PRELIMINARY PROGRAM
(As of February 21, 2020)

SATURDAY, APRIL 18, 2020

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<td>8:00 a.m. to 5:00 p.m.</td>
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<td>8:00 a.m. to 9:00 a.m.</td>
<td>MORNING WORKSHOP REGISTRATION</td>
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<td>9:00 a.m. to 4:00 p.m.</td>
<td>Workshop FD-1 Fields, Filters, and Fun: Incorporating Creativity and Craft Into Database Literature Searches</td>
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*Workshop FD-1*
*Fields, Filters, and Fun: Incorporating Creativity and Craft Into Database Literature Searches*

_Audience:_ Of interest to information specialists and other expert searchers.

_Level:_ Advanced.

_What you’ll learn:_ Participants will gain advanced database searching skills. The workshop will cover techniques to enhance standard biomedical searches to creatively find additional relevant citations while keeping search sizes manageable.

- Kelly Farrah, CADTH
- David Kaunelis, CADTH

_Note:_ Attendance is limited to 25 participants. This workshop is accredited by the Canadian Health Libraries Association for six contact hours.

_Abstract:_ Got #expertsearcher problems? Learn how to approach complex biomedical database searches with creativity and fun in this interactive full-day workshop. This advanced-level workshop will cover innovative ways that librarians and information specialists can use creativity and craft to enhance standard biomedical searches while still maintaining rigorous standards. Using the elements from the PRESS checklist as a guide, we will discuss techniques for handling difficult topic areas, compare and contrast database architectures, and critique database search filters. Each section has a hands-on activity designed to help boost the thoroughness and productivity of your literature searches. By the end of this workshop, participants will:

- have a better understanding of how database and platform structures can be used to improve search retrieval and efficiency
- be able to incorporate various tools, including text mining software and subject heading browsers, within their work to improve search retrieval and efficiency
- learn how creative thinking can be effectively incorporated into the database search process while maintaining rigorous standards
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<th>Time</th>
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| 9:00 a.m. to 12:00 p.m. | **Estimating Health Care Costs Using Health Administrative Data and Phase-of-Care Costing**  
*Audience:* Of interest to researchers, HTA producers, and health care professionals.  
*Level:* Intermediate.  
*What you’ll learn:* Participants will gain an appreciation of the concepts and relevance of costing studies using health administrative data, and how to design and conduct population-based costing studies using propensity score matching and phase-of-care costing methods.  
- Dr. Beate Sander, Population Health Economics Research (PHER), University Health Network  
- Stephen Mac, Institute of Health Policy, Management and Evaluation (IHPME), University of Toronto  
- Ryan O’Reilly, University of Toronto  
*Note:* Attendance is limited to 20 participants.

*Abstract:* Decision-makers routinely consider economic evidence for resource allocation decisions. However, high-quality cost data to inform economic evaluations is often lacking. The availability of large administrative databases and the evolution of costing methods using these databases provide an extraordinary opportunity to estimate real-world health care costs. This workshop will provide an overview of key concepts of cost-of-illness studies and introduce methods of cost-of-illness studies using health administrative data. Typically, exposed subjects (diseased) — identified using a variety of means, including disease registries and diagnostic codes in administrative data — are matched to unexposed subjects (non-diseased) to estimate attributable health care costs. We will illustrate how concepts of propensity score matching of exposed to unexposed subjects are used to minimize confounding and describe the use of the phase-of-care costing approach for the estimation of lifetime costs. Phase-of-care costing assigns the available observation time of each patient to distinct phases consistent with the disease trajectory. By combining phase-specific costs with survival distributions, it is possible to produce synthetic estimates of long-term costs using data from only a few years. This workshop will use a step-by-step approach to discuss concepts from study to the interpretation of results using a case study. Participants will use key concepts acquired in theory bursts to complete a high-level costing exercise using the data provided. Finally, the potential roles and use of this cost data for model-based economic evaluations will be discussed to gain an appreciation of the interplay of model development and costing studies to inform economic evaluation.

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<th>Time</th>
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| 9:00 a.m. to 12:00 p.m. | **Delving into the Literature: What Does the Evidence Really Say?**  
*Audience:* Of interest to health care professionals.  
*Level:* Introductory  
*What you’ll learn:* 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 to assist their decision-making.  
- Dr. Britt Cooper-Jones, CADTH  
- Sarah Garland, CADTH  
- Dr. Joanne Kim, CADTH  
*Note:* Attendance is limited to 30 participants.
### Abstract:

"Clinical trials show..."

"A clinical practice guideline recommends..."

"Statistically significant results demonstrate..."

Health care professionals, policy-makers, and patients alike are bombarded with information and statements like this on a daily basis. With limited time but an abundance of studies, how can we make sense of it all? Do you turn to various interpretations of the literature, but wonder if they are truly relevant to your setting? Do you wish you could assess published papers for yourself, but don’t know where to start or what questions to ask? Join CADTH for an introductory hands-on workshop that will enhance your knowledge of, and confidence with, critical appraisal. This session will explain several different types of published research and highlight the most important things to look for when determining the quality of studies. A significant portion of the workshop will be dedicated to applying and practicing critical appraisal skills in small groups. Sample papers will be circulated in advance, and participants will need to pre-read the papers in preparation for interactive discussions. Geared to health care professionals, decision-makers, and patients needing quick-assessment skills to evaluate scientific papers, this workshop will appeal to anyone who wants to gain an introductory comfort in interpreting medical literature.

### 9:00 a.m. to 12:00 p.m. Workshop AM-3

**Conducting Economic Evaluations in Child Health**

**Audience:** Of interest to HTA producers and users, especially those working in child health who produce or consider pediatric health economic evidence.

**Level:** Intermediate

**What you’ll learn:** Participants will gain a deeper understanding of the application of economic evaluation methods to child health.

- Dr. Wendy Ungar, SickKids Research Institute
- Dr. Myla Moretti, The Hospital for Sick Children (SickKids)
- Kate Tsiplova, SickKids Research Institute

**Abstract:**

**Background:**

With the growth in using economic evaluation to inform budget decisions, challenges in applying standard methods to special populations are increasingly apparent. This is especially true for pediatric economic evaluation. Compared to adults, children display unique patterns of morbidity and mortality, unique patterns of health resource use, and depend on a parent or caregiver to act as gatekeeper and reporter. Moreover, valid methods to measure health state utilities in newborns, infants, and toddlers do not exist. These issues create challenges for the conducting of economic evaluation in children.

**Description:**

Specific challenges include capturing the full spectrum of social and physiological impacts, defining outcome measures for the very young, taking developmental change into account, separating parent and child preferences, extending costing beyond the health care system to include school and community resources, determining productivity costs for children and their parents and caregivers, using life-long time horizons, costing stages of development, developing valid and reliable instruments for assessing utility and quality of life in children, using parent proxy measures for costs and outcomes, and choosing the appropriate unit of analysis.

**Objectives:**

- to provide a basic understanding of conducting health economic evaluations in children
| 9:00 a.m. to 12:00 p.m. | Workshop AM-4  
**When Off-the-Rack Doesn't Fit: Alternative Methods for Estimating Preferences for Specific Health Conditions**

*Audience:* Of interest to health care professionals and intended for decision-makers, researchers, and clinicians who have at least a basic understanding of interpreting cost-utility evaluations and/or measuring preference-based HRQoL.

*Level:* This is an intermediate-level workshop intended for decision-makers, researchers, and clinicians who have at least a basic understanding of interpreting cost-utility evaluations and/or measuring preference-based health-related quality of life (HRQoL).

*What you'll learn:* Participants will learn the importance and relevance of condition-specific preferences for assessment of quality of life; methods for developing indirect condition-specific, preference-based, health-related quality of life instruments; and mapping utilities from condition-specific descriptive instruments.

