and exclude. We found that the choice of Bayesian versus frequentist methods had a large effect on the interpretation of the ranking of individual treatments. We found that studies employing Bayesian methods had poorly reported the reasoning for choice of priors, which importantly affected the results of studies. There is a large reason to believe that studies were conducted in order to demonstrate the effectiveness of specific drugs over others for the purpose of influencing Health Technology Assessments.

Conclusions: In the context of rheumatoid arthritis, there are substantial reasons to be concerned that MTC approaches are employed to mislead, through a black-box approach, the information used in Health Technology Assessments.

Enhancing Interpretability of Pooled Estimates in Meta-analysis of Health-Related Quality of Life Outcomes

Presenting author: Dr. Kristian Thorlund (Assistant Professor), McMaster University

Co-authors: Professor Stephen Walter, McMaster University; Professor Toshi Furuikawa, Kyoto University; Johnston Bradley (Research Fellow), Toronto Sick Kids Hospital; Professor Gordon Guyatt, McMaster University
Background: Meta-analyses of health-related quality of life (HRQL) data present difficulties in interpretation when studies use different instruments to measure the same construct. The presentation of results in standard deviation units (standardized mean difference, SMD) is widely used, but is limited by its vulnerability to differential variability in populations enrolled, and interpretational challenges.

Objectives: To describe the available approaches for enhancing interpretability of meta-analyses involving HRQL outcomes.

Findings: We identified 12 approaches in three categories:

1) Summary estimates derived from the pooled SMD: conversion to units of the most familiar instrument, or conversion to risk difference or odds ratio. These approaches remain vulnerable to differential variability in populations.

2) Summary estimates derived from the individual trial summary statistics: conversion to units of the most familiar instrument or to ratio of means. Both are appropriate complementary approaches to measures derived from converted probabilities.

3) Summary estimates derived from the individual trial summary statistics and established minimally important differences (MIDs) for all instruments: presentation in MID units or conversion to risk difference or odds ratio. Risk differences are ideal for balancing desirable and undesirable consequences of alternative interventions.

Conclusion: Use of these approaches enhances the interpretability and the usefulness of systematic reviews involving HRQL outcomes.

Use of Subgroup Analysis in Health Technology Assessments

Presenting author: Ashley Jaksa (Manager — Data Analytics), Context Matters, Inc.

Co-authors: Dr. Yin Ho (CEO), Emily Rubinstein, and Dr. Daniel Kermit, Context Matters, Inc.

Subgroup analysis is often used in medical literature. In one study of 50 randomized control trials in four major medical journals, more than 66% of studies presented subgroup analysis. Subgroup analysis allows for the identification of treatment moderators; thus, investigators and policy-makers are able to decide who will benefit the most or the least from treatment. Subgroup analysis has been a contentious topic in the literature, but if used correctly, subgroup analysis can be highly informative for health technology assessment (HTA) organizations, policy-makers, and industry representatives. Even though subgroup analysis is widely used in medical literature, to what extent are subgroups identified in health technology assessments?

Our presentation will outline the use of subgroup analysis in 337 single drug reviews. These reviews are from nine agencies spanning seven countries from 2005 to 2011 and include a broad sampling of 13 distinct disease conditions. For our analysis, subgroup was defined as further segmentation from the indication. Within the 337 reviews, approximately one-fifth of the HTAs reported subgroup analyses. Our presentation will evaluate trends by disease conditions and by agencies from 2005 to 2011. We will also explore whether these trends correspond with drug indications becoming more precise over time.
Innovative high-tech medical devices (MD) are major drivers of increases in health care costs, especially for active/non-active implantable devices (e.g., pacemakers, neurostimulators, hip-knee replacements). Such technologies raise important questions about cost-effectiveness, utility, and equity in access to potentially beneficial but very costly treatments that put pressure on already straining national health care budgets. Unlike pharmaceuticals, MD cannot be benchmarked against other traditional commodity products. Decision-making based solely on cost assessments may unjustly limit access to life-saving and life-enhancing innovative technologies, or ignore how these technologies may dramatically improve patients’ quality of life. Given the potential benefits and associated risks (both economic and socio-ethical), it is thus surprising that health technology assessment (HTA) agencies in North America have paid so little attention to MD. While cost-effectiveness analyses are necessary, they are not sufficient for controlling use or containing costs. Physicians should not have to choose between providing the treatment that is “best” for their patients (i.e., offers the best outcome), and that which is “best” (i.e., least costly) for the health care system. Greater attention should be given in the HTA of MD to examining ethical considerations (e.g., socio-economic value, fairness and equity, autonomy, risks) alongside evaluations of clinical evidence and economic outcomes. After considering the differences between a traditional “clinical ethics” for physicians and an “economic ethics” that may be useful for decision-makers, we reflect on how diverse ethical analyses can be integrated with the collection of social and economic evidence to better contextualize and nuance the design of ethical HTA protocols.

Framing PharmaCare: An Analysis of Canadian Print Media Coverage, 1990-2010

Presenting authors: Jamie Daw (Policy Analyst), University of British Columbia Centre for Health Services and Policy Research
Co-author: Dr. Steve Morgan (Associate Professor), University of British Columbia Centre for Health Services and Policy Research
Twitter: @jamie_daw; @SteveMorganUBC

Canada’s lack of a universal system for covering prescription medicines remains an anomaly among developed nations. Despite achieving universal coverage for hospital and physician services, Canadian public drug benefits remain a patchwork, leaving many under- or uninsured for needed medicines. Few scholars have explored the reasons underlying Canada’s unique lack of progress in this policy area. Thus, to examine the public discourse surrounding drug benefit policy in Canada and add insights into the political dynamics of this policy arena, we conducted a descriptive analysis of national print media coverage of this issue from 1990 to 2010. Specifically, drawing on Iyengar’s media effects framework, we examined the quantity and depth of coverage over time.
(agenda-setting and informing effects) and the representation of the problem of drug coverage, potential policy solutions, and attributions of responsibility (framing and persuading effects). Based on our findings and drawing on the political agenda setting and media effects literature, we consider how the public discourse, as evidenced (and influenced) by media coverage, has shaped the perceived need and options for public drug financing in Canada.

**Free-Riding and Reassessment of Health Technologies**

**Presenting authors:** Dr. Mahmood Zarrabi (Senior Health Economist) and Dr. Thach Lang (Project Manager), Alberta Health Services  
**Co-author:** Dr. Don Juzwishin (Director of Health Technology Assessment and Innovation), Alberta Health Services

**Introduction:** A free rider is someone who consumes a resource without paying for it, or pays less than the full cost. The free rider problem is the question of how to limit its negative effect. Free-riding is usually considered to be an economic problem as it causes the non-production or underproduction of a public good and thus leads to inefficiency.

**Background:** Reassessment programs concern assessment of existing health care technologies and services that do not provide value for the cost. A reassessment program usually includes identification, prioritization, evaluation, and implementation processes: all four steps are time-consuming and costly. In addition, there is not enough evidence on ineffectiveness of existing health technologies; therefore, the process of reassessment should also include collecting and/or developing evidence. Given the extent of reassessment programs and the fact that there are many technologies that can be potential candidates for reassessment, it will be less likely for a single entity or organization to be able to execute an effective reassessment program.

**Objectives:** This study aims to (1) identify how free-riding reduces the effectiveness of a local reassessment program, (2) identify factors driving free-riding in reassessment, and (3) recommend management options to address free-riding issues and suggest potential provincial and federal policies and responsibilities.

**Method:** This is a theoretical study that will use economic theories and expand their applications to health technologies. An economic model will be developed to describe how federal government can improve effectiveness of a provincial reassessment program.

**Concurrent Oral Session B3 — Evidence-Based Policy**

**Telehealth for Specialist-Patient Consultations**

**Presenting author:** Pablo Navarro (Research Officer), Newfoundland and Labrador Centre for Applied Health Research  
**Co-author:** Dr. Stephen Bornstein (Director), Newfoundland and Labrador Centre for Applied Health Research

**Background:** Newfoundland and Labrador is a pioneer in telehealth. The province has an established telehealth infrastructure currently supporting three programs (teleoncology, telespsychiatry, and telenephrology). The more rural and remote parts of the province continue to lack local specialists. Patients in these areas face longer wait times for consultations or costly travel to St. John’s. The Labrador-Grenfell Regional Health Authority partnered with Newfoundland and Labrador Centre for Applied Health Research (NLCAHR) to study the potential for developing province-wide telecardiology and teledermatology for specialist-patient consultations.
**Methods:** In partnership with CADTH, NLCAHR synthesized the existing systematic review literature and recent high-quality primary research. We consulted with local experts and administrators to map out the factors particular to Newfoundland and Labrador that could influence the clinical and cost effectiveness of telecardiology and teledermatology. We examined the research evidence in the context of these factors, resulting in a synthesis that takes into account the characteristics and capacities of the province and its health care system.

**Results:** The research literature on telecardiology and teledermatology is limited. Existing evidence indicates telecardiology can reduce avoidable transfers and costs to patients. The evidence for teledermatology consultations indicates it is reliable and compares to face-to-face visits. An existing telehealth infrastructure will increase the expected cost-effectiveness of both services. Significant challenges to implementation for either telehealth option will include establishing a sustainable and acceptable remuneration system.

**Conclusion:** Telecardiology and teledermatology could be clinically and cost-effective methods to increase patient access to specialist consultations in Newfoundland and Labrador.

**Using Evidence to Provide Value for Money — A Case Study in a Provincial Cancer Agency**

**Presenting author:** Jean Hai Ein Yong (Health Economics Manager), St. Michael’s Hospital

**Co-authors:** Jaclyn Beca (Research Coordinator) and Dr. Jeffrey Hoch (Co-Director — Canadian Centre for Applied Research in Cancer Control); Thomas McGowan (Chief Radiation Oncology), Carlo Fidani, Peel Regional Cancer Program; Padraig Warde (Head of Radiation Oncology), Cancer Care Ontario

**Introduction:** Intensity-modulated radiation therapy (IMRT) is an advanced radiation technique that permits the use of escalated doses of radiation while preserving tissue function of neighbouring structures. Previous clinical trials have demonstrated that IMRT is more effective than the conventional radiation techniques for treating prostate cancer and head and neck cancer.

**Aims:** To compare the cost and effectiveness of IMRT with those of conventional radiation techniques in prostate cancer and head and neck cancer to inform the implementation of IMRT across the province of Ontario, Canada.

**Methods:** Two cost-effectiveness analysis models were developed. The costs of IMRT, three-dimensional conformal radiotherapy (3DCRT), and two-dimensional radiotherapy (2DRT) were estimated through activity-based costing, incorporating input from radiation oncologists, physicists, and treatment planners. The clinical effectiveness estimates were obtained from a systematic review, and quality-adjusted life-years (QALYs) gained were calculated using health-related quality of life estimates from the published literature.

