

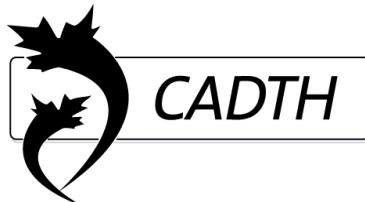
An Introduction to Network Meta-Analysis



**A Hands-On Workshop
with Dr. George A. Wells**

February 26 to 28, 2014

Presented by



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.

A third day has been added to this workshop (with a separate registration fee) that focuses on sessions discussing the rationale and application of integrating findings from network meta-analyses into health economic evaluations.

Day 1

- Introduction to indirect treatment comparisons
- Network meta-analysis methods: Bucher approach, frequentist network meta-analysis, Bayesian network meta-analysis
- Heterogeneity, consistency, convergence, and prior distributions
- Worked example using Bayesian and frequentist approaches
- WinBUGS installation, exercise examples and datasets, and overview to breakout analysis sessions and plenary report-back sessions

Day 2

- Hands-on exercises, with breakout analysis sessions and plenary report-back sessions, on topics including:
 - Safety and effectiveness of new oral anticoagulants in patients with atrial fibrillation
 - Efficacy of combined resynchronization and implantable defibrillation therapy in patients with left ventricular dysfunction
 - Efficacy of biologics in treating patients with rheumatoid arthritis
- Advantages of using network meta-analysis to inform economic evaluations; integration with WinBUGS/MS Excel
- Methodological issues, guidance on planning and report writing on a network meta-analysis

Day 3

- Gain an understanding of the rationale for integrating findings from meta-analyses and network meta-analyses into health economic evaluations
- Gain an understanding of the statistical considerations for integrating findings from a meta-analysis and network meta-analysis, with probabilistic cost-effectiveness analysis
- Work through a hands-on exercise which integrates a meta-analysis or network meta-analysis into a cost-effectiveness analysis

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. For the Health Economics workshop, it is preferable that attendees have taken the Introduction to NMA workshop or have experience with NMA.

Course Location

Address:	Reservations:
Renaissance Toronto Downtown One Blue Jays Way, Toronto, ON, M5V 1J4	Preferred room rate: \$189 (plus taxes) Request “CADTH Workshop” rate when calling for reservations (1-416-341-7100)

Registration

Online registration available at: <http://events.SignUp4.net/NMAWorkshopToronto>

Registration Fees (plus HST)

Academic/government — 2 Day Intro Course	\$1,999 (plus HST)
Academic/government — 1 Day Health Economics Course	\$799 (plus HST)
Commercial organizations — 2 Day Intro Course.....	\$3,999 (plus HST)
Commercial organizations — 1 Day Health Economics Course	\$1,799 (plus HST)

“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

For More Information

Visit 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 CADTH. 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.