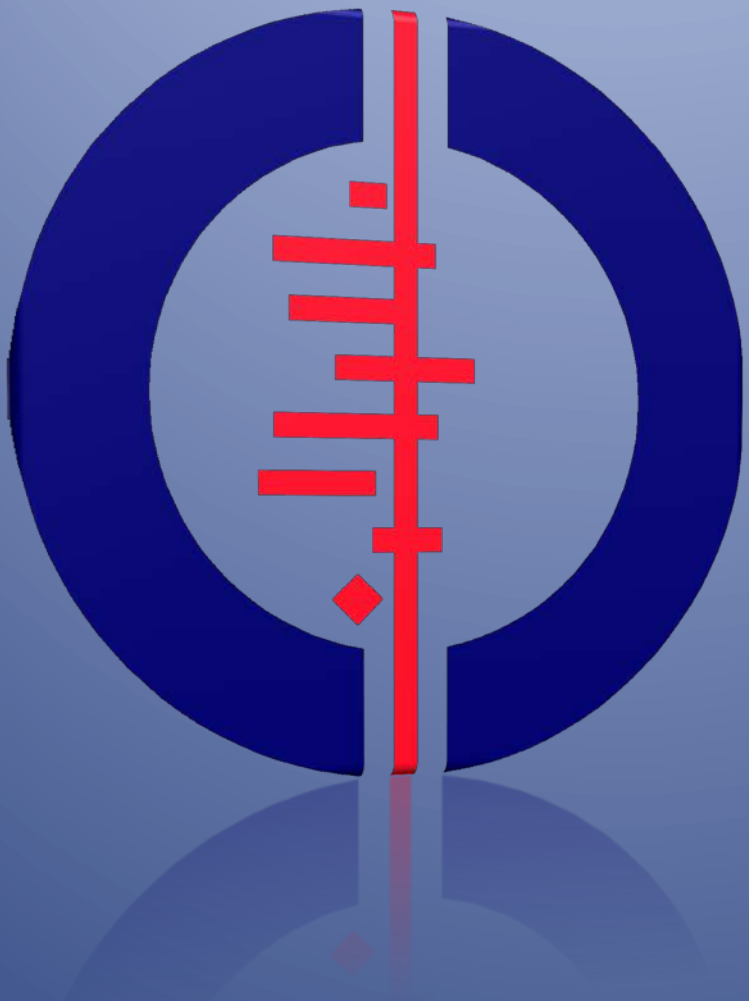

12th Annual Cochrane Canada Symposium

Reaching New Heights, Measuring Success

21 – 22 May, 2015 | University of Calgary | Hotel Alma

169 University Gate NW, Calgary, Alberta, Canada

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Welcome

Welcome to the 12th Annual Cochrane Canada in Calgary, Alberta.

The theme of this year's Symposium is *Reaching New Heights, Measuring Success*. We welcome local and international policy-makers, health practitioners, researchers, students, patients/consumers, caregivers, and anyone who has an interest in evidence-based health care.

The 12th Symposium is an opportunity to learn from and network with leading healthcare experts from Canada and around the world. Whether you are already involved in Cochrane or new to evidence-based research, the information shared at this event will help you develop your knowledge and skills in systematic reviews.

Cochrane Canada, together with our Regional Site at the University of Calgary, welcomes you to this important event to learn how we strive to reach new heights in delivering evidence-based healthcare.

We hope you enjoy your visit to Calgary.

Sincerely,

The Dedicated Staff of Cochrane Canada

Cochrane Canada

Thank You

Cochrane Canada recognizes our Symposium Committees

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Lisa Hartling
Diane Lorenzetti
Lisa McGovern
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Graduate Student Poster Award Committee
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A Special Thank You
We would like to extend a special thank you to the Canadian Institutes of Health Research (CIHR), our primary funder since 2005 and into 2015 (grant # No. CON-105529). All of Cochrane Canada would have not achieved the success we have today without the dedicated support of CIHR.

About Cochrane Canada
The Cochrane Canada office in Ottawa, Ontario, Canada is one of 14 global, independent, not-for-profit Centres of The Cochrane Collaboration, which supports the efforts of The Cochrane Collaboration in Canada and is funded by the Canadian Institutes of Health Research. Founded in 1993, The Cochrane Collaboration is the largest global network of scientists, researchers, health policy-makers and consumer advocates involved in the production of systematic reviews (Cochrane Reviews) of healthcare evidence. Some 31,000 individuals in over 120 countries willingly contribute their time and expertise to a rigorous process of gathering, assessing, synthesizing, and disseminating published research on the effectiveness of healthcare interventions. The results help practitioners, policy-makers and patients make informed and effective health treatment choices. Cochrane Reviews are widely considered the gold standard in systematic reviews of health evidence. They are published in the Cochrane Library in English, with a growing selection available in other languages. As a non-governmental and not-for-profit organization, The Cochrane Collaboration operates without industry or conflicted funding and offers training and guidance to its growing network of contributors. Cochrane Canada works in collaboration with various other health-oriented organizations including health policy organizations, health professional associations, health research organizations, and health and safety organizations. The Canadian Centre in Ottawa is part of Cochrane Canada which encompasses six Review Groups, one Field, two Methods Groups, and 18 Regional Sites. More information about the Cochrane Canada can be found at ccc.cochrane.org.

Program-at-a-Glance

12th Annual Cochrane Canada Symposium
Calgary, Alberta; 21-22 May 2015

Thursday, 21 May 2015

Time	Session	Location
7:30-8:50AM	Registration Poster Set-up	Alberta Room Foyer Dining Centre Building
9-10:30AM	**Opening and Welcoming Remarks** **Plenary I: (Cochrane and COMET)** *Co-Chairs: Peter Tugwell and Paula Williamson* ➢ Mike Clarke ➢ Holger Schünemann ➢ Kay Dickersin	Alberta Room Dining Centre Building
10:30-11AM	Refreshment Break; Exhibitors & Posters	Alberta Room Foyer Dining Centre Building
11AM-12:30PM	**Parallel Session I**	
	Oral Session 1 **Moderator: Ciprian Jauca**	Evans Room Rozsa Centre

	Presenter: David Moher Core Competencies for Scientific Editors of Biomedical Journals *Presenter: Mufiza Zia Kapadia* Development of Preferred Reporting Items for Systematic reviews and Meta-Analysis - Protocols for Children *Presenter: Kieran Shah* Outcome Reporting Bias in Systematic Reviews – A Sample of Published Literature *Presenter: Joshua Day* Examining the Quality of Reporting in Network Meta-Analyses of Cardiovascular Interventions	
	COMET Workshop 1 *Presenter: Paula Williamson* Methods for determining 'what' to measure in core outcome sets	Legacy Suite Dining Centre Building
	COMET Workshop 2 *Presenter: Mike Clarke* Core outcome sets for randomized controlled trials and Cochrane reviews	Senate Room Hotel Alma, 7th Floor
	COMET Workshop 3 *Presenter: Bridget Young* Involving patients in core outcome set development: identifying the challenges and potential solutions	Blue Room Dining Centre Building
	Workshop 4 *Presenter: Julie Wood* Communicating your review findings	CIBC Hub Room Rozsa Centre
12:30-1:30PM	Lunch	Alberta Room
1-1:30PM	Posters	Alberta Room Foyer Dining Centre Building
1:30-3PM	**Parallel Session II**	
	Oral Session 2 **Moderator: Claire Munhall** *Presenter: Roger E. Thomas* Interventions to improve laboratory test ordering by family physicians	Blue Room Dining Centre Building

	Presenter: Jason Globerman Evidence-based STBBI Prevention Interventions for Communities Affected by or At-Risk of HIV *Presenter: Syeda Kinza Rizvi* Association between immigration status & cervical cancer screening: Systematic review & meta-analysis *Presenter: Mariola Mascarenhas* A scoping review of Lyme disease research to inform evidence-based decision making in Canada	
	Oral Session 3 **Moderator: Alicia Marshall** *Presenters: Neil Bell, James Dickinson, and Kim Barnhardt* The Role of Media and Social Media in the Dissemination of the Canadian Task Force on Preventive Health *Presenter: Denise Thomson* Cochrane 2.0: Tweeting and blogging to disseminate child-relevant evidence *Presenter: Jordi Pardo Pardo* Interactive social media interventions to promote health equity: An overview of reviews	Senate Room Hotel Alma, 7th Floor
	Oral Session 4 **Moderator: Karin Dearness** *Presenter: Katelynn Crick* A Descriptive and Comparative Analysis of Child-Relevant Systematic Reviews in the Cochrane Database *Presenter: Beverley Shea* AMSTAR: Helping decision makers distinguish high and low quality systematic reviews that include non-randomized studies *Presenter: Catherine Boden* Randomized Controlled Trial Study Protocols in Systematic Reviews: An Analysis and Recommendations	Evans Room Rozsa Centre
	Workshop 5 *Presenter: Alain Mayhew* Everything you wanted to know about Cochrane Methods but were afraid to ask	Legacy Suite Dining Centre Building

3-3:30PM	Refreshment Break; Posters	Alberta Room Foyer Dining Centre Building
3:30-5:30PM	**Annual Stakeholder Meeting**	Alberta Room
6:00 PM	Social event – Ranchman's Cookhouse and Dancehall Ranch buffet dinner, line dancing and fun! Buses leave the Hotel Alma at 6:00 and 6:15 pm on a first come, first served basis	

Friday, 22 May, 2015

Time	Session	Location
9-10:30AM	**Plenary II: (SPOR)** *Chair: Krista Connell* ➢ Tim Murphy ➢ Lisa Hartling ➢ Anne Lyddiatt	Alberta Room
10:30-11AM	Refreshment Break; Posters	Alberta Room Foyer Dining Centre Building
11AM-12:30PM	**Parallel Session III**	
	Oral Session 5 **Moderator: Nancy Santesso** *Presenter: Claire Munhall* CBRG QuickDecks: A new tool for sharing the best evidence in back and neck pain care *Presenter: Alain Mayhew* An Assessment of Abstracts Submitted to Canadian Cochrane Symposium: A Quality Improvement Report *Presenter: Denise Thomson* Fifteen Years of Integrated Knowledge Translation: The Cochrane Child Health Field *Presenter: Alicia Marshall* How Cochrane affected your life: Impact stories	Blue Room Dining Centre Building

	Oral Session 6 **Moderator: Heather Colquhoun** *Presenter: Brittany Gerber* Transparency and Health Policy *Presenter: François-Pierre Gauvin* The Cochrane Policy Liaison Office: Increasing the visibility, reach and impact of Cochrane reviews *Presenter: David Gogolishvili* Identifying Effective STBBI Prevention Interventions to Inform HIV Programs, Services and Policies *Presenter: Karen Spithoff* Uncertainty in health policy decision-making: The Uncertainty Assessment and Navigation Tool (U-ANT)	Legacy Suite Dining Centre Building
	Oral Session 7 **Moderator: John MacDonald** *Presenter: Matthew Holzmann* The Use of Clinical Trials Registries for Systematic Reviews in Clinical Endocrinology Research *Presenter: Lisa Hartling* The impact of selective searching on the results of systematic reviews *Presenter: Branden Carr* An Analysis of Clinical Trials Registry Searches for Identifying Publication Bias in Neuroscience	Senate Room Hotel Alma, 7th Floor
	Workshop 6 (Part A) *Presenters: Beverley Shea and George Wells* Assessing bias due to confounding and selection of participants into groups in a systematic review which includes non-randomized studies (NRS)	Evans Room Rozsa Centre
12:30-1:30PM	Lunch	Alberta Room
1-1:30PM	Posters	Alberta Room Foyer Dining Centre Building

	Parallel Session IV	
	Oral Session 8 **Moderator: Jordi Pardo Pardo** *Presenter: François-Pierre Gauvin* Sharing Health Information with Older Adults through Online Resources in Canada: A citizen panel *Presenter: Shimae Soheilipour* A Systematic Review of the Effects of Peer-led support Programs in the Context of Cancer *Presenter: Roger E. Thomas* The relative contributions of interventions to prevent influenza transmission *Presenter: Hervé Tchala Vignon Zomahoun* Effectiveness of motivational interviewing interventions on medication adherence in adults with chronic disease	Yamnuska Hall Academic Lounge
1:30-3PM	**Oral Session 9** **Moderator: Alain Mayhew** *Presenter: Janet Jull* Identification and Protection of Populations at Risk for Vulnerability in Cluster Randomized Trials *Presenter: Lisa Jasper* Challenges in Data Synthesis When Examining Long-Term Follow-Up for Total Knee Replacements *Presenter: Lisa Hartling* An exploration of methods and context for the production of rapid reviews *Presenter: Gabrielle Zimmermann* 10 Years of the CADTH Rapid Response Program: Timely and Relevant Evidence for Real-World Decisions	Blue Room Dining Centre Building
	Consumer Round Table *Facilitator: Eileen Vilis* Enhancing consumer involvement in Cochrane Canada	Legacy Suite Dining Centre Building

	Workshop 6 (Part B) *Presenters: Beverley Shea and George Wells* Assessing bias due to confounding and selection of participants into groups in a systematic review which includes non-randomized studies (NRS)	Evans Room Rozsa Centre
	Workshop 7 *Presenters: Nancy Santesso and Holger Schünemann* Using GRADE to assess the quality of evidence	Senate Room Hotel Alma, 7th Floor
3-3:30PM	Refreshment Break; Posters	Alberta Room Foyer Dining Centre Building
3:30–5PM	**Plenary III and Closing** *Chair: Jeremy Grimshaw* ➢ Denise Thomson ➢ Julie Wood ➢ Julian Elliott	Alberta Room

Program subject to change without notice.