**Results:** When comparing an equivalent dose of IMRT to 3DCRT in the treatment of prostate cancer, IMRT produced 0.023 more QALYs than 3DCRT, through reduced incidence of gastrointestinal toxicity, at an additional cost of $621, yielding an
incremental cost-effectiveness ratio (ICER) of $26,768 per QALY gained. In the treatment of head and neck cancer, the use of IMRT appears to be less costly and more effective than 2DRT because IMRT has shorter treatment delivery time than for 2DRT.

**Conclusions:** For radical radiation treatment of prostate cancer and head and neck cancer, IMRT appears to be good value for money when compared with the conventional radiation techniques (3DCRT and 2DRT).

**Cholinesterase Inhibitors: A Cohort Study to Assess Resource Utilization of Patients with Dementia**

**Presenting author:** Raymond Fong (Graduate Student), Queen’s University

**Co-authors:** Dr. Sundeep Gill and Dr. Ana Johnson, Queen’s University

**Background:** Dementia leads to progressive cognitive and functional decline. The symptoms are treated with three cholinesterase inhibitors (ChEIs): donepezil, galantamine, and rivastigmine — drugs covered under Ontario’s formulary plan. There has been little research regarding their economic impact.

**Methods:** This study described the patterns of use of ChEIs, and assessed health care resource utilization and costs in Ontario. Patient-level data from seven provincial administrative databases were linked. First-time users of ChEIs over age 65 were identified between April 1, 2004 and March 31, 2009, with up to one-year follow-up. Resource use was classified into six categories: prescription drugs, physicians, long-term care, home-care nursing, emergency care, and hospitalizations. Comparisons among the three ChEIs were accomplished using chi-square, ANOVA, and linear regression. Costs were reported in 2010 Canadian dollars and from the health care system’s perspective.

**Results:** In the cohort (N = 40,057), the majority were prescribed donepezil (24,347), were female (60.5%), and used an average of 11 medications. The odds of ChEI discontinuation were 1.47 (95% confidence interval, 1.36 to 1.60) and 1.26 (1.17 to1.36) times higher among rivastigmine users than galantamine and donepezil users, respectively. Between 2005 and 2008, overall health care costs increased from $95.2 million to $106.1 million. ChEIs accounted for half of overall prescription drug costs and 16% of overall health care costs for these patients. The mean annual per-patient cost was $12,679.47 ($12,510.86 to $12,848.08).

**Conclusions:** Prescription drugs and ChEIs account for a substantial proportion of health care costs for dementia patients. Knowing patient health service utilization patterns can help professionals and decision-makers plan patient care and resource allocation.

**Appropriateness of MRI Requests in the Toronto Central LHIN: A Retrospective Chart Review**

**Presenting author:** Dr. Thien Huynh (Diagnostic Radiology Resident), University of Toronto

**Co-authors:** Hany Kashani (PhD Candidate, Radiology Research Fellow) and Yasser Karimzad (Clinical Research Coordinator), University Health Network; Karim Khalidi (Diagnostic Radiology Resident), Reza Mobasher (Orthopedic Surgery Fellow), Dr. Walter Kucharczyk (Professor, Staff Neuroradiologist), and Dr. Raj Ramperaud (Associate Professor), University of Toronto; Dr. John You (Assistant Professor), McMaster University
**Background:** Despite increases in magnetic resonance imaging (MRI) volumes, long wait times for MRI in Ontario are an ongoing concern amongst patients, physicians, and health care decision-makers. Inappropriate MRI requests have been suggested as one potential reason for persistently long waits. Appropriateness criteria have been developed for MRI lumbosacral spine separately by the American College of Radiology (ACR Criteria) and more recently by a Canadian Institutes of Health Research–funded expert panel (Feasby Criteria). We used these criteria to assess the appropriateness of lumbosacral spine MRI requests in our region.

**Methods:** A total of 1,440 consecutive MRI lumbosacral spine requisitions were examined from six hospitals within the Toronto Central Local Health Integration Network. After standardized training, four individuals with relevant clinical experience independently abstracted the requisition data and rated the requests as appropriate, inappropriate, or uncertain using the ACR and Feasby criteria.

**Results:** Nine hundred sixty-five (67%) lumbosacral spine MRI scans were performed for back pain or radiculopathy. Four hundred fifty-one (50.3%) of requisitions were from primary care physicians and 446 (49.7%) were from specialists. Appropriateness of most requests (51% by ACR and 65% by Feasby criteria) could not be rated due to insufficient clinical data on the requisitions (e.g., regarding symptom duration, weakness on examination, degree of disability). Of those requisitions that could be rated, 35 out of 336 (10.4%) and 32 out of 191 (16.8%) were inappropriate, according to the ACR and Feasby criteria, respectively.

**Conclusions:** Solutions to standardize and increase the quality of information provided on lumbar MRI requisitions are needed to allow improved triage of MRI referrals by imaging departments and more accurate assessment of MRI appropriateness.

**Concurrent Oral Session B4 — Health Economics**

**Can Universal Screening for Rare Conditions Ever Be Cost-Effective? The Case of Newborn Screening for Biliary Atresia**

**Presenting author:** Lisa Masucci (Health Economics Research Coordinator), Centre for Clinical Epidemiology and Evaluation

**Co-authors:** Dr. Stirling Bryan (Professor/Director), Centre for Clinical Epidemiology and Evaluation; Dr. Janusz Kaczorowski (Professor/Research Director — Department of Family and Emergency Medicine), University of Montreal; Dr. Jean-Paul Collet (Clinical Professor — Department of Pediatrics) and Dr. Richard Schreiber (Clinical Professor — Department of Pediatrics), University of British Columbia

**Background:** Biliary atresia (BA) is rare (5.25 out of 100,000 births) and yet is the most common cause of end-stage liver disease in children. Left untreated, BA typically leads to death by two years. The Kasai Portoenterostomy procedure, if performed by month three, can prevent liver deterioration.

BA is characterized by pale stools and so screening using “stool colour cards” is a policy option. Both Japan and Taiwan run such screening programs (specificity: 99.9%; sensitivity: 97.1%). No such screening exists in Canada.
**Objectives:** (1) To conduct a model-based economic evaluation of BA screening in Canada. (2) To determine the most cost-effective screening approach (passive versus reminders).

**Methods:** A Markov model was developed to compare universal BA screening (both passive distribution and reminder letter strategies) to current practice (no screening). A publicly financed health sector perspective was used. Model parameter estimates were derived from empirical work, literature reviews, and local/national cost sources. Both deterministic and probabilistic sensitivity analyses were performed. Key parameters varied: card utilization rate, and cost of reminder letter and liver transplantation.

**Results:** The incremental cost-effectiveness ratio (ICER) for universal screening (passive distribution) is $18,200 per life-year gained (compared with no screening). The ICER for screening with reminder letter is $157,300 per life-year gained (compared with passive screening). The results are sensitive to variations in administration costs.

**Conclusion:** Universal BA screening of newborns in Canada, through passive card distribution, is potentially a cost-effective use of resources. There is considerable uncertainty; further research on the costs of implementing and running a program is required.

**Cost-Effectiveness Analysis and Budget Impact Assessment: Combining the Two for the Aid of Decision-Makers**

**Presenting author:** Mike Paulden (Research Associate), University of Toronto, and (Scientist), Toronto Health Economics and Technology Assessment (THETA) Collaborative

**Co-author:** Ba’ Pham (Senior Research Associate), University of Toronto

**Objectives:** Cost-effectiveness analysis has traditionally been seen as a means of satisfying an explicit social objective subject to a fixed budget constraint. As a result, existing methods largely ignore budget impact considerations in health systems where budgets are not fixed, such as the provincial health systems in Canada. In particular, none of the traditional methods of presenting results — such as the cost-effectiveness plane, incremental cost-effectiveness ratios (ICERs), and cost-effectiveness acceptability curves (CEACs) — can be used to summarize the results of a cost-effectiveness analysis and budget impact assessment simultaneously. Our objective was to develop such a method in a way that is useful for decision-makers.

**Methods:** We present a novel method for combining cost-effectiveness and budget impact considerations into a single analysis. To do this, we disaggregate the incremental costs of the health technology into those costs that fall on the health budget and displace other health activities and those costs that result in an expansion of the health budget. The net health benefit of the technology is then compared directly against the net budget impact.

**Results:** Our method clearly reveals the trade-off between the cost-effectiveness and budget impact of the health technology across a range of possible values of the cost-effectiveness threshold.

**Conclusions:** Our method aids decision-makers by making the trade-off between the cost-effectiveness and budget impact of new health technologies explicit. Our method also allows analysts to provide meaningful information to decision-makers on the cost-effectiveness and budget impact of new health technologies.
Cost-Effectiveness Analysis of a Multifactorial and Inter-professional Team Approach to Falls Prevention among Older Home Care Clients

Presenting author: Dr. Wanrudee Isaranuwatchai (Post-doctoral Fellow), University of Toronto

Co-authors: Dr. Maureen Markle-Reid (Associate Professor and Acting Assistant Dean), McMaster University; Dr. Jeffrey Hoch (Co-Director — Canadian Centre for Applied Research in Cancer Control)

Cost-effectiveness analysis (CEA) is often conducted alongside randomized controlled trials. Characteristics between the study groups are assumed to be balanced as a result of randomization. Nevertheless, study groups may differ on certain characteristics at baseline, including the outcome variable. Failure to adjust formally for imbalance at baseline may generate incorrect results. The net benefit (NB) regression framework incorporates a regression-based approach that adjusts for potential confounders or predictors. Therefore, baseline NB can be allowed to play an important role in cost-effectiveness results. This study examined three different NB modelling equations in order to investigate the effect of including baseline NB. Our study is a secondary analysis of data from a study of a multifactorial and interprofessional team approach to falls prevention, compared with usual home care, among 92 older home care clients at risk for falling. Our three NB modeling equations included: 1) NB at follow-up as the dependent variable without adjustment for baseline NB; 2) NB at follow-up as the dependent variable with adjustment for baseline NB; and 3) changes in NB as the dependent variable without adjusting for baseline NB. We illustrate how adjusting for baseline NB produces different results. With theoretical and statistical justification, subgroup analyses by age were also conducted. The results highlight the importance of considering the baseline outcome values in CEA. This is an important illustration, as CEA is often selected as the primary way of conducting health technology assessment for the purposes of providing evidence of outcomes, efficiency, and impact.