- Teresa Tsui, Toronto Health Economics and Assessment (THETA) Collaborative
- Dr. Peter Dixon, University of Toronto
- Dr. Murray Krahn, Toronto Health Economics and Assessment (THETA) Collaborative
- Karen Bremner, Toronto Health Economics and Assessment (THETA) Collaborative

*Abstract:*

Preference is a global measure of HRQoL and is frequently expressed as a utility anchored at 0 (dead) and 1 (perfect health). Utility can be applied to a health state and, when multiplied by the amount of length of time spent in a particular health state, is used to calculate a composite measure — quality-adjusted life years — which has applications in cost-effectiveness analyses and clinical decision-making.

Preference can be measured directly using standard methods (e.g., time trade-off, standard gamble) or inferred more efficiently using indirect preference-based instruments (e.g., EuroQol 5-Dimensions, Health Utilities Index). Indirect generic preference-based instruments are applicable to all health conditions. With this broad scope, they may lack content important to a particular disease, condition, or intervention, challenging the validity of the measured utilities. The development of condition-specific, preference-based instruments is one strategy to address this limitation.

This workshop will include an overview of methods that can be used to generate condition-specific, preference-based instruments:

- *de novo* development of a stand-alone instrument
- modifying an existing psychometric HRQoL instrument
- developing a bolt-on module expanding an existing dimension for an existing generic preference-based instrument.

Hands-on exercises will help participants compare methods and determine the circumstances for when each method would be most suitable.
1:00 p.m. to 4:00 p.m.  
**Workshop PM-1**  
*Rapid Reviews: From Decision Problem to Research and Decision-Making*  

*Audience:* Of interest to policy-makers and other decision-makers.  

*Level:* Introductory.  

*What you'll learn:* Participants will receive an introduction to rapid review methodology and will learn how these types of reviews can be used to support decision-making.  

- Elizabeth Carson, CADTH  
- Danielle Rabb, CADTH  
- Andrea Smith, CADTH  
- Dr. Leigh-Anne Gillespie, CADTH  

*Abstract:* To be of value to decision-makers, evidence syntheses need to be both timely and usable. Rapid reviews are a set of methodologies that attempt to balance rigour with timeliness. Participants in this half-day, interactive workshop will be introduced to rapid review methodology, including how decision problems are used to inform research questions, literature search methods and the trade-off between sensitivity and volume, and abbreviated approaches for synthesizing the evidence. You will review completed rapid reviews, critique their strengths and limitations, and evaluate examples for suitability and utility from the perspective of decision-makers. Participants will gain an understanding of:  

- the concept of rapid reviews  
- the need for, and utility of, rapid reviews as an HTA product  
- methodological approaches that differentiate rapid reviews from traditional systematic reviews  
- practical issues that have emerged from experiences in the production of rapid reviews and ongoing initiatives to address some of these challenges.

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1:00 p.m. to 4:00 p.m.  
**Workshop PM-2**  
*Applied Machine Learning for Health Data: Fundamental Concepts and Hands-On Practical Application*  

*Audience:* Of interest to those who want to know more about machine learning and how to apply the methods. This includes students, analysts, researchers, policy-makers, and HTA producers.  

*Level:* Intermediate  

*What you'll learn:* Participants will leave with a sound understanding of important concepts and methods in machine learning (ML), focusing on hands-on practical application to large health data.  

- Dr. Nicholas Mitsakakis, University of Toronto—University Health Network  

*Abstract:* Over the recent years, artificial intelligence (AI) has been showing significant promise to revolutionize health care and to facilitate the translation of RW data to reliable evidence. ML, a branch of AI, has been proven to be particularly successful for tasks such as prediction (e.g., of events such as severe asthma exacerbations) and classification (e.g., diagnosis of conditions using image recognition patterns). The purpose of this workshop is to present and explain fundamental concepts of ML, as well as to describe a number of popular ML methods and to illustrate how these can be used in practice for health-focused applications. Concepts such as supervised and unsupervised learning and overfitting will be discussed, while techniques such as resampling and cross-validation will be described. Some necessary theoretical background will be covered; however, the main
focus will be on hands-on practical application using large health data. Participants will learn how to write scripts and use functions and packages of the R software system to perform analysis and apply ML methods to RW health data. Participants are required to have some previous knowledge of R (basic level is sufficient), as well as a basic understanding of statistics, including regression. However, no previous programming or advanced statistical knowledge is needed.

| 1:00 p.m. to 4:00 p.m. | Workshop PM-3  
**Designing Research to Inform Decision-Making Using Value of Information Analyses**  

*Audience:* Of interest to policy-makers.  
*Level:* Intermediate.  
*What you’ll learn:* This workshop introduces four value of information (VoI) measures and highlights how VoI can determine research priorities that support decision-making. The assumptions of a VoI analysis and methods to display results graphically will also be presented.  
- Dr. Anna Heath, The Hospital for Sick Children (SickKids)  

*Note:* Attendance is limited to 25 participants.

*Abstract:* VoI is a concept from decision analysis that considers whether the current evidence base for a health economic decision model is sufficient to make policy decisions. VoI can then be used to inform future research allocation. Furthermore, VoI measures can direct future research by determining the model inputs with the greatest influence on decision uncertainty. Finally, VoI methods can determine the optimal design for a research study that reduces decision uncertainty as efficiently as possible. Despite this versatility, VoI has rarely been used in practice because of a lack of familiarity, difficulties interpreting these measures, concerns about the assumptions underpinning them, and computational complexity. This workshop aims to address these issues by introducing the general concepts behind VoI, presenting key VoI measures and highlighting where they can be most useful in directing future research. It also demonstrates graphical presentations of these measures and discusses how to critically evaluate VoI analyses and their underlying assumptions. The workshop is a mixture of lectures, computer-based examples, and discussion sessions. Excel worksheets and R code to calculate VoI measures and highlight a Web-based interface for VoI calculations will be provided. Participants will then discuss and interpret examples of VoI analysis from the literature. Participants should have some knowledge of health economic evaluation/HTA and probabilistic sensitivity analysis (PSA).

| 1:00 p.m. to 4:00 p.m. | Workshop PM-4  
**Supporting Decision-Making in an Uncertain Future: A Hands-On Introduction to Horizon Scanning in Health Technology Management**  

*Audience:* Of interest to HTA producers.  
*Level:* Introductory  
*What you’ll learn:* By the end of this workshop, you will understand the role horizon scanning plays in health technology management (HTM), know about sources and processes to identify and prioritize horizon scanning topics, and be able to apply processes to real-world examples.  
- Jeff Mason, CADTH  

*Note:* Attendance is limited to 25 participants.
Abstract: Thousands of new medical devices are approved for use in Canada each year and many more enter the health care system without requiring approval. Often promoted through marketing and media hype, decision-makers face uncertainty about the potential value and impact these technologies may have on the health care system. Horizon scanning — “the systematic identification of health technologies that are new, emerging or becoming obsolete and that have the potential to effect health, health services and/or society” — is an essential component of the HTM toolkit that can be used to support decision-making across the technology life cycle. Using examples from CADTH’s medical devices and clinical interventions horizon scanning service, this half-day, hands-on workshop will teach attendees:

- what horizon scanning is
- the role of horizon scanning in HTA
- common sources of horizon scanning topics
- a process and framework for horizon scanning topic identification and prioritization.

1:00 p.m. to 4:00 p.m.

Roundtable Discussion
It’s a Patient Takeover! Blue-Skying Patient Engagement in HTA/HTM

This roundtable discussion is an opportunity for patients, patient group representatives, family caregivers, representatives of health charities, and others to get a better sense of what HTA and HTM are, the current state of patient input at CADTH, and how patient organizations and health charities perceive this state. Participants will also generate innovative patient engagement ideas for HTA and HTM.

- Dr. Christopher McCabe, Institute of Health Economics
- Sarah Berglas, CADTH
- Annette McKinnon, Canadian Arthritis Patient Alliance

Note: Attendance is by invitation, only. To express your interest in attending this session, please fill out the following form. You will receive an email confirmation from the Symposium Events team when your registration is confirmed.