Social Event

When:	Thursday, 21 May 2015
Where:	Ranchman's Cookhouse and Dancehall 9615 MacLeod Trail South Calgary, Alberta Ranchman's is Calgary's most iconic western bar. For 42 years they have become known worldwide as a museum of rodeo memorabilia and photographs and for their unique brand of western hospitality. Ranchman's is the true western experience!
What:	Ranch Buffet Dinner; line dancing lessons; DJ and Band (starting at 9:00 pm)
How:	Buses will leave the Hotel Alma at 6:00 and 6:15 pm on a first come, first served basis. Buses will leave Ranchman's to return to Hotel Alma at 9:30 pm and 10:30 pm on a first come, first served basis. Ranchman's is about a 30 minute cab ride from Hotel Alma, if you prefer.
Why:	Network, eat, learn to line dance, enjoy some music, ride a mechanical bull (if you dare!) $10 for 3 rides per person. And just to have fun!

Plenaries

Plenary I: Cochrane and COMET

9-10:30am, Alberta Room, Dining Centre Building
Thursday, 21 May, 2015

Co-Chairs: Peter Tugwell & Paula Williamson

- **Mike Clark**: *A descriptive survey of outcomes in Cochrane Reviews from 2007, 2011 and 2013*

As part of the work of the Cochrane Initiative, a survey was done of all Cochrane Reviews that were published in full for the first time in 2007, 2011 and 2013. This allowed us to explore trends over time in the reporting of outcomes in these reviews, to explore consistency in outcome specification over time, and to see if any of them were explicitly using core outcome sets (COS). Outcomes specified in the methods sections and reported in the results section of each review were examined. We also recorded whether a Summary of Findings table was published in the review, and examined the number of outcomes included in these and the quality of the evidence for these outcomes. A total of more than 1227 reviews were included in the survey with 387 from 2007, 401 from 2011 and 439 in 2013. The 2007 and 2011 reviews combined had specified more than 6000 outcomes and the the editorial base of the 50 Cochrane Review Groups (CRGs) were sent details of the findings for their CRG in 2013. In the 2013 sample, the 375 reviews that included at least one study, specified a total of 3142 outcomes. Of these outcomes, 32% (1008) were not reported in the review, which is a decrease from 35% in 2011 and 39% in 2007. A Summary of Findings table was included in 57% of the 2013 reviews that had at least one included study, compared to 31% in 2011. None of the more than 1200 reviews explicitly mentioned the use of a COS but several CRGs demonstrated considerable consistency in their choice of outcomes across their new reviews.

- **Holger Schünemann**: *Grade Evidence to Decision Frameworks: Use and usefulness*

The GRADE working group has provided guidance for evaluating the certainty in evidence and for moving from evidence to recommendations. The recent DECIDE project focused on developing Evidence to Decision (EtD) frameworks. These GRADE EtD frameworks support different types of decision makers in considering the available research evidence and make more transparent judgments about factors that determine the direction and type of decision. The presentation will describe their use and usefulness based on practical examples, including guideline capacity building in low and middle resource settings.

- **Kay Dickersin:** *Variation and standards in choosing core outcome sets*

Core outcome sets have a lot to offer, and more standardization across fields in how they are selected will be useful. Which methods will best achieve harmonization? For example, how much should we depend on what clinical trialists think is important? What if systematic reviewers don't agree? After all, there are different purposes to the two approaches. As our ideas change, core outcome sets must have room to change as well. For example, we are realizing that outcomes purely associated with the "medical model" may not be entirely relevant to patients.

Plenary II: Strategy for Patient-Oriented Research (SPOR)

9-10:30am, Alberta Room, Dining Centre Building
Friday, 22 May, 2015

Chair: Krista Connell

****Plenary II is proudly sponsored by the Knowledge Translation Platform Alberta SPOR Support Unit****

- **Tim Murphy:** *Why SPOR is relevant to (Cochrane) Canada*

This talk will introduce the Strategy for Patient Oriented Research (SPOR) and provide information on the current status of the planned activities and opportunities for Cochrane to engage with and contribute to the SPOR mission.

- **Lisa Hartling:** *Innovations in Supporting Health Systems Research: The case of Alberta's SPOR SUPPORT Unit*

In this talk I will provide an overview of our work as part of the Alberta SPOR SUPPORT Unit, which will provide a remarkable and novel opportunity to support researchers working in the area of health outcomes research. We have been actively planning and setting goals for the Knowledge Translation platform, one of seven platforms comprising the SUPPORT Unit. We have had in-depth interviews with over 50 stakeholders representing various settings and roles in the health services and research communities in Alberta. These have given us valuable feedback about the range and complexity of KT-related research and activity in Alberta. We will operationalize our plans to support Alberta's health care research community by providing resources and expertise in knowledge translation, knowledge synthesis and implementation science. I will highlight some of our considerations in laying the foundation for success and measuring our impact, and will discuss how what we're learning and planning relates to Cochrane's work and other initiatives supporting health systems research.

- **Anne Lyddiatt:** *A patient perspective about SPOR*

The Strategy for Patient Oriented Research (SPOR) is a Canadian Institutes of Health Research (CIHR) initiative designed to integrate funding, research and health care with the goal of ensuring that the research is patient oriented and that it is designed to go from bench to bedside. In other words the basic research proposal would demonstrate how research done in a lab/research setting would be transmitted to healthcare providers and actively implemented in daily practice. How and where do patients fit with and contribute to this initiative? This talk will present the point of view of patients and their approach to research. Anne will navigate through the possibilities and opportunities, but also the barriers and challenges that patient oriented research brings to the table.

Plenary III and Closing

3:30-5pm, Alberta Room, Dining Centre Building
Friday, 22 May, 2015

Chair: Jeremy Grimshaw

- **Denise Thomson:** *A Yardstick for Success: Fifteen Years of Integrated Knowledge Translation*

Cochrane reviews are widely respected in the clinical community as being of very high quality, but few health professionals have the time to read a full review. In parallel to the science of creating methodologically sound reviews, then, Cochrane also needs the art and science of knowledge translation: creating resources and practical materials customized to the needs of those delivering care. In this talk I will present the experiences of the Cochrane Child Health Field and Cochrane Innovations in developing these resources. I will discuss what we've learned about how the nature of Cochrane evidence lends itself to particular types of products, and what we have found to be the optimal ways of integrating end users in the process of development.

- **Julie Wood:** *Ensuring a Cochrane Review makes a difference*

A Cochrane Review can take up to two years to complete. If authors and review groups are going to go to use all that time and energy, how do they ensure that the findings of the review are used to inform policy and practice change?
There are many tools available to help you in your dissemination. With the reviews, we will look at how a communication strategy will help you reach your intended audience and also, how you can use partnerships to maximize your reach and interact more effectively.

- **Julian Elliott:** *The Future of Systematic Reviews is Now*

Innovation in the production and use of evidence has always been one of the hallmarks of Cochrane. After a period in which the technologies available for review production have been relatively stable several innovations are becoming more widely available and integrated into standard workflows. These innovations will improve the production of reviews under the existing model, enable more dynamic processes and the potential for living systematic reviews and provide the foundation for the coming challenges of synthesizing data from an increasing volume and variety of primary study outputs.

Meet our Speakers

Plenary I: Cochrane and COMET

Mike Clarke has more than 25 years' experience in the design and conduct of rigorous assessments of healthcare interventions. He has worked on some of the world's largest randomised trials in maternity care, breast cancer, poisoning and stroke; and on dozens of systematic reviews bringing together evidence from hundreds of research studies. He is Chair of Research Methodology at Queen's University Belfast and Director of Evidence Aid, improving access to evidence in disasters and humanitarian emergencies. He is one of the founders of the COMET Initiative, to facilitate the development and uptake of core outcome sets across health and social care.

Holger Schünemann is chair of the Department of Clinical Epidemiology and Biostatistics and holder of the endowed Michael Gent Chair in Health Care Research at McMaster University, widely regarded the birthplace of evidence based health care and problem based learning. He trained in Medicine (M.D. in 1993) epidemiology (Ph.D. in 2000), preventive medicine/public health and internal medicine which he practices at McMaster University. He authored over 300 peer reviewed publications many of them focusing on guideline methodology and systematic reviews. He co-convenes the Applicability and Recommendations Method Group of the Cochrane Collaboration, is co-chair of the GRADE working group, Member of the Board of Trustees of the Guidelines International Network (GIN), a member of the Advisory Committee on Health Research (ACHR) at the World Health Organization (WHO) and has been member of or chaired various guideline panels at the WHO, the ACP, ACCP and ATS. He has consulted or provided training on guideline development for many organizations including NICE in the UK, various ministries of health, Kaiser Permanente.

Kay Dickersin, M.A., Ph. D. is Professor of Epidemiology at the Johns Hopkins Bloomberg School of Public Health, where she serves as the Director for the Center for Clinical Trials. She is also Director of the U.S. Cochrane Center, one of 13 Centers worldwide participating in The Cochrane Collaboration.
Kay's main research contributions have been in in the area of clinical trials, systematic reviews and meta-analysis, reporting biases, trials registration, and the development and utilization of methods for the evaluation of health care interventions and their effectiveness. She has led and participated in research on reporting biases since the 1980s. Kay has also been actively engaged in teaching, including developing courses on evidence-based healthcare, epidemiology, peer review, clinical trials and systematic reviews. Among her honors, Kay is an elected member of the Institute of Medicine and received the 2014 Ingram Olkin Award from the Society for Research Synthesis Methods for lifetime contributions to the field.

Plenary II: Strategy for Patient Oriented Research

Tim Murphy, MBA, is the Vice President, Strategy for Patient Oriented Research (SPOR) Support Unit & Provincial Platforms with Alberta Innovates Health Solutions. Tim has more than 20 years of senior executive leadership experience in the health care sector. Tim was the inaugural Senior Vice President at the Michael Smith Foundation for Health Research in Vancouver, and has been a senior manager at both the Princess Margaret Hospital (1992 - 1997) and the British Columbia Cancer Agency (1997 - 2002). Tim holds a Bachelor of Science Degree, Life Sciences from Queen's University (1989); a Master's of Health Administration from the University of Toronto (1992); and, a Master's of Business Administration from Queen's University (2006). In 2007, he received his Certified Management Accountant (CMA) designation.

Lisa Hartling is an Associate Professor in the Department of Pediatrics at the University of Alberta. She and Dr. Sumit Majumdar are the Joint Leads for Alberta's SPOR SUPPORT Unit Health Systems Research, Implementation Research & Knowledge Translation platform. Dr. Hartling is a CIHR New Investigator, and holds three directorships. The first two are at the Alberta Research Centre for Health Evidence, and the University of Alberta Evidence-based Practice Centre. The focus at these two centres is to gather and summarize the best available scientific evidence to help support decision-making by healthcare providers, administrators, and patients and their families. Her third directorship is with the international Cochrane Child Health Field, where her role involves knowledge translation activities to disseminate high quality research to inform decisions in health.

