

## Cochrane Canada 10<sup>th</sup> Annual Symposium

**Winnipeg, MB** 9 - 10 May 2012

Presymposium 7 - 8 May 2012

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### Welcome from our Chair

Dear Colleagues,

We are delighted to welcome you to Winnipeg for the 10th Annual Cochrane Canada Symposium.

This year's title, "Health Evidence for ALL," reflects that evidence from *The Cochrane Library* should be developed and utilized by all, including vulnerable and populations at much higher risk for disease and worse health outcomes. Equity within health is a key concept and an important lens through which to examine the evidence.

In this context, planning for the 2012 Symposium centered on themes that examine the progress towards equity in the evidence, ranging from a local perspective to a global one. We also developed a theme centered on engaging with the evidence, reviewing innovative and new ways of doing so, including the use of social media. Lastly, the theme examines what works in evidence production, exploring a wide array of approaches in various contexts.

This event could not be a success without the dedication to excellence of many: We thank the Steering Committee for their expertise and input into planning the event. We thank the Scientific Committee for their time in vetting the large number of abstracts we received. We thank the plenary speakers, session and workshop presenters and poster presenters for contributing to the themes and learning objectives of this Symposium. Finally, we thank the team at the George and Fay Yee Centre for Healthcare Innovation and the Canadian Cochrane Centre for their commitment to making this a great experience for all participants.

We welcome you warmly to Winnipeg and hope you enjoy a time of learning, making new acquantainces and renewing old ones and enjoying all Winnipeg has to offer in May.

Best Wishes,

Terry Klassen Symposium Steering Committee Chair



### **Thank You**

### **Cochrane Canada recognizes our Symposium Committees**

### **Steering Committee**

Terry Klassen (Chair)
Janet Bjornson
Heather Dean
José François
Jeremy Grimshaw
Sande Harlos
Lisa Hartling
Michael Moffatt
David Moher
Mary Ellen Schaafsma
Denise Thomson
Christina Weise
Vivian Welch
Liz Whamond

James Wright

### **Organizing Committee**

Janet Bjornson (Chair) Karen Corver Karyn Iverson Terry Klassen Lisa McGovern Mary Ellen Schaafsma

Jill Hayden

#### **Graduate Student Poster Award Committee**

Erin Ueffing (Chair) Alain Mayhew Catherine McIlwain

### **Session Moderators**

Jeremy Grimshaw
Terry Klassen
John MacDonald
Teresa Marin
Lara Maxwell
Michael Moffat
David Moher
Lorenzo Moja
Jordi Pardo Pardo
Fileen Vilis
Christina Weise
James Wright

#### **Scientific Committee**

Vivian Welch (Chair)

Jenny Cartwright

Heather Colquhoun

Janet Curran

Marion Doull

Donna Dryden

Joanne Homik

France Légaré

Alain Mayhew

Michael Moffatt

Nancy Santesso

Janet Squires

Erin Ueffing

James Wright

Ryan Zarychanski

### **Cochrane Review of the Year Committee**

Erin Ueffing (Chair) Lori Greco Brian Morris Mary Ellen Schaafsma Karine Toupin April

#### A Special Thank You

We would like to extend a special thank you to the Canadian Institutes of Health Research (CIHR) who have been our primary funder over the past seven years, and through the next four (grant # No. CON-105529). Without the support of CIHR, we would not have achieved the success we have today.

#### **About the Canadian Cochrane Centre**

The Canadian Cochrane Centre (CCC), registered in August 1993, is one of 14 independent, not-for-profit Centres of The Cochrane Collaboration worldwide. The CCC is located in the Centre for Practice-Changing Research at the Ottawa Hospital Research Institute. We support the activities of over 2730 members of The Cochrane Collaboration in Canada to promote The Collaboration, *The Cochrane Library,* and evidence-based health care in Canada. We collaborate with health professional organizations, health researchers, health technology assessment groups, national consumer associations, governments and other interested groups in order to achieve this goal. The CCC is a part of Cochrane Canada which is composed of over 1700 review authors, six Review Groups, two Methods Groups, one Field and 18 Regional Sites.

### **Our Exhibitors**



### Canadian Agency for Drugs and Technologies in Health (CADTH)

CADTH is an independent, not-for-profit agency funded by Canada's federal, provincial, and territorial governments. CADTH's mandate is to deliver reliable, timely, evidence-based information to Canada's health care leaders about the effectiveness and efficiency of health technologies (drugs, vaccines, devices and equipment, medical and surgical procedures) through a variety of products and services.

### **Cochrane Register of Studies (CRS)**

Michelle Fiander, Trials Search Co-ordinator, Cochrane Effective Practice and Organisation of Care Review Group

Stop by to take a look at The Collaboration's new software initiative. The CRS is a web-based software which will be used to house records from trial registers developed by Cochrane Review Groups and records found in the Cochrane Central Database of Controlled Trials.

### Use of a wiki-based educational resource as a knowledge translation intervention to improve research in child health

Michele Hamm, PhD student at the University of Alberta with Terry Klassen and Lisa Hartling

Risk of bias is an important consideration in the design, conduct, and appraisal of randomized controlled trials. We have developed a wiki-based educational resource for researchers focusing on minimizing bias, specifically emphasizing research in pediatrics. We are interested in pilot testing the wiki and getting feedback from trialists and systematic reviewers on its content, format, and overall usability. Please come visit us at our booth at the Cochrane Canada Symposium for more information or visit our wiki at: starchildhealth-riskofbias.wikispaces.com

### **Presymposium Program**

Monday, 7 May and Tuesday, 8 May 2012

### **Cochrane Introductory Author Training**

#### When:

**Day 1:** 8:30AM - 5PM, McKesson Room 061, Basement, Apotex Centre, 750 McDermot Avenue, Winnipeg, 7 May 2012

Day 2: 8:30AM - 5PM, Class of '68 Computer Lab, 2nd Floor, Apotex Centre, 750 McDermot Avenue, Winnipeg, 8 May 2012

Faculty: Ruth Barclay-Goddard, University of Manitoba

Tania Gottschalk, University of Manitoba

**John MacDonald**, Cochrane Inflammatory Bowel Disease and Functional Bowel Disorders Review Group

Nancy Santesso, Cochrane Applicability and Recommendations Methods Group and McMaster GRADE Centre, McMaster University

Lucy Turner, Cochrane Bias Methods Group

Erin Ueffing, Canadian Cochrane Centre

**Synopsis:** Take this two-day introductory session to learn the basic skills of conducting a Cochrane Review. Topics include protocols, setting your question, literature searching, study selection, assessing bias, data and analysis, formulating conclusions, and a hands-on session with the Review Manager software. This workshop is aimed at people new to The Cochrane Collaboration and those who are planning or working on their first systematic review.

### Health Systems Evidence: Evidence to support policy-making and management

**When:** 1:30 - 4:30PM, Class of '68 Computer Lab, 2nd Floor, Apotex Centre, 750 McDermot Avenue, Winnipeg, 7 May 2012

**Faculty: Michael Wilson**, Assistant Director, McMaster Health Forum; Assistant Professor (part-time), McMaster University

**François-Pierre Gauvin**, Lead, Evidence Synthesis and Evaluation and Lead, Francophone Outreach, McMaster Health Forum

**Synopsis:** Find decision-relevant evidence at:

healthsystemsevidence.org – the world's most comprehensive, free access point for evidence on any question that policymakers, stakeholders and researchers may have about how to strengthen or reform health systems or how to get cost-effective programs, services and drugs to those who need them. Participants in this workshop will learn about Health Systems Evidence . . . why use it, what's in it, how to search it, what a search will retrieve, and how to sign up to receive monthly updates. The use of Health Systems Evidence will be demonstrated using several topical questions that policy-makers, managers and stakeholders may be asking. Participants will also have the opportunity to work through searches of Health Systems Evidence using a topic or question they are currently working on. Use of Cochrane will be demonstrated hands-on using several topical questions that clinicians may be asking. Bring your own questions for live search demonstrations!

### Meta-Bias in Systematic Reviews: Rethinking fundamental and evolving concepts

When: 2 - 3:30PM, Stefanson Gillis Room 069, Basement, Apotex Centre, 750 McDermot Avenue, Winnipeg, 8 May 2012

Faculty: David Moher, Cochrane Bias Methods Group

Lucy Turner, Cochrane Bias Methods Group

**Synopsis:** Are you comfortable with assessing risk of bias in systematic reviews? Interested in the concept of bias but want to push boundaries and explore further? Join David Moher and Lucy Turner, Bias Methods Group, for an open access journal club considering the currently evolving concepts of meta-bias in systematic reviews.

This session will be highly interactive discussing the umbrella concept of meta-bias and its potential components. We will present and discuss the following papers:

- "Metabias: A challenge for comparative effectiveness research" Goodman, S. Dickersin, K. Annals of Internal Medicine. 2011;155:61-62.
- "Recommendations for examining and interpreting funnel plot asymmetry in meta-analysis of randomized controlled trials" Sterne, JAC. et al. BMJ. 2011; 343.
- "Single-center trials show larger treatment effects than multicenter trials: evidence from a meta-epidemiologic study" Dechartres, A. et al. Annals of internal medicine. 2011;155:39-51.
- "The impact of outcome reporting bias in randomized controlled trials on a cohort of systematic reviews". Kirkham, JJ. BMJ. 2010;340.

Bring your thinking caps and opinions for this exciting discussion!

### Using the GRADE Approach to Evaluate and Present Evidence

When: 4 - 6:30PM, 500 John Buhler Research Centre, 715 McDermot Avenue, Winnipeg, 8 May 2012

**Faculty: Holger Schünemann**, Cochrane Applicability and Rocommendations Methods Group and McMaster GRADE Centre, McMaster University

Nancy Santesso, Cochrane Applicability and Recommendations Group and McMaster GRADE Centre, McMaster University

**Synopsis:** Systematic reviewers and guideline developers are using the GRADE approach to assess the quality of an overall body of evidence and to make recommendations. Participants in this workshop will learn how to apply the GRADE approach to evaluate the quality of a body of evidence and how to present the evidence to decision-makers and guideline developers. Specifically, we will introduce the GRADE system to grade evidence and the strength of recommendations. You will then learn about and have hands-on experience applying the eight criteria used to assess the quality of a body of evidence: risk of bias, indirectness, inconsistency, imprecision, publication bias, magnitude of effect, dose response and plausible biases. You will also have guided hands-on experience using GRADEpro the software to create Cochrane Summary of Findings Tables or GRADE evidence profiles. Whether you are new to GRADE or have attended a GRADE workshop before, we invite you to attend!

**Note:** Participants should bring a laptop and download the GRADEpro software at:

ims.cochrane.org/revman/gradepro before attending. Bring your own completed review to create a table or use our example.

### **Program-at-a-Glance**

### 10<sup>th</sup> Annual Cochrane Canada Symposium: Health Evidence for ALL

### Wednesday, 9 May 2012

Time	Session	Location
7 - 8:25AM	Registration	Lancaster Room
	Opening Remarks and Moderator: Dr Terry Klassen Welcoming Remarks: Theresa Oswald, Minister of Health	
	Plenary I: Progress towards equity in the evidence	
8:30 - 10AM	Dr Brian Postl: Evidence and Equity	Midway Ballroom
	Dr Jonathan Craig: Cochrane's Vision for the future – global participation, global impact	
	Dr John laonnidis: Geometry of the Evidence	
10 - 10:30AM	Coffee break; poster and exhibit viewing	East Ballroom
	Parallel Session I	
	Workshop 1: Engaging with the Evidence Brooks, Lyddiatt, Billedeau, Boyle Knowledge translation of arthritis best practices: Getting a Grip on Arthritis	Harrow
	Workshop 2: What Works in Evidence Production and Use for ALL Fiander Managing Search Strategies & Results: Complying with MECIR and PRISMA	West Ballroom
10:30ам - 12рм	Workshop 3: Ensuring Equity in Evidence Boscoe, O'Neill, Puil, Tudiver Sex and gender-based analysis: Developing a knowledge translation tool with the Cochrane Hypertension, HIV/AIDs and Musculoskeletal Review Groups	Midway Ballroom

	Oral Session 1: (Moderator – David Moher)  Niven Capture-Mark-Recapture as a Stopping Rule for Systematic Reviews in Injury Control  Rhainds A comparison of two search strategies to perform a systematic review: the case study on the effectiveness of intravenous regional sympathetic blockade  Gagnier Consensus-based recommendations for investigating clinical heterogeneity in systematic reviews	Essex/Canterbury
10:30ам - 12рм	Oral Session 2: (Moderator – Christina Weise) Wilson An overview of syntheses about health systems arrangements to support evidence-informed policy White Health and Work Productivity Web-Portal: A knowledge translation and exchange (KTE) platform to facilitate evidence-informed disability prevention and workplace innovation – A proof of concept study  Holmes Engaging for evidence use: developing a provincial KT program  Ueffing Cochrane Canada webinars: opportunities to engage with the evidence	York
12 - 1РМ	Lunch Poster and exhibit viewing (12:40 - 1PM)	East/Midway Ballroom
	Parallel Session II	
1 - 2:30РМ	Workshop 4: Engaging with the Evidence O'Neill, Tugwell Equity Evidence Aid	Midway Ballroom
	Workshop 5: What Works in Evidence Production and Use for ALL Mayhew, Linklater, Turner Assessing risk of bias in non-randomized study designs for inclusion in systematic reviews	Harrow
	Workshop 6: What Works in Evidence Production and Use for ALL Kirkham Core outcome measures for randomized controlled trials and Cochrane Reviews	West Ballroom

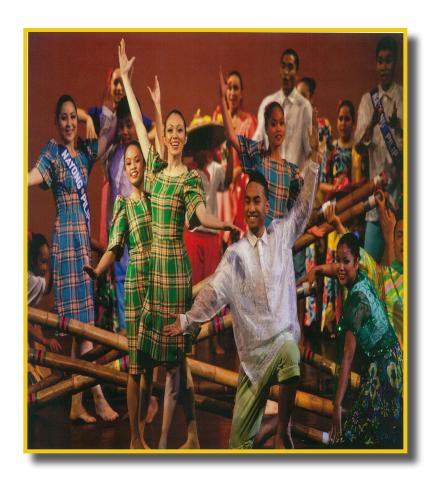
1 - 2:30рм	Oral Session 3: (Moderator – Teresa Marin) Worswick Improving practice: Rx for Change - an intervention research database for health care decision-makers and researchers  Ueffing "Dr Cochrane": An Innovative Approach to Continuing Medical Education Using Cochrane Reviews  Moher The EQUATOR Centre for Journalology  Husson Review results in 140 characters or less: Using social media to link decision makers to evidence	York
	Oral Session 4: (Moderator - Eileen Vilis)  Walsh Consumer support and education beyond national borders: a case study  Gunderson Consumer Involvement in the Cochrane Musculoskeletal Group  Rader Communicating evidence to consumers and patients: an update on plain language summaries  McIlwain Cochrane Summaries; summaries.cochrane.org	Essex/Canterbury
2:30 - ЗРМ	Refreshment break; poster and exhibit viewing	East Ballroom
	Parallel Session III	
	Workshop 7: What Works in Evidence Production and Use for ALL Santesso More than just numbers: understanding statistics in Cochrane Reviews	Harrow
	Workshop 8: Engaging with the Evidence Grymonpre, McLean, Tetroe Integrated Knowledge Translation: What does it mean? How does one do it? How can it be evaluated? What does it look like?	West Ballroom
3 - 4:15рм	Workshop 9: What Works in Evidence Production and Use for ALL Gagnier Investigating clinical heterogeneity in systematic reviews	Midway Ballroom

	Oral Session 5: (Moderator – James Wright) Killian Moving from full systematic reviews to a rapid evidence synthesis research model: A work in progress  Konnyu, Garritty The evolution of a rapid review program  Mustafa The Grading of Recommendations Assessment, Development and Evaluation Reliability Study (the GRADERS)	York
4:15 - 5:30PM	Annual Stakeholder Meeting Please join us for our Cochrane Canada Annual Stakeholder Meeting. We invite all Cochrane Canada members – entities, partners and regional site representatives – and anyone who is interested in learning more about Cochrane Canada. We look forward to seeing you there!	Midway Ballroom
6:30рм	Social Event and dinner A chance to network and enjoy a lovely dinner together in the company of Symposium delegates Entertainment to be provided by the multicultural entertainment group, Folklorama!	Midway/West Ballroom

### 10th Annual Cochrane Canada Symposium

### **Social Event & Dinner**

# Featuring entertainment by Folklorama



Time: 6:30PM

Location: Midway/West Ballroom

Included in your registration is a dinner and evening of entertainment on Wednesday, 9 May, beginning at 6:30PM. We are pleased to announce that Folklorama will be providing the entertainment for this year's social event as they highlight Winnipeg's unique cultural diversity. Please join us in the Midway/West Ballroom for this exciting event. A cash bar will be available.

### Thursday, 10 May 2012

Time	Session	Location
8:30 - 10am	<ul> <li>Plenary II: Engaging with the Evidence (Moderator – Dr Michael Moffat)</li> <li>Peter Gill: Capitalizing on Social Media: Cochrane information for the 21st century</li> <li>Dr Lisa Hartling: Storytelling as a tool to communicate evidence to healthcare consumers</li> <li>Dr Noralou Roos: Getting Health Policy Evidence to the Media: EvidenceNetwork.ca</li> <li>Cochrane Review of the Year presentation</li> <li>Graduate Student Poster Award presentation</li> </ul>	Midway Ballroom
10 - 10:30AM	Refreshment break; exhibit and poster viewing	East Ballroom
10:30 - 11:45AM	Workshop 10: Engaging with the Evidence Allen Knowledge to Practice - A practical tool to enhance presentation of evidence  Workshop 11: What Works in Evidence Production and Use for ALL Marin, Rader The patient perspective in systematic reviews: Providing feedback on Cochrane Reviews and protocols	West Ballroom  Harrow
	Workshop 12: What Works in Evidence Production and Use for ALL Mayhew Non-Randomized Studies: Methodlogical considerations when including non-randomized studies in systematic reviews of interventions	Midway Ballroom
	Oral Session 6: (Moderator – John MacDonald) Turner The influence of CONSORT on the quality of reporting of RCTs: An updated systematic review  O'Neill, Tugwell Developing an Equity-Extension of the PRISMA checklist  Moher Preferred Reporting Items for Systematic reviews and Meta-Analyses for Protocols (PRISMA-P)	Essex/Canterbury

10:30 - 11:45AM	Oral Session 7: (Moderator – Lara Maxwell) Gagnon Organizational readiness for knowledge translation in chronic care: A systematic review of theories  Backe, Harlos Health Equity Evidence: Necessary but not Sufficient  Husson Getting the word out: KT strategies for promoting the use of CIHR-funded reviews  Kreindler Translating evidence on complex health-services issues	York
11:45AM - 12:30PM	Lunch Poster and exhibit viewing (12:15 - 12:30PM)	East/Midway Ballroom
	Parallel Session V	
	Workshop 13: What Works in Evidence Production and Use for ALL Ueffing Logic Models in Systematic Reviews: Improving Processes, Transparency, and Relevance	Midway Ballroom
	Workshop 14: What Works in Evidence Production and Use for ALL Kirkham Assessing the risk of outcome reporting bias in systematic reviews (ORBIT)	West Ballroom
12:30 - 2рм	Oral Session 8: (Moderator - Lorenzo Moja)  Allen Academic detailing to inform physicians about uncertainty in guideline recommendations  Cohen Interventions for implementation of thromboprophylaxis in hospitalized medical and surgical patients at risk for venous thromboembolism: A Cochrane Review  Laugerotte Can a Cochrane Systematic Review be used for pharmacological model validation  Moher Systematic review of the effect of endorsement of reporting guidelines on the completeness of published study reports	Harrow

12:30 - 2рм	Oral Session 9: (Moderator – Jordi Pardo Pardo) Beaudin, Backe How Can We Start Planning to Improve Health Equity?  Djossa Adoun, Gagnon An international collaboration for ensuring the applicability of a systematic review on information and communication technologies for proving sexual and reproductive health among young people in different economic and cultural contexts  Mann A systematic review is only the beginning: moving evidence into the real world – the CADTH experience  O'Neill Cochrane Corner - Promoting gender, sex, and health	York
2 - 2:30РМ	Refreshment break; exhibit and poster viewing	East Ballroom
2:30 - 4РМ	<ul> <li>Plenary III: What Works in Evidence Production and Use for ALL? (Moderator – Dr Jeremy Grimshaw)</li> <li>Dr Marie-Pierre Gagnon: Promoting evidence use by practitioners with their patients and caregivers</li> <li>Dr David Moher: Beyond traditional systematic reviews: what's on the horizon?</li> <li>Dr Peter Tugwell: Methods of synthesis: how authors can contribute to health equity</li> <li>Connie Walker: Evidence - helping Winnipeg achieve its full potential</li> </ul>	Midway Ballroom

### **Plenaries**

### Plenary I: Progress towards equity in the evidence

8:30 - 10AM, Midway Ballroom, 9 May 2012

 Dr Brian Postl, Dean, Faculty of Medicine, University of Manitoba: Evidence and Equity

Evidence has many metrics . . . and doesn't always have the impact we might hope for. This is particularly the case when determinants are broadly defined.