Abstract: Patients are key stakeholders in HTA and HTM. To productively contribute, a basic understanding of the key concepts and the current state of patient engagement in these processes are required. Developed by patients for patients and members of the public, this session intends to generate innovative ideas for effective and impactful patient engagement with HTA and HTM. As such, it is meant to be as barrier-free as possible for patients who wish to attend, with a commitment from the CADTH patient engagement team to make this session free to attend either in person or virtually. Co-moderated by a patient and a researcher, the session will first lay a foundation regarding the basics of HTA and HTM — their purposes and methods (Dr. Christopher McCabe); current methods for patient engagement with HTA and HTM at CADTH (by a member of the CADTH team); and insights from the patient community about these current methods (via a representative of the patient community). Following the presentations and questions, participants will break into groups and be provided with questions to help brainstorm and report back on their ideas for “best in class” patient engagement in HTA and HTM. The ultimate goal is to generate a report for CADTH, other HTA agencies, and the broader health policy-making community about innovative approaches they could consider for patient engagement, with aims for continuing to push patient engagement practices forward.
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<td>8:00 a.m. to</td>
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<td>9:00 a.m. to</td>
<td><strong>Workshop FD-2</strong></td>
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<td>4:00 p.m.</td>
<td>**NMA, MAIC, STC, PSM: Understanding the Various Indirect Treatment</td>
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<td>**Comparison Methods and Which Method Should Be Used to Support HTA</td>
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<td><strong>and Reimbursement Submissions</strong></td>
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<tr>
<td><strong>Audience:</strong></td>
<td>Of interest to HTA producers.</td>
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<td><strong>Level:</strong></td>
<td>Introductory</td>
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| **What you'll  | This workshop will provide: (i) an introduction to ITCs, including NMA,
| learn:**       | MAIC, STC and PSM; (ii) real-world examples of HTA submissions and rationale for ITC methods used; (iii) a case study involving developing a submission package to CADTH. |
| **Dr. Chris     | • Dr. Chris Cameron, EVERSANA                                        |
| Cameron,        | • Dr. Brian Hutton, Ottawa Hospital Research Institute (OHRI)        |
| EVERSANA        | • Tim Disher, PhD Student, EVERSANA                                  |
|                 | • Anja Haltner, EVERSANA                                             |

**Abstract:** Indirect treatment comparisons (ITC) are increasingly used to support health care decision-making. Guidelines for the conducting and transparent reporting of ITCs have been published, but few describe how to choose the most appropriate indirect comparison method to align with analytic objectives while considering the types of data available. This workshop will describe how to select the most appropriate ITC method to support HTA and reimbursement submissions. In this workshop, a variety of ITC methodologies that differ in the type of data available and the number of treatments compared will be presented. Commonly used ITC methods such as network meta-analysis (NMA), matching-adjusted indirect comparisons (MAIC), simulated treatment comparisons (STC), and propensity score matching (PSM) will be discussed in depth, with concepts driven by the presentation of motivating examples. The workshop will also provide guidance on selecting the appropriate ITC method based on key considerations such as the presence of heterogeneity and inconsistency, the availability of individual patient-level data, the ability to perform meta-regression analysis, limitations of clinical trial data, and the number of comparators of interest. Real-world case studies of HTA submissions will be described including the ITC methods used and the rationale for the ITC method chosen. There will also be an interactive hands-on component where groups will be presented with a case study, simulated data, and will have to select the ITC method(s) and a package for submission to CADTH.

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<tr>
<td>12:00 p.m.</td>
<td>**An Introduction to Health Technology Assessment and Health Technology</td>
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<td><strong>Management</strong></td>
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<td><strong>Audience:</strong></td>
<td>Of interest to anyone new to HTA and HTM, including patients, students,</td>
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<tr>
<td><strong>Level:</strong></td>
<td>policy-makers, health care professionals, and anyone attending the CADTH</td>
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<td>**What you'll</td>
<td>Symposium for the first time.</td>
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<td>learn:**</td>
<td><strong>Participants will leave with an understanding of HTA and HTM, where</strong></td>
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<td></td>
<td><strong>they fit in the Canadian health care system, how they relate to other</strong></td>
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<td><strong>programs in the drug and medical devices spaces, opportunities to</strong></td>
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<td><strong>engage in HTA processes, and future trends.</strong></td>
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<td>• Don Husereau, University of Ottawa</td>
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**Abstract:** Attendees will gain a better understanding of what HTA and HTM are, become
more familiar with key concepts and terminology, and learn the role of common analytic and deliberative approaches. Participants will be introduced to HTA and HTM principles and practices, including approaches to assess clinical effectiveness (benefits and harms), meta-analysis and modelling, cost-effectiveness, ethical issues, and organizational and implementation issues.

By the end of the workshop, participants will be able to:

- describe HTA and HTM, and their connection to health care decision-making
- describe best practices in HTA and HTM
- describe best practices in assessing clinical effectiveness (benefits and harms) and cost-effectiveness
- describe approaches to assessing other aspects of the impact of technology and methods for integrating societal and stakeholder values
- describe best practices in deliberative approaches and creating and using recommendations.

9:00 a.m. to 12:00 p.m.

**Workshop AM-6**

**Introduction to Decision Modelling Using R**

*Audience:* Of interest to health technology assessment (HTA) producers.

*Level:* Introductory

*What you’ll learn:* This course introduces participants to the fundamental knowledge and skills to build decision models for economic evaluation, such as decision trees and Markov models, using the programming language R.

- Dr. Petros Pechlivanoglou, The Hospital for Sick Children (SickKids)

*Note:* Attendance is limited to 25 participants.

*Abstract:* This workshop will cover the basics of building decision models using R. A very brief review of basic R functions commonly used in decision modelling (import/export data, data handling, basic distributions, "if" and "for" loops etc.) will be provided to the participants as a self-study exercise in advance before the course, and very briefly covered during the course. During the course, participants will be constructing a simple decision tree using R. A base-case analysis, as well as one-way sensitivity analyses, will be conducted. Subsequently, a simple Markov model will be designed using R. Base-case, multi-way, and probabilistic sensitivity analysis will be conducted. Results of all models will be presented in tabular and graphical form. Principles of good modelling practices using R (e.g., consistency and proper documentation) and the use of reporting tools in R (e.g., RMarkdown and Shiny) will be outlined. Finally, advanced functionality of R in decision modelling will be briefly discussed.

By the end of this workshop, the participants will be able to:

- build a simple decision tree in R
- build a simple Markov model in R
- import parameter data into the R environment
- assign distributions to model parameters and conduct probabilistic sensitivity analysis in R
- create and export tabular and graphical representations of the results of the decision model
- understand the advantages associated with using R for conducting and presenting the results of a decision model.

All course material will be provided to participants after the course for future use.
| 9:00 a.m. to 12:00 p.m. | **Workshop AM-7**  
Plain Language and Clearer Communication: Making Health Research Make Sense  

*Audience:* Of interest to anyone who needs to explain research and complex health topics clearly to people who may not have a research background.  
*Level:* Introductory.  

*What you’ll learn:* Participants will learn why plain language is necessary and worth the effort, and will discover the steps and skills needed to write well in plain language. Helpful resources will be identified throughout the workshop.  
- Barbara Greenwood Dufour, CADTH  
- Elizabeth Jean Betsch, Ontario Health  

*Abstract:* Health care decision-making involves everyone. But the information for making these decisions is often not accessible by everyone. That is, when medical research information is made available, it is often not communicated in a way that is understandable or useful to a lay audience. This is where “plain language” comes in. You may have heard about plain language as a way to more effectively communicate information from specialized fields to the general public. According to Plain Language Association International (PLAIN), plain language is when “wording, structure, and design are so clear that the intended audience can easily find what they need, understand what they find, and use that information.” But how do we put plain language principles into practice? This workshop will provide you with tips and tools to help you write documents that are understandable and useful to any stakeholder group. Attendees will learn about specific challenges of communicating research to a non-research audience, gain practical tips for addressing those challenges and developing reader-focused content, and work through a step-by-step approach to planning a plain language communication project. By the end, attendees will be able to make research-related information resonate with anyone they wish to reach.  

| 9:00 a.m. to 12:00 p.m. | **Workshop AM-8**  
Combining Different Types of Evidence on Effectiveness, Implementation, and Views to Better Understand Complex Interventions  

*Audience:* Of interest to HTA producers.  
*Level:* Introductory  

*What you’ll learn:* Participants will be able to: (i) articulate the differences between traditional effectiveness reviews and mixed-methods research syntheses (MMRS); (ii) identify when an MMRS would be appropriate; (iii) demonstrate an understanding of the different stages of MMRS.  
- Dr. Quan Nha Hong, Institut national d’excellence en santé et en services sociaux (INESSS) and Evidence for Policy and Practice Information and Coordinating Centre (EPPI-Centre)  
- Dr. Ginny Brunton, Ontario Tech University  

*Note:* Attendance is limited to 30 participants.  