Anne Lyddiatt is a National Trainer with the Patient Partners in Arthritis Program and resides in Ingersoll, Ontario. Her work experience in nursing was primarily in the areas of administration, education and community health. A diagnosis of inflammatory arthritis necessitated leaving the work force but once her disease was under control, she became active in volunteer activities. Fifteen years ago, Ms. Lyddiatt joined a volunteer program, Patient Partners in Arthritis. In this program, she was trained in basic clinical musculoskeletal examination skills to a level enabling her to lead educational sessions with medical students, residents and health care professionals within the medical school curriculum and CME (continuing medical education) events. Her involvement in the program evolved and, for the past twelve years, Anne has been the national trainer. Twelve Canadian medical schools include the program in their curriculum, so her duties also involve maintaining standardization of the program and ensuring resources and training are up to date. Anne has served on and continues to serve on various groups and boards to help in the development of self-management guidelines and tools for chronic disease management, at both the patient and professional level.

Plenary III: Measuring Success, Today and Tomorrow

Denise Thomson is a Director of the Cochrane Child Health Field, which has a mandate of carrying out knowledge translation of child-relevant evidence from Cochrane reviews. She currently serves on the Cochrane Steering Group and the Board of Directors of Cochrane Innovations, a company which develops business opportunities on behalf of the Cochrane Collaboration. She is the Assistant Director of the Knowledge Translation Platform of the Alberta SPOR SUPPORT Unit. Ms. Thomson holds a MBA degree with a specialisation in knowledge transfer in the Canadian health care sector as well as a MA degree, both from the University of Alberta. In 2014 Ms. Thomson was awarded the Chris Silagy Prize to recognize "an exceptional contribution to the work of the Cochrane Collaboration.

Julie Wood is the Head of Communications and External Affairs, at Cochrane Central Executive. Julie Wood has just joined the Cochrane Collaboration as Head of Communications and External Affairs in September. In her previous position she created and ran the marketing program for an IT services provider with operations in Europe and North America. Before that she worked in various advocacy, campaigning and communications roles at Oxfam GB and Oxfam International, including as the Director of Corporate Communications.

Dr Julian Elliott is Head of Clinical Research in the Department of Infectious Diseases, Alfred Hospital and Monash University and Senior Research Fellow at the Australasian Cochrane Centre. He is founder and CEO of Covidence, a non-profit online platform that improves the efficiency of evidence synthesis, which has recently been selected as the standard platform for production of Cochrane reviews. Dr Elliott's research is focussed on investigating how we can achieve high quality, up-to-date health evidence, including living systematic reviews. He is co-lead of Project Transform, a Cochrane game changer project, which will be working with the wider Cochrane community to improve the way people, process and technologies come together to produce Cochrane content.

Awards

Cochrane Canada Review of the Year Winner

We are pleased to announce that the following review has been awarded the 2014 Cochrane Canada Review of the Year Award. Dawn Stacey will accept the award during the closing plenary.

Decision aids for people facing health treatment or screening decisions

Dawn Stacey, France Légaré, Nananda F Col, Carol L Bennett, Michael J Barry, Karen B Eden, Margaret Holmes-Rovner,Hilary Llewellyn-Thomas, Anne Lyddiatt, Richard Thomson, Lyndal Trevena, Julie HC Wu

Review Abstract:

Background
Decision aids are intended to help people participate in decisions that involve weighing the benefits and harms of treatment options often with scientific uncertainty.

Objectives
To assess the effects of decision aids for people facing treatment or screening decisions.

Search methods
For this update, we searched from 2009 to June 2012 in MEDLINE; CENTRAL; EMBASE; PsycINFO; and grey literature. Cumulatively, we have searched each database since its start date including CINAHL (to September 2008).

Selection criteria
We included published randomized controlled trials of decision aids, which are interventions designed to support patients' decision making by making explicit the decision, providing information about treatment or screening options and their associated outcomes, compared to usual care and/or alternative interventions. We excluded studies of participants making hypothetical decisions.

Data collection and analysis
Two review authors independently screened citations for inclusion, extracted data, and assessed risk of bias. The primary outcomes, based on the International Patient Decision Aid Standards (IPDAS), were:

A) 'choice made' attributes;
B) 'decision-making process' attributes.

Secondary outcomes were behavioral, health, and health-system effects. We pooled results using mean differences (MD) and relative risks (RR), applying a random-effects model.

Main results
This update includes 33 new studies for a total of 115 studies involving 34,444 participants. For risk of bias, selective outcome reporting and blinding of participants and personnel were mostly rated as unclear due to inadequate reporting. Based on 7 items, 8 of 115 studies had high risk of bias for 1 or 2 items each.

Of 115 included studies, 88 (76.5%) used at least one of the IPDAS effectiveness criteria: A) 'choice made' attributes criteria: knowledge scores (76 studies); accurate risk perceptions (25 studies); and informed value-based choice (20 studies); and B) 'decision-making process' attributes criteria: feeling informed (34 studies) and feeling clear about values (29 studies).

A) Criteria involving 'choice made' attributes:

Compared to usual care, decision aids increased knowledge (MD 13.34 out of 100; 95% confidence interval (CI) 11.17 to 15.51; n = 42). When more detailed decision aids were compared to simple decision aids, the relative improvement in knowledge was significant (MD 5.52 out of 100; 95% CI 3.90 to 7.15; n = 19). Exposure to a decision aid with expressed probabilities resulted in a higher proportion of people with accurate risk perceptions (RR 1.82; 95% CI 1.52 to 2.16; n = 19). Exposure to a decision aid with explicit values clarification resulted in a higher proportion of patients choosing an option congruent with their values (RR 1.51; 95% CI 1.17 to 1.96; n = 13).

B) Criteria involving 'decision-making process' attributes:

Decision aids compared to usual care interventions resulted in:

a) lower decisional conflict related to feeling uninformed (MD -7.26 of 100; 95% CI -9.73 to -4.78; n = 22) and feeling unclear about personal values (MD -6.09; 95% CI -8.50 to -3.67; n = 18);
b) reduced proportions of people who were passive in decision making (RR 0.66; 95% CI 0.53 to 0.81; n = 14); and
c) reduced proportions of people who remained undecided post-intervention (RR 0.59; 95% CI 0.47 to 0.72; n = 18).

Decision aids appeared to have a positive effect on patient-practitioner communication in all nine studies that measured this outcome. For satisfaction with the decision (n = 20), decision-making process (n = 17), and/or preparation for decision making (n = 3), those exposed to a decision aid were either more satisfied, or there was no difference between the decision aid versus comparison interventions. No studies evaluated decision-making process attributes for helping patients to recognize that a decision needs to be made, or understanding that values affect the choice.

C) Secondary outcomes

Exposure to decision aids compared to usual care reduced the number of people of choosing major elective invasive surgery in favour of more conservative options (RR 0.79; 95% CI 0.68 to 0.93; n = 15). Exposure to decision aids compared to usual care reduced the number of people choosing to have prostate-specific antigen screening (RR 0.87; 95% CI 0.77 to 0.98; n = 9). When detailed compared to simple decision aids were used, fewer people chose menopausal hormone therapy (RR 0.73; 95% CI 0.55 to 0.98; n = 3). For other decisions, the effect on choices was variable.

The effect of decision aids on length of consultation varied from 8 minutes shorter to 23 minutes longer (median 2.55 minutes longer) with 2 studies indicating statistically-significantly longer, 1 study shorter, and 6 studies reporting no difference in consultation length. Groups of patients receiving decision aids do not appear to differ from comparison groups in terms of anxiety (n = 30), general health outcomes (n = 11), and condition-specific health outcomes (n = 11). The effects of decision aids on other outcomes (adherence to the decision, costs/resource use) were inconclusive.

Authors' conclusions

There is high-quality evidence that decision aids compared to usual care improve people's knowledge regarding options, and reduce their decisional conflict related to feeling uninformed and unclear about their personal values. There is moderate-quality evidence that decision aids compared to usual care stimulate people to take a more active role in decision making, and improve accurate risk perceptions when probabilities are included in decision aids, compared to not being included. There is low-quality evidence that decision aids improve congruence between the chosen option and the patient's values.

New for this updated review is further evidence indicating more informed, values-based choices, and improved patient-practitioner communication. There is a variable effect of decision aids on length of consultation. Consistent with findings from the previous review, decision aids have a variable effect on choices. They reduce the number of people choosing discretionary surgery and have no apparent adverse effects on health outcomes or satisfaction. The effects on adherence with the chosen option, cost-effectiveness, use with lower literacy populations, and level of detail needed in decision aids need further evaluation. Little is known about the degree of detail that decision aids need in order to have a positive effect on attributes of the choice made, or the decision-making process.

Graduate Student Poster Award Candidates

The winner of the Graduate Student Posted Award will be announced during the closing plenary.

Evaluating the quality of neuroimaging studies
Branden K. Carr

The Use of Methodological Quality Measures in Clinical Specialties
David Herrmann

Decision aids that support decisions about prenatal testing for Down syndrome
Maria Esther Leiva Portocarrero

Workshop Abstracts

COMET Workshop 1:

Method for determining 'what' to measure in core outcome sets

Presenter: Paula Williamson

11am-12:30pm, Legacy Suite, Dining Centre Building
Thursday, 21 May, 2015

Selection of outcomes is crucial to trials designed to compare the effects of different interventions. For findings to influence policy and practice, chosen outcomes need to be relevant to patients, public, healthcare professionals and others making decisions about health care. Trials in a specific condition often report different outcomes, or address the same outcome in different ways. So much could be gained if an agreed core outcome set (COS) of a minimum number of appropriate and important outcomes was measured and reported in all clinical trials in a specific condition. There are, however, no agreed best methods for selection of outcomes for COSs

This workshop will comprise a mixture of presentations, exercises and participant discussion to consider the various methods that have been used to date for COS development. A presentation will introduce methodological issues and considerations involved in developing COS. This will be illustrated with examples of COS developed for different healthcare settings (e.g. primary, secondary care, acute and chronic illnesses). Participants will be given examples of existing work to design COS for clinical trials, and work in groups to discuss potential issues. Participants will also consider different methods and their role in COS development. The importance of including key stakeholders in establishing COS will be emphasised to ensure consideration of appropriate outcomes.

The workshop will be suitable for participants who have no prior experience of COS development, as well as those who have some experience.

COMET Workshop 2:

Core outcome sets for randomized controlled trials and Cochrane reviews

Presenter: Mike Clarke

11am-12:30pm, Senate Room, Hotel Alma, 7th Floor
Thursday, 21 May, 2015

Ill health and treatments can affect people in different ways, making it difficult to select the most appropriate outcomes for research. The development of standardised core outcome sets for all trials of effectiveness in a particular condition would make this easier.

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-standardised selection, measurement and reporting of outcomes, and to 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.

COMET Workshop 3

Involving patients in core outcome set development: Identifying the challenges and potential solutions

Presenter: Bridget Young (University of Liverpool)

11am-12:30pm, Blue Room, Dining Centre Building
Thursday, 21 May, 2015

For a core outcome sets (COS) to have credibility, the chosen outcomes need to be relevant and meaningful to all stakeholders, including patients and carers. Participants in this interactive session will work together to identify the challenges that researchers may encounter when planning to involve patients and carers in COS development (such as how to access patients/carers, how to maintain their involvement over time and how to elicit their views on COS etc.) Participants will also exchange ideas about potential solutions to address these challenges in different contexts and with different stakeholder groups. After brief introductory presentations to set the scene, participants will join breakout groups to discuss the challenges and solutions. A plenary session at the end will provide the opportunity for groups to share their ideas and experiences.

The workshop will be suitable for people who have no prior experience of working with patients/carers to develop COS, as well as those who have some experience. The aim of the workshop is not to teach people how to involve patients/carers in COS development, but rather to raise awareness of the challenges and to discuss some potential ways to tackle these challenges.

Workshop 4

Communicating your review findings

Presenter: Julie Wood (Cochrane Collaboration)

11am-12:30pm, CIBC Hub Room, Rozsa Centre
Thursday, 21 May, 2015

Once a Cochrane review is completed, many think the job is done, but for others, the work of communicating those findings, has just begun.

This workshop will look at each stage in the review process and how to you need to ensure that you are keeping communications in mind. You will receive an offer of what tools are available from Cochrane and Wiley to help you communicate your review findings, and how to help author teams access these resources. We will explore in depth different channels for communicating your findings, including how to work with the media.

Finally, at the end of the session, we will break into groups to work through real-life challenges from authors and Cochrane Review groups so that you can go away from the session with a concrete action of communication plan of what you will do with your next review.