 Dr Jonathan Craig, Co-Chair, The Cochrane Collaboration: Cochrane's Vision for the Future - global participation, global impact

In 20 years, The Cochrane Collaboration has established itself as the pre-eminent source of systematic reviews but much more is needed if our vision 'that healthcare decision-making throughout the world will be informed by high-quality, timely research evidence' is to be realized. Using examples from what Cochrane members are already doing, a picture and vision for more globally relevant systematic reviews, different types of reviews (diagnostic, prognostic), more user-friendly reviews (for policy-makers, consumers, research funders and clinicians), and more globally relevant organizations will be painted.

 Dr John laonnidis, School of Medicine, Stanford University: Geometry of the Evidence

For most medical conditions, there are many choices of different regimens/interventions that may be used. Moreover, many medical interventions are used for diverse conditions and indications. Understanding the wider research agendas requires evaluation of the evidence that goes beyond the scope of traditional meta-analyses operating within narrow PICO boundaries. The talk will address how one can evaluate the geometry of the evidence in large-scale. Such evaluation is important for understanding the number and diversity of interventions, co-occurrence and homophily patterns in the randomized comparisons, and what the implications are for medical practice and for designing future research.

### Plenary II: Engaging with the Evidence

8:30 - 10AM, Midway Ballroom, 10 May 2012

 Peter Gill, University of Oxford; University of Alberta: Capitalizing on Social Media: Cochrane information for the 21st century Social media is a constantly evolving phenomenon that is taking a leading role in health care by creating a "networked public". What are the main social media tools and how are they relevant to The Cochrane Collaboration? What are some examples of social media's influence on policy and research impact? How can The Cochrane Collaboration in Canada capitalize on social media to further the dissemination and uptake of high quality evidence?

 Dr Lisa Hartling, University of Alberta: Storytelling as a tool to communicate evidence to healthcare consumers

This presentation will describe a program of research to investigate the use of storytelling as a method of communicating evidence to healthcare consumers. The presentation will include a discussion of the development and initial testing of story booklets and results from a large randomized controlled trial evaluating their effectiveness. The experiences gained through this initial research provide many considerations for future work in this area.

 Dr Noralou Roos, University of Manitoba: Getting Health Policy Evidence to the Media: EvidenceNetwork.ca

The media shapes consumer expectations and interpretations of health interventions and influences how people think about their need for care and the sustainability of the system. EvidenceNetwork.ca is a non-partisan, web-based project funded by the Canadian Institutes of Health Research and the Manitoba Health Research Council to make the latest evidence on controversial health policy issues available to the media. This website links journalists with health policy experts and uses social media to connect with reporters. Network experts have published over 160 op-eds communicating the evidence in the last year. We are tracking who follows and uses the EvidenceNetwork.ca website and will monitor the impact of the effort.

### Plenary III: What works in evidence production and use for ALL?

2:30 - 4PM, Midway Ballroom, 10 May 2012

 Dr Marie-Pierre Gagnon, Université Laval: Promoting evidence use by practitioners with their patients and caregivers

Patients' and caregivers' involvement in healthcare decisions is recognized as a way to improve quality and appropriateness

of care. Recently, many initiatives have been implemented in order to foster the participation of patients and their caregivers in the production and dissemination of evidence about health interventions. However, few studies report the impact of these initiatives. Our research team has partnered with a local Health Technology Assessment (HTA) unit in order to implement different strategies for involving patients and caregivers in an evaluation of alternative measures to constraint and seclusion in psychiatric and long-term care. Despite some difficulties, our experience shows that involving patients and caregivers in HTA is feasible and may lead to recommendations that are more likely to reflect their perspectives.

 Dr David Moher, Ottawa Hospital Research Institute: Beyond traditional systematic reviews: what's on the horizon?

This talk will focus on some emerging ways of conducting and reporting systematic reviews, including using technology to engage stakeholders early on in the review process, providing rapid responses to emergent and urgent decision maker needs, answering comparative effectiveness questions, and new reporting guidelines.

 Dr Peter Tugwell, Cochrane Musculoskeletal Group;
 Cochrane Health Equity Field: Methods of synthesis: how authors can contribute to health equity

Cochrane Systematic Reviews usually focus on mean results and statistically adjust out differences in populations [eg. gender, education, culture, socioeconomic status] that can provide important information on the applicability of the results to the disadvantaged. The new equity-extension to the PRISMA guidelines for reporting systematic reviews will be presented: these allow authors to apply an 'equity lens' to all relevant Cochrane Systematic Reviews.

 Connie Walker, Vice President, Community Relations & Capacity Building: Evidence - helping Winnipeg achieve its full potential

With good information, people can make better life choices. And with good information, communities can too. For much of the developed world, GDP has been used as evidence of progress. Increasingly, however, countries – and communities – are recognizing that GDP tells us little about quality of life,

sustainability or equity. "GDP does not allow for the health of our children, the quality of their education, or the joy of their play... it measures everything, in short, except that which makes life worthwhile."

Peg is Winnipeg's community indicator system, tracking key indicators of our well-being. Peg builds knowledge and stimulates conversation.

### **Meet our Speakers**

### Plenary I: Progress towards equity in the evidence



**Dr Brian Postl**'s five-year term as Professor and Dean, Faculty of Medicine, began 1 July 2010. Dr Postl is a graduate of the University of Manitoba and received his doctor of medicine degree in 1976 and the Royal College Fellowship in Community Medicine and in Pediatrics in 1981 and 1982, respectively. He was the founding president and CEO of the Winnipeg Regional Health Authority (WRHA) – a position he held for 10 years.

Dr Postl has served as head of pediatrics and child health and as head of Community Health Sciences at the University of Manitoba. He has also served as director of the J.D. Hildes Northern Medical Unit and division of community and northern medicine and as director of the Faculty of Medicine's community medical residency program.

His research, published works and professional involvement focus on Aboriginal child health, circumpolar health and human resource planning. His contributions in these areas, combined with his experience as a visiting pediatrician to communities in northern Manitoba and Nunavut, contributed to him earning the Canadian Association of Pediatric Health Centre's Child Health Award of Distinction in 2006 and the Inter-Professional Association on Native Employment's Champion of Aboriginal Employment award in 2007.

Dr Postl serves on a number of committees and boards of provincial and national associations, foundations, institutes and other organizations.



**Professor Jonathan Craig** is a Paediatric Nephrologist at the Children's Hospital at Westmead and holds a personal Chair in Clinical Epidemiology in the School of Public Health at the University of Sydney, Australia.

He has a passionate belief in the need for evidence-informed healthcare policy, practice and research prioritization. His major research interests are focused on improving the evidence-base underpinning the prevention and treatment of kidney disease in children and adults and child health, more generally. He has published about 300 papers and is currently on the editorial board for the American Journal of Kidney Disease, and Nephrology. He has recently co-edited the textbook, 'Evidence Based Nephrology,' and the evidence-based medicine section for the 'Oxford Textbook of Nephrology'. He is on the Board of Kidney Health Australia.

Jonathan is the Co-ordinating Editor of the Cochrane Renal Group and is the current Co-Chair of The Cochrane Collaboration. He recently received the TJ Neill award for outstanding contribution to science in nephrology in Australia and New Zealand and the International Distinguished Medal of the National Kidney Foundation of the US.

\*See next page for photo

**Dr John loannidis** holds the C.F. Rehnborg Chair in Disease and Prevention at Stanford University, where he is a professor of medicine, professor of health research and policy, and professor of statistics, and Director of the Stanford Prevention Center at Stanford University School of Medicine. Before joining Stanford in 2010, Dr. loannidis chaired the Department of Hygiene and Epidemiology at the University of Ioannina School of Greece since 1999.

Dr Ioannidis trained at Harvard and Tufts specializing in internal medicine and infectious diseases

Continue >



before holding various positions at NIH, John Hopkins University School of Medicine and Tufts University School of Medicine.

Dr Ioannidis' strong interest in large-scale evidence and meta-analysis has lead him to continuously search for new methods for efficient study design and analysis of biomedicine. His 2005 paper in the Public Library of Science Medicine, "Why most Published Research Findings are False," is the most downloaded article in the history of open access publishing. He is one of the most-cited scientists of his generation across all scientific fields worldwide (over 30,000 citations to-date).

As an adjunct professor at the Tufts University School of Medicine, Dr Ioannidis has also led the Center for Genetic Epidemiology and Modeling of the Tufts Institute for Clinical Research and Health Policy Studies at Tufts Medical Center. He has also held adjunct appointments as professor of epidemiology at the Harvard School of Public Health, and as professor of epidemiology and biostatistics at Imperial College London.

A member of the executive board of the Human Genome Epidemiology Network, Dr Ioannidis has also served on the board of more than 20 leading international journals including the PLoS Medicine, Annals of Internal Medicine, Clinical Trials and Journal of Clinical Epidemiology. He also serves as the editor-in-chief of the European Journal of Clinical Investigation for the period of 2010-2014.

His publications include over 500 peer-reviewed papers and over 40 book and chapters. He's also given over 200 invited lectures in 28 countries.





**Peter Gill** is a DPhil Candidate in the Department of Primary Care Health Sciences at the University of Oxford and a Canadian Rhodes Scholar in the MD/PhD program at the University of Alberta. His research focuses on developing evidence-based indicators to measure the quality of care provided for children in primary care. His interests include improving the evidence base for children, methodological research, social media in medicine and diagnostic studies. Peter is actively involved in medical education initiatives teaching EBM courses and co-founding PedsCases (pedscases.com). He runs an active twitter account (@peterjgill) and blogs on 'Trust the Evidence' (trusttheevidence.net).



**Dr Lisa Hartling** is an Assistant Professor in the Department of Pediatrics at the University of Alberta in Edmonton. She is Director of the Alberta Research Center for Health Evidence and the University of Alberta Evidence-based Practice Center. Dr Hartling trained in Physical Therapy (U of A, 1990) and subsequently chose to focus on research, undertaking a Master's in Epidemiology (Queen's University, 1995) and a PhD in Medical Sciences – Paediatrics (U of A, 2010). The focus of her doctoral dissertation was on the use of storytelling as a tool to transfer health information to parents. Dr Hartling has been involved in conducting systematic reviews and methodological research around issues in systematic reviews for the last 12 years and has published extensively in this area. She is a systematic reviewer with seven Cochrane Review Groups and is Co-Lead of the Cochrane Child Health Field.



**Dr Noralou Roos** is the founding director of the Manitoba Centre for Health Policy and led the creation of a population database for understanding why some people are healthy and others are not. She received Canadian Foundation for Innovation funding to create Canada's first data laboratory, containing population based data on health, education and social services and held a Tier 1 Canada Research Chair. Citations to Dr Roos' work place her among the top 100 Canadian scientists according to the Institute of Scientific Information. She was a member of the Prime Minister's National Forum on Health, the Interim Governing Council setting up the Canadian Institutes for Health Research, received the Order of Canada and has joined the Board of the United Way. She has led the Canadian Drug Policy Development Coalition, which resulted in creating the Drug Safety and Effectiveness Network at the Canadian Institutes for Health Research. She is the co-founder of EvidenceNetwork.ca, working to improve the use of research evidence by the media in their coverage of key health policy issues.

Plenary III: What works in evidence production and use for ALL?



**Dr Marie-Pierre Gagnon** is associate professor at the Faculty of Nursing at l'Université Laval. She has recently been awarded a Tier 2 Canada Research Chair in technologies and practices in health. Her research program focuses on the use of scientific evidence in the implementation of innovative technologies, particularly Information and Communication Technologies (ICT), in health care. Her other research interests include health technology assessment and its impact on decision-making, the study of individual, professional and organizational determinants of ICT integration in the healthcare system, patient participation in healthcare decisions, and best practices in knowledge translation and application.



**Dr David Moher** is a Senior Scientist at the Ottawa Hospital Research Institute (OHRI). Dr Moher is also an Associate Professor in the Department of Epidemiology and Community Medicine, University of Ottawa and holds a University Research Chair.

Dr Moher has been Director of the University of Ottawa's Evidence-based Practice Centre (EPC), one of 14 such centres in North America, funded by the U.S. Agency for Healthcare Research and Quality, since Ottawa successfully applied to become an EPC in 2002. He is also the principal investigator of Knowledge Synthesis Canada, OHRI's Evidence on TAP program, DSEN's Network Meta-analyses collaborating center, all funded by the Canadian Institutes of Health Research. He is also the lead Co-Convenor of the Bias Methods Group of The Cochrane Collaboration.

Dr Moher is known for his leadership in developing guidelines for reporting health research, including the internationally-adopted CONSORT guidance for randomized trials and the PRISMA statement for reporting systematic reviews.

Dr Moher has a Master's degree in epidemiology and a PhD in clinical epidemiology and biostatistics.



**Dr Peter Tugwell** is Professor of Medicine, and Epidemiology and Community Medicine at the University of Ottawa. He holds the Canada Research Chair in Health Equity. He is a staff physician and practicing rheumatologist at The Ottawa Hospital, Ottawa, Canada.

In 2001, Dr Tugwell took the post of Director for the Centre for Global Health at the Institute of Population Health, University of Ottawa. He has built a research program and multidisciplinary team around his Canada Research Chair in Health Equity. The goal of this program is to improve the health status of the poor and middle class and reduce socioeconomic inequalities in health, through facilitating the summarizing and dissemination of systematic reviews of educational, health, legal and social strategies to reduce inequalities in health in individuals and populations.

Dr Tugwell received his medical degree from the Royal Free Hospital Medical School at London University. Subsequently, Dr Tugwell has worked in London, Ahmadu Bello University in Zaria, Nigeria, McMaster University in Hamilton and the University of Ottawa. He was Chair of the McMaster University Department of Clinical Epidemiology and Biostatistics for 10 years (1979 – 1989). He was then Chair of the Department of Medicine at the University of Ottawa and The Ottawa Hospital for 10 years (1991 – 2001).

Dr Tugwell was Founding Director of the International Clinical Epidemiology Network Training Centre at McMaster University (1982 – 1991) and currently serves as Secretary General to INCLEN's North American group (CanUSAClen). He is the past Chair of the Epidemiology Committee of the International League of Associations for Rheumatology (1989 – 1997) and of the Canadian Association of Professors of Medicine (2000-2001). He is a Fellow of the Royal College of Physicians of Canada, the American College of Physicians, as well as the American College of Rheumatology. Dr Tugwell is Co-Director of a WHO Collaborating Center for Knowledge Translation and Health Technology Assessment in Health Equity as well as a member of the Organizing Committee of OMERACT (Outcome Measures in Rheumatology Clinical Trials). Dr Tugwell is the Co-Ordinating Editor of the Cochrane Musculoskeletal Review Group and is the Co-Convenor of the Campbell and Cochrane Equity Methods Group. He is on the Executive of The Cochrane Collaboration Steering Group. He is also on the Steering Group of the Campbell Collaboration.

Dr Tugwell is Co-Editor of the Journal of Clinical Epidemiology. He serves as a member of the editorial board of The American Journal of Medicine, The Journal of Quality and Clinical Practice, Clinical and Experimental Rheumatology and Clinical Drug Investigation and BioDrugs. He is a member of the Oversight committee of the Canadian Medical Association Journal.

Dr Tugwell's publication record includes over 300 journal articles, monographs and book chapters. Many of these have been in the area of rheumatology, focusing on the assessment of therapeutic interventions and mechanisms of disease. More recently, the focus has been on research into the disadvantaged, global health and health equity, knowledge translation, decision support and consumer participation in research and health care, and the evaluation and development of educational strategies in the teaching of medicine.



Connie Walker began her career as a public health nurse in Winnipeg's inner city. After a Master's in Business Administration and diverse roles at the City of Winnipeg, Connie led the City's Strategic Management Division providing leadership to policy, planning and corporate initiatives for the City's Chief Administrative and senior elected and appointed officials. In 2008, Connie joined United Way of Winnipeg as the Vice President, Community Investment, where, working closely with volunteers and community leaders, she leads a team of professionals who strive to understand the issues in the community and the opportunities for positive social change. When she's not at work, Connie enjoys life at home and at her family cottage with her husband, two teenage sons and a fabulous golden retriever.

### **WORKSHOP Abstracts**

Please note: the names of workshop presenters appear in bold

### Workshop 1: Knowledge translation of arthritis best practices: Getting a Grip on Arthritis

**Brooks S**<sup>1</sup>, Badley E<sup>2</sup>, Bell M<sup>3</sup>, Beriault P<sup>4</sup>, Brock G<sup>5</sup>, Collins S<sup>1</sup>, Curran V<sup>6</sup>, Drouin K<sup>7</sup>, Fleet L<sup>6</sup>

<sup>1</sup> The Arthritis Society, Canada; <sup>2</sup> University Health Network, Canada; <sup>3</sup> Sunnybrook Health Sciences Centre, Canada; <sup>4</sup> Somerset West Community Health Centre, Canada; <sup>5</sup> Society of Rural Physicians of Canada, Canada; <sup>6</sup> Memorial University, Canada; <sup>7</sup> Arthritis Health Professions Association, Canada

10:30AM - 12PM, Harrow, 9 May 2012

Learning Objectives: Effective knowledge translation involves meaningful consultation with the target audience in the effort to make evidence more relevant and useful. At this workshop, participants will review an established educational program and 1) consider the evidence (including Cochrane Reviews) that supports best practices for people with rheumatoid arthritis (RA) and osteoarthritis (OA); 2) critique the content and format of the program; and 3) prioritize three arthritis best practices to develop as online content for health professionals and consumers. Description: The Getting a Grip on Arthritis (Grip) program is an inter-professional educational program based on clinical practice guidelines for OA and RA. During this workshop, the evidence supporting arthritis best practices will be reviewed briefly. Participants will then be asked to comment on the relevance and importance of each best practice, identify possible additional best practices, rate the items in terms of priority for online content development and make suggestions for the development of educational tools. The Grip program has been shown to improve arthritis management in the community including both health professional and patient outcomes. Adaptation for online learning will ensure the sustainability of the program and allow us to offer the program to more providers in remote and rural locations.