*Abstract:* The aim of this workshop is to introduce HTA producers to a type of literature review that combines different types of evidence on effectiveness, implementation, and people’s perspectives, often named MMRS. After this workshop, participants will: (i) understand how and why MMRS can contribute to evidence-informed decision-making; (ii) know the steps to conduct MMRS; (iii) know the strategies for integrating and synthesizing
different types of evidence.
Description: Decision-makers often face complex issues that cannot be fully addressed using only one type of evidence. In several areas including public health, mental health, rehabilitation, and social care, interventions are often complex (they include several components and involve various players). Several synthesis methods have been developed to address complex interventions. Also, several methods have integrated different types of evidence to address complementary questions such as: “Does an intervention work; why or why not?” “How does it work and for whom and in what context?” Combining different types of evidence can be particularly useful in providing more complete, meaningful, practical, and useful recommendations to patients, clinicians, decision- and policy-makers, and researchers. For example, the synthesis of people’s perspective can complete findings from effectiveness studies by providing better understanding of the impact of contextual factors and identifying the outcomes important for patients. In this workshop, concrete examples of reviews combining different types of evidence will be presented, with structured learning activities. The content will include the definition of MMRS, benefits, steps, synthesis designs and methods, challenges, and available resources.

| 9:00 a.m. to 12:00 p.m. | Workshop AM-9  
Finding the Evidence: Practical Tools for Literature Searching  

**Audience:** Of interest to patients, decision- and policy-makers, health care professionals, and students.  
**Level:** Introductory  
**What you'll learn:** This workshop introduces participants to best practices for approaching literature searches for health-related questions. Participants will have hands-on practice developing a research question into a literature search and learn about evidence-based health resources and tools.  
- Sarah McGill, CADTH  
**Note:** Attendance is limited to 40 participants.  

**Abstract:** Do you need evidence for a health decision and are faced with uncertainty in how to approach searching for it? Or have frustrations encountering too much or too little information? This introductory half-day workshop will introduce participants to best practices in how to approach a literature search in a systematic, structured way to best find evidence for health-related questions.  
**Course objectives:** Participants will learn about systematic literature approaches from CADTH Information Specialists; gain hands-on practice developing a research question into a structured search that can be run in PubMed; build an understanding of which evidence-based sources to start with, including an introduction to the CADTH Grey Matters tool; have exposure to the key elements in appraising evidence; and learn about other search tips and tricks including using study design filters and how to efficiently use Google. This workshop will be of value to anyone required to conduct literature searches to support their work.

| 9:00 a.m. to 12:00 p.m. | Workshop AM-10  
Diagnostic Test Accuracy Meta-Analysis  

**Audience:** Of interest to HTA producers.  
**Level:** Intermediate  
**What you'll learn:** Knowledge of methods needed to carry out a meta-analysis of diagnostic test accuracy, including the methods needed to correct for imperfect reference standard.
• Dr. Nandini Dendukuri, McGill University
• Ian Schiller, McGill University Health Centre—Research Institute

Note: Attendance is limited to 20 participants.

Abstract: The goal of this interactive workshop is to provide participants with an overview of the statistical methods necessary for carrying out a meta-analysis of diagnostic accuracy. Bivariate models necessary to handle the two parameters involved will be covered — sensitivity and specificity of the test under evaluation. Also covered will be how these models can be extended to correct for the bias that arises when a reference test is not perfect. Examples from published HTAs will be used. The workshop format will include lectures followed by tutorials for a hands-on experience.

1:00 p.m. to 4:00 p.m.

Workshop PM-5
Pan-Canadian Pharmaceutical Alliance Update

Audience: Of interest to everyone interested in pharmaceutical price negotiations in Canada.
Level: Introductory.
What you'll learn: Participants will leave with an understanding of the pan-Canadian Pharmaceutical Alliance (pCPA's) evolution and achievements, updated information on current status of negotiations, and how the pCPA is managing uncertainty.
• Sang Mi Lee, pCPA Office

Abstract: The workshop will start with an overview of pCPA's evolution and achievements, followed by an update on current negotiations, recent process improvements, as well as future priorities and activities. The speakers will then present on how the pCPA is managing uncertainties (e.g., innovative agreements for drugs with significant uncertainties in clinical evidence and/or cost-effectiveness and/or budget impact; how the pCPA is preparing for potential federal changes that may impact its work; etc.). Participants will be encouraged to ask questions throughout the talk, with a focus on open dialogue and will also be engaged in an interactive small-group session to identify ways to improve understanding, communication, and collaboration among all stakeholders.

1:00 p.m. to 4:00 p.m.

Workshop PM-6
Reducing Uncertainty: The Need for Qualitative Research in Evidence-Informed Decision-Making

Audience: Of interest to policy-makers.
Level: Introductory
What you'll learn: Participants will become familiar with qualitative research principles, common methods used, and when and how qualitative research can be practically used to influence health policy and practice.
• Dr. Laura Weeks, CADTH
• Brendalynn Ens, CADTH
• Dr. Deidre DeJean, CADTH
• Sarah Garland, CADTH
• David Wells, Ontario Health

Note: Attendance is limited to 30 participants.

Abstract: Qualitative evidence enables insights into the contexts that shape the use of, and therefore the effectiveness of, health care interventions and helps to understand their acceptability and feasibility, and their perceived value to health service users. Within HTA, an interest in qualitative evidence reflects a policy imperative to ensure that the needs,
preferences, and experiences of patients are central to decisions on technologies, treatments, or service redesign. Using illustrative examples from past HTAs, the workshop will provide an overview of qualitative research principles, common qualitative methods used in HTA, and describe and address some common misconceptions regarding these methods. A focus will be on the appropriate use of qualitative evidence in HTA to practically influence health policy and practice. First, the types of policy questions that qualitative evidence can (or cannot) inform will be identified, and what makes a “good” research question. Next, a review of common approaches to qualitative research in HTA, focusing on qualitative evidence synthesis as the predominant method, will be conducted. An introduction on how to interpret a qualitative evidence synthesis, including how to appraise its quality, illustrating the unique insights offered through qualitative evidence, and how qualitative evidence can help inform interpretations and understandings of other HTA evidence will end the workshop. Each part of this workshop involves a short presentation followed by interactive small-group exercises in which participants will gain hands-on experience.

1:00 p.m. to 4:00 p.m.

**Workshop PM-7**

**From Lingo to Application: The Use of Confounder Summary Scores (Propensity Scores and Disease Risk Scores) in Health Technology Assessment Based on Real-World Data**

*Audience:* Of interest to HTA producers.

*Level:* Introductory

*What you'll learn:* Participants will: (i) better understand confounding and confounder summary scores; (ii) be able to estimate propensity scores and disease risk scores; (iii) know their strengths and limits; (iv) have discussed their application within HTA.

- Dr. Jason, Guertin, Université Laval
- Dr. Mina Tadrous, Women’s College Hospital

*Abstract:* Interest in real-world evidence (RWE) using real-world data (RWD) for HTAs has recently skyrocketed. RWD can provide researchers and decision-makers insights on the utilization, effectiveness, and cost of technologies; such studies are often referred to as observational studies. Despite their strengths and value, observational studies are prone to numerous types of biases, namely confounding bias. These biases, if uncontrolled for, may lead to erroneous results and mislead researchers and decision-makers. The purpose of this workshop is to introduce participants to two methodologies, propensity scores and disease risk scores, which are frequently used to adjust for confounding within observational studies. Although both methodologies were developed more than 30 years ago, their use and applications remain unclear. Using practical examples based on empirical and simulated data, participants will be exposed to the strengths and weaknesses of the two methodologies and will learn when and how to use them within comparative effectiveness studies and economic evaluations based on RWD.