Concurrent Oral Session B5 — Cardiovascular

Using Bayesian Network Meta-analysis to Compare Oral Treatments for Pulmonary Arterial Hypertension and Inform Policy Decisions by a Public Drug Plan

Presenting authors: Harold Boudreau (Pharmacist Consultant) and Andrew Portolesi (Biostatistician), Health Canada — Non-Insured Health Benefits

Background: Pulmonary arterial hypertension (PAH) is a life-threatening, progressive condition with a poor prognosis when left unmanaged. A Bayesian network meta-analysis was conducted to evaluate the comparative efficacy of oral treatment options (sildenafil, tadalafil, bosentan, and ambrisentan) in patients with World Health Organization (WHO) functional class II/III PAH in order to support a listing decision by the Non-Insured Health Benefits (NIHB) program.

Methods: Search strategies involved reviews previously completed by the Common Drug Review (CDR) and the NIHB Pharmacy and Therapeutics (P&T) Committee. Additional citations were obtained from separate literature searches by NIHB. Two reviewers
independently extracted data and assessed similarity of trials. With assistance from CADTH, a Bayesian network meta-analysis was conducted to pool trial results.

**Results:** Eight placebo-controlled, randomized controlled trials (RCTs) were identified, using the primary outcome measure of mean distance walked in six minutes (6-MWD). One RCT was excluded, as the population varied significantly from other studies. All therapies achieved statistically significant increases in 6-MWD (33 to 51 metres) with no significant differences between treatments. As a result, the NIHB P&T Committee was able to provide listing recommendations based mainly on the average annual cost ($10,000 per year for sildenafil/tadalafil versus $50,000 per year for bosentan/ambrisentan).

**Conclusion:** Bayesian network meta-analysis was shown to be a useful tool for class reviews in drug plan management, provided the studies involved are reasonably similar. In this case, no difference in efficacy was seen between the four oral treatments for PAH, leading to an NIH B listing decision based primarily on cost comparisons.

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**Intravenous Thrombolysis versus Best Medical Treatment for Late-Presentation Acute Ischemic Stroke: An Economic Evaluation in a Canadian Setting**

**Presenting author:** Julian Nam (Master's Candidate), Programs for Assessment in Technology in Health, McMaster University

**Co-author:** Dr. Daria O’Reilly (Assistant Professor), Programs for Assessment in Technology in Health, McMaster University

**Background:** The economic evidence surrounding the administration of intravenous thrombolysis to late-presentation ischemic stroke patients (3 to 4.5 hours) is lacking. We evaluated the cost-effectiveness of intravenous thrombolysis compared with best medical treatment in late-presentation patients suffering an acute ischemic stroke in a Canadian setting.

**Methods:** A decision analytic model was constructed for a hypothetical 65-year-old patient with ischemic stroke with symptom onset between 3 and 4.5 hours. Functional independence and mortality were extracted from randomized trials. Discharge disposition was based on Ontario registry studies and stroke audits. Age-related survival was modelled using Gompertz functions derived from a Canadian population of ischemic stroke survivors. Quality-of-life estimates were taken from stroke survivors in a registry study. In-patient costs were taken from the Ontario Case Costing Initiative, professional fees from the Ontario Schedule of Benefits for Physician Services, and other costs from an Ontario cost of stroke study. We used an Ontario payer perspective.

**Results:** For the base-case scenario, intravenous thrombolysis resulted in higher functional independence (risk ratio [RR] = 1.10; 95% confidence interval [CI], 1.01 to 1.20) and similar mortality (RR = 0.99; 95% CI, 0.74 to 1.33). Intravenous thrombolysis generated 0.02 additional quality-adjusted life-years (QALYs) over best medical treatment at a cost of $1,957. The associated incremental cost-effectiveness ratio was $97,850 per QALY. Below a willingness-to-pay of $110,000 per QALY, best medical treatment was more likely to be the cost-effective treatment. There was considerable decision uncertainty, driven by clinical uncertainty, which was persistent across all willingness-to-pay.

**Conclusions:** Intravenous thrombolysis in late-presentation stroke patients may not be a cost-effective treatment over a lifetime. Future studies of clinical effectiveness are needed to reduce decision uncertainty.
Cost-Effectiveness of Non-invasive Cardiac Imaging Technologies in Outpatients with Suspected Coronary Artery Disease

**Presenting author:** Dr. Gabrielle van der Velde (Scientist), Toronto Health Economics and Technology Assessment (THETA) Collaborative

**Co-authors:** Mike Paulden (Scientist), Luciano Ieraci (Scientist), Dr. Harindra Wijeyasurya (Scientist), and William Witteman (Scientist), Toronto Health Economics and Technology Assessment (THETA) Collaborative

**Purpose:** To evaluate the cost-effectiveness of six non-invasive cardiac imaging tests in stable outpatients with suspected coronary artery disease (CAD), including stress echocardiography (Echo), stress Echo with contrast (Echo+Contrast), stress Echo with contrast used only if initial results are not interpretable (Echo>Contrast), computed tomography angiography (CTA), cardiac magnetic resonance imaging (CMRI), and stress single-photon emission computed tomography (SPECT).

**Methods:** A probabilistic Markov model simulated the costs and consequences of diagnostic testing in a hypothetical cohort of ambulatory patients presenting with chest pain with an intermediate risk of CAD. Resource use and costs were derived from Ontario sources. Sensitivity and specificity estimates were identified by systematic review and pooled. The analysis took the perspective of the Ontario public payer and was conducted over a lifetime time horizon. Costs were 2008 to 2009 Canadian prices, the primary outcome was quality-adjusted life-years (QALYs), and both were discounted 5% annually. Cost-effectiveness was evaluated using two willingness-to-pay (WTP) thresholds: $50,000 per QALY and $100,000 per QALY.

**Results:** Echo>Contrast was the least expensive test (expected lifetime costs of $21,536) with expected lifetime QALYs of 10.02. CTA was more slightly more expensive ($21,618) and effective (expected lifetime QALYs of 10.05); thus CTA was cost-effective relative to Echo>Contrast (incremental cost-effectiveness ratio = $2,958 per QALY). CTA dominated Echo, Echo+Contrast, CMRI, and SPECT, and extendedly dominated Echo. The probability that CTA was cost-effective at a WTP of $50,000 per QALY and $100,000 per QALY was 0.929 and 0.934, respectively.

**Conclusion:** CTA appears to be a cost-effective option for intermediate-risk outpatients with suspected CAD.
Concurrent Oral Session B6 — Impact

Developing a Provincial Hospital Formulary: The New Brunswick Experience …
Where Evidence Does Matter and Efficiencies and Impacts Are Being Achieved

April 16, 2012
1330 – 1500

Presenting author: Holly Glennie (Drug Use Evaluation Pharmacist), Horizon Health Network (RHA)
Co-author: Faith Louis (Regional Manager, Quality Improvement, Pharmacy Services), Horizon Health Network (RHA)

Prior to September 2008, there were eight Regional Health Authorities (RHAs) in New Brunswick, each with its own hospital formulary and Pharmacy and Therapeutics Committee with varying, yet limited, dedicated staff to support formulary review processes. In 2008, the RHAs were reorganized into two larger RHAs and a single, provincial hospital formulary, and the Drugs and Therapeutics Committee (D&T) was proposed as a means of streamlining hospital formulary management, harnessing efficiencies, and ensuring consistent, equitable access to rational, evidence-informed, safe, and cost-effective pharmacotherapy for all patients in New Brunswick, regardless of which hospital they may be in.

Fall 2011 marked the first full year of operations for New Brunswick’s provincial D&T. This presentation will highlight New Brunswick’s experiences and accomplishments to date. Developmental steps will be reviewed, including the committee structure established, standardized operational processes and policies implemented, and challenges faced. In addition, some deliberate efforts to maximize partnerships and use of existing, quality evidence and avoid duplication of effort will be addressed (e.g., use of CADTH reviews and reports as a basis of the formulary review processes).

As more jurisdictions move toward integrated systems and larger regions, it is important to share relevant accomplishments and lessons learned to help better support the optimal use of scarce resources (human and financial), optimal services, and outcomes for patients. The experience in New Brunswick is one example of what is being done, what can be accomplished, and what can be learned.

Is Newer Technology Better Technology? CADTH Compares 1.5 Tesla and 3.0 Tesla MRI Scanners

Presenting authors: Rhonda Boudreau (Theme Lead) and Kyle Trenwith (Knowledge Exchange Officer), CADTH

In a society in which last year’s iPhone is considered antiquated technology, most Canadians expect that when it comes to their health, they will be diagnosed and treated with the most up-to-date medical technologies. But is buying newer technology always the better decision for Canadians?

Take magnetic resonance imaging (MRI) scanners, for example. The scanners, like most tools, require repairs over time and, eventually, replacement. Currently, many MRI scanners across the country are more than a decade old and are due for repairs or replacement. The question is: should jurisdictions replace existing MRI scanners with the same machines or newer, more sophisticated machines with higher magnetic strength, which cost significantly more? Taking into consideration fixed health care budgets, the decision has become a contentious issue across the country.
To provide information to inform decision-making on this issue, CADTH conducted a review comparing two commonly used types of MRI scanners: the 1.5 Tesla (T) and the 3.0 T. Guidance statements were produced and additional information was provided to guide decisions about MRI scanner placement.

The question of whether to replace existing MRI scanners with the same machines or newer, more sophisticated machines is complex and will involve a significant financial investment from Canadians. Canadians want access to the most effective and cutting-edge technology, as it is thought that this will improve patient care. But, depending on the circumstances, as in the case of 1.5 T MRI and 3.0 T MRI

**Addressing Inappropriate Opioid Prescribing in Ontario — An Evidence-Based Approach**

**Presenting author:** Dr. Tara Gomes (Scientist), Institute for Clinical Evaluative Sciences

**Co-authors:** Dr. David Juurlink (Scientist), Institute for Clinical Evaluative Sciences; Dr. Muhammad Mamdani (Director), Applied Health Research Centre

Over the past decade, the non-medicinal use of prescription painkillers has been identified as a major public health issue, with potentially severe consequences, including addiction and death. In fact, almost 850 people in Ontario and 15,000 people in the United States died of opioid-related causes in 2008, and the use of these drugs, often at high doses, continues to rise.

In 2009, the Ontario Drug Policy Research Network (ODPRN) began to work with the Ontario Public Drug Programs (OPDP) of the Ontario Ministry of Health and Long-Term Care (MOHLTC) to generate drug policy research to guide policy decisions addressing the issue of inappropriate opioid prescribing in Ontario. Over the subsequent two years, the ODPRN produced research investigating changes in how opioids were being prescribed in Ontario, the impact of high-dose prescribing on overdose death, data quality issues creating barriers for the tracking and identification of opioid misuse, and the evaluation of strategies designed to reduce opioid-related harm.