Level: introductory

<u>Target Audience</u>: General public, people with arthritis, healthcare professionals and researchers interested in patient education and shared decision-making, Cochrane authors interested in knowledge translation in Canada.

### Workshop 2: Managing Search Strategies & Results: Complying with MECIR and PRISMA

#### Fiander M<sup>1</sup>

<sup>1</sup> Cochrane Effective Practice and Organisation of Care (EPOC) Group, Canada

10:30AM - 12PM, West Ballroom, 9 May 2012

<u>Background</u>: Systematic Reviews (SRs) entail extensive searching and management of thousands of citations from multiple sources. Despite the complexity of this process, strategies for managing search results and strategies are often developed ad hoc. Without planning, however, authors or Information Specialists may have difficulty documenting the search process to fulfill PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) requirements and the standards described in The Cochrane Collaboration's Methodological Expectations of Cochrane Intervention Reviews (MECIR).

Objectives: This workshop will demonstrate methods to manage search strategies and search results to meet both PRISMA and MECIR standards. Citation management will be discussed and demonstrated using Reference Manager bibliographic management software; topics will include importing references from a variety of databases in a consistent manner; coding references to track their source and date of capture; identifying and managing duplicate references. Search strategy and results management will be illustrated for a variety of databases and interfaces including: OVID Medline and EMBASE; EbscoHost CINAHL; ISI Web of Science; Trial Registries, and Gray Literature.

<u>Knowledge/Technology</u>: The session is about methods to meet reporting standards. Therefore, while Reference Manager is employed, it is not the focus. Further, the principles demonstrated in Reference Manager will be applicable to other bibliographic management software packages.

# Workshop 3: Sex and gender-based analysis: Developing a knowledge translation tool with the Cochrane Hypertension, HIV/AIDs and Musculoskeletal Review Groups

Doull M<sup>1</sup>, **Tudiver S**<sup>2</sup>, **Boscoe M**<sup>3</sup>, **Puil L**<sup>4</sup>, Runnels V<sup>5</sup>, Welch V<sup>6</sup>, Shea B<sup>7</sup>, Borkhoff C<sup>8</sup>, **O'Neill J**<sup>6</sup>

<sup>1</sup> School of Population and Public Health, Faculty of Medicine, University of British Columbia; Canada; <sup>2</sup> Independent researcher, Canada; <sup>3</sup> REACH Community Health Centre, Canada; <sup>4</sup> Cochrane Hypertension Review Group, Canada; <sup>5</sup> School of Population and Public Health, Faculty of Medicine, University of British Columbia, Canada; <sup>6</sup> Centre for Global Health, University of Ottawa, Canada; <sup>7</sup> CIET, University of Ottawa, Canada; <sup>8</sup> Women's College Hospital and Institute for Clinical Evaluative Sciences (ICES), Canada

10:30AM - 12PM, Midway Ballroom, 9 May 2012

Learning Objectives: 1) Enhance participants' skills in applying sex and gender-based analysis (SGBA) to protocols and systematic reviews with the aid of a new knowledge translation (KT) tool; 2) Critically appraise this KT tool; 3) Develop strategies for disseminating and adapting the tool to other Review Groups. Description: Men and women may exhibit different vulnerabilities, symptoms and responses to treatment, with implications for risk assessment and health outcomes. SGBA is a framework used to guide researchers in determining whether interventions have differential effects for men and women. It can also be used to assess health equity. Increasingly, government organizations and institutions, including the CIHR, require the application of SGBA to research. Despite this, there continues to be a lack of analysis and reporting of evidence concerning sex and/or gender in primary studies and systematic reviews. At a CIHR funded meeting (May 2011), reviewers and users of systematic reviews identified a need for concise, evidence-based products to guide authors in how sex and gender can be considered in reviews. In response, our Working Group has developed a briefing note template and is piloting three briefing notes in collaboration with the Cochrane Musculoskeletal, Hypertension and HIV/AIDS Review Groups. This workshop is part of the pilot evaluation process. The workshop will include brief presentations on: 1) the relevance of SGBA to systematic reviews and available tools and resources for review authors; 2) the development of these topic specific briefing notes. Participants will then engage in a guided small group exercise to discuss and appraise the KT tools and apply them to a specific area of interest. Responses will be included in evaluating the KT tools.

<u>Level and Target Audience</u>: Review authors, peer reviewers, editors, researchers and consumers. All levels and anyone interested in this crosscutting area of interest are welcome.

### Workshop 4: Equity Evidence Aid

O'Neill J<sup>1</sup>, Welch V<sup>1</sup>, Ueffing E<sup>2</sup>, Tugwell P<sup>1</sup>

<sup>1</sup> Centre for Global Health, University of Ottawa, Canada; <sup>2</sup> Canadian Cochrane Centre, Canada

1 - 2:30PM, Midway Ballroom, 9 May 2012

<u>Learning Objectives</u>: By the end of the session participants will: • Understand equity and equity evidence aid. • Understand importance of creating user-friendly summaries for policy-makers in low- and middle-income countries. • Identify interventions that are likely to reduce health inequities and/or work in targeted disadvantaged groups.

<u>Description</u>: Health inequities persist for most diseases and in most countries both within and between countries. Following the tsunami in the Indian Ocean in 2004, The Cochrane Collaboration created "Evidence Aid". Evidence Aid uses Cochrane and other systematic reviews to provide information on interventions that may be relevant following natural disasters. The Campbell and Cochrane Equity Methods Group is developing and testing a searchable, online "Equity Evidence Aid" database of userfriendly summaries of systematic reviews that provide evidence on what works to reduce health inequities, particularly what works in low- and middle-income countries and among disadvantaged groups. We will present the background and our methods of developing the Equity Evidence Aid summaries. We are also testing different methods of dissemination for the summaries, including podcasts and Plain Language Summaries. Examples will be presented. Participants will be asked to work through examples, including creating a modified Summary of Findings table and determining the relevance of the review for low- and middle-income countries. Participants will be able to provide feedback on gaps in research and suggest ideas for other topic areas for Equity Evidence Aid. We will discuss how to set priorities and how to engage with appropriate target audiences, including decision-makers.

Level: Introductory

<u>Target Audience</u>: Policy-makers, systematic review authors and other interested attendees.

### Workshop 5: Assessing risk of bias in nonrandomized study designs for inclusion in systematic reviews.

**Mayhew A**<sup>1</sup>, Worswick J<sup>1</sup>, Sullivan K<sup>1</sup>, **Linklater S**<sup>1</sup>, **Turner L**<sup>2</sup>

<sup>1</sup> Cochrane Effective Practice and Organisation of Care Review Group, Canada; <sup>2</sup> Cochrane Bias Methods Group, Canada

### 1 - 2:30PM, Harrow, 9 May 2012

Learning Objectives: To apply the Cochrane Risk of Bias (RoB) tool to a variety of study designs, including cluster randomized trials, interrupted time series, and controlled before-after designs. Description: Quality assessment of individual included studies remains a critical component in the conduct of systematic reviews. The Cochrane Risk of Bias tool has been used in Cochrane Reviews for over three years. However, many of the criteria are particularly targeted at addressing risk of bias in individual randomized controlled trials. The Cochrane Effective Practice and Organisation of Care Group (EPOC), a review group within The Cochrane Collaboration, supports systematic reviews of professional, organizational, financial, and regulatory interventions to improve healthcare delivery and care systems. EPOC allows authors to include certain nonrandomized designs within the reviews, specifically controlled before-after designs and interrupted time series designs. This inclusion has led to new challenges in using the Cochrane RoB quality assessment tool. A review of the study design eligibility criteria for EPOC reviews will be presented. Criteria specific to interrupted time series designs and controlled before-after designs will be described and discussed. Furthermore, applying the RoB criteria to cluster trials will be explored. Participants will be asked to assess the quality of studies of different designs. Ample time will be provided to discuss both the process of the quality assessment and the findings.

Level: Intermediate.

<u>Target Audience</u>: Authors and users of systematic reviews, particularly those reviews including non-randomized studies.

### Workshop 6: Core outcome measures for Randomized Controlled Trials and Cochrane Reviews

**Kirkham J**<sup>1</sup>, Tugwell P<sup>2</sup>, Altman D<sup>3</sup>, Blazeby J<sup>4</sup>, Clarke M<sup>5</sup>, Williamson P<sup>6</sup>, Gargon E<sup>6</sup>

<sup>1</sup> Department of Biostatistics, University of Liverpool, UK; <sup>2</sup> Centre for Global Health, Institute of Population Health, University

of Ottawa, Canada; <sup>3</sup> University of Oxford, UK; <sup>4</sup> University of Bristol, UK; <sup>5</sup> Queens University Belfast, UK; <sup>6</sup> University of Liverpool, UK

### 1 - 2:30PM, West Ballroom, 9 May 2012

<u>Objectives</u>: Ill health and treatments can affect people in different ways, making it difficult to select the most appropriate outcomes for research. The development of standardized core outcome sets for all trials of effectiveness in a particular condition would make this easier. This workshop will explore these issues and the notion of standardized core outcome sets.

<u>Description</u>: This workshop will comprise a mixture of presentations and participant discussion. A presentation will set the scene for several key issues and the participants will then be given specific Cochrane Reviews to look at. They will work in groups to identify examples of non-standardized selection, measurement and reporting of outcomes, and discuss problems this may cause for authors of systematic reviews. Subsequent presentations and group discussion will focus on existing work to design core outcome sets for clinical trials, and to identify outcomes of most importance to patients, families and carers. Participants will discuss how similar research could identify appropriate outcomes for Cochrane Reviews, and how core outcome sets can be used to help authors present their findings clearly and succinctly, such as within the Summary of Findings table.

### Workshop 7: More than just numbers: understanding statistics in Cochrane Reviews

#### Santesso<sup>1</sup>

<sup>1</sup>Cochrane Applicability and Recommendations Group and McMaster GRADE Centre, McMaster University

#### 3 - 4:15PM, Harrow, 9 May 2012

As a consumer of evidence, whether as a health care provider, policy-maker, peer reviewer, public or patient, it can be difficult to understand the numbers presented in systematic reviews and primary studies. This workshop will explain the statistics produced and presented in systematic reviews and provide simple solutions for how to interpret and use the numbers. It will be an interactive workshop and use examples to illustrate common statistical concepts in reviews.

## Workshop 8: Integrated Knowledge Translation: What does it mean? How does one do it? How can it be evaluated? What does it look like?

Suter E<sup>1</sup>, Deutschlander S1, Mickelson G<sup>2</sup>, Nurani Z<sup>1</sup>, Lait J<sup>1</sup>, Harrision L<sup>3</sup>, Jarvis-Selinger S<sup>4</sup>, Bainbridge L<sup>5</sup>, Achilles S<sup>6</sup>, Ateah C<sup>7</sup>, Ho K<sup>4</sup>, **Grymonpre R**<sup>8</sup>, **McLean R**<sup>9</sup>, **Tetroe J**<sup>10</sup>

<sup>1</sup> Health Systems Workforce Research Unit, Alberta Health Services, Canada; <sup>2</sup> Provincial Health Services Authority, Canada; <sup>3</sup> College of Medicine, University of Saskatchewan, Canada; <sup>4</sup> Faculty of Medicine, University of British Columbia, Canada; <sup>5</sup> Faculty of Medicine and College of Health Disciplines, University of British Columbia, Canada; <sup>6</sup> Primary Health, Saskatoon Health Region, Canada; <sup>7</sup> Faculty of Nursing, University of Manitoba, Canada; <sup>8</sup> IPE Initiative, University of Manitoba, Canada; <sup>9</sup> Evaluator, Canadian Institutes of Health Research, Canada

#### 3 - 4:15PM, West Ballroom, 9 May 2012

<u>Learning objectives</u>: a) To understand the principles of integrated knowledge translation (iKT) and how it applies to knowledge syntheses (KS); b) To apply iKT principles in one's own context when conducting knowledge syntheses.

Description: Considerable resources are invested in conducting applied research with the goal of achieving a more effective and efficient health care delivery system and improving the health and wellbeing of individuals. Unfortunately, a knowledgeto-action (KTA) gap exists with inadequate and slow uptake of research knowledge into practice. Integrated knowledge translation (iKT) has been identified by the Canadian Institutes of Health Research (CIHR) as an effective strategy to bridge this KTA gap. In iKT, potential research knowledge users are engaged in the entire research process. The intent of this approach is to produce research findings that are more likely to be relevant to and used by the end users. During this workshop we will outline the principles of iKT and why they are important. We will describe CIHR's evaluation of knowledge translation funding programs, an ongoing project aimed at understanding how and why KT works and doesn't work. The iKT strategies used in one exemplar CIHR funded KS will also be presented. Working in small groups, participants will discuss the following:

 In previous knowledge synthesis projects that you were involved in, did you apply iKT principles? If so, which principles of iKT did you apply? Which specific strategies did you use? What worked? What didn't?

• Having heard the presentation during this session, which other principles of iKT might you apply? Which specific strategies might you use? Which challenges do you perceive for applying these principles in your research?

Level: Introductory to advanced

<u>Target Audience</u>: Individuals with interest or expertise in knowledge syntheses and a desire to learn more about and/or share their own experiences with iKT.

### Workshop 9: Investigating clinical heterogeneity in systematic reviews

### Gagnier J<sup>1</sup>

<sup>1</sup> Departments of Orthopaedic Surgery and Epidemiology, University of Michigan, USA

3 - 4:15PM, Midway Ballroom, 9 May 2012

<u>Objective</u>: To aid systematic reviewers in investigating clinical aspects of heterogeneity in systematic reviews of controlled trials.

Description: While there is some consensus on methods in systematic reviews for investigating statistical and methodological heterogeneity, little attention has been paid to clinical aspects of heterogeneity. Clinical heterogeneity may be defined as differences within and between trials that arise from variables related to the patients, intervention, outcome measurements and research setting. Recently, consensus-based recommendations were created to guide reviewers on methods for investigating clinical heterogeneity. This includes recommendations regarding expertise to include in the review process, how to choose variables, statistical methods for investigating the influence of such variables, and how these investigations can be used in forming conclusions or improve the applicability of systematic reviews. We will present these recommendations in detail and allow participants to work through this material with research questions of their own specific interest.

<u>Level and target audience</u>: Introductory and knowledge producers.

## Workshop 10: Knowledge to Practice - A practical tool to enhance presentation of evidence

Allen M<sup>1</sup>, Bugden S<sup>2</sup>

<sup>1</sup> Continuing Medical Education, Dalhousie University, Canada; <sup>2</sup> Faculty of Pharmacy, University of Manitoba, Canada

10:30 - 11:45AM, West Ballroom, 10 May 2012

Learning Objectives: Putting evidence from clinical research into practice is complex and requires healthcare professionals to have complete, unbiased knowledge of the safety and efficacy of new therapies. The National Institutes of Health recommends that results of clinical trials be conveyed accurately (i.e., in absolute terms such as number needed to treat as well as relative terms such as relative risk reduction). Our own research has found that absolute terms are seldom presented in continuing education programs even though family physician-learners recognize the importance of knowing absolute treatment effects. By attending this workshop participants will learn how to use an online tool we have developed that calculates absolute risk reduction, relative risk reduction, number needed to treat, and confidence intervals from data found in clinical trial publications and exports the results to a PowerPoint template.

<u>Description</u>: We will briefly review results of our research and then participants will have hands-on experience using the online tool by working through some examples from clinical trial publications. **Participants will have to bring their laptops** and access the wireless network provided.

<u>Level</u>: Intermediate. Participants should have a basic understanding of relative risk reduction, absolute risk reduction, number needed to treat and confidence intervals.

<u>Target Audience</u>: Knowledge translation professionals who provide or organize educational programs for health care providers.

## Workshop 11: The patient perspective in systematic reviews: Providing feedback on Cochrane Reviews and protocols

Marin T1, Rader T2

<sup>1</sup> Cochrane Back Group, Canada; <sup>2</sup> Cochrane Musculoskeletal Review Group, Canada

10:30 - 11:45AM, Harrow, 10 May 2012

Consumers around the world volunteer to provide comments to Cochrane Reviews and protocols. Consumer comments make the review more relevant and useful to the reader and the comments are highly valued by Cochrane editors and authors. By the end of this workshop participants will learn how different Cochrane Groups engage with consumers. They will understand the parts of the review that benefit from consumer comments and learn about recent developments in Cochrane Reviews. They will learn how to comment effectively on reviews and protocols by using a checklist to make comments on an actual review or protocol. A group discussion with a question & answer period will follow with a managing editor, consumer coordinator, and a consumer. This workshop will be an introduction to providing comments, and a refresher course for experienced consumers. It will also be a good opportunity for Cochrane Review Groups to learn about this function and learn about ways of engaging consumer volunteers in their own groups.

# Workshop 12: Non-Randomized Studies: Methodological considerations when including non-randomized studies in systematic reviews of interventions

#### Mayhew A1

<sup>1</sup>Cochrane Effective Practice and Organisation of Care (EPOC) Review Group, Canada

12:30 - 2PM, Midway Ballroom, 10 May 2012

<u>Learning Objectives</u>: a) To explore considerations for and advantages and disadvantages of including non-randomised studies (NRS) in systematic reviews of interventions; b) To review the inclusion criteria of the EPOC group.

<u>Description</u>: The Cochrane Effective Practice and Organisation of Care (EPOC) Group has experience including NRS in systematic reviews. This will be an interactive workshop, discussing the inclusion of NRS in systematic reviews of interventions. The impact of including NRS on various aspects of the review process from question development to implications for practice will be discussed. Where possible, participants will be encouraged to discuss specific review examples where consideration of NRS is an issue. The EPOC criteria for NRS inclusion (controlled before-after designs, interrupted time series designs) will be presented.

Level: Intermediate

Target Audience: Review authors and readers.

### Workshop 13: Logic Models in Systematic Reviews: Improving Processes, Transparency and Relevance

<sup>1</sup>**Ueffing E**, <sup>2</sup>Anderson L, <sup>3</sup>Armstrong R, <sup>4</sup>Baker P, <sup>4</sup>Francis D, <sup>5</sup>Petticrew M, <sup>6</sup>Rehfuess E, <sup>7</sup>Tugwell P

<sup>1</sup>Canadian Cochrane Centre, Canada; <sup>2</sup>Washington State Institute for Public Policy, USA; <sup>3</sup>University of Melbourne, Australia; <sup>4</sup>QLD Health, Australia; <sup>5</sup>London School of Hygiene & Tropical Medicine, UK; <sup>6</sup>University of Munich, Germany; <sup>7</sup>University of Ottawa, Canada

12:30 - 2PM, Midway Ballroom, 10 May 2012

<u>Learning Objectives</u>: a) Participants will learn how to develop logic models, or analytical frameworks, to make their reviews more relevant and understandable for knowledge users.
b) They will also learn how logic models can increase the transparency of different stages of the systematic review process.

<u>Description</u>: As systematic reviews become more complex, they become more difficult to conduct and understand. Logic models describing mechanisms of action – with consideration of political, social, and cultural contexts – can bring clarity to this complexity. They can simplify the review process, make these processes more transparent, and improve knowledge users' understanding of the review's hypotheses.

In this introductory workshop, participants will learn strategies for developing logic models and explore examples of logic models in systematic reviews. Audience interaction will be encouraged, and participants will work in small groups to create logic models; topics will be provided, though participants are welcome to use their own review topics.