1:00 p.m. to 4:00 p.m.

**Workshop PM-8**

**Health Technology Management Associated With Novel Clinical Trials Designs**

*Audience:* Of interest to HTA producers.

*What you'll learn:* Participants will: learn the difference between basket trials, umbrella trials, and platform trials, including the advantages and limitations of each; discuss methods to evaluate the clinical trial data generated from these trials and the associated cost-effectiveness; discuss patients’ values, ethics, and implementation issues (testing) associated with precision medicines in oncology; and discuss health technology management (HTM) and re-assessments of precision medicines in oncology.
Abstract:
Advancements in genomics have changed the paradigm of clinical trial design in oncology. Master protocols in which multiple parallel drug studies are conducted under one overarching protocol are increasingly used to test multiple hypotheses. A 2019 systematic review (Park et al., Trials, 2019) identified 83 master protocols, most of them in the field of oncology (N = 76/83) and ongoing (N = 68/83) at the time of the review. Master protocols are often classified as basket trials (N = 49/83), umbrella trials (N = 18/83), and platform trials (N = 16/83).

Compared to traditional clinical trials, basket trials test therapies for a specific genetic marker regardless of the anatomical location, while umbrella trials test multiple targeted therapies for a single tumour type that is stratified into subgroups by molecular alteration. Platform trials, which test several interventions against a common control group, allow interventions to enter and exit the trial under a Bayesian decision-rule framework based on demonstration of efficacy or futility. These trial designs have their own advantages and limitations.

Methods to understand clinical evidence, patient values and need, ethics, and implementation are increasingly being considered as part of HTM.

This session will present broad perspectives and considerations when assessing the evidence generated by these new study designs from an HTM perspective. The main objectives of this workshop are to:

- Provide an overview of basket trials, umbrella trials, and platform trials, and associated advantages and limitations.
- Discuss methods to evaluate the clinical trial data generated from these trials and associated cost-effectiveness.
- Discuss patients’ values, ethics, and implementation issues (testing) associated with precision medicines in oncology.
- Discuss Health Technology Management of precision medicines in oncology.

1:00 p.m. to 4:00 p.m.  
Workshop PM-9  
Survival Analysis and Decision Modelling in R

Audience: Of interest to HTA producers.  
Level: Intermediate.
What you'll learn: This is an introduction to survival analysis methods for model-based economic evaluations through practical examples in R. The advantages and disadvantages of each method will be discussed.

- Dr. Petros Pechlivanoglou, The Hospital for Sick Children (SickKids)

Note: Attendance is limited to 20 participants.

Abstract: Economic evaluations often rely on input from time-to-event or survival data. The unique characteristics of such data (i.e., right skewness, non-negative values, competing risks, censoring) require the use of more advanced statistical modelling techniques. Consequently, incorporating input from such statistical models into a model-based economic evaluation can be challenging. This course will teach participants how to appropriately integrate survival analysis data in decision models using R. We will provide an overview of the available methods (e.g., partitioned survival analysis, multi-state models, Markov/semi-Markov models, mixture cure models) and the advantages and disadvantages of each. The implementation of these methods in R will be outlined. Course participants will be asked to complete simple survival analysis exercises in the context of decision modelling to familiarize themselves with the main concepts. Finally, more advanced examples will be presented using different types of data (patient-level, life tables, digitized data from published curves). Participants will also discuss propagating parameter uncertainty from a parametric survival model to the outcomes of the decision model. By the end of the course the participants will be able to:

- understand the advantages and limitations of the different survival analysis methods when used in an economic evaluation context
- fit different parametric forms to survival data using R
- fit competing risks model and multi-state models in R
- integrate the results of different survival analysis models in a decision-modelling framework
- conduct probabilistic sensitivity analysis using survival models in R.

All R code used in the short course will be provided to participants for future use.

1:00 p.m. to 4:00 p.m.

Workshop PM-10
Finding the Grey: Searching for Regulatory and Safety Information on Pharmaceuticals and Medical Devices

Audience: Of interest to information specialists, librarians, researchers, health care professionals, and patient groups representations

Level: Introductory

What you'll learn: Participants will be guided on the regulatory and safety information available for medical devices and pharmaceuticals from major regulatory agencies including Health Canada, the US FDA, and the European Medicines Agency (EMA).

- Monika Mierzwinski-Urban, CADTH
- Melissa Severn, CADTH

Abstract: Hundreds of new drugs and medical devices are trying to reach world markets every year. Most of these health technologies go through various levels of regulatory scrutiny, which vary between different authorities depending on technology type and risk level. With the increasingly growing volume of regulatory and safety information published by these bodies, searching for quality evidence within these large information repositories can be challenging and time-consuming. This workshop will help participants understand the different approval processes for pharmaceuticals and medical devices. Participants will learn how to locate and effectively search regulatory and safety information for drugs and medical devices, focusing on approval status,
clinical efficacy, and post-marketing safety. The instructors will walk participants through the information available on Health Canada’s website, including the Notice of Compliance database, Medical Devices Active Licence Listing, Healthy Canadians database and Health Product InfoWatch. Information available from the FDA including Drugs@FDA, Devices@FDA, MedWatch, and MAUDE will also be presented, together with EMA European Public Assessment Reports (EPAR). Participants will be guided through the different classification systems for medical devices among the three major regulating bodies. Additionally, current issues and upcoming changes related to medical device and drug regulatory processes will be discussed. Relevant checklists such as the regulatory and safety sections of CADTH’s *Grey Matters* search guide will be highlighted, with hands-on exercises that illustrate these search aids in action.