This presentation will outline the process undertaken by the ODPRN and the OPDP to generate evidence-based research to inform the 2010 Narcotics Safety and Awareness Act, will describe the key messages from this research, and will highlight how this research can continue to inform future opioid policies and funding decisions. This will be of interest to health policy-makers, health care providers, and researchers with an interest in opioid prescribing and safety.
Patients Benefit from Primary Health Care Professionals’ Use of Clinical Information from Electronic Knowledge Resources

Context: Primary health care practitioners (PHCP) searching for information in electronic knowledge resources.

Objective: To produce clinical vignettes describing PHCPs’ self-reported information use and subsequent patient health benefits.

Design: Mixed methods research combining prospective observational quantitative study and qualitative multiple case study.

Setting: Canada.

Participants: Ten family medicine residents, 10 family health team pharmacists, 10 registered nurse practitioners.

Intervention: Access to e-Therapeutics+, leading to 787 searches for information over an average of 31 weeks in 2008-2009.

Outcome assessment: Using the Information Assessment Method (IAM), participants rated their searches. Rated searches were examined in interviews guided by log reports of completed IAM questionnaires. Critical searches (cases) were defined as clearly described searches where clinical information was used for a specific patient. For each case, interviewees described information-related patient health outcomes.

Mixed methods data analysis: Quantitative and qualitative data were merged into clinical vignettes.

Results: One hundred and thirty critical searches (cases) were described as clinical vignettes. Of those, 52 vignettes corresponded to clinical situations where information use was associated with one or more than one type of patient health outcome: increased patient knowledge (n = 34), avoidance of unnecessary or inappropriate intervention (n = 28), prevention of disease or health deterioration (n = 10), health improvement (n = 7), and increased patient satisfaction (n = 3).

Conclusion: PHCPs’ self-reported information use results in patient health benefits. This may encourage clinicians to search for information more often, and provide justification for more information retrieval training. This paper reports the first systematic, comprehensive examination of the use of information retrieved by PHCPs, and subsequent benefits.
Informing Physicians about the Uncertainty in Guideline Recommendations: Lessons Learned from Academic Detailing

Presenting author: Dr. Michael Allen (Director — Evidence-Based Programs, Continuing Medical Education), Dalhousie University

Co-authors: Kim Kelly (Drug Evaluation Pharmacist), Capital Health Pharmacy Department; Isobel Fleming (Senior Academic Detailer — Continuing Medical Education), Dalhousie University

Treating hypertension is a bread-and-butter practice for family physicians. Thresholds for starting pharmacotherapy and targets for achieving blood pressure are widely disseminated in guidelines. However, in some populations, such as the elderly and people with diabetes, the evidence behind the threshold and target recommendations is uncertain. While guidelines acknowledge this uncertainty, it is seldom conveyed to family physicians. The purpose of this academic detailing intervention was to inform family physicians of the uncertainty behind these recommendations while engaging local specialists.

We reviewed Canadian, American, and European hypertension guidelines and noted the strength of the recommendation; e.g., Grade A, B, or C. We also reviewed the studies cited by the guidelines to support recommendations, as well as studies that were not included in guideline documents. To ensure clinical relevance of this evidence review, we consulted widely with community and academic specialist physicians, who reviewed our educational material.

Specialist physicians provided valuable comments on our evidence review and accepted our approach well. We have just started academic detailing to family physicians. They appreciate being informed about the uncertainties in the guideline recommendations. Approximately 50% of physicians indicated they intend to change their practice based on our educational messages. For about 40%, the information reinforces their present practice and gives them confidence in their approach. Involving community and academic specialists in developing our material adds credibility and ensures their active participation in academic detailing messages.

An Evaluation of the Effect of the Provincial Academic Detailing Service on Antibiotic Prescribing in Primary Care in British Columbia

Presenting author: Dr. Kelly Grindrod (Assistant Professor — School of Pharmacy), University of Waterloo (Twitter — @kgrindrod)

Co-authors: Kendra Jones (Analyst), Dr. Anne Nguyen (Director of Evaluation), Weiwei Du (Analyst), and Dr. Terryn Naumann (Director of Evaluation), Drug Use Optimization — Pharmaceutical Services Division, British Columbia Ministry of Health

Introduction: The British Columbia (BC) Ministry of Health, Pharmaceutical Services Division has developed a province-wide academic detailing service to improve prescribing in the primary care sector.

Objectives: To evaluate the feasibility and effect of the Provincial Academic Detailing (PAD) service on antibiotic prescribing for common community-acquired infections.
Methods: We launched the PAD topic “Antibiotics in Community Practice” in November of 2009. To enable a pragmatic evaluation of the service, we randomized primary care physicians to receive academic detailing in either an early or delayed group. In brief one-on-one visits, trained pharmacist detailers delivered key messages on optimal first-line antibiotic prescribing for common community-acquired infections. We analyzed the feasibility and effect of the service through primary data collected by academic detailers and through administrative data from the BC Ministry of Health.

Results: Between November 30, 2009, and June 30, 2011, pharmacists detailed 827 physicians. Of these, 686 consented to the evaluation, were practicing in primary care, and received at least five minutes of detailing. Participating physicians were 60% male, had an average age of approximately 50 years, and had been in practice an average of 25 years. For two-thirds of physicians, the antibiotic topic was their first exposure to the PAD service. On preliminary analysis, it appears that the PAD service improved prescribing of antibiotics for community-acquired infections in BC.

Conclusions: Our evaluation of the BC PAD service demonstrates that a province-wide academic detailing service is feasible. It also appears that the PAD service improved antibiotic prescribing in the province.

Concurrent Session C1 — Panel Discussion

Health Technology Assessment in Alberta: Continuing the Journey

April 16, 2012
1530 – 1700
Room: Les Saisons

Panellists: Rosmin Esmail (Director, Clinical Epidemiology), Dr. Paule Poulin (Research Scientist — Health Technology Innovation, Local HTA Decision Support Program), and Dr. Don Juzwishin (Director — Health Technology & Innovation), Alberta Health Services; Joan Berezanski (Executive Director — Clinical Advisory and Research Branch), Alberta Health and Wellness

Evidence-informed decision-making is key to ensuring innovative, effective, and safe health technologies are used in practice. In Alberta, health technology assessment (HTA) is applied at three levels: macro, mezzo, and micro. The Alberta Health Technologies Decision Process (AHTDP) is the provincial, macro-level process led by Alberta Health and Wellness (AHW) for evidence-informed decision-making on public provision of health technologies and services in Alberta’s health care system. The AHTDP Alberta Advisory Committee on Health Technologies identifies and prioritizes technologies, and identifies policy issues and options to consider in developing recommendations on public provision. The mezzo level involves Alberta Health Services’ (AHS) Health Technology Assessment & Innovation (HTAI) department and its development of the “hub and node model” in embedding HTA and innovation, within AHS and Strategic Clinical Networks. The HTAI hub serves as a facilitator among and between different levels of HTAI activity. The focus at the micro level is on clinical engagement for the creation of a bottom-up approach that empowers clinicians and patients in understanding and applying HTA in health care technology decisions. This presentation will showcase the role of HTA at these three levels, how it is done, and how these levels interface and interact to ensure that HTA is used in practice. Lessons learned include the need for leadership; clear processes and framework from AHW; expertise and support from HTA producers; the capability to drive hub activity within AHS; coordination among the three levels; resources; and commitment and resolve to get action at the local level.
**C2**

**Concurrent Session C2 — Panel Discussion**

**Conflict of Interest Policies: Current and Future Controversies**

**Panellists:** Dr. Anne Holbrook (Director, Division of Clinical Pharmacology and Therapeutics, and Professor, Department of Medicine), McMaster University; Chander Sehgal (Director — Formulary Review), CADTH; Marc Jolicoeur, Borden Ladner Gervais Canada; Alain Boisvert (VP – Market Access), Bristol-Myers Squibb Canada

Most regulatory and major drug policy reimbursement organizations have strict guidelines about financial conflicts of interest for committee members — all must be disclosed and some circumstances preclude participation in discussion and voting. Little research addresses the association of decision-maker conflict of interest (COI) and adverse patient outcomes related to poor decisions. Intellectual and institutional COI have received even less attention, yet may be equally important. The engagement of public opinion as well as public participation in health policy-making has been advocated to improve the transparency and credibility of the health care system. We carried out the first national survey of public opinion on pharmaceutical industry–health care professional interactions vis-à-vis perceived COI. Our workshop is focused on conflict of interest and drug policy decision-making. We plan to update the evidence regarding competing interests and their influence on decision-making, gauge agreement with current COI guidelines by key stakeholders including providers, patients, pharmaceutical industry and drug plans, and predict future trends in COI policies.

**C3**

**Concurrent Session C3 — Panel Discussion**

**Using the Cancer Risk Management Model to Support Cancer Control Policy Decision-Making in Canada**

**Panellists:** Dr. Michael C. Wolfson — Moderator; Dr. Jeffrey Hoch (Co-Director — Canadian Centre for Applied Research in Cancer Control); Dr. Sonya Cressman (Health Economist), British Columbia Cancer Agency; Dr. Hla-Hla (Rosi) Thein (Assistant Professor — Dalla Lana School of Public Health), University of Toronto; Luciano Ieraci (Health Economist), Toronto Health Economics and Technology Assessment Collaborative, University of Toronto

Cancer planners and policy-makers face the challenge of having to make decisions about competing cancer-control interventions in an increasingly resource-constrained environment. To meet this challenge, policy-makers need access to information that helps gauge the future impact of changes in cancer control programs and policies on populations. Funded by the Canadian Partnership Against Cancer, the population-based Cancer Risk Management Model (Model) provides the Canadian cancer-control community with a shared, evidence-based tool enabling cancer-control interventions to be assessed and evaluated constantly. The model uses micro-simulation techniques to project health and economic impacts of different cancer control interventions in Canada. The panel will present four case studies that utilize the Model in assessing real-world, cancer-related health technologies at the population level and provide insight into how best to target scarce health care resources to prevent cancer as well as improve cancer outcomes for Canadians. Panellists will present the outcomes and discuss policy implications in the context of: 1) assessing cost-effectiveness of a lung cancer drug in a
reimbursement review; 2) providing information for health system resource planning in Ontario related to increased uptake of colorectal cancer screening; 3) optimizing the costs and benefits of colorectal cancer screening strategies using guaiac Fecal Occult Blood Test (gFOBT), Fecal Immunochemical Test (FIT), and Flexible Sigmoidoscopy (FS); and 4) the early detection of lung cancer in heavy smokers using the low-dose helical computed tomography (CT). The discussion at the end will focus on lessons learned and future research opportunities.