Level: Beginner

Target Audience: Knowledge producers

### Workshop 14: Assessing the risk of outcome reporting bias in systematic reviews (ORBIT)

**Kirkham J**<sup>1</sup>, Altman D<sup>2</sup>, Dwan K<sup>3</sup>, Gamble C<sup>3</sup>, Williamson P<sup>3</sup>

<sup>1</sup> Department of Biostatistics, University of Liverpool, UK.; 
<sup>2</sup> University of Oxford, UK.; 
<sup>3</sup> University of Liverpool, UK

12:30 - 2PM, West Ballroom, 10 May 2012

<u>Objectives</u>: a) To provide the reviewer with a background to the problem of outcome reporting bias and how it might lead to misleading conclusions; b) to demonstrate how a reviewer

might identify such bias in their review; c) to present techniques for assessing the robustness of the meta-analysis to such bias. Description: Within-study selective reporting has been defined as the selection, on the basis of the results, of a subset of the analyses undertaken to be included in a study publication. Sources of bias will be described. The workshop will focus on outcome reporting bias (ORB). Empirical evidence for the existence of ORB is accumulating. In a meta-analysis, often a total number of k eligible studies are identified but only n report the data of interest. The reviewer needs to examine the remaining (k-n) studies to establish whether the outcome of interest was collected but not reported. Methods for the identification of ORB in a meta-analysis and an individual study will be described and illustrated using examples. Participants will be encouraged to undertake such assessments from examples provided and to discuss issues for their reviews.

### **ORAL Abstracts**

Please note: The names of oral presenters appear in bold

### **Oral Session 1:**

### Capture-Mark-Recapture as a Stopping Rule for Systematic Reviews in Injury Control

Stelfox H<sup>1</sup>, Foster G<sup>2</sup>, Goldsmith C<sup>3</sup>, **Niven D**<sup>1</sup>

<sup>1</sup> University of Calgary, Canada; <sup>2</sup> McMaster University and St Joseph's Healthcare, Canada; <sup>3</sup> Simon Fraser University, Canada

10:30AM - 12PM, Essex/Canterbury, 9 May 2012

<u>Background</u>: Systematic reviews are an important knowledge synthesis tool for informing injury control researchers and clinicians about the state of knowledge. With new literature available each day, reviewers must balance identifying all relevant literature against timely synthesis so that results are presented before the information becomes out of date.

<u>Objective</u>: We tested a stopping strategy using capture-mark-recapture (CMR) statistical modeling to estimate the total number of articles with evidence about the reliability, validity and implementation of quality indicators (QI) for evaluating adult trauma care using four large bibliographic databases.

<u>Methods</u>: CMR is an ecology-based technique that involves sequential sampling, tagging and resampling of elements to allow estimation of population size. We performed an evaluation of the Horizon Estimate (i.e. estimate of the total population of research studies) for a systematic review of four electronic databases (Medline, EMBASE, CINAHL, *The Cochrane Library*) and citation references for research studies (no methodology restrictions) of QIs in trauma care.

Results: The systematic review included 40 articles identified from Medline, EMBASE, CINAHL and citation references (no articles identified from *The Cochrane Library*). The CMR model suggested that three (95% confidence interval [CI]: 0 to 6) articles were missed and the total number of potential articles for inclusion in the systematic review was 43 (95% CI: 40 to 46). The database search provided 93% (one-sided 95% CI:  $\geq$  83%) of known articles for inclusion in the systematic review. The search order used for identifying the articles was optimal amongst the 24 that could have been used.

<u>Conclusions</u>: The CMR technique can be used in systematic reviews in injury control to estimate the closeness to capturing

the total body of literature for a specific topic. Future systematic reviews may consider including Horizon Estimates as possible stopping rules.

A comparison of two search strategies to perform a systematic review: the case study on the effectiveness of intravenous regional sympathetic blockade

Bussières M<sup>1</sup>, Coulombe M<sup>1</sup>, Hamel M<sup>1</sup>, **Rhainds M**<sup>1</sup> *UETMIS-CHUQ*, *Canada* 

10:30AM - 12PM, Essex/Canterbury, 9 May 2012

<u>Background</u>: The completeness of search strategies and their efficacy to retrieve all relevant information are major concerns among systematic review (SR) producers.

<u>Objectives</u>: To compare two approaches to conduct an evaluation of the effectiveness of intravenous regional sympathetic blockade to treat adult patients with complex regional pain syndrome (CRPS).

Methods: A combination of Mesh terms and free words synonyms were identified by an interdisciplinary group. Two search strategies were elaborated and applied in Pubmed. The first was a narrow search developed with specific limits (dates, type of article, language, species). A broad search, using research methodology filters, was elaborated based on the Pubmed clinical queries tool (except for medical genetic filter). Article selection, quality assessment and data extraction were performed by two independent reviewers.

Results: A total of 271 articles were retrieved from the narrow strategy compared to 473 from the broad search. Twenty-six articles were included following the selection process. The quality assessment results gave six randomized controlled trials (RCTs) and one clinical guideline. Both strategies were effective to retrieve pertinent information, except for one included RCT that was not found using the narrow strategy. In an attempt to retrieve data, the limits were removed from the strategy, increasing the amount of publications but resulting in the capture of the missed RCT. In this particular question, the level of evidence and conclusion were not affected by the exclusion of this RCT.

<u>Conclusion</u>: Comparison of narrow and broad search strategies showed that some information could be missed despite the fact that similar sets of RCTs were found. HTA producers are facing difficult choices between good sensitivity of a search, which brought high levels of background noise, versus the risk to miss data with a narrow search. The value-added of a broader strategy must be balanced with time and resource required.

## Consensus-based recommendations for investigating clinical heterogeneity in systematic reviews

**Gagnier J**<sup>1</sup>, Moher D<sup>2</sup>, Morgenstern H<sup>3</sup>

<sup>1</sup> Departments of Orthopaedic Surgery and Epidemiology, University of Michigan, USA; <sup>2</sup> Clinical Epidemiology Program, Ottawa Hospital Research Institute, Canada; <sup>3</sup> Departments of Epidemiology, University of Michigan, USA

10:30AM - 12PM, Essex/Canterbury, 9 May 2012

<u>Background</u>: Few systematic reviews investigate clinical reasons for heterogeneity, and when done, the investigators often fail to use valid statistical or other methods. While there is some consensus on methods in systematic reviews for investigating statistical and methodological heterogeneity, little attention has been paid to clinical aspects of heterogeneity. <u>Objective</u>: To develop recommendations for investigating clinical heterogeneity in systematic reviews.

<u>Methods</u>: We identified and invited potential participants with expertise in systematic review methodology, systematic review reporting, heterogeneity, statistical aspects of meta-analyses, or those who published papers on clinical heterogeneity. Three phases were conducted: 1) Pre-meeting item generation; 2.) Face-to-face consensus meeting in the form of a modified Delphi process; and 3) Post-meeting feedback.

Results: During April to June 2011 we conducted phone calls with participants to generate items for discussion at the face to face meeting. On 3 - 4 June 2011, we held the face-to-face focus group meeting in Ann Arbor, during which a total of 18 people participated. They were an international group with a variety of expertise including: clinical epidemiologists, epidemiologists, statisticians, methodologists, surgeons, trialists, and social workers. First, we agreed upon a definition of clinical heterogeneity: Variations in the treatment effect that are due to differences in clinically related characteristics. Second, we discussed and provided recommendations on the following

categories related to investigating clinical heterogeneity: the systematic review team, planning investigations, rationale for variable choices, types of clinical variables, the role of statistical heterogeneity, the use of plotting and visual aids, dealing with outlier studies, the number of investigations or variables, how to obtain data for these variables, the role of the best evidence synthesis, types of statistical methods, the interpretation of findings and reporting.

<u>Conclusions</u>: Our recommendations can help guide systematic reviewers in conducting valid and reliable investigations of clinical heterogeneity.

#### Oral Session 2:

## An overview of syntheses about health systems arrangements to support evidence-informed policy

Wilson M<sup>1</sup>, Lavis J<sup>2</sup>, Moat K<sup>3</sup>

<sup>1</sup> McMaster Health Forum; Centre for Health Economics and Policy Analysis, McMaster University; Department of Clinical Epidemiology and Biostatistics, McMaster University; Ontario HIV Treatment Network; Canada; <sup>2</sup> McMaster Health Forum; Centre for Health Economics and Policy Analysis, McMaster University; Ontario HIV Treatment Network; Department of Political Science, McMaster University; Canada; <sup>3</sup> Health Policy PhD Program, McMaster University; Canada

10:30AM - 12PM, York, 9 May 2012

<u>Background</u>: Policy-makers, stakeholders and researchers interested in how to strengthen or reform health systems or in how to get cost-effective programs, services and drugs to those who need them require easy access to syntheses of research evidence to inform their decision-making, advocacy efforts or their research programs.

<u>Objectives</u>: To assess the synthesized research evidence available about governance, financial and delivery arrangements within health systems, and about implementation strategies that can support change in health systems.

Methods: We searched Health Systems Evidence

(HSE - healthsystemsevidence.org) and profiled the number and types of documents available, the topics they address and how many are focused on low- and middle-income countries (LMIC). For systematic reviews, we outlined how recently they were conducted and their average quality.

Results: As of January 2012, HSE contained 1357 systematic

reviews of effects (of which 367 are Cochrane Reviews), 255 systematic reviews addressing other questions, 179 systematic reviews in progress (all of which are Cochrane protocols) and 52 review-derived products (evidence briefs for policy and overviews of systematic reviews). Most records address topics related to delivery arrangements (n=1446) or implementation strategies (n=650) with far fewer addressing financial (n=143) and governance arrangements (n=139) or with a LMIC focus (n=89). As of May 2011 (data is currently being updated using the newly re-launched database), 475 reviews had been quality appraised with an average AMSTAR rating of 6.0 (out of a possible 11), 353 reviews have no independently produced user-friendly summary and half were completed in 2005 or later. Conclusions: Policy-makers, stakeholders and researchers now have access to a comprehensive set of reviews and review summaries to inform health systems decision-making, advocacy and research. Over time, HSE will also provide a continuously updated repository of economic evaluations addressing health system topics, descriptions of health system reforms and descriptions of health systems.

# Health and Work Productivity Web-Portal: A knowledge translation and exchange (KTE) platform to facilitate evidence-informed disability prevention and workplace innovation – A proof of concept study

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10:30AM - 12PM, York, 9 May 2012

<u>Background</u>: The Health and Work Productivity Web-Portal was developed as a KTE collaborative platform to create effective and efficient mechanisms to identify, evaluate, translate and effectively disseminate credible and relevant knowledge, tools and implementation resources across multiple stakeholders involved in disability prevention and workplace innovation. This study engaged two occupational health and safety organizations,

a benefit plan provider and academic researchers.

<u>Objectives</u>: To define metrics of success, roles and responsibilities, refine processes and workflows and assess interest and future commitment of academic and community partners in the web-portal initiative.

<u>Methods</u>: This qualitative study, using principles and social cognitive theories underpinning community development, engaged Academic and Community Partners (ACP) members in iterative processes of problem identification, clarification and program planning. Baseline, mid-term and end of project surveys were used to assess collaborative process, expectations and utility of results.

Results: Roles and responsibilities, processes and workflows, and metrics of success were collaboratively developed, piloted, refined and have been incorporated into the web-portal. The collaborative process led to the creation of a stakeholder-centred systematic review of qualitative and quantitative systematic reviews of risk factors contributing to workplace absences across health conditions. Team members continually reflected on individual insights and contextual factors. Attention was directed at actively translating these insights into program planning creating a respectful environment and early and continuing mutual appreciation of each member's knowledge, experience and expertise.

<u>Conclusions</u>: The ACP provided perceived multi-level benefits to all participants and resulted in the identification and translation of credible knowledge derived from a stakeholder-centred systematic review. Stakeholders actively participated in framing the final stakeholder report which may be attributed to early uptake and fruitful discussions within their organizations and constituents.

### Engaging for evidence use: developing a provincial KT program

Holmes B<sup>1</sup>, Steinberg M<sup>2</sup>

<sup>1</sup> Michael Smith Foundation for Health Research, Canada; <sup>2</sup> Evaluation Consultant, Canada

10:30AM - 12PM, York, 9 May 2012

<u>Background</u>: Increasingly, provincial health research funding agencies are implementing programs to support researchers and decision-makers to use evidence more effectively. Developing a useful, effective program aimed at building capacity for knowledge translation (KT) is a complex undertaking. In keeping with the

spirit of KT, this project used an evidence-informed, iterative and multi-faceted approach to determine how best to support KT needs in British Columbia. The presentation describes the steps taken to date in the project and the challenges we encountered. Objectives: To develop a provincial health funding agency KT program by: a) Determining existing national and provincial KT supports; b) Learning about KT needs; c) Understanding facilitators and barriers to knowledge uptake and use

<u>Methods</u>: We used a variety of methods to generate the evidence base for the program, including environmental scans, interviews, a province-wide survey and discussion papers.

Results/Conclusions: Our environmental scan, initial key informant interviews and discussion paper revealed five main KT roles played by health research funders (building KT skills and providing KT resources; funding KT; advocating for KT; advancing the science of KT; managing KT projects) and highlighted gaps in KT capacity building that we began to address through workshops. Positive reaction to the workshops and requests for and suggestions about further support led to the development of a provincial needs assessment (survey and additional key informant interviews) to determine how to build a more comprehensive provincial program. The development of the program has mirrored other knowledge synthesis, production and use endeavours: we have grappled with the complexity of our subject matter (KT) and the context in which we work, as well as the limitations of the evidence. Our presentation highlights how we engaged with the evidence and addressed these challenges in order to develop the supports that will enable others to do the same.

### Cochrane Canada webinars: opportunities to engage with the evidence

**Ueffing E**<sup>1</sup>, Vilis E<sup>1</sup>, Stevens A<sup>2</sup>, Cuervo LG<sup>3</sup>

<sup>1</sup> Canadian Cochrane Centre, Canada; <sup>2</sup> Ottawa Hospital Research Institute, Canada; <sup>3</sup> Pan American Health Organization (PAHO/WHO), USA

10:30AM - 12PM, York, 9 May 2012

<u>Background</u>: The Canadian Cochrane Centre is strengthening health research systems through capacity building using virtual training tools, in a partnership with the Pan American Health Organization, Regional Office of the World Health Organization (PAHO/WHO).

Objectives: a) To support Canadian efforts to advance locally

and regionally the PAHO Policy on Research for Health and the WHO Strategy on Research for Health; b) To promote the use of knowledge translation to strengthen national health research systems by building capacities and developing skills, especially in Canada; c) To promote the use of Cochrane Reviews, tools and resources in health care and health policy to improve health; d) To inspire and motivate participants to become Cochrane Collaboration contributors; e) To empower participants to make evidence-based decisions about health and health care; f) To provide a unique training opportunity to a wide audience.

Methods: Webinars offer tools to engage participants and to enhance learning/retention. For example, functions such as application sharing and polls allow participants to join handson demonstrations. Moreover, webinars allow for real-time debates and knowledge exchange. They can be recorded for continuing education purposes and references. Finally, webinars are evaluated using surveys and post-webinar knowledge assessments.

Results: Feedback from participants suggests that webinars may complement and/or replace other forms of learning (e.g. face-to-face workshops). Evaluations also suggest that these virtual educational platforms are effective. Continuous evaluation, periodicity, and consistency have resulted in a comprehensive, growing collection of sessions addressing different needs, breadths, and depth in topics. Our webinars successfully engage participants from varied geographic and professional settings and with different levels of expertise.

<u>Conclusions</u>: Through developing these webinars, we have noted enhanced cohesion among local, national, and regional approaches towards the use of research evidence in policy and practice. The webinars represent a creative approach towards capacity building and strengthening of national health systems and good research practices.

#### Oral Session 3:

## Improving practice: Rx for Change - an intervention research database for health care decision-makers and researchers

Grimshaw JM<sup>1</sup>, Hill S<sup>2</sup>, Mayhew A<sup>3</sup>, Cowie G<sup>2</sup>, Ryan R<sup>2</sup>, Lowe D<sup>2</sup>, **Worswick J**<sup>3</sup>, Fiander M<sup>3</sup>, Wayne SC<sup>3</sup>, Sullivan K<sup>3</sup>

- <sup>1</sup> Ottawa Hospital Research Institute, Canada; <sup>2</sup> Cochrane Consumer and Communication Review Group, Australia; <sup>3</sup> Cochrane Effective Practice and Organisation of Care Group.
- <sup>3</sup> Cochrane Effective Practice and Organisation of Care Group, Canada

#### 1 - 2:30PM, York, 9 May 2012

<u>Background</u>: There is an abundance of evidence available on the effects of strategies targeting healthcare professionals, systems, and consumers to improve medicine-related behaviour across diseases and populations, making it difficult for decision-makers and others to reliably access and assess. Rx for Change (rxforchange.ca) is an internationally recognized intervention research database. This database provides one-stop access to summaries of key findings from quality assessed systematic reviews on interventions to improve evidence-based prescribing practices and consumers' use of medicines.

<u>Objectives</u>: To describe Rx for Change and disseminate the evidence gathered on the effectiveness of interventions in order to change professional prescribing practice behaviour and medicines use by consumers.

Methods: We identify, analyze, summarize and synthesize findings from systematic reviews of good methodological quality, at regular intervals using standardized methods as appropriate. The data is organized and presented on the Rx for Change website using a multi-layer format that includes: an expandable list of intervention categories; summaries of the evidence found for each intervention; a list of all the systematic reviews that have addressed the intervention topic with corresponding quality scores; a description and summary of the results and conclusions from each individual review; and links to reviews and their trials.

Results: The database contains: summaries of key findings for 275 systematic reviews and summaries and statements of effectiveness for 39 intervention categories that the reviews addressed. Examples of effective interventions include those to minimize risks or harms for improving consumers' use of medicines; distribution of educational materials and use of educational meetings to improve professional behaviour (including prescribing). Research gaps are evident in 11 intervention categories.

<u>Conclusion</u>: Rx for Change is a publicly available resource that translates the results of systematic reviews into formats useful for policy-makers. The database provides users with reliable conclusions based on the evidence found in good quality systematic reviews.

## "Dr. Cochrane": An Innovative Approach to Continuing Medical Education Using Cochrane Reviews

Moja L<sup>1</sup>, Bombardier C<sup>2</sup>, Feagan B<sup>2</sup>, Moayyedi P<sup>3</sup>, Schaafsma ME<sup>4</sup>, Tugwell P<sup>5</sup>, **Ueffing E**<sup>4</sup>, Grimshaw J<sup>6</sup>

<sup>1</sup> University of Milan, Mario Negri Institute for Pharmacological Research, Italy; <sup>2</sup> Department of Medicine, Division of Gastroenterology, McMaster University, Canada; <sup>3</sup> Department of Medicine, Division of Gastroenterology, McMaster University, Canada; <sup>4</sup> Canadian Cochrane Centre, Ottawa Hospital Research Institute, Canada; <sup>5</sup> Department of Medicine, University of Ottawa; Centre for Global Health, Institute of Population Health, University of Ottawa, Canada; <sup>6</sup> Canadian Cochrane Centre, Ottawa Hospital Research Institute; Clinical Epidemiology Program, Ottawa Hospital Research Institute, Canada

### 1 - 2:30PM, York, 9 May 2012

<u>Background</u>: The Italian Cochrane Centre and the Canadian Cochrane Centre are using Cochrane Reviews addressing gastrointestinal and musculoskeletal conditions to develop a comprehensive suite of online continuing educational and professional development (CEPD) modules targeting Canadian family physicians and other healthcare professionals.

Objectives: a) To promote evidence-based management of common gastrointestinal and musculoskeletal conditions; b) To strengthen the availability of high quality information resources for Canadian family physicians and other healthcare professionals (especially those in remote/rural settings who have difficulties accessing traditional continuing professional development activities); c) To build Canadian capacity to take a global leadership position in the further development of Cochrane educational activities.