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| 1:00 p.m. to 4:00 p.m. | **Workshop PM-11**  
*A Concise Guide on How to Calculate the Cost-Effectiveness Estimates and Characterize Uncertainty Using Person-Level Data*  
*Audience:* Of interest to researchers, producers and health care professionals.  
*Level:* Intermediate  
*What you’ll learn:* At the end of the session, participants will understand the concepts of person-level data in economic evaluations and observe real-world examples, and know how to generate cost-effectiveness estimates and characterize their uncertainty using person-level data and regression techniques.  
*Dr. Kepnapha Thavorn, Ottawa Hospital Research Institute*  
*Dr. Wanrudee Isaranuwatchai, St. Michael’s Hospital*  
*Abstract:* In an environment with constrained resources, understanding the value for money of a health intervention (e.g., medication, medical device) could support the process for funding and resource allocation decisions. Several analytical approaches and data sources can be used to assess the “value for money” of health interventions. Although aggregate data obtained from published literature are often used to populate decision analytic models to show the value for money of an intervention, they remove variability within groups and rely on certain assumptions. In today’s context, person-level data (e.g., those obtained from administrative databases, observational studies, or randomized controlled trials) are becoming more accessible. This workshop will introduce how person-level data could be used to show a cost-effectiveness of an intervention and assess the uncertainty around the cost-effectiveness findings. Regression techniques and how they can be used to estimate incremental cost-effectiveness ratio and incremental net benefit will be illustrated. The use of regression analysis is attractive for several reasons such as the fact that it allows for the adjustment of potential confounders and the investigation of whether the value for money of health interventions varies across subgroups. Also discussed will be methods to characterize the uncertainty of these cost-effectiveness estimates using parametric and non-parametric approaches. This workshop will illustrate concepts and the step-by-step conducting of person-level economic evaluations from research question formulation to results interpretation using case studies. At the end of the workshop, participants will have the information to start applying the concepts of person-level economic evaluations into their own work. |
<p>| 4:00 p.m. to 5:00 p.m. | <strong>STUDENT MEET AND GREET</strong> |
| 4:00 p.m. to 5:00 p.m. | <strong>PATIENT GROUP MEET AND GREET</strong> |
| 5:00 p.m. to 7:00 p.m. | <strong>WELCOME RECEPTION AND SCIENTIFIC POSTER EXHIBITION</strong> |</p>
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<tr>
<td>7:30 a.m.</td>
<td>Registration Desk Open</td>
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<td>7:30 a.m.</td>
<td>Buffet Breakfast</td>
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| 7:45 a.m.    | Breakfast Session M1                                                 | Decision Aids: Tools to Reduce Uncertainty in Diagnostic Imaging  
Dr. Martin Reed, The Children's Hospital of Winnipeg  
Anna Cooper Reed, University of Toronto |
| 7:45 a.m.    | Breakfast Session M2                                                 | Pharmaceutical Pricing Reform in Canada: An Overview of the PMPRB's New Price Review Process  
Dr. Etienne Gaudette, Patented Medicine Prices Review Board (PMPRB) |
| 7:45 a.m.    | Breakfast Session M3                                                 | Nordic Decision-Making: Real-World Data and HTA  
Kirk Geale, Umeå University and Quantify Research |
| 9:00 a.m.    | Official Opening                                                      |                                                                                                                                       |
| 9:30 a.m.    | Opening Plenary                                                       | Decision-Making in an Age of Uncertainty  
Uncertainty is a fact of life for every decision-maker in the health care system, whether a patient, health care provider, policy-maker, administrator, industry representative, or payer. Rarely are all the facts available when a new drug, medical device, diagnostic tool, or surgical intervention is introduced. It sometimes seems that the situation is getting worse as more and more innovative products, curative therapies, and disruptive technologies enter the market. In this session, speakers from different parts of the health system will lay out the challenges and opportunities they see in this age of uncertainty and what they need from HTA and HTM bodies to thrive despite uncertainty. |
| 10:45 a.m.   | Networking Break                                                      |                                                                                                                                       |
| 11:15 a.m.   | Concurrent Session A1 – Panel Discussion                              | Reducing Uncertainty and Driving the Uptake of Biosimilars: Lessons From the pan-Canadian Oncology Biosimilars Initiative  
Kathy Vu, Cancer Care Ontario  
Marc Geirnaert, CancerCare Manitoba  
M.J. DeCoteau, Rethink Breast Cancer  
Lisa Maslanka, Amgen Canada Inc.  
Dr. Leta Forbes, Durham Regional Cancer Centre and Cancer Care Ontario |
| 11:15 a.m.   | Concurrent Session A2 – Panel Discussion                              | Value- and Outcome-Based Agreements in Medical Devices to Manage Uncertainty  
Frederic Rupprecht, Johnson & Johnson Medical Device Companies  
Dr. Harindra Wijeyasurya, CADTH  
Erik Hellsten, Health Quality Ontario  
Dr. Fiona Miller, University of Toronto |
| 11:15 a.m.   | Concurrent Session A3 – Panel Discussion                              | Testing for the Age of Precision Medicine: Uncertainty, Challenges, and Future Directions  
Monette Greenway, Precision Rx-Dx |

Note: The schedule is subject to change.
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<th>Session/Activity</th>
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<tr>
<td>12:30 p.m. to 1:30 p.m.</td>
<td>NETWORKING LUNCH</td>
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</table>
| 1:30 p.m. to 2:45 p.m. | CONCURRENT SESSION B1 – ORAL PRESENTATIONS
ADDRESSING UNCERTAINTY
Decision-Making in the Face of Uncertainty: Experiences of Neurologists and Parents in the Use of Medical Cannabis for Children With Drug-Resistant Epilepsy
   - Jesse Elliott, University of Ottawa
Leveraging Automation in Health Technology Assessment: Implementation and Its Impact on the Characterization of Uncertainty
   - Daniel Wagner, University of Calgary
The Cost of Uncertainty: The Burden of Care of Failed Extubation in Intensive Care Units and Ways Forward
   - Sasha van Katwyk, Ottawa Hospital Research Institute
Proton Beam Therapy at a Canadian Centre: Untangling Uncertainty Using a Budget Impact Analysis
   - Dr. David Felipe Forero, McGill University Health Centre|
| 1:30 p.m. to 2:45 p.m. | CONCURRENT SESSION B2 – ORAL PRESENTATIONS
ARTIFICIAL INTELLIGENCE
Artificial Intelligence in Outcomes Research: A Systematic Review to Inform Decision-Makers
   - Dr. Pooyeh Graili, Quality HTA
Measuring the Uptake and Adoption of Artificial Intelligence Tools to Support Advanced Imaging Modalities in Canada
   - Andra Morrison, CADTH
Optimizing the Value of Artificial Intelligence: Anticipating a New Level of Complexity
   - Hassane Alami, INESSS
   - Dr. Michèle de Guise, INESSS|
| 1:30 p.m. to 2:45 p.m. | CONCURRENT SESSION B3 – ORAL PRESENTATIONS
HOT TOPICS
Vaccine Hesitancy: A Conceptual Model for Understanding the Factors that Influence Vaccine Decision-Making of Parents With Young Children
   - Umair Majid, University of Toronto
Under the Hood of Product Listing Agreements: The Continuing Evolution of the Non-Insured Health Benefits Product Listing Agreements Invoicing System
   - Andrew Portolesi, Indigenous Services Canada
Pharmaceutical Pricing Reform in Canada: A New Role for Health Technology Assessments
   - Dr. Étienne Gaudette, Patented Medicine Prices Review Board
The Cost “Changing the Game”: An Impact Assessment of CAR T-Cell Therapy
   - Scott Gavura, Cancer Care Ontario|
| 1:30 p.m. to 2:45 p.m. | CONCURRENT SESSION B4 – ORAL PRESENTATIONS
BIOSIMILARS |
How Extrapolation of Indications Is Applied in the Regulatory Approval of Oncology Biosimilars
- Sean Hopkins, Cancer Care Ontario

Biosimilars in Canada: Challenges and Opportunities
- Jared Berger, PMPRB

In an Era of Biosimilars, Can Originator Infliximab Pricing Remain Competitive in Treating Inflammatory Bowel Disease?
- Dr. Naazish Bashir, The Hospital for Sick Children (SickKids)

1:30 p.m. to 2:45 p.m. CONCURRENT SESSION B5 – ORAL PRESENTATIONS
FROM HTA TO HTM
- Jonathan Harris, CADTH

Swiss Federal Office of Public Health Disinvestment HTA Program
- Dr. Goedele van Haasteren, Swiss Federal Office of Public Health

Filling the Evidence Gap: The Role of Real-World Data in Guiding the Rational Dispersion of New Disruptive Technologies
- Laurie Lambert, INESSS

Building a Reassessment Framework for Cancer Drugs: Lessons Learned From the CanREValue Collaboration Mock Reassessment Exercise
- Wei Fang Dai, Cancer Care Ontario

1:30 p.m. to 2:45 p.m. CONCURRENT SESSION B6 – ORAL PRESENTATIONS
PATIENT AND PUBLIC ENGAGEMENT
(Re)Defining Legitimacy? Expertise and Public and Patient Involvement in Canadian Drug Assessment
- Dr. Katherine Boothe, McMaster University

Understanding Primary Care Patients’ Preferred Roles and Decisions in an Era of Uncertainty and Increased Health Technology
- Prof. Vidhi Thakkar, University of Toronto

A Public Advisory on HTA Decisions: An Opportunity to Help Determine Pharmacare’s Essential Medicines List?
- Colene Bentley, BC Cancer Research Centre

Patient Organizations’ Vision for Patient Engagement in New Product Reviews
- David Page, Canadian Hemophilia Society

1:30 p.m. to 2:45 p.m. CONCURRENT SESSION B7 – ORAL PRESENTATIONS
ONCOLOGY
The Cost-Effectiveness of Replacing Mammography With Tomosynthesis for Breast Cancer Screening in British Columbia
- Dr. Sonya Cressman, BC Cancer Research Centre

Developing the Breast Utility Instrument from the EORTC QLQ-C30 and the EORTC QLQ-BR45 to Measure Patient Preferences in Breast Cancer: Confirmatory Factor Analysis
- Teresa Tsui, Toronto Health Economics and Technology Assessment (THETA) Collaborative