C4 Concurrent Session C4 — Panel Discussion
Evidence Assessment in Drug Reviews: Current State, Challenges, and What’s Ahead

Panellists: Karen Lee (Director — Health Economics), Dr. Vijay Shukla (Scientific Advisor), Dr. Trevor Richter (Manager — Clinical Research), CADTH; Dr. Scott Klarenbach (Associate Professor and Clinician Scientist — Department of Medicine, Division of Nephrology), University of Alberta in Edmonton; and Dr. Adil Virani (Director — Lower Mainland Pharmacy Services), Fraser Health, Providence Health Care, Provincial Health Services and Vancouver Coastal Health

As part of the Common Drug Review (CDR) process, clinical and economic evidence are reviewed to address the mandate of assessing drugs for clinical and cost-effectiveness. A systematic review of published and unpublished clinical trials is conducted, as well as research into other aspects that might help to inform the expert committee (e.g., information on clinical effects of comparators, validity of clinical outcomes, natural history of the disease or condition). As part of the economic review, the economic evaluation supplied by the manufacturer is critically appraised in terms of transparency and clarity of information, as well as how well the evaluation adheres to best practices (e.g., appropriate comparator(s) considered, validity of model structure, justification of assumptions, extent of sensitivity analyses). The work conducted by the economic review team is done in close collaboration with the clinical review team to ensure appropriate use of clinical data in the economic evaluation. The purpose of this panel is to understand the state of clinical and economic reviews and any key developments made since the CDR began (more than eight years ago), the current challenges, and what’s likely ahead. Furthermore, the use of the reviews by the expert committee is critical for recommendations, and, as such, the perspective of the expert committee member with respect to the information in the reviews and how reviewers have attempted to deal with challenges is important to consider. Panel members will provide their perspectives on reviews, followed by discussion on some structured questions. Panel members represent the perspectives of the reviews (clinical, pharmacoeconomic, methodology) and the expert committee.
Concurrent Session C5 — Panel Discussion
Who Does What? Understanding Drug Safety Evidence at the Global and National Level

Panellists: Dr. Ebele Ola (Director — Drug Safety and Surveillance), Janssen Inc.; Dr. Amrit Ray (Chief Safety Officer), Janssen R&D US; Kimby Barton (Director — Bureau of Cardiology, Allergy and Neurological Sciences, Therapeutic Products Directorate), Health Canada; Dr. Sarah Frise (Director — Patient Safety and Medical Information), AstraZeneca; Dr. Diane Forbes (Associate Director — Drug Safety and Effectiveness Network), Canadian Institutes of Health Research

Regulators around the world have expanded their investments and policy frameworks in both pre- and post-market safety evidence assessment through the past decade. Risk management/evaluation and mitigation plans (RMPs/REMs), active surveillance, and progressive licensing are an extension of existing benefit-risk assessment processes undertaken by international regulatory authorities.

More recently, Health Canada (HC) and the Drug Safety and Effectiveness Network (DSEN) have developed a framework for leveraging DSEN’s administrative database research linkages. This provides an additional tool for assessment of real-world safety signals in the Canadian market for some products.

It is important that patients, practitioners, payers, and HTA agencies alike are aware of the significant investment of resources undertaken by regulators and industry in today’s environment — and the associated outcomes achieved to date. The highly specialized nature of benefit-risk assessment, signal detection, and interpretation of data reinforce the importance of HC’s mandate and specific skills required in this aspect of regulatory science.

The panel will share information on global and local drug safety processes, as undertaken by both industry and regulators. The importance of applying specialized knowledge and an informed benefit-risk assessment perspective in the assessment of such evidence will be discussed.

Concurrent Session C6 — Panel Discussion
It Takes a Village: Optimizing Drug-Related Health Outcomes and Cost-Effective Use

Panellists: Dr. Tarun Ahuja (Theme Lead) and Dr. Janice Mann (Knowledge Exchange Officer), CADTH; Dr. Richard Williams (Professor of Psychiatry), University of British Columbia, Royal Jubilee Hospital; Dr. Lisa Dolovich (Canadian Expert Review Committee Chair, Academic Pharmacist, Associate Professor), McMaster University, St. Joseph’s Healthcare; Bernard Gauthier (Co-founder), Vision Research

What can be done when it is suspected that a drug is not being prescribed or used in the best possible way? How do you even determine what is the “best possible” or optimal use of a drug? If a drug isn’t being used optimally, what can be done to improve this gap in practice?

When the Canadian Psychiatric Association (CPA) decided it was time to look at the issue of high-dose and combination therapy with atypical antipsychotic agents (AAPs) for the treatment of schizophrenia, they brought the issue to CADTH. The jurisdictions across
Canada agreed that this was indeed an issue needing to be addressed, and a CADTH Optimal Use project on AAPs was begun.

This project provides an example of how together through collaboration, we (CPA, clinical experts, researchers, Theme Lead, and Knowledge Exchange professionals), progressed from an identified issue in practice to recommendations and tools for improving that practice.

Panel members, including representatives from CPA, the COMPUS Expert Advisory Committee, and CADTH, will provide insight into the challenges and successes of the optimal use approach to address a gap in practice. The steps necessary for achieving the goals of this project — including a systematic review, expert panel recommendations, current utilization, current practice, identification of practice and knowledge gaps, and key message and tool development — will be outlined, as will the Knowledge Exchange strategy to promote the uptake of these recommendations. How this model can be used to approach other topics will be highlighted.

**Session D1 — Methodology**

**The Results of Direct and Additive Treatment Effects in Meta-analysis of Randomized Trials**

*Presenting author:* Dr. Edward Mills, Canada Research Chair/Associate Professor of Health Sciences, University of Ottawa

*Co-authors:* Dr. Kristian Thorlund (Assistant Professor), McMaster University; Dr. John Ioannidis (Chair and Professor), Stanford University

**Background:** In the treatment of many conditions, patients may use more than one treatment. However, many of these drugs have not been evaluated in combination previously. Until now, there have not been available methods to assess what the combined effects of drugs are.

**Methods:** Using examples from a systematic review and multiple treatment comparison of chronic obstructive pulmonary disease (COPD) drugs, we display how to evaluate simple additive effects with single trials, multiple trials, and in networks of trials. We display the minimum assumptions required for assessing additive effects and a set of guidance on the conduct and interpretation of additive effects.

**Results:** Using the example of COPD drugs, we will demonstrate that the effects of individual drugs can be additive, synergistic, or antagonistic. We will demonstrate the incorporation of indirect evidence and illustrate how additive effects can help decision-makers in determining the relative efficiency of placing a new drug in combination with existing drugs. As with COPD, many areas of medicine use multiple drugs on similar end points and this method can be made both simply or statistically complex.

**Conclusions:** Assessing the additive effects of drugs represents an important step forward for decision-makers for evaluating the role of new drugs. For clinicians, this will permit them to assess the best estimate of their combined drug recommendations, and for economists, this will provide an opportunity to display optimal combination therapies. In the absence of head-to-head evidence, additive effects may have an important role for health technology assessments.
Cost-Effectiveness Analysis and Budget Impact Assessment: Combining the Two for the Aid of Decision-Makers

**Presenting author:** Mike Paulden (Research Associate), University of Toronto

**Co-author:** Ba’ Pham (Senior Research Associate), University of Toronto

**Objectives:** Cost-effectiveness analysis has traditionally been seen as a means of satisfying an explicit social objective subject to a fixed budget constraint. As a result, existing methods largely ignore budget impact considerations in health systems where budgets are not fixed, such as the provincial health systems in Canada. In particular, none of the traditional methods of presenting results — such as the cost-effectiveness plane, incremental cost-effectiveness ratios (ICERs), and cost-effectiveness acceptability curves (CEACs) — can be used to summarize the results of a cost-effectiveness analysis and budget impact assessment simultaneously. Our objective was to develop such a method in a way that is useful for decision-makers.

**Methods:** We present a novel method for combining cost-effectiveness and budget impact considerations into a single analysis. To do this, we disaggregate the incremental costs of the health technology into those costs that fall on the health budget and displace other health activities and those costs that result in an expansion of the health budget. The net health benefit of the technology is then compared directly against the net budget impact.

**Results:** Our method clearly reveals the trade-off between the cost-effectiveness and budget impact of the health technology across a range of possible values of the cost-effectiveness threshold.

**Conclusions:** Our method aids decision-makers by making the trade-off between the cost-effectiveness and budget impact of new health technologies explicit. Our method also allows analysts to provide meaningful information to decision-makers on the cost-effectiveness and budget impact of new health technologies.

**Surrogates and Biomarkers: Adventures at the Common Drug Review**

**Presenting author:** Angela Rocchi (Principal), Axia Research Inc.

Surrogate outcomes are stated to be one of the biggest challenges at the Common Drug Review (CDR). There is an external view that CDR questions the use of surrogates — even when these are well accepted by clinical and regulatory authorities — resulting in higher “do not list” (DNL) rates. The objective was to conduct a descriptive analysis of surrogate outcomes with respect to the DNL rates and the factors associated with the use of surrogates. Recommendations to December 31, 2010 were reviewed (n = 159). Primary outcomes were categorized as final, surrogate, or clinical end points/scales. Surrogates were further classified into: not accepted (statement of concern or statement of preference for a different outcome) or accepted (implicit by lack of challenge and a positive recommendation). The 70 surrogate-based recommendations had a DNL rate of 43% (versus 49% overall). However, where there was a statement of concern (n = 29), the DNL rate was 76%. Outcomes varied by therapeutic area: CNS, arthritis, and analgesia drugs used clinical end points/scales, while antiviral and rare disease drugs used surrogates. Drugs using surrogates were more commonly biologicals, NOC/C approvals,
first for disease, first in class, for life-threatening diseases and accepted for priority review. Price seemed related to surrogate acceptability. For accepted surrogates, 54% were priced the same or less than comparators (versus 17% for non-accepted surrogates). In several cases, the same surrogate had variable acceptability within the same disease. These data can be useful to investigate stakeholder concerns about surrogate acceptability.

**Concurrent Session D2 — Policy Issues**

Trends in Science and Evidence in the Pharmaceutical Sector: Reflections from a Program of Research Conducted in Partnership with Decision-Makers

April 17, 2012  
1015 – 1145

**Presenting author:** Dr. Steve Morgan (Associate Professor), University of British Columbia Centre for Health Services and Policy Research  
(Twitter: @SteveMorganUBC)

**Co-authors:** Colleen Cunningham (Doctoral Student), Duke University, Michael Law (Assistant Professor), University of British Columbia Centre for Health Services and Policy Research

This presentation will summarize global trends in drug development and pharmaceutical policy and is intended for an audience of policy-makers, analysts, health professionals, and researchers.