Methods: The modules will include questions and answers corresponding to a fictional vignette featuring "Dr. Cochrane" and based on published Cochrane Reviews. Vignette topics are chosen by the Cochrane Review Groups, family physicians, and specialists according to quality, relevance, and potential impact. The modules will be produced by The Cochrane Collaboration, Wiley-Blackwell Publishing and the University of Ottawa CME Office.

Results: The Review Groups have identified module topics, and vignette writing is underway. The modules have been approved for credit with the Accreditation Council for Continuing Medical

Education. We anticipate that the modules will be launched online in 2013.

<u>Conclusions</u>: The "Dr. Cochrane" initiative will engage family physicians in a unique learning activity that will enable them to improve patient outcomes and the efficient use of healthcare system resources.

### The EQUATOR Centre for Journalology

**Moher D**<sup>1</sup>, Galipeau J<sup>1</sup>, Shamseer L<sup>1</sup>, Bagheri E<sup>2</sup>

<sup>1</sup> Ottawa Hospital Research Institute, Canada; <sup>2</sup> Athabasca University, Canada

1 - 2:30PM, York, 9 May 2012

<u>Background</u>: Billions of dollars invested in health research annually are lost because of correctable problems, including inaccessible, unusable and biased research reports. Contributors and gatekeepers of medical literature have been shown to have varying levels of exposure to training in academic writing and publication. However, it is unknown to what extent this impacts health research. Limited formal training options exist. However, an independent, academic, research-based training program or certification process for academic writing and publishing may be of benefit.

<u>Objectives</u>: A proposal to open the first global centre dedicated to the scientific study of academic writing and publishing - The EQUATOR (Enhancing the QUAlity and Transparency Of health Research) Centre for Journalology (ECJ) – is being developed. This presentation aims to gain audience perspectives on plans for research and education at the ECJ.

Methods: The ECJ will provide training and resources in Journalology for publishers, editors, journal and grant peer reviewers, authors, physicians in training, journalists, and the general public. Users will be able to access training modules, workshops, learning resources, webinars, and a speaker series through an interactive web portal. The ECJ will also offer CME-certified courses, as well as those uniquely certified as Continuing Education in Journalology (CEJ). ECJ research will involve evaluations of change in learners' knowledge, behavioural intentions and reporting practices. These findings will be used to improve the content and delivery of ECJ curriculum on a continuous basis. Systematic reviews will also be carried out to examine the effects of peer review in editorial review and the decision-making process of granting agencies.

Revelance: The ECJ will increase users' knowledge of best practices in journalology and improve the quality of reported literature. In doing so, the health literature will become more usable by systematic reviewers and clinicians in making important decisions about our population's health.

### Review results in 140 characters or less: Using social media to link decision makers to evidence

**Husson H**<sup>1</sup>, Dobbins M<sup>1</sup>, DeCorby K<sup>1</sup>

<sup>1</sup> Health Evidence, McMaster University, Canada

1 - 2:30PM, York, 9 May 2012

<u>Background</u>: Health Evidence hosts an online registry of 2,400+ quality-appraised reviews evaluating public health interventions. Social media presents new opportunities for linking public health decision-makers with review-level evidence.

<u>Objectives</u>: To facilitate evidence-informed decision-making in public health using social media to promote awareness of and access to systematic review findings.

<u>Methods</u>: A social media strategy to promote user engagement was developed, primarily focusing on Twitter, but also including: YouTube, SlideShare, and Google Alerts.

Results and Conclusions: Social media has increased awareness and use of Health Evidence worldwide. Fourtysix thousand, eight hundred and seventy-nine visitors (66% Canadian, 171 countries) used health-evidence.ca in 2011, representing a 16.7% increase over 2010. Four to five Tweets are posted to Twitter daily, directing followers to the Health Evidence website, YouTube, and SlideShare profile pages, increasing decision-maker exposure to review-level content. Consistent posting to Twitter resulted in a rapid increase in followers; as of December 2011, Health Evidence had 1,096 followers, representing a 326% increase over 2010. Twitter followers Retweet ~65% of content to countries including: USA, UK, Australia, New Zealand, Spain, Chile, Italy, Indonesia and Vietnam. Per week, the average Tweet is clicked 9.6 times and Retweeted by five followers. 2011 Google Analytics reveal that Tweets based on reviews in the Health Evidence registry increase user access by >78%. For example one 2011 Tweet about an online health literacy Cochrane Review resulted in 19 views on Health Evidence, representing 100% of visitor views of this review in 2011. Webinars on interpreting review evidence, and user accounts of Health Evidence posted to YouTube have been viewed 900+ times. Presentations posted to SlideShare have been viewed 5,300+ times. This presentation will highlight strategies for gauging audience engagement in social media, as well as review Twitter click trends, highlighting public health decision makers' interests in health-related content via social media.

#### Oral Session 4:

### Consumer support and education beyond national borders: a case study

Walsh M1, Rader T1

<sup>1</sup> Cochrane Musculoskeletal Review Group, Canada

1 - 2:30PM, Essex/Caterbury, 9 May 2012

<u>Background</u>: Many consumers today rely on the internet as their primary source of health-related information. Unfortunately, some of that information is unreliable. Consequently, some consumers are poorly informed about their conditions and appropriate accompanying interventions. This project illustrates how one consumer's exposure to The Cochrane Collaboration has enabled the dissemination of reliable knowledge about interventions for ankylosing spondylitis (AS) and other forms of arthritis to consumers in and beyond Canada.

<u>Objective</u>: To contact as many English speaking AS/arthritis patient organizations worldwide as possible with articles outlining all information necessary to understand the mission of The Cochrane Collaboration and the benefits of *The Cochrane Library*.

Method: An internet search was performed to locate contact information for English speaking AS/arthritis related not-for-profit national and international patient organizations worldwide. An article regarding The Cochrane Collaboration and *Library* was written for the Canadian Spondylitis Association's national newsletter after consultation with the Cochrane Musculoskeletal Review Group. This article was revised for an international readership and it, as well as a briefer version, was sent out to the contacted organizations to be printed in websites/magazines/newsletters.

Results: In total, 27 organizations were contacted, of which 26 were national, while one was international. Nine of the groups were AS-specific. Ten of the 27 (37%) responded positively (either publishing the article or expressing interest in doing so), including the Hong Kong Spondylitis Association, the

National Rheumatoid Arthritis Society (UK), and the Ankylosing Spondylitis International Federation. Only two groups declined, although on the basis of inadequate journal space and may keep the article on file for later publication. Fifteen of the 27 organizations did not respond.

<u>Conclusion</u>: It is hoped that those consumers reached by the above articles will benefit from shared decision-making and the avoidance of disease related complications due to compliance with proven treatments.

### Consumer Involvement in the Cochrane Musculoskeletal Review Group

**Gunderson J**<sup>1</sup>, Rader T<sup>1</sup>, Lyddiatt A<sup>1</sup>

<sup>1</sup> Cochrane Musculoskeletal Review Group, Canada

1 - 2:30PM, Essex/Caterbury, 9 May 2012

<u>Background</u>: There is a world-wide trend toward patient involvement in their health care. This trend includes patient involvement in health research. The Canadian Institutes of Health Research as well as the Cochrane Musculoskeletal Review Group has adopted this approach, in the hopes that it will produce research findings that are more likely to be relevant to consumers and used by them.

Objectives: To showcase the many different ways consumers are involved with the Cochrane Musculoskeletal Review Group. Methods: The Cochrane Collaboration is an international, independent, not-for-profit organization dedicated to making up to date accurate health information available worldwide. The Cochrane Musculoskeletal Group is one of many groups within The Cochrane Collaboration. Consumers within the Musculoskeletal Group have many different roles. Consumers do this by:

- Providing comments on systematic reviews and protocols
- Helping guide research priorities
- Evaluating decision aids and Plain Language Summaries
- Oral and poster presentations at national and international conferences
- Promoting *The Cochrane Library*
- Knowledge Translation
- Recruiting and training new consumers
- · Mentoring new consumers
- Joining author teams in writing a systematic review
- Consumer on the Cochrane Musculoskeletal Editorial Board Results: The role of consumers within the Cochrane

Musculoskeletal Review Group continues to expand due to the support of the Cochrane Musculoskeletal Review Group's staff. There are many ways that consumers can become involved at a meaningful level.

<u>Conclusion</u>: Within the Cochrane Musculoskeletal Review Group there are many roles that consumers can assume. Consumers have started to promote *The Cochrane Library*. Some of our challenges are recruiting more consumers from other countries. We would also like to promote access to *The Cochrane Library* for all Canadians.

## Communicating evidence to consumers and patients: an update on Plain Language Summaries

Rader T<sup>1</sup>, Lyddiatt A<sup>1</sup>, McIlwain C<sup>2</sup>, Santesso N<sup>3</sup>, Tanjong Ghogomu E<sup>1</sup>

<sup>1</sup> Cochrane Musculoskeletal Review Group, Canada; <sup>2</sup> Cochrane Consumer Network, UK; <sup>3</sup> Applicability and Recommendations Methods Group, Canada

#### 1 - 2:30PM, Essex/Caterbury, 9 May 2012

<u>Background</u>: The Plain Language Summary (PLS) is arguably the most important part of the Cochrane Review. It is written in a style that the general public can understand and it is freely available on the web. It is often reproduced in the press, and in patient newsletters and websites, and translated into other languages in order to reach the widest range of people.

<u>Objectives</u>: It is essential that the PLS is as accurate, readable, and accessible as possible. Because of the recognized importance of these summaries to communicate evidence to consumers and the public, The Cochrane Collaboration is actively working to develop high quality PLS in a consistent format.

<u>Methods</u>: This presentation will review the research activities and experiences of the Cochrane Musculoskeletal Review Group to create a standardized PLS based on the 'Summary of findings' (SoF) tables from each Cochrane Review. We will include a report on patient involvement as peer reviewers in the process.

Results: These activities and efforts from other groups are now co-ordinated in the PLEACS (Plain Language Expectations for Authors of Cochrane Summaries) initiative. The main goal of the PLEACS group is to ensure that review findings are clearly presented in a standard format throughout the *Library*. The

project will provide clear guidance on producing standardized PLS, facilitate their production through software modifications, and create a useful website with translations for global dissemination of the completed PLS.

<u>Conclusions</u>: These activities and efforts will help ensure that the PLS reports the accurate results of the review and supports the idea that different audiences will find the same conclusions, whether they read the PLS, the abstract, or the entire review.

### Cochrane Summaries - http://summaries.cochrane.org

McIlwain C<sup>1</sup>, Mavergames C<sup>2</sup>, Becker L<sup>3</sup>

<sup>1</sup> Cochrane Collaboration Secretariat, UK; <sup>2</sup> German Cochrane Center, Germany; <sup>3</sup> Department of Family Medicine, SUNY Upstate Medical University, USA

1 - 2:30PM, Essex/Caterbury, 9 May 2012

<u>Background</u>: Cochrane Summaries (summaries.cochrane.org) is a new website that was designed with consumers in mind.

<u>Objectives</u>: a) To help consumers navigate Cochrane Summaries; b) To increase awareness of the Cochrane Summaries resource.

<u>Description</u>: This website was developed in response to consumer concerns that *The Cochrane Library* was not user-friendly for the public. This presentation will highlight the features available on the website and reveals tools specially produced for this website.

Results: A poster of this presentation was originally presented at the Colloquium in Madrid with positive comments from consumers.

<u>Conclusions</u>: The presentation should have the same impact among Canadian contributors.

#### Oral Session 5:

## Moving from full systematic reviews to a rapid evidence synthesis research model: A work in progress

Killian L<sup>1</sup>, Babineau J<sup>1</sup>, Hayden J<sup>2</sup>

<sup>1</sup> Nova Scotia Cochrane Resource Centre, Canada; <sup>2</sup> Nova Scotia Cochrane Resource Centre, Canada; Department of Community Health and Epidemiology, Dalhousie University, Canada

3 - 4:15PM, York, 9 May 2012

<u>Background</u>: A provincial health research funding body requested an evidence synthesis within a four-month time frame on the topic of a new model of care provision: collaborative emergency centres (CECs). CECs are being opened in rural areas to provide access to primary care and 24 hour access to urgent care and emergency services.

Objectives: Our team aimed to apply knowledge of conducting Cochrane Reviews to provide the best evidence-based research possible while adapting to a shorter time frame. We focused our research efforts through consultation with content experts and healthcare stakeholders, and summarized the published literature to provide messages to inform policy development. Methods: We began by examining methods used at other institutions for rapid syntheses. We compiled a list of components (structures and processes) relevant to CECs with a jurisdictional review. We prioritized components of highest interest through workshop-based stakeholder consultation. Through a series of comprehensive literature searches we identified high quality systematic reviews that addressed prioritized components. We extracted PICO information, assessed quality, and summarized results. We conducted scoping searches on the remaining components and held a second stakeholder workshop to disseminate our main results.

Results: Our approach was ambitious and iterative, and though we attempted to streamline our processes, we found it challenging to balance the tight turnaround time with known, robust methods for performing literature searches, screening processes, data extraction, narrative summaries, and integrated knowledge translation. We negotiated a time extension to allow for project completion in six months.

<u>Conclusions</u>: We learned a great deal from this experience and in the future plan to liaise earlier and more frequently with key stakeholders who can help our team understand what information is most sought after, allowing us to direct our research efforts as precisely as possible and to complete future rapid syntheses within allotted time frames.

#### The evolution of a rapid review program

**Konnyu K**<sup>1</sup>, **Garritty C**<sup>1</sup>, Moher D<sup>1</sup>

1 Ottawa Hospital Research Institute, Canada

3 - 4:15PM, York, 9 May 2012

Background: For over two years the Knowledge Synthesis

Group of Ottawa has explored the methods, execution, and teaching of rapid reviews.

<u>Objective</u>: To share the evolution of our rapid review program and delineate ongoing rapid review projects.

Methods: An eight-step rapid review process was developed iteratively based on the needs of knowledge users, Cochrane principles, and a review timeline of four - six weeks. Decision-makers requiring evidence summaries were either solicited based on expected need or approached our team independently. Workshops outlining the rapid review approach, our experience with using it, and findings of pertinent reviews were developed for key stakeholders.

Results: From November 2009 to December 2011 we produced 18 rapid reviews on a variety of questions related to health interventions, health systems and health services. We also delivered three workshops on rapid review methodology to a diverse range of stakeholders (e.g., methodologists, policy analysts) across Canada. Ongoing work focuses on three distinct but interrelated areas: 1) methodological development; 2) review execution; 3) knowledge translation.

<u>Conclusions</u>: Rapid reviews are a plausible tool for addressing the evidentiary needs of stakeholders. Opportunities for expanding and refining the rapid review program continue to be explored.

### The Grading of Recommendations Assessment, Development and Evaluation Reliability Study (the GRADERS)

**Mustafa R**<sup>1</sup>, Santesso N<sup>1</sup>, Brozek J<sup>2</sup>, Akl E<sup>3</sup>, Schünemann H<sup>2</sup>

<sup>1</sup> Department of Clinical Epidemiology & Biostatistics, McMaster University, Canada; <sup>2</sup> Department of Medicine, McMaster University, Canada; <sup>3</sup> Department of Medicine, State University of New York at Buffalo. United States

3 - 4:15PM, York, 9 May 2012

<u>Background</u>: The Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach has been widely adopted by systematic reviewers and guideline developers for summarizing, grading and presenting evidence. <u>Objectives</u>: a) Evaluate the inter-rater reliability of assessing quality of evidence (QoE) using the GRADE approach; b) Evaluate the effect of various baseline characteristics on predicting reliability; c) Evaluate the effect of assessing QoE in duplicate on the reliability of this approach.

Methods: All participants completed a survey about baseline characteristics. All raters used the GRADE profiler software (version 3.6) designed to assess the QoE, create GRADE summary tables and record the required judgments. In the first exercise, raters independently assessed the QoE of four outcomes from four systematic reviews. We then randomly paired raters and asked them to submit a rating of the QoE based on consensus. Investigators, data abstractors and data analyzers were all blinded to raters' identification. The primary statistical analysis for inter-rater reliability will be based on both crude agreement and chance-corrected agreement using weighted kappa statistics. We will adjust our analysis to level of training and experience with the GRADE approach.

Results: Twenty-eight volunteer raters participated in this study. They had a range of background knowledge about systematic review methodology and GRADE. Results of the analyses will be presented.

<u>Discussion</u>: This study will help identifying sources of poor reliability and confusion about the GRADE approach. It will inform future development of training materials. Additionally, this study will inform the decision about the minimal required training for raters to reliably use the GRADE approach and about the need for duplicate assessment of QoE when using GRADE.

#### **Oral Session 6:**

## The influence of CONSORT on the quality of reporting of RCTs: An updated systematic review

**Turner L**<sup>1</sup>, Shamseer L<sup>1</sup>, Weeks L<sup>2</sup>, Peters J<sup>1</sup>, Plint A<sup>3</sup>, Altman D<sup>4</sup>, Schulz K<sup>5</sup>, Moher D<sup>1</sup>

<sup>1</sup> Ottawa Hospital Research Institute, Canada; <sup>2</sup> Ottawa Integrative Cancer Centre, Canada; <sup>3</sup> Children's Hospital of Eastern Ontario, Canada; <sup>4</sup> University of Oxford, UK; <sup>5</sup> FHI, USA

10:30 - 11:45AM, Essex/Canterbury, 10 May 2012

<u>Background</u>: The Consolidated Standards of Reporting Trials (CONSORT) Statement was developed in response to concerns about the quality of reporting of randomized controlled trials (RCTs). It is an evidence-based minimum set of recommendations for reporting RCTs, intended to facilitate complete and transparent reporting and aid in critical appraisal and interpretation. A 2006 systematic review examining the effectiveness of CONSORT for improving the reporting of RCTs in endorsing journals (i.e. those which, at minimum, recommend

that authors use CONSORT), found CONSORT endorsement to be associated with better quality of reporting, despite poor methodology of some included studies. Five years on from the publication of that review, an update is needed.

<u>Objectives</u>: To update the systematic review of CONSORT effectiveness by Plint et al.

<u>Methods</u>: Conventional systematic review methods employed in the original review were followed. The search for new comparative studies evaluating the quality of reporting of RCTs spanned August 2005 – March 2010. Two reviewers independently screened studies for eligibility; data extraction and study validity assessments were conducted by a single reviewer and verified by a second reviewer.

Results: In the five year period since publication of the original review, 41 new eligible studies were identified in addition to the eight included in the original review. When comparing endorsing and non-endorsing journals, items such as sequence generation, allocation concealment and participant flow were reported better in those endorsing CONSORT. Further details of the comparison between endorsers and non-endorsers as well as between trials published before and after CONSORT publication (both 1996 and 2001) will be presented.

<u>Conclusion</u>: This Cochrane Review provides further evidence on whether CONSORT is effective at improving the reporting of RCTs. This information will be helpful to authors, peer-reviewers and journal editors in helping decide whether to endorse CONSORT.

### Developing an Equity-Extension of the PRISMA checklist

Welch V<sup>1</sup>, Moher D<sup>1</sup>, Petticrew M<sup>2</sup>, **O'Neill J**<sup>1</sup>, Pardo J<sup>1</sup>, Ueffing E<sup>3</sup>, **Tugwell P**<sup>1</sup>

<sup>1</sup> University of Ottawa, Canada; <sup>2</sup> London School of Hygiene and Tropical Medicine, UK; <sup>3</sup> Canadian Cochrane Centre, Canada

10:30 - 11:45AM, Essex/Canterbury, 10 May 2012

<u>Background</u>: PRISMA stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses. The PRISMA Statement aims to help authors improve the reporting of systematic reviews (SR) and meta-analyses by promoting transparency of reporting for methods and results. Currently PRISMA has no guidance specific to health equity-focused SRs. The Equity Methods Group defines an equity-oriented SR as meeting one or more of the following criteria: the SR is relevant to vulnerable groups,

defined across categories of sociodemographic vulnerability or disadvantage; the SR addresses population-level interventions and presents findings for identifiable vulnerable groups; or the SR includes studies targeted at the vulnerable groups. Objectives: We will present the results of an online survey and a consensus meeting on the development of an equity-extension of the PRISMA checklist.