“Prepared to Live With the Unknown”: Adult Cancer Patients’ Experiences with Uncertainty in Decision-Making About Learning Incidental Results From Genomic Sequencing
<table>
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<tr>
<th>Time</th>
<th>Session Description</th>
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<tr>
<td>2:45 p.m. to 3:15 p.m.</td>
<td>NETWORKING BREAK</td>
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</table>
| 3:15 p.m. to 4:30 p.m. | **CONCURRENT SESSION C1 – PANEL DISCUSSION**
|                | Getting Real About Real-World Evidence: Critical Steps and Essential Components for Building an Effective Program in Real-World Evidence Generation |
|                | • Dr. Winson Cheung, Cancer Control Alberta                                          |
|                | • Dr. Darren Brenner, University of Calgary                                         |
|                | • Devon Boyne, University of Calgary                                                |
|                | • Christie Farrer, Alberta Health Services                                          |
| 3:15 p.m. to 4:30 p.m. | **CONCURRENT SESSION C2 – PANEL DISCUSSION**
|                | Has CAR T-Cell Therapy Changed the Drug Review Paradigm in Canada?                  |
|                | • Dr. Christopher McCabe, Institute of Health Economics                             |
|                | • Dr. Michèle de Guise, INESSS                                                      |
|                | • Dr. Elizabeth Lye, Lymphoma Canada                                                |
|                | • Scott Gavura, Cancer Care Ontario                                                 |
|                | • Dr. Donna Wall, The Hospital for Sick Children (SickKids)                         |
| 3:15 p.m. to 4:30 p.m. | **CONCURRENT SESSION C3 – PANEL DISCUSSION**
|                | Is Clinician Participation in the CADTH pan-Canadian Oncology Drug Review (pCODR) Impactful on Decision-Making? |
|                | • Martine Elias, Myeloma Canada                                                    |
|                | • Dr. Maureen Trudeau, Sunnybrook Health Sciences Centre                           |
|                | • Dr. Tom Kouroukis, McMaster University                                           |
|                | • Kim Yoong, Astellas Pharma Canada Inc.                                            |
|                | • Marc Geirnaert, Cancer Care Manitoba                                             |
| 3:15 p.m. to 4:30 p.m. | **CONCURRENT SESSION C4 – PANEL DISCUSSION**
|                | Environmentally Preferable Health Technologies: The Role of HTA and Management      |
|                | • Dave Marchand, CADTH                                                            |
|                | • Prof. Beate Sander, University of Toronto                                         |
|                | • Prof. Steven Young, University of Waterloo                                      |
|                | • Dr. Edward Xie, University of Toronto                                            |
|                | • Prof. Fiona Miller, University of Toronto                                       |
| 3:15 p.m. to 4:30 p.m. | **CONCURRENT SESSION C5 – PANEL DISCUSSION**
|                | CADTH and Patients: A Paradigm Shift to Seeking Patient and Community Partnership |
|                | • Zal Press, CADTH Patient and Community Advisory Committee                        |
|                | • Marney Paradis, CADTH Patient and Community Advisory Committee                   |
|                | • Dr. Michelle Mujoomdar, CADTH                                                   |
|                | • Sarah Berglas, CADTH                                                            |
|                | • Tamara Rader, CADTH                                                             |
| 3:15 p.m. to 4:30 p.m. | **CONCURRENT SESSION C6 – PANEL DISCUSSION**
|                | Medical Cannabis — Consensus Guidance on the Use of Cannabinoids and Opioids in Chronic Pain |
|                | • Aaron Sihota, University of British Columbia                                     |
• Dr. Colleen O’Connell, Stan Cassidy Centre for Rehabilitation
• Dr. Mark Ware, Canopy Growth Corporation
• Dr. Paul Oh, University Health Network
• Dr. Judith Glennie, J.L. Glennie Consulting Inc.

3:15 p.m. to 4:30 p.m.

CONCURRENT SESSION C7 – PANEL DISCUSSION
Creating an Outcomes-Based Agreement: A Canadian Case Study
• Sang Mi Lee, pan-Canadian Pharmaceutical Alliance (pCPA) Office
• Angie Wong, Ontario Public Drug Programs
• Andre Vidal Pinheiro, Takeda
• Jonathan Soong, Takeda
• Rebecca Yu, Takeda
• Dr. David Armstrong, McMaster University

6:00 p.m. to 9:00 p.m.

SOCIAL EVENT – DINNER IN THE CLOUDS
Join us at the CN Tower for a spectacular evening of fun, food, and breathtaking views. You’ll arrive at 346 metres above-ground to the LookOut Level, where you’ll take in the unparalleled scenes of Toronto through the new floor-to-ceiling panoramic Window Walls. From there, you can look straight down below you through the Glass Floor. Enjoy hors d’oeuvres and dinner from the CN Tower’s award-winning menu that showcases the best Canadian- and Ontario-specific food and beverages. Prepare yourself for an informal networking evening with amazing sights, delicious food, and unique entertainment. Buses leave from the Sheraton Centre at 5:30 p.m.

TUESDAY, APRIL 21, 2020

7:30 a.m. to 5:00 p.m.

REGISTRATION DESK OPEN

7:30 a.m. to 9:00 a.m.

BUFFET BREAKFAST

7:45 a.m. to 8:45 a.m.

BREAKFAST SESSION T1
Implementing an Expanded Mandate for National Vaccine Decision-Making in Canada
• Dr. Matthew Tunis, Public Health Agency of Canada
• Dr. Shelley Deeks, Public Health Ontario
• Dr. Beate Sander, University Health Network
• Man Wah Yeung, Public Health Agency of Canada

7:45 a.m. to 8:45 a.m.

BREAKFAST SESSION T2
Drugs for Rare Diseases: The Promise Precision Medicine Has in Creating Certainty in an Uncertain World
• Rob Burtch, Cystic Fibrosis Canada
• Tammy Moore, ALS Society of Canada
• Dr. Felix Ratjen, The Hospital for Sick Children (SickKids)
• Dr. Larry Lynd, University of British Columbia

7:45 a.m. to 8:45 a.m.