To set the context for current policy-making in the pharmaceutical sector, we begin with an analysis of historical trends in drug development. The rapid decline in new drug approvals since 2000 has captured significant attention but has not been studied in sufficient detail to illuminate underlying changes in scientific and policy paradigms. We therefore identify trends in both the number and nature of drugs developed since 1945. We then link these trends in drug development to the challenges faced by policy-makers over the past 20 years and discuss how policy-makers have responded to those challenges.

The policy insights described in this presentation come from four research studies and seven knowledge exchange events involving those responsible for pharmaceutical licensing, assessment, funding, and pricing from North America, Europe, and Australasia. We find that the advent of active, evidence-based formulary management helped to manage the unprecedented entrants into primary care drug classes in the 1990s. However, the sector’s current transition from the era of “blockbuster medicines” to the era of “specialized therapy” places new challenges on decision-makers and value-based pricing paradigms. A common policy response is increased reliance on post-market evaluation safety, effectiveness, and value. To advance the standards and transparency of evidence generated under the paradigm of post-market evaluation, policy-makers will need to work together — both across Canada and internationally.
Genetic Test Evaluation Models: How Well Do They Fit the Translational Process?

**Presenting author:** Francisco Caballero (Student), Department of Health Administration, University of Montreal; CHU Ste-Justine research centre

**Co-authors:** Dr. Renaldo Battista and Dr. Anne-Marie Laberge, CHU Ste-Justine research centre; Department of Health Administration, University of Montreal; Apogée-Net/CanGèneTest Network

**Purpose:** Compare genetic test evaluation models in terms of their place in the translational pathway.

**Context:** The exponential growth of new discoveries in genetics has led to a significant increase in the number of molecular tests available. Concerns have been expressed regarding the appropriate assessment of these technologies. Several frameworks have been developed to provide a systematic, evidence-based approach for the evaluation of new genomic applications. We propose an overview and comparison of these models.

**Methods:** Using publicly available databases and appropriate keywords, we identified genetic test evaluation models. The information used to evaluate genetic tests in each model was situated along the translational pathway developed by Khoury.

**Results:** Genetic test evaluation models come from different sources and countries. We identified seven evaluation models specific to genetic tests. While most suggested a formal streamlined evidence collection procedure, review, and synthesis of the available data, few focused on issues beyond these.

**Conclusion:** The evaluation of genetic tests often stops at the evidence review, synthesis, and recommendation for a test. Decision-makers need a way to apply the results of these evaluations in the context of limited resources and competing interests. We suggest the evaluation process should be viewed as a comprehensive process ranging from early transition from the research setting to clinical practice all the way to post-implantation stages. By exposing the strengths and limitations of these models, we hope to allow decision-makers to make informed resource allocation decisions in respect to the introduction and use of genetic tests.

How Does the Committee to Evaluate Drugs Make Decisions about Ambulatory Pharmaceutical Funding in Ontario?

**Presenting authors:** Dr. Ana Johnson (Associate Professor), Queen’s University

**Co-authors:** Jennifer Speicher, Jaime Sim and Professor Gerald Evans, Queen’s University

**Objective:** The purpose of this study was to provide a comprehensive overview of how drug-funding decisions are made in Ontario.

**Methods:** Access to Ontario’s Committee to Evaluate Drugs (CED) meeting minutes (July 2009 to July 2010) was granted. A data abstraction form was created based on the framework established by Johnson et al. (2009). Two reviewers independently extracted the information and consensus was achieved.
Results: Forty-four submissions were included. Five main observations: 1) the CED considered certain criteria more frequently than others (e.g., clinical benefit was considered for all decisions, while societal values were discussed less frequently); 2) the relative impact of each criterion on the CED’s recommendation varied (e.g., overall clinical benefit, efficacy, value for money, and need had the largest influence); 3) the CED was more likely to discuss the strength of evidence when its recommendation did not support public funding (e.g., the strength of cost evidence was discussed three times more often for those drugs not recommended for funding); 4) the frequency with which the CED considered criteria varied according to whether or not the CED believed there was an established need; and 5) the majority of the comments made by the CED about the strength of evidence indicated that the quality of the data was low.

Conclusion: This review identified trends in the influence of different criteria involved in the CED’s drug assessment process. These results may promote the development and application of a comprehensive, consistent, and transparent framework for reimbursement decision-making.

Concurrent Session D3 — Cancer

Placebo Response in the Treatment of Cancer-Related Fatigue and Chronic Fatigue Syndrome — A Systematic Review

April 17, 2012
1015 – 1145
Room: Provinces II

Presenting author: Dr. Steve Simpson (Associate Professor), University of Calgary
Co-author: Aravind Ganesh (Medical Student), University of Calgary

Background: Cancer-related fatigue (CRF), experienced by many cancer patients, demonstrates considerable symptomatic overlap with chronic fatigue syndrome (CFS). Etiologically, the conditions may represent a conserved neurobehavioural symptom complex, the fatigue being a manifestation of the host response to different triggers. One method to assess this is to compare the incidence of placebo response in both conditions. Previous papers on the placebo response have included too few studies (de la Cruz et al. 2010, CRF) or inappropriately combined different placebo groups (Cho et al. 2005, CFS).

Objectives: This presentation will discuss the findings of our systematic review of all RCTs published to date on the treatment of CRF — excluding confounders such as anemia, cachexia, and ongoing cancer therapy that could secondarily cause fatigue — aiming to:
1) update the literature reviewed by the 2010 Cochrane review of CRF to reflect additional articles published and treatment guidelines, and 2) provide a reliable estimate of placebo effect in CRF and CFS.

Summary of findings: An efficient MEDLINE search yielded 66 RCTs on CRF, of which eight fully met inclusion criteria and provided 882 patients with CRF on placebo to calculate the placebo response. We reassessed Cho et al. 2005, combining all oral placebo studies together, and thereby calculated the placebo response for CFS. Our findings suggest that the placebo effect in CRF has been inadequately accounted for in the design of pharmacological trials, causing a squandering of resources through suboptimally powered studies which in turn produce substandard results, with similar implications for CFS.
An Update on the Canadian Centre for Applied Research in Cancer Control

Presenting authors: Dr. Jeffrey Hoch (Co-Director) and Sarah Benn (Network Manager), Canadian Centre for Applied Research in Cancer Control (ARCC)

Co-authors: Dr. Stuart Peacock (Co-Director) and Kim van der Hoek (Business Manager), ARCC

Established in 2009, the Canadian Centre for Applied Research in Cancer Control (ARCC) is a pan-Canadian research centre whose mission is to improve cancer control and the delivery of cancer care through interdisciplinary, pan-Canadian leadership in health economics services, policy, and ethics research, education, and knowledge translation.

ARCC is a unique partnership between the British Columbia Cancer Agency, Cancer Care Ontario, the University of British Columbia, and the University of Toronto, with funding from the Canadian Cancer Society. More than 100 academics and decision-makers from collaborating academic units across Canada are involved with the ARCC network.

Cancer control research agendas and priorities are driven by the needs of policy-makers and practitioners, and take into account the values of patients and the public. The complex cancer control problems identified through stakeholder consultation require a team from a variety of backgrounds and disciplines to work together to address these issues. Effective knowledge translation is vital to effect policy change, enhance cancer control programs, and improve patient and population health outcomes.

As leaders of policy-relevant research, ARCC aims to make cancer control more effective, efficient, and equitable, from prevention, screening, and diagnosis, to treatment, rehabilitation, palliative care, and survivorship. To achieve this, ARCC utilizes five thematic research program areas to address cancer control: 1) health technology assessment; 2) societal values and public engagement; 3) health system, services, and policy; 4) patients and families; and 5) knowledge translation. ARCC’s research approach and accomplishments will be reviewed in this update.

Chemotherapy Waste: Implications for Value in Health

Presenting author: Dr. Shawn Bugden (Associate Professor, Faculty of Pharmacy), University of Manitoba

Economic assessment is an integral part of the assessment of new medications in oncology. Frequently, wastage is not fully considered in these assessments. As evidence guides the adoption of new therapies into practice, it is important to consider the potential implications of waste on both budget impact and cost-effectiveness. Despite the potential importance of this issue in high-cost oncology medications, little is known about the impact of wastage on the return on investment for these products. CancerCare Manitoba coordinates a province-wide program (Provincial Oncology Drug Program) for all Manitobans. Through this program, data are now collected on all wastage of chemotherapy products in Manitoba. These data allow for an examination of the impact of wastage and the factors that contribute to higher levels of wastage. Only through examination of this information can we begin to understand the magnitude of the issue and the potential management implications. As we learn more, it is hoped that we can use real-world wastage assessment to guide our evaluation of the potential impact of wastage on budget impact and cost-effectiveness when considering potential investment in new oncology medications.
Factors Influencing Value of Patient Submissions on Drug Review Processes

Presenting author: Dr. Durhane Wong-Rieger (President and CEO), Institute for Optimizing Health Outcomes

Co-authors: Dr. Devidas Menon (Professor) and Tanis Stafinski, University of Alberta

Introduction: In 2011, the Consumer Advocare Network conducted two workshops to prepare patient representatives for making submissions to drug review committees. The use of a simulated drug review process allowed investigation of several issues: perceived added value of patient submissions, potential influence of drug and disease type on funding recommendations, and impact of group discussion methods on deliberation process and outcomes.

Method: About 50% of the 90 participants in the Toronto session and 65% of the 75 in Vancouver were patient representatives. Participants were divided into small groups (patients and non-patients separately) to simulate committees making recommendations on drug funding. Each group reviewed three of four drugs, varied in terms of prevalence and severity of disease; incremental benefit of the drug; and cost utility. Participants evaluated first without and then with patient submissions. Each group used three of four “group discussion” methods (open discussion, nominal group technique, deliberative dialogue, and multiple attribute rating technique) to arrive at a consensus on funding recommendations, with the restriction that only two of the three drugs could be approved.

Results: Both quantitative and qualitative responses were analyzed. All participants felt the patient submissions added significantly to understanding the value of the drugs to patients. The most important factor influencing recommendations was impact of drug on disease in particular, severity of disease, other treatment options, and risks/benefits. The multiple attribute rating technique was best liked and had the most influence on achieving group consensus. Overall, patient groups behaved very similarly to the non-patient groups.

The Impact of Disease Labels on the General Public’s Perceptions on Hypothetical Rationing Scenarios

Presenting author: Dr. Stuart Peacock (Co-Director), Canadian Centre for Applied Research in Cancer Control

Co-authors: Dr. Helen McTaggart-Cowan (Health Economist) and Syed Rahman (Health Economist), Canadian Centre for Applied Research in Cancer Control

Introduction: Difficult policy decisions are increasingly being based on general public preferences. However, there is mixed evidence that their preferences can change once knowing the identity of the disease. This presentation illustrates the impact of disease labels on the general public’s perceptions of hypothetical rationing scenarios.