Methods: We proposed 15 modified or additional items to the PRISMA statement for reporting whether and how equity was considered in SRs. We conducted a broad consultation of international leaders in equity and systematic reviews for input on these 15 proposed items. We posted the survey to listserves of policy-makers, clinicians, funders, journal editors and systematic review authors. We held a two-day meeting to support and encourage an interactive process bringing together researchers, journal editors, funders, and knowledge-users. We presented evidence for each proposed equity-extension item and held small group discussions. Participants voted on each item to achieve consensus.

<u>Results</u>: We will present the results of the survey and meeting, including the proposed consensus items included in the equity-extension of PRISMA and the feedback of survey respondents and meeting participants.

<u>Conclusions</u>: The results of the survey and the meeting will be used to create the equity-extension of the PRISMA checklist. The next step is to broadly disseminate and monitor uptake and results of implementing these reporting guidelines on SRs.

## Preferred Reporting Items for Systematic reviews and Meta-Analyses for Protocols (PRISMA-P)

**Moher D**<sup>1</sup>, Shamseer L<sup>1</sup>, Clarke M<sup>2</sup>, Ghersi D<sup>3</sup>, Liberati A<sup>4</sup>, Petticrew M<sup>5</sup>, Shekelle P<sup>6</sup>, Stewart L<sup>7</sup>

<sup>1</sup> Ottawa Hospital Research Institute, Canada; <sup>2</sup> Queen's University, Ireland; <sup>3</sup> National Health and Medical Research Council, Australia; <sup>4</sup> University of Modena, Italy; <sup>5</sup> London School of Hygiene and Tropical Medicine, UK; <sup>6</sup> Southern California Evidence-based Practice Centre, USA; <sup>7</sup> Centre for Reviews and Dissemination, University of York, UK

10:30 - 11:45AM, Essex/Canterbury, 10 May 2012

<u>Background</u>: Outside of The Cochrane Collaboration, systematic review (SR) protocols are seldom published. One reason might be due to there being little guidance as to the content of such

protocols.

<u>Objectives</u>: To develop a guideline to aid authors when reporting SR protocols - Preferred Items for Reporting Systematic reviews and Meta-Analyses 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 (PROPSERO), 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. In the months following the meeting, the checklist has undergone a process of iterative revision among steering committee authors and meeting attendees.

Results: The PRISMA-P checklist is divided into three sections consisting of 18 essential items (22 sub-items) - administrative information (eight items), introduction (two items) and methods (12 items), which should be addressed by authors preparing reports of systematic review protocols.

<u>Impact</u>: 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.

#### Oral Session 7:

### Organizational readiness for knowledge translation in chronic care: A systematic review of theories

Attieh R<sup>1</sup>, **Gagnon M**<sup>2</sup>, Labarthe J<sup>1</sup>, Légaré F<sup>3</sup>, Ouimet M<sup>4</sup>, Estabrooks CA<sup>5</sup>, Roch G<sup>2</sup>, Ghandour EK<sup>1</sup>, Grimshaw J<sup>6</sup>

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10:30 - 11:45AM, York, 10 May 2012

<u>Objective</u>: The objective of this working paper is to develop an evidence-based, comprehensive, and valid instrument to measure organizational readiness (OR) for knowledge translation (KT) in chronic care. The existing evidence on theoretical foundations of organizational readiness for change (ORC) was reviewed and synthesized as the basis for the development of a comprehensive, bilingual OR for KT instrument.

<u>Methods</u>: A systematic review of the literature on conceptual frameworks and theoretical models of ORC in health care was conducted to document the core concepts to be operationalized for measuring KT in the knowledge-to-action process.

Results: This systematic review found 59 articles describing how ORC has been used as a critical precursor to the successful implementation of complex changes in health care settings and measured in health services and in other fields. Preliminary findings suggest a lack of consensus on the theoretical domains involved in ORC and limited evidence of ORC instruments' validity.

<u>Conclusion</u>: This systematic review provides a comprehensive synthesis of current knowledge on explanatory models assessing OR for KT. Moreover, it aims to create more consensus on the theoretical underpinnings of OR for KT in chronic care.

### Health Equity Evidence: Necessary but not Sufficient

Backe H1, Harlos S1

<sup>1</sup> Winnipeg Regional Health Authority, Canada

10:30 - 11:45AM, York, 10 May 2012

<u>Background</u>: Health equity research evidence is necessary to describe health inequities, generate and test causal hypotheses, identify effective interventions, and monitor changes over time. However, to effectively activate health systems, social and physical environments, political and economic institutions and citizenry, health equity evidence alone is not sufficient. To apply health equity evidence at a local level, strategic action is also needed to engage health system leadership, community partners and citizenry, and communicate effectively with the public.

<u>Objectives</u>: We will outline deliberate steps taken to use descriptive and interventional health equity evidence to motivate system change. We illustrate the importance of partnership

relationships, community engagement, organizational change and communication strategies in effecting evidence-based action on health equity.

Methods: The experience of one health region will be described to illustrate the multifaceted and complicated context in which efforts towards health equity occur. The challenges of translating evidence to action on health equity will be portrayed by sharing narrative on the strategic engagement of leadership within the health system, the use and amplification of existing partnerships beyond the health system, and the development of a multifaceted communication strategy aimed to resonate with a wide range of ideologies. The role of evidence to mobilize and motivate will also be highlighted.

Results and Conclusions: Health equity evidence is only useful when it is applied effectively with appropriate timing and packaging, and sufficient dose and duration to make lasting changes in the daily realities of communities. Evidence alone cannot achieve this, but must be consumed and used to fuel multifaceted and sustained system and societal change. Appreciation of this real world context can lead to better designed research that is more likely to make a difference in addressing the intolerable health inequities that occur in Canada today.

### Getting the word out: KT strategies for promoting the use of CIHR-funded reviews

Dobbins M<sup>1</sup>, Tirilis D<sup>1</sup>, DeCorby K<sup>1</sup>, **Husson H**<sup>1</sup> *McMaster University*, *Canada* 

10:30 - 11:45AM, York, 10 May 2012

<u>Background</u>: Pressure to demonstrate evidence-informed decision making (EIDM) in public health is increasingly prevalent in Canada. Health-evidence.ca is committed to facilitating easy access to over 2,000 reviews evaluating effectiveness of public health interventions.

<u>Objectives</u>: This project enhances knowledge translation (KT) for promoting systematic reviews funded by the Canadian Institutes of Health Research (CIHR), which are relevant to public health. This project evaluated tailored messaging, shown effective in supporting EIDM in a CIHR-funded randomized controlled trial 2004-2007 (MOP-64201). Additional active KT strategies for supporting review finding integration were implemented and evaluated.

Methods: Eleven CIHR-funded, high-quality reviews were identified, indexed, and quality rated by two independent

reviewers. Summaries were written to present key findings and implications. A tailored email campaign drew attention to reviews and invited decision-makers to a webinar to discuss findings. Following each webinar, an online evaluation survey was distributed with follow up surveys five months afterwards. A moderated, online discussion forum supported and enhanced interpretation and application of evidence, accounting for local context (CIHR grant KTB-112487).

Results: This project initially offered four webinars November 2011 to March 2012, adding three sessions due to demand, for a total of seven webinars. Preliminary data indicate that 64% of attendees felt webinars were useful, with the majority of participants indicating the research evidence presented was new to them. Practical implications, tips on interpreting evidence, explanations of EIDM, and presentation format were particularly useful. Final follow-up data will be available fall 2012.

<u>Conclusions</u>: Webinar attendees expressed interest in KT throughout the stages of research, opportunities to practice skills learned, more self-directed webinars, and additional webinars on topics of interest. Suggestions to facilitate research use in program planning were identified. Decision-makers would like review authors to include cost information, examples of practical implications for different sectors, and translation of results into practice.

### Translating evidence on complex health services issues.

Kreindler SA<sup>1</sup>, Sadeh E<sup>2</sup>, Beaudin P<sup>3</sup>, Moffatt MEK<sup>2</sup>

<sup>1</sup> Winnipeg Regional Health Authority, Research & Evaluation Unit, Canada; University of Manitoba, Dept of Community Health Sciences, Canada; <sup>2</sup> University of Manitoba, Dept of Community Health Sciences, Canada; <sup>3</sup> Winnipeg Regional Health Authority, Research & Evaluation Unit, Canada

10:30 - 11:45AM, York, 10 May 2012

<u>Background</u>: Healthcare administrators and policy-makers are increasingly seeking evidence to inform high-level decisions. However, undertaking knowledge syntheses that respond to this need brings some unique challenges.

<u>Objectives</u>: Focusing on three disparate syntheses prepared by an "embedded" research unit in a Canadian regional health authority, we outline five key challenges and strategies for addressing them.

Methods: The syntheses included a Cochrane Review on the

organization of acute-care surgical services, a mixed-methods review on chronic disease prevention and management, and a theory-based synthesis on healthcare silos and social identity. Results: Challenges addressed included: a) Defining the question: In two reviews, the original question changed dramatically through the engagement process, as it became clear that decision-makers' original request did not match their real needs; b) Making theory practical: Theory - whether this meant a formal, established theory or an organizing principle identified during review development - played an important role in making complex areas intelligible; c) Generating clear, actionable recommendations from a body of diverse, often non-RCT evidence: In one instance, this entailed balancing caution and clarity in drawing inferences from studies with notable risks of bias; in another, determining how to compare interventions that could not be tested through the same research method; d) Presenting the findings optimally for a decision-maker audience; e) Working to senior managers' timelines.

Conclusions: Our experiences with the three syntheses illuminate a) the importance of decision-maker engagement and long-term relationship-building; b) the value of both factual KT ("what is the evidence?") and conceptual KT ("how should we think about the evidence?"); c) the possibility of preparing separate, sequential versions of a review for different audiences; and d) the role of both traditional and non-traditional review methodologies in responding to organizations' knowledge needs.

#### **Oral Session 8:**

### Academic detailing to inform physicians about uncertainty in guideline recommendations

Allen M<sup>1</sup>, Kelly K<sup>2</sup>, Fleming I<sup>1</sup>

- <sup>1</sup> Continuing Medical Education, Dalhousie University, Canada;
- <sup>2</sup> Drug Evaluation Unit, Capital Health Pharmacy Department, Canada

12:30 - 2PM, Harrow, 10 May 2012

<u>Background</u>: Treating hypertension is a bread and butter practice for family physicians. Blood pressure 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.

<u>Objectives</u>: The purpose of this academic detailing intervention was to inform family physicians of the uncertainty behind these blood pressure recommendations while engaging local specialists.

Methods: 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.

Results: Specialist physicians provided valuable comments on our evidence review and most accepted our approach well. We have visited 350 family physicians plus other health professionals. Family physicians appreciated being informed about the uncertainties in the guideline recommendations. Approximately 35% of physicians indicated they intend to change their practice based on our educational messages. For about 30%, the information reinforced their present practice and gave them confidence in their approach. Written comments indicated physicians appreciate the review of evidence behind the guideline recommendations but some will need time to reflect before accepting the uncertainties we informed them of. Conclusions: Academic detailing is an effective way to inform family physicians of the uncertainty in guideline recommendations. Engaging specialist physicians in topic preparation provides the same information to them and promotes their support of educational messages.

#### Interventions for implementation of thromboprophylaxis in hospitalized medical and surgical patients at risk for venous thromboembolism: A Cochrane Review

**Cohen J**<sup>1</sup>, Morrison D<sup>2</sup>, Shrier I<sup>2</sup>, Emed J<sup>3</sup>, Tagalakis V<sup>2</sup>, Kahn S<sup>2</sup> <sup>1</sup> Department of Epidemiology, Biostatistics, and Occupational Health, McGill University, Canada; <sup>2</sup> Jewish General Hospital Centre for Clinical Epidemiology and Community Studies, Canada; <sup>3</sup> Department of Nursing, Jewish General Hospital, Canada

12:30 - 2PM, Harrow, 10 May 2012

<u>Background</u>: Prophylactic therapies for venous thromboembolism (VTE) are effective and safe, yet, underutilized. There are many

proposed strategies to increase the use of thromboprophylaxis. System-wide interventions may be more effective to improve the use of VTE prophylaxis than relying on individuals' prescribing behaviors.

<u>Objectives</u>: To determine the effectiveness of various interventions designed to increase the use of thromboprophylaxis in hospitalized patients at risk for VTE.

Methods: We searched MEDLINE, EMBASE, and SCOPUS databases and reference lists of included studies and published reviews. Eligibility, data extraction, and risk of bias were assessed in duplicate. Primary outcomes included received prophylaxis (RP) and received appropriate prophylaxis (RAP). We meta-analyzed RCTs and non-randomized studies (NRS) separately and categorized interventions into education, alerts, and multifaceted interventions. We used random effects models to pool risk differences (RD) and assessed heterogeneity using the I2 statistic and subgroups.

Results: Of 1802 records included in our primary screen of titles and abstracts, 78 studies were assessed for eligibility. Fifty-six studies (eight RCTs and 48 NRS) were included in our review. Among RCTs, there were sufficient data to pool one outcome (RP) for the intervention alert; RD=0.13 (95% CI: 0.06-0.21). Among the NRS, there was sufficient data to pool both primary outcomes for each intervention type. Pooled RDs for RP ranged from 0.08-0.15, and for RAP ranged from 0.12-0.19. All pooled effects were statistically significant. Multifaceted interventions had the largest pooled effects. Twelve results showed substantial statistical heterogeneity which was in part explained by patient types and type of hospital.

<u>Conclusions</u>: We found significant increases in prescription of prophylaxis and appropriate prophylaxis associated with education, alerts, and multifaceted interventions. Multifaceted interventions with an alert appear more effective than those without. Our results suggest that any intervention can be effective, but multifaceted approaches appear to have the greatest effect.

### Can a Cochrane Systematic Review be used for pharmacological model validation

**Laugerotte A**<sup>1</sup>, Wong G<sup>2</sup>, Gueyffier F<sup>3</sup>, Wright JM<sup>2</sup>

<sup>1</sup> Service de Pharmacologie Clinique, France and Cochrane Hypertension Group, Canada; <sup>2</sup> Cochrane Hypertension Review Group, Canada; <sup>3</sup> Service de Pharmacologie Clinique, France

12:30 - 2PM, Harrow, 10 May 2012

<u>Background</u>: Pharmacokinetic-Pharmacodynamic (PK-PD) models are useful for basic and clinical drug research. PK-models provide an evaluation of time or dose-concentration relationships and PD-models an evaluation of concentration-effect relationships. To allow a helpful clinical application, models should be tested using high quality clinical data.

<u>Objectives</u>: Being regularly up-dated, Cochrane Reviews provide the best available evidence to answer health care questions. However, they are not used to validate PK-PD models while models are often limited by missing data during the process of validation. Our objective was to test whether a Cochrane Systematic Review could be used to assist in validating a PK-PD model.

Methods: We built a PK-PD model of Carvedilol based on data from the literature evaluating the effect of a single-dose of Carvedilol 25mg on mean arterial pressure (MAP). Applying the principle of accumulation, we predicted from a single-dose model the effect on MAP of repeated-doses of Carvedilol 25mg for three weeks. A protocol for a systematic review of the Blood Pressure Lowering-Efficacy of Dual Alpha and Beta-blockers is published in *The Cochrane Library*. From the review author we obtained the mean reduction in systolic and diastolic blood pressure with Carvedilol 25mg and calculated from them the MAP.

Results: A reduction of 3.7 mmHg of MAP was predicted. The Cochrane Review was based on three RCTs; Carvedilol GSK B100, Carvedilol GSK B101 and McPhilipps 1988 for the same dose of Carvedilol. The mean reduction of MAP was 3.2 mmHg [1.05 mmHg, 5.2 mmHg] in 260 experimental and 241 placebo control people.

<u>Conclusion</u>: The predicted MAP lowering effect of 3.7 mmHg from Carvedilol 25 mg daily lies within the confidence interval of the observed effect from a Cochrane Review. We thus demonstrated that Cochrane Systematic Reviews can help in the validation of PK-PD models and add some creditability to the model.

## Systematic review of the effect of endorsement of reporting guidelines on the completeness of published study reports

Stevens A<sup>1</sup>, Shamseer L<sup>1</sup>, Skidmore B<sup>1</sup>, Turner L<sup>1</sup>, Altman DG<sup>2</sup>, Hirst A<sup>2</sup>, Hoey J<sup>3</sup>, Palepu A<sup>4</sup>, Schulz K<sup>5</sup>, Simera I<sup>2</sup>, **Moher D**<sup>1</sup>

<sup>1</sup> Ottawa Hospital Research Institute, Canada; <sup>2</sup> Centre for Statistics in Medicine, University of Oxford, UK; <sup>3</sup> Queen's University, Canada; <sup>4</sup> St. Paul's Hospital, Canada; <sup>5</sup> FHI360, USA

12:30 - 2PM, Harrow, 10 May 2012

<u>Background</u>: Reporting of health research is often incomplete and inadequate. To this end, many reporting guidelines (RGs), aimed at improving the quality of health research reports, have been developed for reporting a wide variety of research types. Despite their emergence, RGs are underused and published health research continues to be poorly reported.

<u>Objective</u>: To systematically review evidence on the effect of RG endorsement on the quality of published research.

Methods: RGs for which evaluations were sought were identified through a previous systematic review and literature search carried out by the EQUATOR (Enhancing the QUAlity and Transparency Of health Research) network and included if they met the following criteria: a document to guide authors on what should be included in a health research report; developed using explicit methods; involved a consensus process; and contained of a checklist, flow diagram or explicit guidance text. Potential evaluations for each RG were comprehensively sought from three electronic databases (MEDLINE, EMBASE and the Cochrane Methodology Register) and one web citation index (Scopus) and included if they contained a comparison of reporting quality of: studies published before and after journal endorsement of a RG or studies published in endorsing and nonendorsing journals. Screening of records is currently underway and single data extraction, with 10% verification, will be carried out. Data on reporting quality will be collected as adequacy of reporting according to recommended RG standards. The proportion of adequately reported studies across all evaluations will be compared between groups using a relative risk or standardized mean difference where appropriate, with 99% confidence intervals.

<u>Potential Impact</u>: Many RGs are currently available. This systematic review will provide stakeholders with evidence about which RGs are associated with improved reporting quality.

#### Oral Session 9:

### **How Can We Start Planning to Improve Health Equity?**

Beaudin P1, Backe H1

<sup>1</sup> Winnipeg Regional Health Authority, Canada

12:30 - 2PM, York, 10 May 2012

<u>Background</u>: Many international and Canadian groups have developed action-oriented evidence-informed recommendations

as components of plans to address health equity. Collectively, the number of proposed recommendations for improving health equity is overwhelming, particularly for local contexts, creating a barrier to moving forward on health equity initiatives. Therefore, a process is urgently needed to synthesize and categorize the existing body of health equity recommendations.

<u>Objectives</u>: This research uses a systematic method for distilling, synthesizing, and categorizing the plethora of health equity recommendations. The resulting categories can be used by local health equity groups to tailor recommendations based on their need to promote health equity planning within their local contexts.