BREAKFAST SESSION T3
A Case Study on the Spread of New Technology: Using Evidence and Partnership to Improve Clinical Delivery, Outcomes, and Costs of Transcatheter Aortic Valve Implantation (TAVI)
• Graham Woodward, CorHealth Ontario
• Mirna Rahal, CorHealth Ontario
• Jana Jeffrey, CorHealth Ontario
• Lauren Bell, Piexxus
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<tr>
<th>Time</th>
<th>Session</th>
<th>Topic</th>
<th>Speakers</th>
<th>Notes</th>
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<tr>
<td>7:45 a.m. to 8:45 a.m.</td>
<td><strong>BREAKFAST SESSION T4</strong></td>
<td>Can Ontario Administrative Data at ICES-Data &amp; Analytic Services (DAS) Be Used to Address Uncertainty?</td>
<td>Soo Jin Seung, HOPE Research Centre, Sunnybrook Research Institute</td>
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<td>Ryan Walton, AstraZeneca Canada</td>
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<td>Refik Saskin, ICES-DAS</td>
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<td>Dr. William Evans, McMaster University</td>
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<td>7:45 a.m. to 8:45 a.m.</td>
<td><strong>BREAKFAST SESSION T5</strong></td>
<td>The Next Generation of Health Leaders: How Evidence and Ingenuity Will Transform the (Uncertain) Future of Health Care</td>
<td>Evelyn Pyper, Janssen Inc.</td>
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<td>Dr. Zayna Khayat, SE–Saint Elizabeth Health</td>
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<td>Diana Martins, Ontario Drug Policy Research Network</td>
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<td>9:00 a.m. to 10:15 a.m.</td>
<td><strong>CONCURRENT SESSION D1 – PANEL DISCUSSION</strong></td>
<td>Therapeutic Vaccines: Managing the Uncertainty of the Post-Regulatory Process</td>
<td>Dr. Matthew Tunis, Public Health Agency of Canada</td>
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<td>Brent Fraser, CADTH</td>
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<td>Heather Logan, CADTH</td>
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<td>Dr. Trevor Richter, CADTH</td>
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<td>9:00 a.m. to 10:15 a.m.</td>
<td><strong>CONCURRENT SESSION D2 – PANEL DISCUSSION</strong></td>
<td>Addressing Uncertainties to Improve the Successful Management of HIV</td>
<td>Dr. Judith Glennie, J.L. Glennie Consulting Inc.</td>
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<td>Ron Rosenes, HIV/AIDS Legal Network</td>
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<td>Dr. Francisco Ibáñez-Carrasco, Dalla Lana School of Public Health, University of Toronto</td>
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<td>Muluba Habanyama, Canadian Foundation for AIDS Research</td>
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<td>9:00 a.m. to 10:15 a.m.</td>
<td><strong>CONCURRENT SESSION D3 – PANEL DISCUSSION</strong></td>
<td>Gene Therapies: What Happens After the Reimbursement Recommendation?</td>
<td>Andrea Lau, PDCI Market Access Inc.</td>
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<td>Wayne Critchley, Global Public Affairs</td>
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<td>Steven Hill, PTC Therapeutics Canada</td>
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<td>Dr. Annette Hay, Queen’s University</td>
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<td>Carolyn Bell, British Columbia Ministry of Health</td>
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<td>9:00 a.m. to 10:15 a.m.</td>
<td><strong>CONCURRENT SESSION D4 – PANEL DISCUSSION</strong></td>
<td>How Public Private Philanthropic Partnerships are Changing Funding and Evidence Generation in Alberta</td>
<td>Dr. Lawrence Richer, University of Alberta</td>
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<td>Mehmood Alibhai, Boehringer Ingelheim</td>
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<td>Jamie Bliss, University Hospital Foundation</td>
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<td>Norm Berberich, Takeda Canada</td>
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<td>10:15 a.m. to 10:45 a.m.</td>
<td><strong>NETWORKING BREAK</strong></td>
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<td>10:45 a.m. to 12:00 p.m.</td>
<td><strong>CONCURRENT SESSION E1 – ORAL PRESENTATIONS</strong></td>
<td>MENTAL HEALTH</td>
<td>Patterns of Antipsychotic Drug Use Before Initiation of Long-Acting Injectable Antipsychotic Drugs</td>
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<td>Donica Janzen, University of Manitoba</td>
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<td>10:45 a.m.</td>
<td>CONCURRENT SESSION E2 – ORAL PRESENTATIONS</td>
<td>Universal Screening of Newborns for Biliary Atresia: A Cost-Effectiveness Comparison of Alternative Strategies</td>
<td>Lisa Masucci, University of Toronto</td>
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<td>Modelling to Support Health Technology Decision-Making in British Columbia: The Case of Universal Mismatch Repair Reflex Testing for Lynch Syndrome</td>
<td>Dr. Shahzad Ghanbarian, University of British Columbia</td>
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<td>Methodological Considerations to Address the Uncertainty Associated With Economic Evaluations for Antimicrobial-Resistant Bacteria Prevention and Control Programs</td>
<td>Stephen Mac, University of Toronto</td>
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<td>10:45 a.m.</td>
<td>CONCURRENT SESSION E3 – ORAL PRESENTATIONS</td>
<td>When Less Means More: Insight into the Spending on Expensive Drugs for Rare Diseases</td>
<td>Jared Berger, PMPRB</td>
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<td>Can We Afford to Screen and Treat Hepatitis C Virus Infection in Canada? Latest Insight From a Canadian Policy Model: A Province-by-Province Analysis</td>
<td>Dr. William W.L. Wong, University of Waterloo</td>
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<td>A Full CART of Learnings on System Implementation for Breakthrough Therapies</td>
<td>Dr. Sherrie Hertz, Cancer Care Ontario</td>
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<td>Uptake of the Ontario Naloxone Program for Pharmacies</td>
<td>Diana Martins, Ontario Drug Policy Research Network</td>
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<td>10:45 a.m.</td>
<td>CONCURRENT SESSION E4 – ORAL PRESENTATIONS</td>
<td>Furthering the Case for the Spread and Scale of Evidence-Based Remote Consult Services Across Health Systems: Results and Lessons from a Pan-Canadian Initiative</td>
<td>Neil Drimer, Canadian Foundation for Healthcare Improvement</td>
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<td>Assessing Colorectal Cancer Screening in Northern Canada Using Participatory Simulation Modelling</td>
<td>Dr. Heather Smith, University of Ottawa</td>
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**Subject to change**
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<th>Time</th>
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<tr>
<td>10:45 a.m.</td>
<td>CONCURRENT SESSION E6 – ORAL PRESENTATIONS</td>
<td>The 3-I Framework: Considerations for Developing Regulations for Direct-to-Consumer Genetic Testing in Canada</td>
<td>- Alexandra Cernat, University of Toronto</td>
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<td>Projecting the Utilization of Clinical Genetics Services in Canada: A Demand Model</td>
<td>- Dr. Nick Dragoljovic, University of British Columbia</td>
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<td>Exploring the Adoption of Genomic Sequencing in Canada: A Qualitative Descriptive Study</td>
<td>- Salma Shickh, St. Michael’s Hospital</td>
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<td>Health Technology Management in Genomics: Managing the Need to Recontact Patients as Genomics Results Change Over Time</td>
<td>- Dr. Yvonne Bombard, Li Ka Shing Knowledge Institute</td>
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<td>10:45 a.m.</td>
<td>DATA SOURCES</td>
<td>Should Medico-Administrative Data Be Used as a Source of Real-World Evidence in Health Technology Assessment?</td>
<td>- Laurie Lambert, INESS</td>
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<td>12:00 p.m.</td>
<td>NETWORKING LUNCH</td>
<td>Mapping Canadian Data Assets to Conduct Real-World Studies: Lessons Learned From the CanREValue Real-World Evidence Data Working Group</td>
<td>- Dr. Claire de Oliveira, CAMH</td>
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<td>1:00 p.m.</td>
<td>CONCURRENT SESSION F1 – PANEL DISCUSSION</td>
<td>The Evolution of Health Technology Assessment: How Must Canadian Stakeholders Adapt to the Use of Pharmacoeconomic Analyses for Regulatory Pricing Decisions?</td>
<td>- Beena Kuriakose, Janssen Inc.</td>
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<td>1:00 p.m.</td>
<td>CONCURRENT SESSION F2 – PANEL DISCUSSION</td>
<td>Translating Research to Inform Policy Decisions: The OncoSim’s Experience</td>
<td>- Wayne Critchley, Global Public Affairs</td>
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<td>1:00 p.m.</td>
<td>CONCURRENT SESSION F3 – PANEL DISCUSSION</td>
<td>Guidelines Don’t Self-Implement — How Can Implementation Science Help?</td>
<td>- Dr. Chris Cameron, EVERSANA</td>
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<td>1:00 p.m.</td>
<td>CONCURRENT SESSION F4 – PANEL DISCUSSION</td>
<td>Crowd-Sourcing the Design of an Observational Study Using Patient Registry Data/Real-World Evidence to Address Uncertainties for a Drug Granted Marketing Authorization on the Basis of Phase II Data</td>
<td>- Dr. Mina Tadrous, Women’s College Hospital</td>
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<td>- Dr. Laura Desveaux, Women’s College Hospital</td>
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<td>- Dr. Noah Ivers, Women’s College Hospital</td>
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<td>- Emily Nicholas Angl, Patient</td>
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<td>2:15 p.m. to 2:45 p.m.</td>
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| 2:45 p.m. to 4:00 p.m. | CLOSING PLENARY  
PHARMACEUTICAL MANAGEMENT IN AN AGE OF UNCERTAINTY  
Pharmaceutical management in Canada is facing a perfect storm of change, with political and policy uncertainty, a desire for formulary modernization, new curative treatments, affordability issues, and other issues and pressures. How does pharmaceutical management need to evolve in order to improve patient outcomes and maintain health system sustainability? |
| 4:00 p.m. to 4:30 p.m. | OFFICIAL CLOSING                           |

- Dr. Anil Kapoor, Kidney Cancer Research Network of Canada, Kidney Cancer Canada
- Ranjena Maloni, Kidney Cancer Research Network of Canada
- Dr. Mona Sabharwal, Rexall Pharmacy Group Ltd.
- Dr. Alice Dragomir, Montreal General Hospital