Methods: Seventy-three members of the general public were divided into eight focus groups. During the session, they individually rated four hypothetical rationing scenarios and discussed their ratings. When making their assessments, four of the groups held an individual perspective, while the remaining groups held a decision-maker perspective. For the first rating, participants evaluated the scenarios in general terms, and for the second,
the specific health condition in each scenario was provided. This was followed by a group discussion to understand participants’ rationales for their ratings. For the final rating, participants rated the same scenarios again.

**Results:** Both statistical tests of association and framework analysis demonstrated that knowing the identity of the health condition had an effect; for example, the priority ratings for the cancer and the osteoarthritis scenarios increased statistically (P < 0.03). However, the perspectives held by the public had no impact on their decision-making process. Analysis of the discussion revealed that (1) the patients’ ages, to equalize lifetime health, and (2) the gain in quality of life, to maximize health, were also important factors.

**Conclusions:** The general public carefully considered all aspects of the rationing scenarios prior to making their decisions. When specific information about the condition is provided, their views appeared to systematically differ.

**Empowering Patient Groups to Contribute to CADTH’s Patient Input Process**

**Presenting authors:** Sarah Berglas (Knowledge Exchange Officer) and Elaine MacPhail (Senior Advisor), CADTH

**Co-authors:** Tijana Fazlagic (Director — Formulary Management), British Columbia Pharmaceutical Services; Sherry O’Quinn (Senior Manager), Ontario Public Drug Program

CADTH introduced Patient Input into the Common Drug Review in May 2010. Patient group input is used throughout the Common Drug Review (CDR) process from development of the review protocol to inclusion in deliberations leading to a formulary listing recommendation. Other review bodies within Canada have also initiated, or are in the process of initiating, similar opportunities.

To enable meaningful patient input in CDR and other similar review process, Canadian patient groups need to be aware (1) that the opportunity exists, (2) of how to provide input, and (3) of what information is most useful for decision-making. In June 2011, CADTH hosted an education workshop for patient groups, supported by the pan-Canadian Oncology Drug Review (pCODR), Ontario Public Drug Program, and British Columbia Pharmaceutical Services.

Forty-one unique patient groups attended the session. The majority of the groups in attendance had not yet submitted evidence to CDR (26/41), nor had subscribed to the CADTH e-alert service identifying opportunities to do so (29/41). Patient groups made up 55% of 99 delegates, and were joined by those from industry (35%), academic, or public sector (10%).

Post-workshop evaluation showed that respondents left with a greater appreciation of how drug coverage recommendations and decisions are made in Canada (12/13 agreed or highly agreed); knew enough to provide patient input to CDR (10/13 agreed or highly agreed); and would recommend the workshop to colleagues (11/13 agreed or highly agreed). Since the event, CADTH has seen a 25% increase in subscribers to patient input e-alert.
Health care organizations typically allocate resources on the basis of historical patterns and/or political means. Evidence-informed policy-making is thereby minimized and limited resources are often not used in the best manner possible. There has been limited research aimed at understanding how, in the face of these pressures, decision-makers attempt to achieve high-quality performance: On what factors are decisions based? What context and culture enable successful application of methods and processes? Our research aims to develop a framework to assist health care managers in resource allocation.

In the first phase, spring 2011, we conducted an online survey of senior decision-makers within regional health authorities (and closely equivalent organizations) across all provinces and territories. The survey inquired about structures, process features, and behaviours related to organization-wide resource allocation decisions. Decision-making rules and procedures, enabling and constraining factors, criteria, participation, and internal and external communications were among the topics addressed. Highlights will be summarized.

The current phase, case studies of six health care organizations from different Canadian regions, allows for in-depth investigation of resource allocation practice. In each organization, we are reviewing key documents, observing senior management team resource allocation activities, and conducting open-ended interviews with senior- and mid-level managers. These mixed methods enable data triangulation. Findings from this research will provide us with cross-case learnings about features that facilitate effective performance in resource allocation under different health care system contexts. We expect senior managers in particular to find this presentation relevant to the challenges they face on an ongoing basis.

**Why, When, and How: Optimizing the Use of the Medical Isotope Technetium-99m**

**Presenting author:** Dr. Michelle Mujoomdar (Manager — Clinical Research), CADTH

**Co-authors:** Kimberlee Lambe (Knowledge Exchange Officer) and Kyle Trenwith (Knowledge Exchange Officer), CADTH

**Background:** Given the relatively recent global shortages, Health Canada asked CADTH to provide national guidance on the management of the medical isotope technetium-99m ($^{99mTc}$) in times of supply disruption.

**Objective:** To describe CADTH’s project to optimize the use of $^{99mTc}$, the process/Committee approach used to produce national guidance, and the customizable web-based tool that will help end users implement the guidance. The CADTH guidance may be timely in light of the proposed temporary shutdown of the National Research Universal Reactor at Chalk River in April 2012.
Information presented will include:

- The issue(s) that led to the previous shortages of $^{99m}$Tc (how the National Research Universal Reactor at Chalk River supplies almost half of the world’s supply of $^{99m}$Tc; the age of the reactor; the rarity of these reactors around the globe, etc.), moving Health Canada to request national guidance
- The current state of the supply of $^{99m}$Tc in Canada
- The methodological approach selected to prioritize uses of $^{99m}$Tc (multi-criteria decision analysis [MCDA])
- The flexible web-based tool that has been developed using the national guidance as its foundation. This customizable tool will permit users to input jurisdictional-, regional-, or institutional-specific data. The output will be a tailored, priority list of $^{99m}$Tc usage during a supply disruption, which is reflective of their local setting.

**Measuring Health System Efficiency**

**Presenting author:** Dr. Katerina Gapanenko (Senior Researcher), Canadian Institute for Health Information

**Co-authors:** Alexey Dudevich (Analyst), Jean Harvey (Director), Dr. Jeremy Veillard (VP, Research and Analysis), Dr. Michel Grignon (Scientific Consultant), and Dr. Sara Allin (Senior Researcher), Canadian Institute for Health Information

Canadians support measuring and reporting on performance and efficiency in health care. One of the ways to measure performance in health systems is to assess its economic efficiency. Currently, Canada does not have a consistent approach to economic evaluation at the health system level that provides meaningful and actionable results for performance improvement targeted to decision-makers and system managers.

The Canadian Institute for Health Information (CIHI) is leading a project that aims to develop an analytical tool for measuring health system efficiency in Canada. The research methods include (1) literature review of similar tools from countries and worldwide organizations; (2) review of policy documents from Canadian government; (3) elite interviews; (4) a facilitated consensus-building session with high-level decision-makers (user/target group); and (5) gathering of available data.

Currently, the project is at the stage of collecting the information and analyzing the data. The project will result in an analytical tool to measure efficiency of the health system for Canadian provinces, territories, and health regions.
Concurrent Session D6 — Collaboration and Networks

We Listen! How a Health Information Provider Benefits from Clinicians’ Feedback

Presenting author: David Li Tang (PhD Candidate), McGill University

Co-authors: Dr. France Bouthillier (Associate Professor, Director — School of Information Studies), Dr. Pierre Pluye (Associate Professor — Department of Family Medicine), and Dr. Roland Grad (Associate Professor — Department of Family Medicine), McGill University; Carol Repchinsky (Editor-in-Chief), Canadian Pharmacists Association

The Canadian Pharmacists Association (CPhA) publishes e-Therapeutics+, an online information resource of treatment recommendations widely used by clinicians. Every week, the CPhA receives hundreds of feedback comments regarding these recommendations. Assessing both the value of that feedback and the ways in which the CPhA can effectively realize that value are two issues highly relevant to the quality of this health information resource.

Partners at McGill University and the CPhA conducted action research to fulfill three objectives: (1) identify the types of issues reported in the feedback comments, (2) clarify the usefulness of these comments to the CPhA, and (3) develop a process to facilitate use of these comments.

Our results include: (1) a typology of nine themes with regard to feedback on e-Therapeutics+ content, (2) the knowledge value, instrumental value (i.e., value-in-use), and contributory value (to organizational mandates) of the feedback as observed by the CPhA, and (3) an information system for enabling efficient feedback use.

This oral presentation will showcase a real-life example of how a national association, through collaboration with academic researchers, improves the provision of health information. This initiative is innovative in two respects: first, our literature review shows this research is the first to empirically examine the value of clinician feedback to a provider of health information; second, we outline a systematic process for handling clinician feedback. As a result of this project, Canadian health care practitioners stand to be better served by the clinical information they rely on for practice and for continuing education.

Exploring Partnerships in Science — CADTH, WHO, and GRADE Working Group

Presenting authors: Karen Lee (Director — Health Economics) and Dr. Vijay Shukla (Scientific Advisor), CADTH

Co-author: Elaine MacPhail (Senior Advisor), CADTH

Globally, there has been an increasing interest in better understanding the economic implications of adopting health care interventions. There are some challenges when attempting to include economic information in guidelines, as cost information may be less generalizable and, as such, resource use may be more useful for research to be applied globally; e.g., World Health Organization (WHO) guidelines, which are used internationally. As part of a CADTH-WHO project, CADTH was asked to conduct a systematic review of economic studies for physical interventions to prevent or reduce the spread of respiratory viruses and to develop GRADE resource use tables, to be used by the WHO expert panel to make recommendations.
Objective: To provide an overview of the advantages and efficiencies of using multi-partnerships that were fostered as part of a CADTH-WHO project to determine and display resource use information for which there was minimal precedent work.

Methods: A Cochrane review of physical interventions to prevent or reduce the spread of respiratory viruses was updated by the WHO, which formed the clinical basis for the project. Researchers worked closely with the Cochrane reviewers to understand the clinical findings. A systematic review of economic studies based on the same search criteria as those used for the Cochrane review was conducted. Researchers consulted with GRADE Working Group members to develop resource use tables with the same type of criteria and level of appraisal as tables established for clinical evidence.

Discussion: This project leveraged the experience of CADTH in the areas of health economics and appraisal of evidence, working with Cochrane to build from an existing Cochrane clinical systematic review, GRADE to develop resource use tables, and the WHO to bring the information into international guideline development. This project is a prime example of the benefits of partnerships.

Ethics Expertise in Canada: A National Survey

Presenting author: Ken Bond (Research Associate), Institute of Health Economics

Co-authors: Dr. Mark Oremus (Assistant Professor — Department of Clinical Epidemiology and Biostatistics), McMaster University; Dr. Glenn Griener (Associate Professor — Department of Philosophy), and Katherine Duthie (PhD Candidate — School of Public Health), University of Alberta

Background: Canadian health technology assessment (HTA) agencies have difficulty identifying and enlisting appropriate expertise in ethics analysis. This difficulty is an obstacle to the proper and consistent conduct and evaluation of ethics analyses in HTA. This obstacle may be overcome if HTA agencies know the number and range of potential experts in ethics analysis in Canada.