Workshop 5

Everything you wanted to know about Cochrane Methods but were afraid to ask

Presenter: Alain Mayhew

1:30-3pm, Legacy Suite, Dining Centre Building
Thursday, 21 May, 2015

A thorough understanding of Cochrane methods is beneficial for both authors and users of Cochrane reviews. The Cochrane Handbook has 649 pages full of great advice but can be hard to follow and many questions arise within review conduct or reading. This workshop is an opportunity to bring questions to experienced Cochranites and ask questions about Cochrane; discussion topics will follow from the questions presented, possibly addressing review aspects such as title formulation, search strategies, risk of bias assessments, data extraction, data analysis or summarizing findings. The facilitators will be prepared to address issues about basic approaches and advanced techniques of Cochrane methodology for systematic reviews. Items for discussion can be about specific issues or broad concepts.

All questions are welcome. No previous experience with Cochrane reviews is required. Participants are encouraged to bring questions but it is not mandatory. We will have small and large group discussions about the identified questions. Facilitators will endeavor to address as many issues as possible.

Workshop 6 (Part A)

Assessing bias due to confounding and selection of participants into groups in a systematic review which includes non-randomized studies (NRS)

Presenters: Beverley Shea & George Wells

11am-12:30pm, Evans Room, Rozsa Centre
Friday, 22 May, 2015

The workshop aims to train review authors to assess the risk of bias due to confounding and selection of participants into groups when including NRS in systematic reviews about the effects of interventions, using an extended risk of bias tool (ACROBAT-NRSI). Cochrane recommends that review authors consider and justify whether or not to include NRS for all research questions. Decisions to include NRS may arise when there are inadequate or no RCTs but where the question addressed by the review is a considered a priority. Topics about possible harmful or long term effects of interventions, or review questions about the effects of public health and non-pharmacological interventions, may have these characteristics. This workshop aims to give review authors and others intending to include non-randomized studies (NRS) in Cochrane systematic reviews experience in applying ACROBAT-NRSI (an extended risk of bias tool for this situation). Participants will mainly work in small groups to apply the confounding and selection bias domains of the tool, domains which do not apply to RCTs. Signalling questions prompt the user to assess key aspects of studies and then to judge whether a study is at high or low risk of material bias in these domains for specified outcomes. Responses to signalling questions and domain specific bias judgements are made on four-point scales and include a 'no information' option; these features will be contrasted with the existing risk of bias tool.

Workshop 6 (Part B)

Assessing bias due to confounding and selection of participants into groups in a systematic review which includes non-randomized studies (NRS)

Presentesr: Beverley Shea & George Wells

1:30-3pm, Evans Room, Rozsa Centre
Friday, 22 May, 2015

Workshop will continue from before lunch.

Workshop 7

GRADE: Using GRADE to assess the quality of evidence

Presenters: Nancy Santesso and Holger Schünemann

1:30-3pm, Senate Room, Hotel Alma, 7th Floor
Friday, 22 May, 2015

The GRADE criteria is used to evaluate the quality of evidence for outcomes reported in systematic reviews and health technology assessments, and to interpret findings and draw conclusions. It can be used to assess the evidence from randomised and non-randomised studies to answer questions about the effects of treatment interventions, tests, as well as prognosis. This workshop will focus on using GRADE for reviews of treatment interventions. We will discuss the GRADE criteria including risk of bias, indirectness, imprecision, inconsistency, publication and others. We will also describe how to use GRADE to make conclusions which incorporate the quality of the evidence and magnitude of effect.
How you will engage participants: Participants will have hands on experience using GRADE to assess the evidence for 1-2 outcomes from a systematic review and present the evidence.
Level of knowledge required: Introductory; Although this is an introductory workshop, participants will also have the opportunity to consult with the facilitators on more advanced topics.

Consumer Round Table

Enhancing consumer involvement in Cochrane Canada

Facilitator: Eileen Vilis
1:30-3pm, Legacy Suite, Dining Centre Building

Background: Over the last 10 years, Cochrane Canada has benefited from the involvement of Canadian consumers. Consumers have disseminated information about Cochrane Reviews and how they can be used to inform health care decisions to a variety of audiences. As Cochrane in Canada plans for future funding, the opportunity is ripe to review past consumer involvement and explore what future consumer involvement could look like.

Objectives: To provide a forum to review and discuss past consumer involvement; what has worked, what could be changed, and identify areas for future involvement by consumers in Cochrane across Canada.

Methods: A round table discussion will be used to promote and stimulate discussion about ways consumers can be effectively involved in the future of Cochrane Canada and looking at possible communication strategies that could be used to encourage more consumer involvement in the dissemination of Cochrane Reviews.

Results: The round table discussion will provide information as to how consumers can become more involved in Cochrane Canada.

ORAL Abstracts

Please note the names of presenters appear in bold

Oral Session 1:

Moderator: Ciprian Jauca

Core Competencies for Scientific Editors of Biomedical Journals

David Moher, James Galipeau, Larissa Shamseer, Sharon Straus, Peter Tugwell, Elizabeth Wager, Margaret Winker
Ottawa Hospital Research Institute

11am – 12:30pm, Evans Room, Rozsa Centre
Thursday, 21 May 2015

Background: Scientific editors, who are responsible and accountable for selecting the scientific content of a peer-reviewed journal, play a central role in the dissemination of biomedical research. Yet across journals there are no agreed-upon competencies to determine what makes a good scientific editor or how to properly train them.

Objectives: A four-phase program is currently underway to outline a minimum set of core competencies for scientific editors, including Cochrane editors, of biomedical journals. The project is international in scope and includes several key stakeholder groups, such as WAME, COPE, and the Cochrane Collaboration.

Methods: Phase 1 involves searching the published and unpublished literature for information relating to competencies of scientific editors; the output will be a scoping review. Phase 2 consists of a training needs assessment, which will be sent out to a large pool of scientific editors. Phase 3 is a Delphi process designed to achieve consensus on a minimum set of competencies for scientific editors. Phase 4 involves the development of training modules geared toward achieving each of the core competencies derived in Phase 3, developed in concert with a certification program.

Conclusion: This program will to provide enhanced credibility and consistency within the scientific editor role across the spectrum of biomedical journals.

Development of Preferred Reporting Items for Systematic reviews and Meta-Analysis - Protocols for Children

Mufiza Zia Kapadia, David Moher, Martin Offringa
The Hospital for Sick Children

11am – 12:30pm, Evans Room, Rozsa Centre
Thursday, 21 May 2015

Background: Systematic reviews (SRs) are keys to decision making by healthcare providers and policymakers. The methodological quality of SRs has been questioned recently. Although Preferred Reporting Items for Systematic reviews and Meta-Analysis (-Protocol) - PRISMA 2009 and PRISMA-P 2015- were developed to improve the transparency and quality of SRs, lacking guidance on how to incorporate pediatric specific methodological features into child health SRs continues to impair decision making.

Objectives: Develop child health extensions for PRISMA-Protocols for Children (PRISMA-PC) and for Reporting (PRISMA-C).
Methods: We synthesized evidence on the quality of reporting of child health SRs and compiled a preliminary list of child health specific (candidate) extension items; a two-phase Delphi survey followed by an international consensus meeting lead to final extension checklists. Participants of the Delphi survey and consensus meeting include experts in SR methodology, reporting guideline developers, journal editors, Cochrane and PROSPERO representatives and end-users of child health SRs.

Conclusion: Pediatric extensions PRISMA-PC and PRISMA-C will a) aid authors write clear protocols and reports of child-health SRs; b) create a framework for reviewers to assess publications; c) provide a training too; and d) help end-users of the SRs (patients, providers, funders, payers) to evaluate its validity and applicability in their decision making process

Outcome reporting bias in systematic reviews: A sample of published literature

Kieran Shah, Aaron M Tejani, Emma Reid, Lawrence Nichoe Huan, Gregory Egan, Jamie Kirkham
University of British Columbia

11am – 12:30pm, Evans Room, Rozsa Centre
Thursday, 21 May 2015

Background: Evidence suggests that outcome-reporting bias (ORB) has the potential to skew results and overestimate treatment effects in RCTs. Increasing literature also suggests ORB exists in systematic reviews; however, the prevalence of discrepant outcome reporting and ORB is unknown after several strategies were proposed to mitigate this (e.g. Cochrane Handbook).

Objective: To estimate the prevalence of discrepant outcome reporting and assess risk for ORB In Cochrane reviews between years 2007-2014.

Methods: A stratified random sampling approach was applied to collect a sample from each Cochrane review group. Outcomes from each Cochrane Review were assessed to determine if they match their respective protocol with respect to pre-specified analysis of outcomes.

Results: 48/100 (48%) of protocol and review pairings contained a discrepancy in at least one outcome measure. Where reasons were provided for discrepancies, there was found to be a high risk for bias in 3/100 (3%) of these reviews, with changes being made after knowledge of results from individual trials.

Conclusions: Our preliminary results indicate that discrepant outcome reporting is still widely prevalent despite recent interventions to address this. Our study is still ongoing; we plan to obtain estimates for discrepant outcome reporting and ORB that will represent the true population mean in Cochrane reviews.

Examining the Quality of Reporting in Network Meta-Analyses of Cardiovascular Interventions

Joshua Day, Matt Vassar
Oklahoma State University Center for Health Sciences

11am – 12:30pm, Evans Room, Rozsa Centre
Thursday, 21 May 2015

Background: Network meta-analysis (NMA) is an increasingly popular procedure for comparing multiple treatments. In recent years, researchers have questioned the quality of reporting in NMA, and while extensions of the PRISMA statement for NMA have been discussed, there is not a standardized reporting framework. Initial research on reporting quality in NMA has found significant deficiencies, yet little is known about the reporting quality in specific clinical specialties.

Purpose: To examine the quality of reporting in NMAs of cardiovascular interventions.

Methods: an information specialist derived a series of searches to locate NMAs that met selection criteria. These articles were examined on several quality reporting dimensions including the literature search, eligibility criteria, assumptions, and statistical analytic approaches.

Results: Significant reporting deficits were noted across most dimensions. Descriptive statistics and graphical displays will be presented to detail these results.

Conclusion: Quality of reporting in NMA related to cardiovascular interventions is lacking. Given the increased prevalence of NMA, we recommend the development and use of a standardized framework for NMA research

Oral Session 2:

Moderator: Claire Munhall

Interventions to improve laboratory test ordering by family physicians

Roger E. Thomas, Marcus M. Vaska, Christopher Naugler, Turin Tanvir Chowdhury
University of Calgary

1:30-3pm, Blue Room, Dining Centre Building
Thursday, 21 May 2015

Background: Laboratory tests in western countries increase 5-8%/year. Family physicians order 60-70% of tests and influence 30% of referrals to specialists/hospitals. Test ordering and frequency vary widely.

Objectives: To identify all studies of interventions with family physicians/GPs to decrease laboratory testing not recommended and increase testing recommended by guidelines/systematic reviews.

Methods: Searched MEDLINE, EMBASE, Cochrane Database of Systematic Reviews, ACP Journal Club, DARE, Cochrane Central Register of Controlled Trials, Cochrane Methodology Register, Health Technology Assessment, NHS Economic Evaluation Database, PubMed, PubMed Central, Scopus, Web of Science, CINAHL. No language/date restrictions.

Results: We identified 21 RCTs from 8 countries and 19 non-randomised studies from 8 countries to educate family physicians about laboratory rest ordering, and 11 studies of interventions by laboratory directors in 6 countries to reduce test ordering. Interventions are heterogeneous in numbers of family physicians and patients, intensity and duration of intervention, numbers of tests targeted, whether the intervention was based on guidelines, and outcomes (e.g., INR in range, quality of Pap smears). Twelve of the RCTs found significant preferred changes. We will present the financial effects if these interventions were applied to the 150 million laboratory tests in the Calgary Laboratory system.

Conclusions: Twelve of 21 RCTs achieved significant preferred effects.

Evidence-based STBBI Prevention Interventions for Communities Affected by or At-Risk of HIV

Jason Globerman, David Gogolishvili, Sanjana Mitra, Kira Gangbar, Maggie Shi, Emily White, Sonia Gaudry, David Seekings, Jean Bacon, Sean B. Rourke
Ontario HIV Treatment Network

1:30-3pm, Blue Room, Dining Centre Building
Thursday, 21 May 2015

Background: Knowledge translation of effective sexually transmitted and blood-borne infection (STBBI) prevention interventions is critical as the creation of new knowledge does not, on its own, lead to widespread implementation or impacts on health. Raising knowledge users' (AIDS service organizations) awareness of research findings and facilitating the use of these findings is of great value.

Objectives: To determine feasibility of implementing effective STBBI prevention interventions among people living with HIV or at-risk.

Methods: Searches were conducted in MEDLINE, EMBASE, PsychInfo, and Cochrane Library. Interventions from high income countries between 1998 and 2014 were included. Studies were grouped by population, intervention, comparison group and outcome (PICO). Quality of evidence was determined using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system.