Methods: A "grey literature" internet search, followed by a manual reference search for documents containing either specific recommendations or plans to promote health equity was conducted. The search revealed specific recommendations to promote health equity in Canada, nationally, provincially or in major cities; as well as selected major international documents generated by the World Health Organization, and English speaking countries including the United Kingdom and the United States. The collection of documents revealed over 1200 recommendations for improving health equity. Recommendations were extracted, compiled, and analyzed. Data management software was used to distill, code, sort, and categorize the recommendations into options for action.

Results and Conclusions: Organizations initiating plans to address health equity may be overwhelmed with the number and variability of potential recommendations from which to choose, thus creating a barrier to action on any of them. The systematic process of this research will provide a useful means to synthesize, distill, and categorize, health equity recommendation. The result will yield a substrate that can be used for improved priority setting and planning for local health equity initiatives.

An international collaboration for ensuring the applicability of a systematic review on information and communication technologies for improving sexual and reproductive health among young people in different economic and cultural contexts.

**Djossa Adoun SM**<sup>1</sup>, **Gagnon M**<sup>2</sup>, Godin G<sup>3</sup>, Tremblay N<sup>4</sup>, Ratté S<sup>4</sup>, Gagnon H<sup>5</sup>, Coté J<sup>6</sup>, Miranda J<sup>6</sup>, Bailey J<sup>7</sup>, Ly B.A.<sup>8</sup>

<sup>1</sup> Department of Social and Preventive Medicine, Université Laval, Canada; Research Center of the Centre Hospitalier Universitaire de Québec – Hôpital St-François d'Assise, Canada; <sup>2</sup> Department of Social and Preventive Medicine, Université Laval, Canada; Research Center of the Centre Hospitalier Universitaire de Québec – Hôpital St-François d'Assise, Canada; Faculty of Nursing Sciences, Université Laval, Canada; <sup>3</sup> Faculty of Nursing Sciences, Université Laval, Canada; <sup>4</sup> Research Center of the Centre Hospitalier Universitaire de Québec – Hôpital St-François d'Assise, Canada; <sup>5</sup> Développement des individus et des communautés, Institut national de santé publique du Québec, Canada; <sup>6</sup> Faculty of Nursing Sciences, Université de Montréal, Canada; <sup>7</sup> Research Department of Primary Care and Population Health, University College London, UK; <sup>8</sup> Research Center of the Centre Hospitalier Universitaire de Québec – Hôpital St-François d'Assise, Canada; Faculty of Nursing Sciences, Université Laval, Canada

12:30 - 2PM, York, 10 May 2012

Background: Sexual and Reproductive Health (SRH) is an important aspect of human health. Despite several decades of sexual education and promotion of safer sexual practices, the epidemiologic portray of adolescents and young adults' SRH remains worrisome, reflecting the need to strengthen primary prevention. The familiarity with, and growing accessibility to information and communication technologies (ICT) among youth positions ICT as a highly promising avenue in the field of SRH promotion. SRH involves several issues which vary according to contexts. Thus, this review involves partners from different countries and organizations around the world in order to produce information that responds to the knowledge needs of users and to support decision-making regarding the development of ICT interventions in SRH in specific contexts.

<u>Objectives</u>: To assess the effectiveness of ICT interventions for SHR promotion and HIV/AIDS prevention among adolescents and young adults and the transferability of these results to different contexts.

Methods: Randomized and quasi-randomized controlled trials and controlled before-and-after trials were considered. Participants include heterosexual adolescents and young adults, aged between 15-24 years-old, targeted by any ICT intervention for SRH promotion and/or HIV/AIDS prevention. Titles and abstracts were independently screened by two reviewers to assess if studies met the selection criteria, as well as data extractions. Any discrepancies on study inclusion were resolved by discussion with other team members.

<u>Results</u>: A total of 15,224 titles were identified. After consideration of the including criteria, 17 studies have been retained and extracted. Main findings will be discussed.

<u>Conclusions</u>: These results will be important to inform the development of ICT interventions in different economic and socio-cultural contexts. For a wider translation of this knowledge, an international expert panel will be held to design an applicability study of ICT interventions for SHR promotion and HIV/AIDS prevention in both developed and developing countries.

## A systematic review is only the beginning: moving evidence into the real world – the CADTH experience

Mann J<sup>1</sup>, Crain J<sup>1</sup>, Knowledge Mobilization T<sup>1</sup>

<sup>1</sup> Canadian Agency for Drugs and Technologies in Health (CADTH), Canada

12:30 - 2PM, York, 10 May 2012

<u>Background</u>: Too often completing a systematic review on an important health topic and having it published is seen as the end of a project. But this approach risks having valuable research evidence "sit on the shelf" and not get applied in practice and policy where it can make a difference in the health of Canadians. <u>Objectives</u>: At the Canadian Agency for Drugs and Technologies in Health (CADTH), the goal of our Knowledge Mobilization (KM) efforts is to use our research to effect change in policy and practice across Canada promoting the optimal use of drugs and other health technologies in Canada.

Methods: When a topic for review is chosen, the systematic review and meta-analysis of the clinical and economic evidence is the first deliverable. Then, based on the results, recommendations to optimize use of the health technology are made by a multidisciplinary expert committee. Current utilization and current practice analyses are undertaken to gain an understanding of how the technology is currently being used as well as the related behaviours and beliefs of health care professionals and patients. Working closely with the researchers and expert committee, the knowledge mobilization team identifies gaps between current practice and optimal use. Key messages are crafted and tools and interventions are developed. Dissemination takes place through of variety of means including the CADTH Liaison Officers (in most provinces), engaging opinion leaders, and partnerships with related organizations.

Results: Evidence generated by CADTH research is put into the hands of those who can use it in the real world to influence policy and practice related to the health technology.

Conclusions: Systematic reviews are necessary to better

understand the evidence on how a health technology should best be used in Canada and sufficient KT efforts are required to help ensure uptake of the evidence by decision-makers.

### **Cochrane Corner - Promoting gender, sex, and health**

**O'Neill J**<sup>1</sup>, Welch V<sup>1</sup>, Ueffing E<sup>2</sup>, Tugwell P<sup>1</sup>

<sup>1</sup> University of Ottawa, Canada; <sup>2</sup> Canadian Cochrane Centre, Canada

12:30 - 2PM, York, 10 May 2012

Background: The Campbell and Cochrane Equity Methods Group (CCEMG), in collaboration with the Canadian Institutes of Health Research's (CIHR) Institute of Gender and Health (IGH), has started a Cochrane Corner to promote health equity as it relates to gender and sex. The Corner provides summaries describing how sex and gender are considered within systematic reviews and reports the strengths and weaknesses of the approaches to sex and gender used in the reviews selected. The Corner aims to introduce those working in gender, sex and health to the methods of The Cochrane Collaboration and to bring awareness of sex- and gender-based analyses to the Cochrane community. Objectives: To present the results of the preliminary evaluation of our Cochrane Corner and our work to increase utilization of the reviews and linkages to other Cochrane Corners.

Methods: Every three months, two systematic reviews are selected and summarized with a focus on the review's use of subgroup analyses by sex and discussion of sex, gender, and health. The summaries are peer reviewed by experts in the field and sent to the review authors for feedback. To date, 10 summaries have been posted to the website: www.cihr-irsc.gc.ca. We are working with the other Cochrane Corners to increase utilization of the Corners by a wider audience and to develop an evaluation strategy.

Results: We will present the preliminary evaluation results, including metrics, such as the number of hits to the Corner. We will present the next steps, including working with the Canadian Cochrane Centre and the other Corners to increase utilization of the summaries.

<u>Conclusions</u>: The Equity Group will continue to promote the Corner through relevant websites and listservs and look for other ways to increase utilization. We will continue to connect with other Corners and the authors of the summarized reviews.

#### **POSTER Abstracts**

Please note: The names of poster presenters appear in bold

## Theme 1: What Works in Evidence Medical Devices: known and unknown unknowns

Couban R<sup>1</sup>, Marin T<sup>1</sup>, Jacobs W<sup>2</sup>

<sup>1</sup> Cochrane Back Review Group, Canada; <sup>2</sup> Leiden University Medical Centre, Netherlands

<u>Background</u>: Published reports of clinical trials may be incomplete. Can we in other ways access the information we need to conduct a systematic review of lumbar disk arthroplasty? <u>Objectives</u>: We sought full information about Food and Drug Administration Investigational Device Exemption (FDA-IDE) clinical trials for four lumbar prostheses that were known to us through our review of the published literature.

Methods. We searched the FDA's suite of device databases. Records for two lumbar disc prostheses approved for use by the FDA were found in the FDA's Premarket Approval (PMA) Database for Class III Devices. For two others, although we know the trade name, manufacturer and other details about the device, no records are available on the FDA website.

Results. Using the PMA records found for the Pro-Disc L and Charite prostheses, we filed Freedom of Information Act (FOIA) requests asking for the study protocols and complete results. We await a response. We also filed FOIA requests for information about the Flexicore and Maverick prostheses, but we are not optimistic about these requests, because we learned that the existence or non-existence of pre-approved investigational applications is subject to a non-disclosure policy.

Conclusions. Because they were partially reported in the peer-reviewed literature, the FDA-IDE studies of the Maverick and Flexicore devices may be seen as "known unknowns." Others may be found using clinical trials registries and through information made available to researchers by industry leaders like Medtronic. 1) The FDA policy on the disclosure of Investigational Device Exemption (IDE) studies is currently under review as part of a transparency process, 2) but for now, clinical trial data for new medical devices remains a field of "unknown unknowns." 1) Krumholz HM, Ross, JS. A model for independent dissemination and independent analysis of industry data. JAMA 2011; 306(14): 1593-4 2) www.fda.gov/AboutFDA/Transparency/PublicDisclosure/DraftProposalbyTopicArea/

## Green tea for weight loss and weight maintenance in overweight or obese adults: lessons learned

**Jurgens T**<sup>1</sup>, Whelan AM<sup>2</sup>, **Killian L**<sup>3</sup>, Kirk S<sup>4</sup>, Doucette S<sup>5</sup>, Foy E<sup>1</sup>

<sup>1</sup> College of Pharmacy, Dalhousie University, Canada; <sup>2</sup> College of Pharmacy and Dept of Family Medicine, Dalhousie University, Canada; <sup>3</sup> College of Pharmacy, Dalhousie University and NS Cochrane Centre, Canada; <sup>4</sup> School of Health and Human Performance, Dalhousie University, Canada; <sup>5</sup> Research Methods Unit, Dalhousie Dept of Community Health and Epidemiology, Capital Health Research Services, Centre for Clinical Research, Canada

<u>Background</u>: A Cochrane Review was undertaken to evaluate the evidence of efficacy and safety of green tea products in weight control. This was the first Cochrane Review for the majority of authors.

<u>Objectives</u>: 1) To assess the efficacy and safety of green tea products for weight loss/weight maintenance in overweight/ obese adults; and 2) to share lessons learned.

Methods: Eleven databases were searched to identify randomized controlled trials (RCTs), in any language, of at least 12 weeks duration, comparing green tea with placebo in overweight/obese adults. Three authors independently extracted data and assessed studies for quality and risk of bias, with differences resolved by discussion. Heterogeneity of studies was assessed, data summarized statistically and subgroup and sensitivity analyses were conducted. Adverse effects were recorded.

Results: Fifteen weight loss and three weight maintenance RCTs met inclusion criteria. Meta-analysis of 14 weight loss studies with the lowest risk of bias showed a difference in mean weight loss of -0.95 kg [-1.75, -0.15] for green tea compared to control. Meta-analysis of 12 weight loss studies produced a difference in reduction in Body Mass Index of -0.47 kg/m2 [-0.77, -0.17] in favor of green tea. Meta-analysis of two weight maintenance studies did not show statistically significant results for any measurement of weight reduction. Four studies reported mostly mild to moderate adverse events. The number of non-English studies requiring translation, the number of studies requiring statistician time and the diversity in product content were among

unpredicted factors that impacted the time for completion of the review.

<u>Conclusions</u>: Although green tea produced a statistically significant weight loss in overweight/obese adults, it is unlikely to be clinically significant. Adverse events were mostly mild to moderate. Authors planning a review on a natural product topic should consider the need for translation of studies and understanding product content.

### The Rigour of Selected Studies in a Qualitative Systematic Review

Karimi-Dehkordi M<sup>1</sup>, Clark AM<sup>2</sup>

<sup>1</sup> Faculty of Nursing, University of Alberta, Canada; <sup>2</sup> Professor and Associate Dean (Research), Faculty of Nursing, University of Alberta, Canada

<u>Background</u>: Knowledge translation has been identified as a process to improve population health and health services and reduce the gap between knowledge and practice. This process requires many steps. The first and the most important step is conducting sufficiently high quality research with respect to scientific rigor and practical relevance which is followed by disseminating the result to the target group and implementing the latest high quality research findings into routine clinical practice.

<u>Aim</u>: Given the importance of the quality of research evidence, the aim of this study was to identify the quality of the selected studies in a qualitative systematic review.

Methods: The scientific rigor of the 37 yielded qualitative studies out of 1832 published>1995 via Ovid MEDLINE, EMBASE, PsycINFO, Ageline, Ebsco, CINAHL, Scopus, and Dissertation and Thesis were appraised by using Critical Appraisal Skills Programme (CASP) tool and a data extraction tool. Strengths and weaknesses of all articles were appraised based on all components of CASP tool. Papers ranked in terms of qualification.

Results: In this study we will present the frequency of the weaknesses and strengths of the studies based on ten key questions of the CASP tool. Papers classified into three categories: high, medium and low quality which was 14, 19, four respectively. This result presents that only approximately 38% of the studies were placed in high quality position.

<u>Conclusion</u>: As the process of the knowledge transfer and exchange is fundamentally based on the high quality studies,

efforts must be undertaken to generate a robust evidence base and publish high quality research with scientific rigor.

## The association between genetic variants and tuberculosis in humans: A scoping study of published research knowledge

Mascarenhas M<sup>1</sup>, Rajic A<sup>1</sup>, Greig J<sup>1</sup>, Malik S<sup>2</sup>

<sup>1</sup> Laboratory for Foodborne Zoonoses, Public Health Agency of Canada, Canada; <sup>2</sup> BGPH, Public Health Agency of Canada, Canada

<u>Background</u>: Mycobacterial tuberculosis (Mtb)is a complex disease resulting from genetic and environmental interactions. Existing evidence indicates that host genetic factors play an important role in susceptibility to tuberculosis(TB). Common genetic variants in the vitamin D biosynthetic/immunomodulatory pathway can modify the relationship between vitamin D serum levels and Mtb. The role of other genetic variants is less known. A better understanding of the various genetic variants that contribute to the overall burden of Mtb is necessary.

<u>Objective</u>: To elucidate the current state of published research knowledge on genetic variants and their association with latent or clinical tuberculosis in humans by using a scoping study (ScS).

Methods: Our research team developed and pre-tested a protocol prescribing all replicable steps of the review process, from formulation of the question to data charting. A pretested search strategy was implemented in two electronic databases, followed by a comprehensive search verification strategy. Abstract level relevance screening and full article data characterization was conducted by two independent reviewers in Distiller. Data was charted by various population, outcome and exposure combinations to better understand areas with solid evidence and main knowledge gaps. The team prioritized focused questions for subsequent systematic reviews and meta-analyses (SR-MA).

Results: A total of 6,332 unique abstracts are being screened for relevance. Our preliminary results indicate that approximately 15% might be relevant. The results of data characterization including areas with solid research knowledge, potential datasets suitable for SR-MA, and areas requiring further primary research within the Canadian context will be presented and discussed at the meeting.

<u>Conclusions</u>: The resulting information will be used to inform the public health research and policy-making communities in Canada.

### Scoping studies in health and other sectors: Opportunities and challenges

**Pham M**<sup>1</sup>, Greig J<sup>2</sup>, Rajic A<sup>1</sup>, Young I<sup>2</sup>, Waddell L<sup>3</sup>, Wilhelm B<sup>1</sup>, McEwen S<sup>1</sup>

<sup>1</sup>DepartmentofPopulationMedicine, University of Guelph, Canada; <sup>2</sup> Science to Policy Division, Laboratory for Foodborne Zoonoses, Public Health Agency of Canada, Canada; <sup>3</sup> Department of Population Medicine, University of Guelph, Canada; Science to Policy Division, Laboratory for Foodborne Zoonoses, Public Health Agency of Canada, Canada

Background: Scoping studies are a type of literature review that aims to rapidly map the relevant research evidence in a field of interest. They differ from systematic reviews in that they tend to address broader topics where many different study designs might be applicable. Scoping studies can thus be of particular use to disciplines such as agri-food public health where undertaking a systematic review may be difficult due to the paucity of randomized controlled trials.

<u>Objectives</u>: To describe the characteristics and current use of scoping studies in various sectors, and to discuss the need for their methodological standardization, and the opportunities and challenges for their use in agri-food public health.

Methods: An explicit search strategy across a range of data sources was adopted to identify scoping studies in the published and grey literature. Inclusion criteria entailed any peer- and non-peer-reviewed scoping study in English, French or Spanish, published up to June 2011. Abstract relevance screening and data extraction of relevant papers were performed by two independent reviewers using pre-tested forms. Data were analyzed using a descriptive numerical summary and thematic analysis.

Results: The search yielded 1635 citations, of which 166 documents describing 182 scoping studies met the inclusion criteria and were included in the analysis. Identified studies varied widely in terms of purpose, methodological rigor, and quality of reporting. Over 80% were conducted in the health sector, although a wide range of sectors was represented. Studies varied from six weeks to eight months in duration. Fifty per cent utilized a published methodological framework, and 20 per cent included methodological quality assessment.

<u>Conclusions</u>: This review describes the extent, range and nature of scoping studies in the literature. The results will be used to develop a methodological framework outlining a standardized approach for conducting transparent and systematic scoping studies in the agri-food public health sector.

### A multi-facet HTA approach to address complex decisional questions

Hamel  $M^1$ , Bélanger  $L^1$ , Lalancette  $D^2$ , Coulombe  $M^1$ , Rhainds  $M^1$ 

<sup>1</sup> UETMIS-CHUQ, Canada; <sup>2</sup> IUSMQ, Canada

<u>Background</u>: Health technology assessment (HTA) relies mostly on systematic review (SR) methods to inform decisions through the appraisal of technologies and healthcare practices. However, when confronted with decisional questions for which data is scarce or focusing on local, organizational, or ethical issues, other methodologies are warranted to collect reliable information to help decision-makers.

<u>Objective</u>: To present a multi-facet HTA approach through the illustration of a case on the assessment of the best replacement measures to help decrease isolation and restraint use in hospitalized patients.

Methods: A multidisciplinary, multicenter, workgroup was involved in identifying replacement measures used in targeted healthcare centers. Preliminary data highlighted preoccupations regarding efficacy and safety of constant observation and surveillance devices. A SR on both types of replacement measures was conducted in major healthcare databases, including grey literature. Selection, quality assessment, and extraction were performed by two independent reviewers. In order to identify key issues related to the use of replacement measures, a triangulation method was carried out including a standardized questionnaire sent out to healthcare centers (n = 19) and 10 focus groups composed of multidisciplinary stakeholders (n=66).

Results: The few methodologically sound studies identified in the literature (n=7) did not allow strong conclusions on efficacy or safety of either observation modality. Information derived from focus groups and questionnaires converged towards several preoccupying aspects of these replacement measures. Potential adverse effects and safety threats to patients and staff, burden and resource organization, high costs, and ethical considerations were among those. Despite their widespread use and pragmatic appearance, usefulness of either modality as replacement measures is still questioned and research warranted to optimize their use in our healthcare settings.

<u>Conclusion</u>: In contexts where decisional questions are complex and empirical data lacking, taking into account the many dimensions of HTA and adapting methodologies accordingly can be critical to support decisional processes.