Objectives: (1) to identify individuals with expertise in ethics analysis, located in Canada, who are willing to become involved in ethics analysis in HTA; and (2) to gauge these individuals' familiarity with, and experience participating in, the production of HTA.

Methods: A contact list was developed using the membership list of the Canadian Bioethics Society and web-based searches of faculty listings of all Canadian universities, bioethics centres, and provincial health agencies. Additional contacts were identified by members of the Canadian HTA Exchange. Between October and December 2011, an 18-question English and French language survey was distributed to potential respondents by email to collect data on demographic information, education and work experience in applied ethics, and knowledge of and prior involvement in HTA.

Results: Requests to complete the survey were sent to 736 potential respondents located in academic and health care institutions, government, and private sector organizations in Canada. Results will be presented at the Symposium.
Concurrent Session E1 — Panel Discussion

The pan-Canadian Oncology Drug Review: An Enhanced Approach to Evidence-Based, Cancer Drug Policy Decision-Making, or Just Another Acronym?

Panellists: Dr. Allan Grill (Family Physician and Member of pCODR Expert Review Committee), Markham Family Health Team; Dr. Mona Sabharwal (Executive Director), pan-Canadian Oncology Drug Review; Scott Livingstone (CEO), Saskatchewan Cancer Agency

The pan-Canadian Oncology Drug Review (pCODR) was established by Canada’s provincial and territorial Ministries of Health (excluding Quebec) to assess cancer drug therapies and make recommendations to guide drug-funding decisions. pCODR brings consistency and clarity to the cancer drug assessment process by looking at clinical evidence, cost-effectiveness, and patient perspectives.

pCODR evolved from the interim Joint Oncology Drug Review (iJODR), which provided evidence-based recommendations for cancer treatments since early 2007, and demonstrated the value that a national collaborative platform can provide to cancer care decision-making. The objective of pCODR as the permanent successor of iJODR is to build the foundation for a streamlined, national cancer drug review process that supports evidence-based decision-making. Ultimately, the aim is to improve access to a more consistent standard of care across Canada, and bring clarity for patients, health professionals, and industry about how, when, and why drug-funding decisions are made.

This presentation will highlight specific pCODR enhancements from three different perspectives — operational, policy decision-making, and clinical. The speakers will use their unique viewpoints to compare the two processes. pCODR’s additional emphasis on directly involving end-users; requesting feedback from stakeholders; producing transparent, publicly accessible recommendation documents and review reports; and completing the entire process for each drug review within a strict timeline will be discussed.

This presentation will be of interest to health care policy-makers and health care providers committed to the use of evidence-based information that contributes to health system sustainability and improved health outcomes.

Concurrent Session E2 — Panel Discussion

Coverage with Evidence Development in Canada

Panellists: Dr. Robert Peterson (Executive Director), CIHR/DSEN, and Chair, Canadian Drug Expert Committee; David K. Lee (Director — Office of Legislative and Regulatory Modernization), Health Canada; Dr. Devidas Menon (Professor), University of Alberta; Lucie Robitaille (Secretary General and Associate General Director – Organizational Development and Medications), Institut national d’excellence en santé et en services sociaux (INESSS); Nancy McColl, former public representative, CEDAC

Clinical trials that support federal regulatory decisions for market authorization of new drugs often lack sufficient external validity to predict how the drug will behave across the “patient horizon”; that is, all patients who will subsequently be exposed to the drug outside the randomized controlled trial (RCT) environment (the “real world”). While fulfilling data requirements for the regulator, pre-market RCTs frequently lack information required by other health care decision-makers: payers, prescribers, patients, and clinical practice guideline developers, among others. Several paths forward have been debated...
for the past decade. Of note, federal regulatory modernization has pointed toward progressive licensing of drugs; pharmaceutical companies have discussed managed entry with product listing agreements; and, most recently, payers in some jurisdictions have introduced the concept of coverage with evidence development (CED) in order to collect needed information on new drugs in real-world health care settings. This workshop will consist of brief presentations by experts from the Canadian Institutes for Health Research (CIHR) Drug Safety and Effectiveness Network (DSEN), Health Canada, a provincial government public payer, academic researchers, a public representative, and the pharmaceutical industry, in order to introduce sectoral opinions on the feasibility of introducing a robust program of coverage with evidence development in Canada. An open discussion will follow, engaging the audience in this debate.

**Concurrent Session E3 — Panel Discussion**

**Value-Based Pricing of Pharmaceuticals: Is a Pan-Canadian Approach Feasible?**

**Panellists:**
- Stephen Samis (Vice-President), Canadian Health Sciences Research Foundation (moderator);
- Dr. Karl Claxton (Professor — Centre for Health Economics), University of York;
- Don Husereau (Adjunct Professor — Department of Epidemiology and Community Medicine), University of Ottawa;
- Brent Fraser (Director), Ontario Ministry of Health and Long-Term Care;
- Mark Ferdinand, Rx&D

Some provinces have turned to value-based price negotiation mechanisms to improve access to new drugs. However, many provinces lack the resources, capability, legislative authority, and price negotiation levers (in terms of volume of drug utilization) to be able to negotiate with drug manufacturers. Furthermore, manufacturers are tasked with predicting new drug uptake across jurisdictions and must expend time and resources to negotiate individually with provinces. This results in differences in access across provinces and political pressure that can lead to health system inefficiency. A pan-Canadian approach to value-based pricing would reduce unnecessary pressure and improve efficiency, but many questions remain: What are the barriers to a pan-Canadian approach? How will value be defined? Can it be linked to bulk purchasing? This panel will provide international insight, views from government, the biopharmaceutical industry, and academia to shed light on the subject.

**Concurrent Session E4 — Panel Discussion**

**Opportunities for Health Technology Assessment Collaboration over the Continuum of a Technology's Life Cycle**

**Panellists:**
- Dr. Bernard Prigent (Vice-President and Medical Director), Pfizer Canada Inc.;
- Dr. Tammy Clifford (Chief Scientist), CADTH;
- Dr. Nick Bansback (Health Economist), Centre for Clinical Epidemiology and Evaluation;
- Dr. Murray Krahn (Director), Toronto Health Economics and Technology Assessment Collaborative

Producers and end-users of health technology assessment (HTA) are exploring frameworks for a more “life cycle” approach to the assessment of health technologies. The pharmaceutical industry, which in the past primarily considered the input and feedback of regulatory agencies during the drug development phase, is now also seeking
feedback on the needs of payers and HTA agencies to guide drug development programs. There are different evidentiary requirements at each stage of this life cycle, from pre-clinical drug development through to regulatory, payer, and post-marketing effectiveness and safety evaluation. Frameworks are also being explored for the re-evaluation of potentially obsolete technologies. Over this continuum of HTA, there may be opportunity for greater collaboration between HTA producers, regulators, payers, and manufacturers. This could ensure that evidentiary needs are mutually understood, that new technologies will meet the needs of the populations for whom they’re developed, that they will be adopted appropriately, and that HTA can become a more powerful tool for stimulating innovation. The goal of this panel session is to explore opportunities for greater collaboration over the life cycle of a product. Panellists, including Drs. Bernard Prigent, Tammy Clifford, Nick Bansback, and Murray Krahn, will present a variety of perspectives and examples, including early engagement between HTA authorities, regulators, payers, and industry; and criteria and guidelines required for revisiting obsolete technologies.

**Concurrent Session E5 — Panel Discussion**

**Turning a Big Ship: Shifting Attitudes and Approaches to Self-Monitoring of Blood Glucose in Type 2 Diabetes**

April 17, 2012  
1315 - 1445  
Room: Les Saisons

Panellists: Judy McPhee (Director — Formulary and Clinical Practice), Nova Scotia Department of Health; Peggy Dunbar (Provincial Program Manager), Diabetes Care Program of Nova Scotia; Dr. Suzanne Taylor (Executive Director — Drug Use Optimization), British Columbia Ministry of Health; Dr. Robyn Houlden (Endocrinologist), Kingston General Hospital and (Professor — Faculty of Health Sciences), Queen’s University; Lori Berard (Nurse Coordinator/Manager — Health Sciences Center Diabetes Research Group), Winnipeg Regional Health Authority

Self-monitoring of blood glucose (SMBG) has been a pillar of diabetes self-management for decades, despite a scarcity of evidence supporting the efficacy of its routine use in patients with type 2 diabetes (T2DM) who are not managed with insulin.

Over the past several years, evidence has been mounting to support more discretionary SMBG testing in this specific population; however, the issue has triggered debate among experts and current practice of SMBG has not significantly changed to reflect the evidence for its optimal use. Recently, though, a gradual, ideological shift on the use of SMBG is apparent as a growing number of groups from around the world have issued evidence-based guidelines and recommendations that parallel the research findings for optimal use of SMBG.

The aim of this session is to share thoughts, and experiences and encourage dialogue highlighting various approaches to and perspectives on SMBG. The panel will feature five expert speakers from across Canada: the Canadian Diabetes Association (CDA), the Diabetes Care Program of Nova Scotia (DCPNS), the Drug Use Optimization (DUO) group in British Columbia, and the Nova Scotia Department of Health and Wellness. The session will provide the audience with ideas for applying evidence to their respective contexts by focusing on the journey from evidence to practice, highlighting barriers and facilitators, strategies for maximizing and/or overcoming these, early and long-term wins, and lessons learned.

A forward-facing emphasis will look toward how implementation work in this area is poised to continue shaping attitudes, approaches, and policy into the future.
Concurrent Session E6 — Panel Discussion

Big Ideas for HTA

Panellists: David Ames (Director of Health Technology Assessment and Medical Affairs), Johnson & Johnson Medical Products; Dr. Stirling Bryan (Director), Vancouver Coastal Health Research Institute; Dr. Reiner Banken (Associate General Director – External Affairs, Partnerships and Networks), Institut national d’excellence en santé et en services sociaux; Professor Ron Goeree (Director), PATH Research Institute, St Joseph’s Healthcare Hamilton; Dr. Janet Martin (Director — HTA), EPICOR & HITEC; Matthew Brougham (Vice-President — Products and Services), CADTH

We asked an expert panel to come up with ways to improve the relevance, timeliness, quality, and impact of health technology assessment in Canada. The panel will present their top 10 ideas. Session attendees will provide immediate input by voting for the ideas they think are truly “big ideas for HTA.”
Committees

CADTH would like to acknowledge the hard work and tremendous effort of these committee members.

**Symposium Moderator**

**Mr. Peter Chinneck**, Special Assistant to the CEO, Canadian Agency for Drugs and Technologies in Health

**Symposium Coordinators**

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Delta St. John’s Hotel and Conference Centre
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