Results: Data and implementation strategies from effective STBBI prevention interventions (those with statistically significant effects and moderate or high quality of evidence) were provided to local AIDS service organizations. Feasibility was determined by knowledge users. Assessments were made based on intervention intensity and resource requirements. Staff training and capacity-building were identified to ensure successful implementation.

Conclusions: Involving knowledge users in the synthesis, dissemination and implementation of interventions can provide more effective health services, programs and policies for this population

Association between immigration status & cervical cancer screening: Systematic review & meta-analysis

Syeda Kinza Rizvi, Ruth Diaz, Dr. Doreen Rabi, Dr. James Dickinson
University of Calgary

1:30-3pm, Blue Room, Dining Centre Building
Thursday, 21 May 2015

Background: In developed countries, most invasive cervical cancer, and the highest mortality rates occur in women who never had a pap test. Immigrants appear less likely to have been screened for cervical cancer than non-immigrants.

Objectives: We aimed to determine the association between immigration status and cervical cancer screening among women in developed countries.

Methods: The search used guidelines of Center for Reviews and Dissemination, using a combination of keywords related to cervical cancer and screening. Data was extracted using 2009 PRISMA checklist. Newcastle-Ottawa Quality Assessment Scale was used for confounding and quality assessment.

Results: From 7426 citations, ten articles were included in the systematic review and eight in meta-analysis. The studies spanned 2001 and 2013 from Australia, UK, USA, Canada & Spain. Non-Immigrant women are screened twice as often in Canada (pooled OR = 2.25; 95% CI: 1.956 – 2.592), Spain (OR = 2.42; 95% CI: 2.14 – 2.74), and Australia (OR = 2.29; 1.97 – 2.66). In the UK, the ratio is worse (OR = 4.42; 4.10 –4.76) In the USA, the trend was similar but not significant (polled OR = 1.60; 0.48 – 5.25)

Conclusion: Efforts to increase cervical screening should focus on newly arrived immigrants from Asia, with low education and income.

A scoping review of Lyme disease research to inform evidence-based decision making in Canada

Judy Greig, Ian Young, **Mariola Mascarenhas**, Lisa Waddell, Pascal Michel
Laboratory for Foodborne Zoonoses, Public Health Agency of Canada

1:30-3pm, Blue Room, Dining Centre Building
Thursday, 21 May 2015

Background: Lyme disease is endemic in parts of Canada due to established tick vectors for Borrelia burgdorferi. Climate change can expand the range of these tick vectors and increase risk to Canadians.

Objectives: A scoping review was undertaken to identify global evidence on Lyme disease to inform development of programs and policies to protect Canadians against Lyme disease.

Methods: An expert Canadian advisory committee was solicited for insight on the scope of the review. A priori developed review protocol included a pretested search and all screening tools. Citations/papers were appraised independently by 2 reviewers. Data was extracted, categorized and mapped to understand the quantity, characteristics and utility of global research on Lyme disease.

Results: From 16 415 abstracts, 4 156 full papers were characterized and charted under six main focus areas: 1) surveillance methods; 2) diagnostic test evaluation; 3) risk factors for Lyme disease; 4) efficacy of mitigation strategies; 5) public knowledge, attitudes and/or risk perception towards Lyme disease; 6) economic burden and/or cost-benefit of potential prevention and control strategies.

Conclusions: The scoping review results helped prioritize several systematic reviews and informed researchers on knowledge gaps. Best available evidence summaries will help Canadian public health decision-makers evaluate and develop effective response strategies against Lyme disease.

Oral Session 3:

Moderator: Alicia Marshall

The Role of Media and Social Media in the Dissemination of the Canadian Task Force on Preventive Health

Neil Bell, **James Dickinson**, **Kim Barnhardt**, Kaylyn Kretschmer,
Canadian Task Force on Preventive Health Care

1:30-3pm, Senate Room, Hotel Alma, 7th Floor
Thursday, 21 May 2015

Background: Media/social media play an important role in driving which information is disseminated, shared and interpreted by patients and clinicians. In Canada and other countries significant controversy exists on screening for prostate cancer. The CTFPHC "Recommendation on Screening for Prostate Cancer with the PSA Test, published online in CMAJ on October 27, 2014, was accompanied by a proactive communications plan with emphasis on media outreach.

Objective: To examine the role of the media/social media in the dissemination of the CTFPHC recommendation on prostate cancer screening.

Methods: Observational study that examined the type, number and responses of messages in the media/social media utilizing media reports from multiple sources.

Results: Media uptake included: over 800 media stories (television interviews, radio interviews, national and international online and print articles). Social media uptake included 299 tweets from 275 tweeters (Twitter). The guideline ranked 2nd of 2691 CMAJ articles (Altmetric score 425)) and guideline downloads (3rd highest on Infobase for 2nd half 2014).

Conclusions: Guideline recommendations could receive rapid dissemination by the media/social media. Measurement of effect is difficult and inexact. Guideline developers should consider the role of the media/social media and develop proactive media communication strategies. Further research is needed to examine the effect on patient and physician behaviour.

Cochrane 2.0: Tweeting and blogging to disseminate child-relevant evidence

Denise Thomson, Michele Hamm, Mandi Newton, Ricardo Fernandes, Robin Featherstone, Lisa Hartling
Cochrane Child Health Field

1:30-3pm, Senate Room, Hotel Alma, 7th Floor
Thursday, 21 May 2015

Background: Healthcare providers desire ready access to reliable synthesized information to support point-of-care decision-making. Virtual communities, facilitated by the adoption of social media tools such as Facebook, Twitter, and YouTube, are increasingly used for knowledge mobilization, bridging the gap between knowledge generation/synthesis and knowledge implementation.

Objective: To develop and evaluate a structured social media strategy to disseminate Cochrane evidence in child health to healthcare providers caring for children.

Methods: The social media strategy has three components: daily tweets, weekly blog posts, and a monthly Twitter journal club.

Results: The social media strategy will be evaluated in the following ways:

- Twitter & blog site analytics – measuring engagement with tweets, and blog site visits;
- bit.ly statistics – measuring interaction with URL links;
- Altmetrics – data on the change in scores of social media engagement with source evidence after our promotion;
- Participant satisfaction with the journal club;
- Results of the evaluation will be presented at the Symposium.

Conclusions: This work will provide empiric evidence for the utility of specific social media strategies for the dissemination of evidence to professionals providing health services to children and youth. The results will be applicable to other audiences and other areas of health.

Interactive social media interventions to promote health equity: An overview of reviews
Vivian Welch, Jennifer Petkovic, **Jordi Pardo Pardo**, Tamara Rader, Peter Tugwell
Cochrane Musculoskeletal Group

1:30-3pm, Senate Room, Hotel Alma, 7th Floor
Thursday, 21 May 2015

Background: Social media use has been increasing in public health and health promotion since it removes geographic barriers. However, social media interventions also have potential to increase health inequities for people who do not have access to or do not use social media.

Objective: To assess the effects of social media interventions on health outcomes, behaviour change and health equity.

Methods: We conducted an overview of systematic reviews. We included systematic reviews focused on interventions allowing two-way interaction consisting of activities such as discussion forums, social networks, blogging, applications linked to online communities, and media sharing.

Results: Eleven systematic reviews were included. We did not find disaggregated analyses across characteristics associated with disadvantage, such as lower socioeconomic status or age. However, some studies reported that social media interventions were effective in specific populations related to age, socioeconomic status, ethnicities, and place of residence.

Conclusion: Social media interventions were effective in certain population who may be at risk for disadvantage indicating that these interventions are potentially effective for promoting health equity. More research on established social media platforms with existing social networks is needed, particularly among populations at risk for disadvantage, to assess effects on health outcomes and equity.

Oral Session 4:

Moderator: Karin Dearness

A Descriptive and Comparative Analysis of Child-Relevant Systematic Reviews in the Cochrane Database
Katelynn Crick, Lisa Hartling, Brian Rowe
University of Alberta

1:30-3pm, Evans Room, Rozsa Centre
Thursday, 21 May 2015

Background: In 2009, a comprehensive description of child-relevant SRs produced through the Cochrane Collaboration was completed. This study aimed to update the previous work, and to describe and compare current child-relevant SRs according to their content and methodological approaches.

Objectives: To identify:

1) the extent of child-relevant evidence available,
2) gaps in evidence,
3) methodological advancements and limitations.

Methods: All child-relevant SRs produced through the Cochrane Collaboration were identified and described according to their content and methodological approaches. These data were compared to the 2009 sample.

Results: Of 5,520 Cochrane SRs, 1,338 were child-relevant; these included 16,804 primary studies involving over 38,346,913 participants. Most commonly represented clinical areas are Airways (11.5%), Cystic Fibrosis and Genetic Diseases (7.9%), Acute Respiratory Infections (7.8%), Developmental, Psychological and Learning Disorders (6.7%), and Infectious Diseases (6.2%). 52% of SRs examined pharmacological interventions. 56% used the Cochrane Risk of Bias tool to assess methodological quality. Publication bias was formally assessed in only 14%

Conclusions: This compilation and analysis of child-relevant SRs offers an important resource for clinical decision-making and shows advances in SR methods since 2009. Detailed analysis will allow us to identify clinical topics of priority for future SRs, and areas for improved methodological rigor.

AMSTAR: helping decision makers distinguish high and low quality systematic reviews that include non-randomized studies

Beverley Shea
OHRI and Bruyère Research Institute

1:30-3pm, Evans Room, Rozsa Centre
Thursday, 21 May 2015

Background: AMSTAR is widely used in the critical appraisal of systematic reviews (SR). The instrument was validated using SR of RCTs. Surveys have shown that over 60% of SR of treatment effects include non-randomized studies (NRS).

Objectives and methods: A version of AMSTAR capable of appraising SR that include NRS. A literature review found no critical appraisal instrument that incorporated suitable measures of risk of bias (ROB) of the component studies. An expert group reviewed the results and suggested a single instrument with separate paths to incorporate ROB assessment of either RCTs or NRS. The opportunity was taken to update the instrument in a number of other domains.

Results: The modified AMSTAR now has 15 items. The review process guided more clearly by the PICOT framework, makes a more detailed assessment of literature searching methods, gives guidance on whether authors have made adequate assessment of ROB of included studies and whether limitations were acknowledged in making conclusions from the results of the review. The revised instrument is undergoing pilot testing.

Conclusions: assessing the quality of SR that include NRS is very challenging. The modified AMSTAR is a first step towards a more accurate appraisal of this important type of study.

Randomized Controlled Trial Study Protocols in Systematic Reviews: An Analysis and Recommendations

Catherine Boden, Julia Bidonde, Angela Busch
University of Saskatchewan

1:30-3pm, Evans Room, Rozsa Centre
Thursday, 21 May 2015

Background: Registration of protocols is now a standard requirement for trialists conducting randomized controlled trials (RCTs). Including RCT protocols in systematic reviews (SRs) is recommended. However, how to document and utilize RCT protocols is less well-established.

Objectives: We aim to (1) describe current standards for documenting and utilizing RCT protocols in SRs, (2) illustrate the complexity of incorporating RCT protocols, and (3) recommend possible procedures where there were gaps in the current standards.

Methods: A literature search supplemented by consultation with SR experts and analysis of guidelines, standards documents, and handbooks describing procedures for SR published by key SR bodies, institutes and collaborations was conducted. The guidelines from the following selected standards setting organizations were examined: the Cochrane Collaboration, Joanna Briggs Institute, University of York's Centre for Reviews and Dissemination, Campbell Collaboration, and the Institute of Medicine.

Results: Search of RCT trial registries is mandated in most guides, standards documents and handbooks, but procedures for incorporating RCT protocols are less well documented. Where there was ambiguity on the standards or procedures, possible methods for utilizing protocols were suggested.

Conclusions: Current SR standards lack sufficient guidance on some aspects of the procedures related to RCT protocols. Preliminary recommendations for such procedures were proposed.

Oral Session 5:

Moderator: Nancy Santesso

CBRG QuickDecks: A new tool for sharing the best evidence in back and neck pain care

Andrea Furlan, **Claire Munhall**, Shivang Danak, Jaemin Kim, Teresa Marin
Cochrane Back Review Group

11am-12:30pm, Blue Room, Dining Centre Building
Friday, 22 May 2015

Background: It is important to create different summary products in addition to scientific publications to support claims about interventions based on evidence from Cochrane Reviews. The Cochrane Back Review Group (CBRG) wanted to create a product that would decrease the burden and yet encourage the use of evidence from Cochrane reviews for busy researchers and clinicians.

