An Introduction to Network Meta-Analysis

A Two-Day Hands-On Workshop with Dr. George A. Wells

December 5-6, 2013
Vancouver, British Columbia

Presented by CADTH
Course Description

Network meta-analysis is a general term for the statistical method used to compare multiple treatments and their alternatives simultaneously. The method involves combining direct and indirect evidence in a single analysis, resulting in summary estimates of efficacy or safety for treatments that may not have been compared head-to-head in a randomized controlled trial. It is also known as mixed or indirect treatment comparisons.

The workshop will provide an overview of network meta-analysis and its applications, including demonstrations of worked examples using SAS and WinBUGS, and hands-on sessions where participants will work through real-world examples.

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<th>Day 1</th>
<th>Day 2</th>
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<td>▪ Introduction to indirect treatment comparisons</td>
<td>▪ Hands-on exercises, with breakout analysis sessions and plenary report-back sessions, on topics including:</td>
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<td>▪ Network meta-analysis methods: Bucher approach, frequentist network meta-analysis</td>
<td>▪ Safety and effectiveness of new oral anti-coagulants in patients with atrial fibrillation</td>
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<td>▪ Heterogeneity, consistency, convergence and prior distributions</td>
<td>▪ Efficacy of combined resynchronization and implantable defibrillation therapy in patients with left ventricular dysfunction</td>
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<td>▪ Worked example using Bayesian and frequentist approaches</td>
<td>▪ Efficacy of biologics in treating patients with rheumatoid arthritis</td>
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<td>▪ WinBUGS installation, exercise examples and datasets, and overview to breakout analysis sessions and plenary report back sessions</td>
<td>▪ Advantages of using network meta-analysis to inform economic evaluations; integration with WinBUGS/MS Excel</td>
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<td>▪ Methodological issues, Guidance on planning and report writing on a network meta-analysis</td>
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“The presenters were excellent. They were very helpful and patient. The workshop was well organized and I appreciate the access to the Cloud and the YouTube videos. Definitely met all my expectations.”

– Comment from 2012 Workshop Participant
Learning Objectives

- Awareness of the role of indirect evidence in comparing treatments when direct clinical evidence is not available
- Understanding Bayesian and frequentist approaches to network meta-analysis
- Ability to conceive, implement, and conduct a network meta-analysis
- Understanding of the cautions and limitations associated with conducting and interpreting network meta-analysis

The course will be presented in English.

Prerequisites: An understanding and appreciation for systematic reviews and meta-analysis.

Course Location

Westin Bayshore Vancouver
1601 Bayshore Drive
Vancouver, BC  V6G 2V4

Reservations:
Preferred room rate: $129.00 (plus taxes) — request “CADTH NMA Workshop” rate when calling for reservations – 604-682-3377 or 1-800-WESTIN-1 or use the following link — CADTH Workshop
Guestroom Block

Registration

Online registration available at: NMA Workshop
(http://events.SignUp4.com/2013NMAworkshop)

Registration Fees

Academic/government............................................................... $1,999 (plus HST)
Commercial organizations....................................................... $3,999 (plus HST)

For More Information

Visit NMA Workshop for more information or to register for this event.
Please contact Dale Calder at 613-226-2553, ext. 1241 or events@cadth.ca with any questions.
Presenters

**George A. Wells** is a Professor in the Department of Epidemiology and Community Medicine at the University of Ottawa and Director of the Cardiovascular Research Methods Centre at the University of Ottawa Heart Institute. He is also a Professor in the Department of Medicine and a Senior Investigator at the Ottawa Hospital Research Institute at The Ottawa Hospital. Dr. Wells is the author or co-author of over 600 published articles and 900 scientific abstracts. He has been the principal investigator or co-investigator on over 200 research projects. He has taught at the university graduate and undergraduate level for 30 years and has supervised over 60 graduate students.

**Chris Cameron** is a Vanier Canada Graduate Scholar in the Department of Epidemiology and Community Medicine at the University of Ottawa. He is also Lead, Health Economics, at the Canadian Agency for Drugs and Technologies in Health. His research focuses on health technology assessment, with a particular emphasis on Bayesian evidence synthesis, decision-analytic modelling, and health economic evaluation.

**Shannon Kelly** coordinates research activities for a CIHR-DSEN funded network meta-analysis (CCNMA) team grant led by George A. Wells and the University of Ottawa Heart Institute Cardiovascular Research Methods Centre. She is currently finishing graduate work in Epidemiology at the University of Ottawa. Shannon’s research focuses on health technology assessment, post-market drug safety and effectiveness, knowledge synthesis methods and clinical study design.

**Target Audience**

You should consider taking this workshop if you are starting to encounter network meta-analysis or indirect treatment comparisons in your work and don’t know what it is, how to do it, or how to interpret the results:

- Health care and health policy organizations, health technology assessment bodies
- Pharmaceutical and medical device industry
- Academic and research institutions
- Biostatisticians and methodologists
- Health insurance organizations
- Consultancy organizations.