#### **Evaluating The Quality Of Evidence In Thoracic Surgery: A Pilot Study**

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Background: Refereed journals are a major source of evidence in surgical practice, but a measure of the overall quality of evidence in peer reviewed journals is lacking. We report a pilot study seeking to determine the overall quality of evidence published in surgical journals. Our goal was to develop a protocol to characterize and quantify measures of quality in studies published in peer reviewed journals in thoracic surgery. Methods: We defined the specialty of thoracic surgery according to topics examined by the Royal College of Physicians and Surgeons of Canada Fellowship Examination. We developed a comprehensive list of peer reviewed journals which publish reports of relevance to the specialty. We carried out a systematic search within this list of journals from 1 January 2008 to 16 September 2010. Studies of an intervention were included for analysis. Two trained reviewers extracted all data in duplicate and disagreements were adjudicated. The primary outcome for this pilot study was raw agreement for inclusion for analysis. A raw agreement of greater than 90% is considered satisfactory agreement for each criterion. We also determined agreement for other criteria which encompass various data types.

Results: We identified 1276 titles and 934 were selected for full text review. A random sample of 106 titles underwent full text review to determine inclusion. The raw agreement for inclusion was 73%. After adjudication, 69 studies underwent full data extraction. The raw agreements for each criterion in the included studies were: subfield (90%), study type (94%), number of subjects (92%), age (82%), grade of outcome (70%), a significant primary outcome (77%), study favours intervention (96%), number of arms in the study (86%).

<u>Conclusions</u>: The definitions of inclusion and exclusion criteria require further clarification to yield a raw agreement for inclusion of greater than 90%. Further refinements of the protocol will be undertaken.

# Theme 2: Engaging with the Evidence Peer to Peer Mentoring for Individuals with Early Inflammatory Arthritis: Feasibility Pilot

Bell MJ<sup>1</sup>, Veinot P<sup>2</sup>, Embuldeniya G<sup>2</sup>, Nyhof-Young J<sup>3</sup>, Sale J<sup>4</sup>, Sargeant J<sup>5</sup>, Tugwell P<sup>6</sup>, Brooks S<sup>7</sup>, Ross S<sup>7</sup>, Tonon R<sup>7</sup>, Sandhu

S<sup>8</sup>, Richards D<sup>9</sup>, **Boyle J**<sup>7</sup>, Knickle K<sup>10</sup>, Britten N<sup>11</sup>, Bell E<sup>8</sup>, Webster F<sup>12</sup>, Cox-Dublanski M<sup>13</sup>

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<u>Background</u>: Peer support is proposed as an adjunct to clinical care and instrumental part of assisting individuals with early inflammatory arthritis (EIA) to manage their disease.

<u>Objectives</u>: The goal is to examine potential benefit of early peer support to improve health and quality of life of individuals with EIA. We present findings of a pilot study to assess acceptability and feasibility of a peer support intervention for individuals with EIA.

Methods: Qualitative and quantitative methods were used. Individuals with established IA were trained as peer mentors to provide support (face-to-face/telephone, once/week/12 weeks) to individuals with EIA (mentees). Training was evaluated. Peer mentor self-efficacy was assessed at baseline and three additional timepoints. Mentees were assessed at baseline and two additional timepoints: disease modifying anti-rheumatic drugs (DMARDs)/biologic treatment use, self-efficacy, self-management, health-related quality of life, anxiety, coping-efficacy, social support, disease activity. Results were compared from baseline using Wilcoxon signed-rank test with effect size calculation. One-on-one interviews were conducted to examine acceptability and feasibility of procedures and outcome

measures and gain perspectives on value of peer support. Key themes were identified through constant comparison.

Results: Nine pairs participated. Training was well-received by mentors. Mentors' self-efficacy increased significantly after training completion. Mentees experienced improvement in overall arthritis impact on life, coping, and social support (effect size > 0.3). Mentees perceived emotional, informational, appraisal, and instrumental support. Mentors also reported benefits (e.g., self-management techniques, lifestyle changes), and learned from mentees' fortitude and self-management skills. Participants' experience of peer support was informed by the unique relationship they forged with their peer partner. All participants were unequivocal about the need for peer support for the newly diagnosed.

<u>Conclusions</u>: The intervention was well-received. Training process, peer support program, and outcome measurements were demonstrated to be feasible with modifications. Early peer support may help augment current rheumatologic care.

## Health Evidence Literacy Training from Toronto to Ethiopia: the TAAAC Library Science Program

Hagstrom C<sup>1</sup>

<sup>1</sup> University of Toronto, Canada

<u>Background</u>: TAAAC (Toronto Addis Ababa Academic Collaboration) is an offshoot of TAAPP (Toronto Addis Ababa Psychiatry Program). The Library Science program was established in 2008 and in October 2011, the first team of librarians travelled to Addis Ababa to give two weeks of medical and health science literacy training to librarians, library workers, physicians, nurses, and students.

<u>Objectives</u>: To increase literacy and critical thinking skills of medical librarians and health workers at Addis Ababa University and Black Lion Hospital in Addis Ababa.

Methods: Training consisted of three days for library technicians (introduction to the Internet, searching for online journals, Boolean logic, search strategies); two days of web design for anyone interested; three days for librarians (search strategies, levels of evidence, using databases via Ptolemy); one day for physicians (access to Ptolemy, using databases); and one day for nursing faculty and students (search strategies, using CINAHL). Additional classes on authorship were offered by a guest lecturer from the United States who also did training on HINARI resources.

Results: 133 attendees took part in the program, including librarians from various faculties besides medicine, such as law, pharmacy, dentistry, and business. Evaluation forms handed out to the attendees provided feedback. Learners were attentive and attendance was 90 - 100% for every session. Some of the students contacted the trainers for search strategy help after the trainers' return to Canada.

<u>Conclusions</u>: The initial training program was a resounding success. It would probably be useful to do a skills assessment to determine the level of computer literacy prior to future sessions.

### A systematic review and meta-analysis of CCDSSs for diabetes care

**Jeffery R**<sup>1</sup>, Iserman E<sup>1</sup>, Haynes RB<sup>1</sup>

<sup>1</sup> McMaster University, Canada

Background: Chronic diseases such as diabetes present unique challenges to healthcare providers due to the complexity of treatments. Computerized clinical decision support systems (CCDSS) may be able to improve patient care by supporting the decision-making process for a clinician. There is limited evidence of the effectiveness of CCDSS in chronic disease management (CDM). A recent review, updated to January 2010, of their impact on patient care[1] reported inconsistent effects on the process of care (26/55 studies (54%) showed a significant effect) and little success in improving patient outcomes (11/36, 31%). The subset of studies of diabetes care appeared more positive, especially since 2005, possibly because most of these included information for patients as well as practitioners.

<u>Objectives</u>: To undertake an updated, systematic review and meta-analysis of randomized controlled trials (RCTs) of the effects of CCDSSs on diabetic patient care and patient outcomes. <u>Methods</u>: We will search MEDLINE, EMBASE, INSPEC, EBM Reviews databases from inception to January 2012, using our published search strategy[1] and reference lists of eligible studies. Only unconfounded RCTs that compare diabetes specific CCDSSs to usual care and include a measure of the process of care and patient outcomes will be included.

Results: In our recent review on CDM and CCDSSs, 55% of trials on diabetes centered CCDSSs found improvements in the process of care, while 63% reported improved patient outcomes. This update, which is expected to include at least two additional RCTs, will provide more precise estimates of success, including a meta-analysis (which was previously not warranted because of heterogeneity), and will assess whether more recent studies

continue the positive trend.

<u>Conclusions</u>: CCDSSs may help clinicians improve the quality of care for diabetic patients, but this is not clearly established in the evidence available to early 2010. [1]Roshanov PS et al. Implementation Sci 2011; 6:9

Engaging stakeholders in the implementation of evidence-based policy at WorkSafeBC: Policy Item #15.50 and # 15.51 (on hernia) as an example.

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Background: WorkSafeBC's Policy Item # 15.50 and 15.51 (PI-15.50-51) on hernia, which was developed in the mid 1980s and was developed by employing expert consensus, gives front line staffs direction on how to deal with claims involving hernias. Access to The Cochrane Library in the early 2000s revealed large discrepancy between the outcome of Cochrane Review on hernia and PI 15.50-51 on duration of post-herniorraphy time off work. Cochrane Review found that, on average, workers return to work in < 21 days post-herniorraphy while PI 15.50-51 stated that ". . . Post-operative wage loss will be limited to 42 calendar days unless there are complications. . . " Analysis on WorkSafeBC claims, from 1987-2001, showed an average return to work of 43 days post-herniorraphy. In early 2004, this finding was sent to WorkSafeBC Policy and Practice Department (PPD) for the consideration of policy changes to compensated time off work post-herniorraphy. In late 2004, WorkSafeBC PPD changed this automatic payment of up to 42 calendar day post-herniorraphy to state: "Usual recovery times for hernia surgical repair are based on medical protocols and procedures adopted by the Board". Review of claim data post-herniorraphy in January 2011 showed that average days returning to work post-herniorraphy remained unchanged at 43 days.

<u>Objectives</u>: To summarize the development of evidence-based policy on hernia at WorkSafeBC. To describe our revised methods in engaging stakeholders in the management of hernia related claims at WorkSafeBC.

Methods: a) Outcomes of 2011 WorkSafeBC EBPG metaanalysis and data analysis on hernia will be rewritten to target different stakeholders; b) Finding dissemination through:

- Internal communication WorkSafeBC BC Medical Association Liaison Committee
- BC Medical Journal

Results: a) Factsheets on hernia and hernia related claims will be presented; b) Dissemination strategies will be described.

Conclusions: We expect to see a decline in average claim time loss post-herniorraphy.

#### A scoping review approach to manage heterogeneous and low level evidence: the case of risk factors and determinants of revisions for total hip and knee arthroplasties

**Mollins J** $^1$ , Beaupre LA $^2$ , Meropoulis A $^2$ , Crowell C $^2$ , Stevens H $^2$ , Jones CA $^2$ 

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<u>Background</u>: The number of hip and knee replacements performed annually is increasing due to the population aging and the use of joint replacements in younger ages (i.e <60 years old). Total joint replacements typically last 10-20 years; thus the need for revision surgery will increase as total joint replacement rates increase, particularly in the younger population. A scoping review was performed to evaluate factors associated with increased risk for revision following total hip and knee replacement, as well as factors associated with poor outcomes following revision surgery.

 $\underline{Objectives}\hbox{:}\ To\ discuss\ methodological\ challenges\ of\ synthesizing\ limited\ or\ low-quality\ evidence.$ 

Methods: CINAHL, Medline, PASCAL, Sport Discus, *The Cochrane Library*, PEDro, EMBASE and Web of Science were searched from1990 to September 2011. Systematic reviews, randomized trials, cohort or case-control designs were included to determine the current state of the evidence for revision surgery. Two independent reviewers identified appropriate articles in a three phase (title, abstract, full text) selection strategy, using predetermined criteria. Data were extracted from selected articles. Results: A scoping review was chosen due to lack of high quality evidence. The initial search retrieved 5318 articles of which 96 articles were included. Most studies were excluded because they were retrospective case series. Included studies were cohort designs (Level II-b evidence); most were reports from national joint registries that focused on surgical issues rather

than clinical factors. The majority of evidence was inconclusive or contradictory, with only a few factors emerging with consistent evidence of association with risk of revision. There were no consistent results regarding factors associated with recovery following revision surgery.

<u>Conclusions</u>: The current review identifies the need for more high quality investigations assessing risk of revision surgery and recovery following revision surgery. A scoping review allowed synthesis of the current state of evidence and provided direction for future research.

# Effectiveness of combined positron emission tomography and computed tomography in radiation therapy planning for lung cancer: a systematic review

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<u>Background</u>: Use of combined positron emission tomography and computed tomography (PET-CT) in radiation therapy (RT) planning has recently gained popularity for cancer management but the health benefits remain unclear.

<u>Objectives</u>: To assess the effectiveness of PET-CT in RT planning for lung cancer.

Methods: A literature search was performed in PubMed, Embase, *The Cochrane Library* and the grey literature between 2000 and September 2011. Data were retrieved from systematic reviews (SRs), evidence-based practice guidelines, randomized controlled trials, and observational studies. Studies reporting data on target volumes, treatment intent, normal tissue radiation exposure with PET-CT compared to CT or MRI were eligible. Studies with sample size <20 were excluded. Article selection, quality assessment and data extraction were performed by two independent reviewers. Synthesis review was shared with an interdisciplinary group of experts.

Results: Two SRs, two clinical guidelines, and 10 observational studies on non-small cell lung cancer (NSCLC) were included. No study on small-cell lung cancer was included. Lack of uniformity between studies in contouring methods and image acquisition were noticed. Results showed that use of PET-CT in RT planning contributed to detect distant metastases in eight to 19 per cent of patients and was associated with change from

curative to palliative treatment in up to 25 per cent of patients. PET-CT also led to changes in gross tumor volume (GTV) in at least 37 per cent of subjects. No data was available to evaluate the clinical benefits related to these changes. Because of scarce results, no conclusion can be drawn regarding the impacts on mean target volumes and normal tissue exposure.

<u>Conclusions</u>: Data from observational studies suggest that use of PET-CT in RT planning could be helpful in restaging and tumor delineation for NSCLC. Additional studies are needed to evaluate the impact on recurrence rate, survival rate, and quality of life.

## Laboratory-acquired mycoses: Evaluating the risks associated with handling clinical specimens

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<u>Background</u>: Biosafety level (BSL) -3 facilities and BSL-3 operational practices are required for handling Blastomyces dermatitidis, Histoplasma capsulatum, and Coccidioides immitis (risk group 3 fungal agents) in medical laboratories. However, recommendations are not well defined when the clinical specimen's infectious potential is unknown.

<u>Objectives</u>: To evaluate the risks of laboratory-acquired mycoses (LAM) due to Blastomyces, Histoplasma, and Coccidioides associated with handling clinical specimens and the BSL required for their safe manipulation.

Methods: A literature search was conducted in PubMed and the gray literature to identify LAM cases due to these risk group 3 fungal agents observed between 1980 and January 2012. Experts in the field were also consulted. A survey was conducted in medical mycology laboratories across nine hospitals in the province of Quebec. Respondents were queried about facilities and operational practices for fungi analyses, exposure to Blastomyces, Histoplasma, and Coccidioides, and confirmed case of LAM contracted from these fungi.

Results: Four cases, three caused by Coccidioides and one by Blastomyces, were identified in the literature. Source of exposure, circumstances surrounding transmission, and operational practices at time of fungal infection were not always well described. Low prevalence of fungal exposure related to Blastomyces, Histoplasma, and Coccidioides was observed in surveyed laboratories. Moreover, no LAM cases caused by

these agents were reported. Operational practices (BSL- 2 or 3) for handling specimens which are likely to contain these risk group 3 agents varied across the surveyed laboratories.

Conclusion: Given the low frequency of reported LAM cases, data suggest that recommended BSL for facilities and operational practices in medical laboratories are efficacious. However, LAM cases could be under-reported by staff and hospital authorities. The risks associated with handling clinical specimens likely to contain a risk group 3 fungal agent appear to be manageable in most laboratories with BSL-2 facilities and BSL-3 operational practices.

# Development, dissemination and preliminary impact of evidence-based policy on opioids prescribing for chronic non-cancer pain at WorkSafeBC

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Background: Opioids are the most potent analgesics available. Even though its effectiveness in treating severe acute, surgical and cancer pain has been established, their use in treating chronic non-cancer related pain (CNCP) is still controversial. In the context of workers compensation, studies have shown that early opioid prescribing is associated with longer disability duration and potential death. WorkSafeBC policy on "The Prescription of Narcotics and Other Drugs of Addiction" states that ". . . Board responsibility for narcotic analgesics, hypnoticsedatives and tranquilizers will be limited to a post-injury or post-surgery period of eight weeks. An extension of this eightweek period may be considered, however. . ." As such, an evidence-based practice directive (PD) on opioids was recently developed. The objectives of this PD is to support physicians in following best practices to achieve optimum outcomes for injured workers and to ensure that injured workers throughout BC receive consistent service from WorkSafeBC.

Objectives: a) To present recent evidence-based PD for claims

with opioids prescribed; b) To present dissemination (internal and external) methods on this PD; c) To present interim impact on opioids prescribing to injured workers

Methods: a) Systematic reviews on the role of opioids in treating CNCP was conducted; b) Stakeholders, including claim staffs, professional associations, Pharmacare and injured workers were identified and were asked to participate in the formulation, dissemination and participation of this PD; c) Routine administrative data mining is done to assess the impact of this policy

Results: We present the results on: a) Systematic reviews on the effectiveness and side effects of opioids in treating CNCP; b) Translation of evidence into policy in a compensation setting;

c) Development and dissemination process of opioids PD; d) outcome data on claims with opioids prescribed.

<u>Conclusions</u>: The role of opioids in treating CNCP among injured workers still needs to be defined.

# Theme 3: Ensuring Equity in Evidence Rapid testing for improving uptake of HIV/ AIDS services: Addressing equity issues in a systematic review

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<u>Background</u>: An estimated 30% of people living with HIV in Canada and 90% worldwide are not aware of their diagnosis. Delays in diagnoses may lead to lost opportunity for HIV prevention and treatment, especially in disadvantaged populations. Rapid testing may improve the uptake of testing, diagnosis, counselling and treatment for HIV.

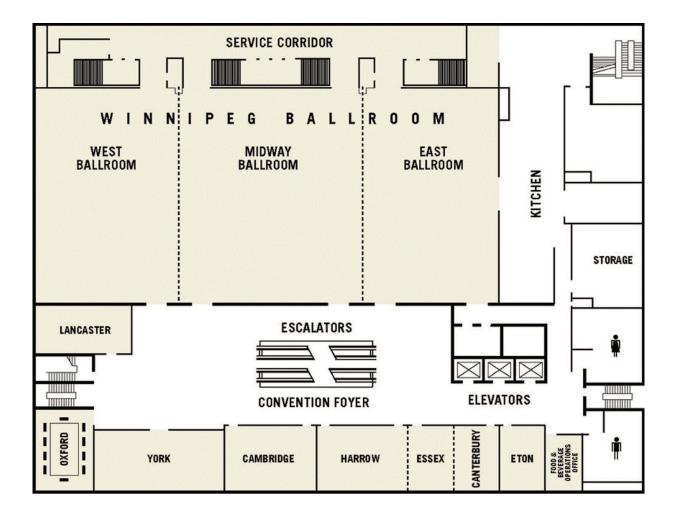
<u>Objectives</u>: The aim of our review is to assess effects of rapid HIV testing strategies on HIV screening outcomes: i) uptake; ii) transport and costs; iii) harmful effects/false positives compared to traditional approaches.

Methods: We searched Medline, Embase, LILACS, Global Health, Psychlnfo, CINAHL, Cochrane CENTRAL, abstracts of meetings and AIDS speciality journals. Relevant abstracts were reviewed according to predetermined criteria; those most pertinent to the stated objective were selected for evaluation. We held regular consultation with knowledge users in government and clinical practice throughout the systematic review process. More consultation is planned to ascertain clinical and contextual issues that will help in our knowledge translation efforts.

Results: We screened over 2500 abstracts and identified over 30 studies which measured the effects of rapid testing strategies on HIV screening outcomes. Preliminary results show HIV testing strategies using social media and computer-assistance, rapid testing, and community outreach elements. Effectiveness results will be available in May 2012.

<u>Conclusions</u>: Determining the evidence for rapid testing has the potential to address issues of equity in the area of HIV in various patient groups: youth, homeless, rural dwellers, and from lowand middle-income countries without regular access to health care.

### **Fairmont Winnipeg Floor Plan**



#### **NOTES**



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