Objectives: To create a product to share findings from reviews published within the CBRG that provides a quick snapshot of the evidence in an accessible format.

Methods: QuickDecks are created for each intervention review and classified into 8 different intervention themes. They consist of three summary slides with a standard format presenting objectives, methods, results and conclusions of the review. QuickDecks, prepared by the CBRG, are sent to the review authors for approval. PDF versions of the slides are available for anyone to download and PowerPoint versions are available upon request.

Results: QuickDecks have been promoted through the CBRG Twitter, Facebook, newsletters and email communications. Since the QuickDecks have been available to download in August 2014, there has been a lot of positive feedback and a large number of downloads.

Conclusion: QuickDecks are a new tool used to share evidence and promote uptake of Cochrane review findings.

An Assessment of Abstracts Submitted to Canadian Cochrane Symposium: A Quality Improvement Report

Alain Mayhew, James Galipeau, Vivian Welch, Jordi Pardo Pardo, Lisa McGovern
Cochrane Bias Methods Group, Knowledge Synthesis Group, Ottawa Hospital Research Institute

11am-12:30pm, Blue Room, Dining Centre Building
Friday, 22 May 2015

Background: The Canadian Cochrane Symposium considers abstracts for both oral and poster presentations that fit within the overall theme and one of the sub-themes of the Symposium. However, no data is available describing the submitted abstracts.

Objectives: To describe the abstracts that were submitted for the 2015 Symposium and the differences between those accepted and those rejected.

Methods: All abstracts were submitted by January 21, 2015. Authors identified whether or not they preferred an oral or a poster presentation, and the appropriate sub-theme. All abstracts were blindly evaluated by at least two reviewers and final decisions re acceptance were made by the co-chairs of the Abstract Review Committee. Consideration was given to relevance of topic to Cochrane attendees, and clarity of abstract.

Results: Over 40 abstracts were submitted for the 2015 Symposium. Anonymous data collected by reviewers will be presented on abstract content, subtheme identified, and whether the abstract was accepted as a poster or abstract. Common reasons for rejection will also be explored with suggestions of how to improve chances of acceptance.

Conclusions: Providing this information will give an overall profile of accepted oral and poster abstracts. The data will also help attendees with the preparation for future submissions for Cochrane meetings.

Fifteen Years of Integrated Knowledge Translation: The Cochrane Child Health Field

Denise Thomson, Ricardo Fernandes, Katrina Williams, Lisa Hartling
Cochrane Child Health Field

11am-12:30pm, Blue Room, Dining Centre Building
Friday, 22 May 2015

Background: The establishment of Cochrane Fields acknowledged the importance of moving evidence into practice—connecting the findings of Cochrane reviews with those making practice and policy decisions. The Child Health Field, founded in 2000, is celebrating fifteen years of supporting decision-making in child health.

Objectives: To review the Field's knowledge translation initiatives.

Methods: The Child Health Field has followed an approach of integrated knowledge translation, engaging knowledge users as partners in our work.

Results: Our initiatives include: Evidence for Clinicians" columns, profiling Cochrane reviews selected by a panel of community pediatricians and general practitioners; Overviews of reviews, synthesizing data from multiple Cochrane reviews on interventions for one condition into one accessible and usable document; Evidence-Based Child Health, a journal profiling child-relevant Cochrane reviews in a variety of reader-friendly formats; Podcasts, brief downloadable audio recordings of clinicians highlighting the overviews' implications for practice; Child health browse lists, assisting users of the Cochrane and Cochrane Library websites to find child-relevant reviews; Advocacy for improved child-relevant reviews, enhancing their clinical applicability, which is a crucial first step for knowledge translation initiatives.

Conclusions: Valuable lessons learned from the Child Health Field's sustained work in knowledge translation over 15 years can help inform similar initiatives by other groups.

How Cochrane affected your life: Impact stories

Alicia Marshall, Lisa McGovern, Eileen Vilis
Cochrane Canada

11am-12:30pm, Blue Room, Dining Centre Building
Friday, 22 May 2015

Background: Cochrane is recognized as a valuable and reliable source of information. However, it is not easy to document the impact that Cochrane reviews might have on individuals.

Objectives: To collect impact stories from users of Cochrane reviews of the influence they had on real-life decisions.

Methods: We made an open call for stories via website, social media, Cochrane and partners newsletters and e-mail distribution lists, plus an ad in a local newspaper. As an incentive, a small set of prizes was set up.

Results: We received 82 submissions with stories from students, patients and health professionals. We heard how Cochrane evidence helped students with medical school research, how it inspired better practices for elderly care, and how it led to career growth for researchers, along with many other positive outcomes. The three winner stories were:

1. Cochrane Review sparked research program aimed at reducing pain in infants and children
2. Nurse Advocates for herself, thanks to Cochrane
3. Cochrane Review supports effectiveness of unpleasant procedure

Conclusions: An impact stories contest, well disseminated through the existing Cochrane channels, collected a significant number of stories and assists to document positive impact of Cochrane reviews in real life.

Oral Session 6:

Moderator: Heather Colquhoun

Transparency and Health Policy
Brittany Gerber, Tara Cowling, Brooke Rakai

Medlior Health Outcomes Research Ltd.

11am-12:30pm, Legacy Suite, Dining Centre Building
Friday, 22 May 2015

Objectives: The current project aimed to assess whether predefined methodological details were provided in evidence-based health policy reports by healthcare organizations in Canada, the US and UK.

Methods: Up to five evidence-based reports, published within the last 12 months, were reviewed from the following organizations: (1) Canadian Agency for Drugs and Technologies in Health; (2) Health Canada; (3) Public Health Agency of Canada; (4) National Institute for Health and Care Excellence; and (5) Agency for Healthcare Research and Quality. The review compared the methodology provided in the selected reports to the standardized methodology provided in Cochrane reviews.

Results: The methodology reported was inconsistent; although many reports provided details on the type of evidence utilized (e.g. web-searches), most did not include a methods section or details including: search strategies, selection criteria or quality assessment.

Conclusions: To increase the validity of evidence-based health policy reports, a rigorous methodology should be applied and reported to ensure meaningful, transparent and appropriate decision-making.

The Cochrane Policy Liaison Office: Increasing the visibility, reach and impact of Cochrane reviews
François-Pierre Gauvin, Mike Wilson, Kaelan Moat, and John Lavis
Cochrane Policy Liaison Office and McMaster Health Forum

11am-12:30pm, Legacy Suite, Dining Centre Building
Friday, 22 May 2015

Background: The Cochrane Policy Liaison Office (CPLO) is a sub-unit of the Canadian Cochrane Centre and works to increase the use of Cochrane reviews among health-system policymakers and stakeholders.

Objective: To highlight CPLO's core programs and recent enhancements to support the use of Cochrane reviews.

Methods: A review of CPLO's core programs and related websites.

Results: The CPLO plays a key role in several key programs, including Health Systems Evidence, a rapid response service, stakeholder dialogues, citizen panels, and Health Systems Learning (an online and in-person training program). Moreover, the CPLO contributed to a number of programmatic enhancements this year, including incorporating Health Systems Evidence into the McMaster Optimal Aging Portal, which allows users to find the best available evidence about aging issues, and launching a 'hitting the headlines' service to profile both media coverage about important aging topics and the evidence available on those topics. In addition, the CPLO invested significant effort in the development of a public engagement platform to assist citizens in reaching informed judgements about key health-system challenges.

Conclusions: The CPLO continues to increase the visibility, reach and impact of Cochrane reviews.

Identifying Effective STBBI Prevention Interventions to Inform HIV Programs, Services and Policies

Jason Globerman, **David Gogolishvili**, Sanjana Mitra, Kira Gangbar, Maggie Shi, Jean Bacon, Sean B. Rourk
Ontario HIV Treatment Network

11am-12:30pm, Legacy Suite, Dining Centre Building
Friday, 22 May 2015

Background: As evidence of the effectiveness of sexually transmitted and blood-borne infection (STBBI) prevention interventions is continuously evolving, a more coordinated approach to assess the quality of these interventions must be developed.

Objectives: To assess the effectiveness of STBBI prevention interventions among men who have sex with men (MSM); Aboriginal populations; ethno-cultural minorities, and people living with HIV (PHAs).

Methods: Searches were conducted in MEDLINE, EMBASE, PsychInfo, the Cochrane Library and the CDC Compendium of Effective Interventions. Only interventions taking place in high income countries between 1998 and 2014 were included. Studies were grouped and assessed by population, intervention, comparison group and outcome (PICOs).

Results: Data came from 179 experimental studies. Effective Interventions were defined as having statistically significant effects ($p<0.05$) with moderate or high quality according to the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system. Among ethno-cultural minorities, individual/group level interventions with a skills component were effective at reducing STBBI incidence. Among PHAs and MSM, group interventions with a skills component and client-centred risk reduction counselling demonstrated significant decreases in STBBI incidence and sexual risk behaviours.

Conclusions: Funders, policy-makers and program developers may wish to consider the implementation of context-relevant STBBI prevention interventions that have been identified as effective within specific populations.

Uncertainty in health policy decision-making: The Uncertainty Assessment and Navigation Tool (U-ANT)

Karen Spithoff, Melissa Brouwers, Michelle Driedger, Julie Makarski, Samantha Craigie, Gary Annable
McMaster University

11am-12:30pm, Legacy Suite, Dining Centre Building
Friday, 22 May 2015

Background: Evidence-informed decision-making is a cornerstone of health care in clinical and policy settings; however, decision-makers often make decisions within a context of uncertainty.

Objectives: The objectives were to identify sources of uncertainty, their impact on decision-making, and strategies to measure or navigate uncertainty; and to develop a tool to assist decision-makers to manage decisional uncertainty systematically and transparently.

Methods: An integrated literature review, key informant interviews with health policy-makers, and focus groups with members of the public were conducted and used to develop a framework characterizing uncertainty in health care and health policy decision-making. This framework was the basis for the development of a tool to assess and navigate uncertainty.

Results: The Uncertainty Assessment and Navigation Tool (U-ANT) assesses two key sources of uncertainty: (i) Evidence and (ii) Implementation. Evidence considers issues related to defining or understanding the health care problem and/or the decision options and Implementation considers feasibility, affordability, acceptability and political context of the decision options.

Conclusions: The research team successfully developed a tool to assist health care and health policy decision-makers consider and manage uncertainty in a systematic and transparent manner. The U-ANT will be pilot tested in several health care and policy settings to assess the validity of the tool

Oral Session 7:

Moderator: John MacDonald

The Use of Clinical Trials Registries for Systematic Reviews in Clinical Endocrinology Research

Beth DeWitt, Chelsea Koller, David Herrmann, **Matthew Holzmann**, Kimberly Day, Joshua Day, Branden Carr, Matt Vassar, Ph.D.
Oklahoma State University Center for Health Sciences

11am-12:30pm, Senate Room, Hotel Alma, 7th Floor
Friday, 22 May 2015

Background: Publication bias is a significant methodological concern in systematic reviews (SRs). To address this problem, researchers have attempted several strategies. Most recently, clinical trials registries have been suggested as an avenue for obtaining data from unpublished trials. Little, however, is known about their use in SR searches.

Objectives: To determine the use of clinical trials registries in SRs in endocrinology research

Methods: Four clinical endocrinology were selected based on their high impact factors. Journals were reviewed over a 6 year period (2008-2014) to identify SRs and meta-analyses that met criteria for inclusion in this study. To locate SRs, a previously published PubMed search strategy was applied. After SRs were located and sorted, the authors independently reviewed the full text, appendices, and online supplements of each SR to determine if clinical trials registries were used in the SR search process.

Results: 145 meta-analyses met inclusion criteria and were selected for analysis. Of these, only 7 searched a clinical trials registry. Therefore, clinical trials registries were not often utilized as a source of data for SRs published in clinically-focused endocrinology journals. (All results will be presented using descriptive statistics.)

Conclusions: Researchers should utilize clinical trials registries as part of a systematic process for handling publication bias.

The impact of selective searching on the results of systematic reviews

Lisa Hartling, Robin Featherstone, Megan Sommerville, Kassi Shave, Ben Vandermeer
University of Alberta

11am-12:30pm, Senate Room, Hotel Alma, 7th Floor
Friday, 22 May 2015

Background: One of the hallmarks of a well-conducted systematic review (SR) is a comprehensive search. However, empiric evidence is lacking on the impact of database selection on the outcomes of SRs.

Objectives: To examine the impact of selective searching on the results of existing SRs.

Methods: The sample was all child-relevant SRs from Cochrane's Acute Respiratory Infections Group with at least one meta-analysis (n=57). We searched 13 databases to determine the proportion of relevant studies that were indexed in each source. We re-ran the primary meta-analysis with the studies identified in Medline only and in MEDLINE plus each of the other databases. We determined how often results changed in statistical significance. We calculated the change in point estimates and confidence interval widths (results not shown).

Results: The average number of relevant studies was highest for Scopus (89%), Medline (85%), EMBASE (80%), Web of Science (80%), and BIOSIS (65%). For Medline alone, 6 meta-analyses changed in significance. The fewest number of meta-analyses changing in significance (n=2) was for Medline plus EMBASE and Medline plus Scopus.

Conclusions: This study provides quantitative data regarding the impact on SR results of restricting searches to select databases. This information may be useful to increase efficiencies in the conduct of SRs.

An Analysis of Clinical Trials Registry Searches for Identifying Publication Bias in Neuroscience

Greg Cook, Halie Muckelrath, Laura Varney, Vadim Yerokhin, Philip Sinnett, Matthew Weiher, **Branden Carr**, Matt Vassar, Ph.D.
Oklahoma State University Center for Health Sciences

11am-12:30pm, Senate Room, Hotel Alma, 7th Floor
Friday, 22 May 2015

Background: Systematic reviews (SRs) synthesize existing research findings in order to better inform medical decision making. Inherent to SR methodology is publication bias, or the notion that statistically-significant published studies are more commonly included in SRs than unpublished studies. Because of this, the resulting effect sizes from SRs may be misleading. Researchers have handled publication bias in numerous ways, and clinical trials registries have recently been discussed as a possibility for obtaining unpublished data. Very little is known about their use in SR searches, however.

Objectives: To examine the use of clinical trials registries in published SRs from the neuroscience literature.

Methods: A six-year review (2008-2014) of 5 neuroscience journals was performed to identify eligible SRs. Journals were selected based on their high impact factors. A previously published PubMed search strategy was used to initially identify eligible studies. All SRs comprising the final sample were independently reviewed to determine if clinical trials registries had been included as part of the search process.

Results: Results suggest that clinical trials registries were seldom used as a resource for obtaining trial data for meta-analyses in neuroscience research

Conclusions: Researchers conducting SRs should search clinical trials registries to locate additional sources for unpublished data.

Oral Session 8:

Moderator: Jordi Pardo Pardo

Sharing Health Information with Older Adults through Online Resources in Canada: A citizen panel

François-Pierre Gauvin, Kaelan Moat, John Lavis
Cochrane Policy Liaison Office and McMaster Health Forum

1:30-3pm Yamnuska Hall, Academic Lounge
Friday, 22 May 2015

Background: The internet is one of the primary resources for citizens looking for health information, but little is known about how to share health information with older adults through online resources.

Objectives: To highlight the views and experiences of older adults about: the underlying problem; three options to address the problem; and potential barriers and facilitators to implement these options.
Methods: We convened a panel with a diverse group of 12 citizens recruited using explicit criteria. Participants were provided with a brief summarizing in lay language what is known about the topic. The panel consisted of facilitated deliberations allowing participants to share their views and experiences.

Results : Several challenges were consistently raised by participants (e.g., older adults are struggling to find credible health information grounded in the Canadian context; and many have complex care needs, making it even more challenging to find relevant and personalized information). Participants generally favoured the development of an online one-stop shop of health information, but acknowledged the need to improve e-health and digital literacy among older adults, and train providers to support their patients' use of online resources.

Conclusions: Participants see online resources as increasingly key but significant effort will be needed to support their use.

A Systematic Review of the Effects of Peer-led support Programs in the Context of Cancer

Shimae Soheilipour, Lisa Parvin, Nandini Maharaj, Aaron Miller, Arminee Kazanjian
Universirty of British Columbia

1:30-3pm Yamnuska Hall, Academic Lounge
Friday, 22 May 2015

Background: Cancer patients often describe feeling lost and confused when navigating the complex and fragmented health and social systems. They may benefit from peer-based support programs which usually provide a setting to share their experience with those who have been in similar situations.

Objectives: To investigate the effectiveness of peer to peer interaction interventions for cancer patients to reduce the psychosocial burden of disease

Methods: Six electronic bibliographic databases were searched since 1990 using predetermined search strategies and inclusion criteria. We searched for intervention studies with or without control groups and cohort studies.

Results: Almost 60% irrelevant titles were excluded at the title screening phase; 97 papers providing primary data on peer based support programs met inclusion criteria. The data shows a diversity among studies related to types of support (only peer support or mixing of different services), delivery models (on-line, face to face …) and health-related outcome measurements (psychosocial distress, quality of life…). There is a need to regroup studies to calculate the effect size. A quality assessment to evaluate the strengths and weaknesses of the evidence will be undertaken using GRADE.

Conclusions: Tabulated findings will be discussed. The analysis will provide insight on effectiveness of peer support programs for specific cancer patient populations.

The relative contributions of interventions to prevent influenza transmission

Roger E. Thomas
University of Calgary

1:30-3pm Yamnuska Hall, Academic Lounge
Friday, 22 May 2015

Background: Some authorities mandate influenza vaccination or antivirals or masks for health care workers. There are no reviews assessing relative contributions of vaccination, masks, anti-virals, quarantine, worker-furlough or hospital cleaning to prevent transmission.

Objectives: To identify all RCTs/systematic reviews preventing influenza transmission.

Methods: Searched MEDLINE, EMBASE, Cochrane Database of Systematic Reviews, ACP JournalClub, DARE, Cochrane Central Register of Controlled Trials, Cochrane Methodology Register, Health Technology Assessment, NHS Economic Evaluation Database, PubMed, PubMedCentral, Scopus, Web of Science, CINAHL. No language/date restrictions.

Results: A systematic review found 4.8% of vaccinated and 7.54% not-vaccinated and 3% of healthy vaccinated 18-60 year olds and 5.12% not-vaccinated have influenza/influenza season. A Cochrane review of influenza vaccine for 18-60 year olds found NNV=71. An individual with influenza on average sheds for 6 days, some individuals are super-shedders (one study found 20% of the most infectious children caused 96% of total shedding). Viable virus lasts 15 minutes on tissue and < 2 hours on stainless steel. Ultraviolet germicidal irradiation, microwave-generated steam, and moist heat markedly reduced viral load (tested by RT-PCR). RCTs of masks vs. N95 ⁄ P2 respirators with/without hand hygiene often fail to monitor continuous use.

Conclusions: Multiple interventions are needed to reduce transmission of influenza and other respiratory viruses.

Effectiveness of motivational interviewing interventions on medication adherence in adults with chronic disease

Hervé Tchala Vignon Zomahoun, Line Guénette, Jean-Pierre Grégoire, Sophie Lauzier, Adouni Moulikatou Lawani, Laetitia Huiart, Cyril Ferdynus, and Jocelyne Moisan

Branche Cochrane Québec/ Plateforme de recherche clinique et évaluative du CHU de Québec

1:30-3pm Yamnuska Hall, Academic Lounge
Friday, 22 May 2015

Background: Medication adherence is frequently suboptimal in adults with chronic disease resulting in negative consequences. Motivational interviewing (MI) is a collaborative conversation style for strengthening a person's own motivation and commitment to change. This intervention was shown effective on the enhancing of some health behaviours.

Objectives: To assess whether MI is effective to enhance medication adherence in adults with chronic disease.

Methods: We performed a systematic review and meta-analysis according to the PRISMA recommendations. We searched in Medline, Embase, PsycInfo, the Cochrane Library, CINAHL, Current Contents Connect, and Web of Science to find relevant RCTs. A random-effects model was used to estimate the pooled MI effect size (Hedges's g) and its heterogeneity (Higgins's I2). We also explored the heterogeneity.

Results: Seventeen out of 19 RCTs selected were included in our meta-analysis. Pooled effect size of MI was small but statistically significant (0.23, 95%CI= (0.08–0.37), I2= 59%). The heterogeneity exploration showed that only one RCT explained a great part of I2 which decreased from 59% to 1% after exclusion of this RCT. Moreover, the pooled effect size decreased from 0.23 to 0.12 (95%CI= (0.05–0.20)).

Conclusion: MI could be useful to health professionals interested to enhance medication adherence in their patients with chronic disease.

Oral Session 9:

Moderator: Alain Mayhew

Identification and Protection of Populations at Risk for Vulnerability in Cluster Randomized Trials

Janet Jull
Bruyère Research Institute & University of Ottawa

1:30-3pm, Blue Room, Dining Centre Building
Friday, 22 May 2015

Background: CRTs randomly allocate groups of people to interventions and collect information from individuals, making interpretation of standard research ethics guidelines challenging. While the Ottawa Statement on the Ethical Design and Conduct of Cluster Randomized Trials identified the protection of vulnerable participants as a unique ethical concern, relatively limited guidance is provided.

Objective: To assess CRTs, develop guidance for identification of vulnerable populations, and propose feasible protections.

Methods: An integrated knowledge translation approach will structure a study team and knowledge-user group to define participant vulnerability. In an existing random sample of CRTs, the prevalence of vulnerable participants will be evaluated, unique characteristics identified, and findings used to inform the development of a purposive sample of new CRTs. Qualitative analysis of the purposive CRT sample will examine identification and protection of vulnerable populations. Concurrent analysis of ethical guidance and principles for protection of vulnerable populations will include analysis of ethical issues. A qualitative study interviewing trialists, subject experts and representatives of trial participant populations about vulnerability issues will be conducted.

Results: Findings will inform a consensus-building process with knowledge-users to develop ethical guidance. Published results and extensions to the Ottawa Statement and CONSORT will contribute to developing higher quality evidence for systematic reviews and Cochrane summaries.

Challenges in Data Synthesis When Examining Long-Term Follow-Up for Total Knee Replacements

Lisa Jasper, C Allyson Jones, Lauren Beaupre
University of Alberta

1:30-3pm, Blue Room, Dining Centre Building
Friday, 22 May 2015

Background: The survivorship of total knee replacements (TKR) for arthritis is 15-18 years. In spite of exponentially increasing TKRs over the past two decades, it is unclear what factors determine surgical revisions. A scoping review was undertaken to identify determinants for revision surgery of TKR.

Objectives: To discuss the challenges of synthesizing different sources of data used in surveillance of TKR.

Methods: Of the 4460 articles screened for risk factors of revision, 42 articles met the inclusion criteria. The scoping review will exemplify the challenges of synthesizing the data, and advantages and limitations of registry data will be discussed.

Results: 26(62%) of included articles used joint specific registry data. Two geographical clusters were found in the registry articles; 46% (12) of registry data were from Scandinavian countries and 42%(11) from USA. These large, population-based datasets tracked demographic, health resource and prosthetic data over decades. Data did not provide patient-reported outcomes (PROS) or patient-reported experience measures (PREMs) which are central to clinical outcomes of TKR.

Conclusions: Synthesis of surveillance data for elective surgery (TKR) provides a means to follow patients over 15-20 years yet limited information can be collected. Patient reported concerns for this primary elective surgery are not yet monitored to identify patients who may require revision surgery.

An exploration of methods and context for the production of rapid reviews

Lisa Hartling, Jeanne-Marie Guise, Elisabeth Kato, Johanna Anderson, Naomi Aronson, Suzanne Belinson, Elise Berliner, Donna Dryden, Robin Featherstone, Michelle Foisy, Matthew Mitchell, Makalapua Motu'apuaka, Hussein Noorani, Robin Paynter, Karen A. Robinson, Karen Schoelles, Craig A. Umscheid, Evelyn Whitlock
University of Alberta

1:30-3pm, Blue Room, Dining Centre Building
Friday, 22 May 2015

Background: Systematic reviews are critically important to support decision making in health care. Interest in reliable and quick evidence synthesis has sparked development of ""rapid reviews.""

Objective: To understand and describe practices of conducting rapid reviews.

Methods: We conducted a literature search and interviews with organizations that produce rapid reviews to identify methods, guidance, empiric evidence, and current practice in conducting rapid reviews.

Results: We identified 36 rapid products from 20 organizations (production time, 5 minutes to 8 months). Almost all products used four approaches to save time (restricted database searching, inclusion criteria, data abstraction, and dual review). Methods varied by synthesis type, with some products (Inventories) avoiding synthesis completely, while others (Rapid reviews) performed syntheses similar to standard systematic reviews. Interviews with producers provided insight into these variations. Most rapid products support specific decisions in an identified timeframe within the context of a close relationship between researcher and end-user. This allows selection of methods that best fit the decision and timeframe. Little empiric evidence exists comparing rapid and systematic reviews.

Conclusions: Rapid products have tremendous methodological variation; categorization based on timeframe or type of synthesis reveals patterns. Their similarity lies in the close relationship with the end-user to meet time-sensitive decision making needs.

10 Years of the CADTH Rapid Response Program: Timely and Relevant Evidence for Real-World Decisions

Chris Kamel, Janice Mann, Eftyhia Helis, **Gabrielle Zimmermann**
Canadian Agency for Drugs and Technologies in Health

1:30-3pm, Blue Room, Dining Centre Building
Friday, 22 May 2015

Background: CADTH introduced its Rapid Response Service in 2005 because even urgent decisions deserve sound evidence. Marking its 10th anniversary, the Rapid Response Service has produced and delivered almost 3000 reports to healthcare decision-makers across Canada and is a world leader in rapid evidence reviews.

Objectives: CADTH's Rapid Response Service aims to provide Canadian healthcare stakeholders with timely, relevant evidence to support informed decision-making.

Methods: Requests are accepted from Canadian healthcare decision-makers. CADTH Liaison Officers from the provinces and territories, together with CADTH researchers, work with requestors to understand their unique needs, refine research questions and ensure that the final report is relevant and useful. The service balances — with a range of reports from reference lists to full systematic reviews— scientific rigour with real-world timelines.

Results: Evaluations of CADTH's Rapid Review service confirm its timeliness and quality. Leader in the field, CADTH shares its expertise in this area with other researchers and HTA producers nationwide. Several health jurisdictions have integrated Rapid Response requests into their health technology decision processes. Improvements to methodologies and processes continue based on evaluations and advances in the field.

Conclusions: CADTH assists decision-makers to access, understand and share HTA evidence while mobilizing the evidence to reach far beyond the original requestor.

POSTER Abstracts

Please note the names of presenters appear in bold
***** Denotes a student poster***

Training students with abilities to influence Health Systems
Daniela Junqueira
Universidade Federal de Minas Gerais

Background: Lack of knowledge on evidence based concepts by health professionals and policymakers may be at the centre of barriers for implementation of research towards better health systems, especially in developing countries.

Objectives: To develop core competences in evidence based concepts as an approach to incorporate training in research implementation in the curriculum of an undergraduate course of Bachelor of Pharmacy.

Methods: Four pharmacy students from a Brazilian university developed their undergraduate thesis under the subjects 'health education' and 'evidence-based practice'. Theses were developed in a three semesters discipline. Students had no basic training and followed a structured tutorial of activities and learning materials focused on tools for evidence-informed health policymaking.

Results: Four undergraduate theses were developed in different topics: (i) polycystic ovary syndrome, (ii) sinusitis in children, (iii) otitis media in children, (iv) hypertension during pregnancy. All theses were based in a Cochrane review and included a leaflet or infographic diagram designed to inform the use of evidences in each topic considering local resources and costs. Students were able to demonstrate critical understanding of concepts in order to influence future professional environments.

Conclusions: Including concepts of informed health decisions is essential to prepare health professionals with abilities to influence Health System and Health Policies.

Knowledge transfer for the prevention of contrast-induced nephropathy: from hospital-based health technology assessment to clinical practice
Sylvain L'Espérance, Brigitte Larocque, Steve Jeffrey, Marielou Gallichand-Dutil, Martin Coulombe, **Marc Rhainds**
HTA unit - CHU de Québec

Background: Concerns are raised about the challenges related to the implementation of evidence-based recommendations in clinical practice. Hospital-based health technology assessment (HB-HTA) is described as a strategy to facilitate knowledge transfer at the local level. HB-HTA on contrast-induced nephropathy (CIN) prevention is used to illustrate the impact of such process.

Objective: To describe the contribution of HB-HTA to implementation of evidence-based recommendations in the context CIN prevention.

Methods: A systematic review on CIN prevention measures was performed as part of HB-HTA process with a multidisciplinary group of clinicians and administrative decision-makers. The knowledge-to-action framework was used to study the impact of HB-HTA at different steps in the cycle.

Results: HB-HTA provided knowledge synthesis and contributed to data contextualisation. Moreover, a steering committee was created to complete the identification of external barriers to implementation. Those barriers include factors associated with clinical setting and context, task definitions as well as some legal issues. Formal scientific presentation and clinical team education sessions are planned to help the implementation of the updated protocol.

Conclusions: HB-HTA may contribute to the initiation of the knowledge transfer in order to implement evidence-based clinical procedure to prevent CIN

**** Decision aids that support decisions about prenatal testing for Down syndrome**

Maria Esther Leiva Portocarrero, France Légaré , Brenda Wilson , François Rousseau, Emmanuel Bujold , Anik Giguère, Hubert Robitaille, Mirjam M Garvelink, Maria Margarita Becerra Perez
Université Laval

Background: Decisions about prenatal screening for genetic abnormalities are a source of clinically significant decisional conflict in pregnant women. Decisional conflict can be addressed effectively with decision aids.

Objective: to identify decision aids (DAs) focusing on prenatal screening/diagnosis for Down syndrome, that provide effective support for decision-making.

Methods: We searched the Decision Aids Library Inventory (DALI) and the Internet and contacted experts in the field. Eligible DAs targeted pregnant women, focused on prenatal screening and/or diagnoses, applied to tests for foetal abnormalities or aneuploidies, and were in French, English, Spanish or Portuguese. Pairs of reviewers independently assessed the quality of eligible DAs. Discrepancies were resolved by consensus. Simple descriptive statistics were used.

Results: Out of 543 potentially eligible DAs (512 in DALI, 27 from experts, and four on the internet), 23 met eligibility criteria and 20 were available for data extraction. DAs were developed between 1996-2013 in six countries (UK, USA, Canada, Australia, Sweden, and France). Seventeen DAs were for prenatal screening, 15 for prenatal diagnosis and 12 for both.

Conclusions: None had all the characteristics necessary for adequate decision support or comprehensibility. Overall, our results indicate there is a need for DAs that effectively support decision making regarding prenatal testing for Down syndrome.

Development of a repository of genetic variants associated with human tuberculosis: a scoping review

Mariola Mascarenhas, Andrijana Rajić, Judy Greig, Lisa Waddell, Suneil Malik
Laboratory for Foodborne Zoonoses, Public Health Agency of Canada

Background: Around 10% of those infected by Mycobacterium tuberculosis develop infectious tuberculosis (TB). This progression is influenced by genetic, immunologic and environmental factors. In 2013, about 9 million people worldwide are reported to have developed TB.

Objectives: Create a population-specific repository of the global evidence for genetic variants associated with TB predisposition, resistance and disease progression.

Methods: A scoping review of peer reviewed literature included an a priori developed search strategy, protocol and pre-tested screening tools. Two independent reviewers evaluated each citation and article. Several population, outcome and exposure combinations were analyzed to highlight knowledge gaps and areas with significant evidence.

Results: From 10 034 citations, 702 articles were characterized. Gene variants were categorized according to their association with risk, protection and disease progression in affected human populations. Human leucocyte antigens and vitamin D biosynthesis/immunomodulatory pathway variants were most studied. Results are conflicting for many variants, thereby substantiating population-specific roles for their association with TB.

Conclusions: This compilation of gene variants highlights the complexity of tuberculosis. Conflicting evidence demonstrates important population-specific differences. Researchers can use this repository to understand the current knowledge so future research can focus on true knowledge gaps. These evidence-informed results can help improve programs and policies to mitigate human TB.

Reducing drinking in concurrent problem alcohol and illicit drug users: An impact story

Klimas, J.; Tobin, H.; Field, C.-A.; O'Gorman, C.; Glynn, L., G.; Keenan, E.; Bury, G.; Dunne, C.; Cullen, W.
University of British Columbia & University College Dublin

Background: One out of three people who receive methadone in primary care drink in excess of the recommended limits. This poses significant risk to their health, especially to their liver; it complicates their care and increases risk of relapse.

Objective: To inform addiction treatment in primary care with respect to psychosocial interventions to reduce drinking in concurrent problem alcohol and illicit drug users, by: exploring the experience of (and evidence for) psychosocial interventions, developing and evaluating a complex intervention to improve implementation.

Methods: A Cochrane review found only four studies. Having inconclusive evidence, we interviewed 28 patients, 38 physicians and nurses.

Results: Information from the Cochrane review and the qualitative interviews informed an expert panel consultation which developed clinical guidelines for primary care.

Conclusions: The guideline became part of a complex intervention to support the uptake of psychosocial interventions by family physicians; the intervention is currently evaluated in a pilot controlled trial. Two new alcohol education programmes were created as a response of the community to the problem and a lack of specialist support services for patients with dual dependencies. Both Coolmine Therapeutic Community and the Community Response Agency run a 10-week group that specifically seeks to include people with dual dependencies, from methadone programmes.

Think Globally, Collaborate Locally: The Ottawa Experience

Alain Mayhew
Cochrane Bias Methods Group; Knowledge Synthesis Group; Ottawa Hospital Research Institute

Background: The Cochrane Review Group Structure and Function Project strongly supports local collaboration.

Objectives: To present the experience of the local cluster of Cochrane groups in Ottawa.

Methods: Ottawa-based Cochrane groups meet biweekly for 30-60 minutes. The informal membership includes representation from the Canadian Cochrane Centre, two review groups, and three methods groups. Some meetings have had a clear focus for discussion, such as reports from Colloquia, provision of formally requested and informal feedback to the Collaboration, or presentations by invited speakers such as the Wikipedian in-residence for Cochrane. Other meetings have open agendas, with the opportunity for attendees to share ongoing activities, plan for the future and brainstorm issues.

Results: Attendance and participation in the meetings has been consistent, with eight to twelve people attending regularly. Group input has been provided on international issues such as updating reviews, and national issues such as meeting funding deliverables. The meetings have also facilitated calls for membership involvement in activities such as abstract peer review.

Conclusions: This model of regional meetings is useful for participants and helpful in responding to requests for input. Other regions with Cochrane groups in close proximity should consider the model to improve local collaboration.

Practical application of the MECIR standards for literature searches in CMSG reviews

Tamara Rader, Louise Falzon**, Jordi Pardo Pardo** and the Editors of the Cochrane Musculoskeletal Group
Cochrane Musculoskeletal Group

Background: Methodological standards for the conduct of new Cochrane Intervention Reviews (MECIR) were developed in 2013. These standards include several items that summarize attributes of the literature search portion of the process as described in the Cochrane Handbook that are either mandatory or highly desirable for new Cochrane Reviews.

Objective: This paper will outline the process of conducting a literature search for musculoskeletal studies for the purposes of producing a Cochrane systematic review in the Cochrane Musculoskeletal Group (CMSG) which adheres to MECIR standards.

Methods: To promote the use of MECIR among author teams, the CMSG has produced a guide to applying MECIR guidance about literature searching.

Results: Authors are advised to develop the structure of search strategies in bibliographic databases around the main concepts of the review, using appropriate elements from PICO and study design. The goal is to maximize sensitivity while striving for reasonable precision. The result is a practical guidance and specific examples from rheumatology reviews. This includes developing a searchable question, choosing databases, and other sources including grey literature, logical structure of a literature search, proper documentation of the search strategy, and sample text for documenting search methods.

Conclusions: Providing a search framework with specific guidance and examples of search strategies might enhance adherence to current MECIR standards related to searching.

Development and validation of a meta-tool for quality appraisal of public health evidence: MetaQAT

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Introduction: Applying quality appraisal tools in public health can be challenging due to the focus on study-specific appraisal tools and limited attention to applicability. A meta-tool is an approach that combines enhanced principles of quality appraisal with the rigor of risk of bias assessment using design-specific companion tools.

Methods: A search of critical appraisal tools was conducted to identify those relevant to public health and used to inform a four part appraisal framework. This framework was then paired with a set of existing design-specific companion tools. The resulting meta-tool was validated by comparing study appraisals from MetaQAT with alternate appraisal methods.

Results: The framework that was developed from the search included four domains: relevancy, reliability, validity, and applicability. MetaQAT guides users through an appraisal process broadened to cover public health application. Importantly, users are directed to the design-specific companion tools to assist in the appraisal of validity. The validation showed many similarities relevant to validity between appraiser groups; however, the MetaQAT appraisers commented more extensively on issues related to the application of evidence.

Conclusions: The meta-tool structure allows for a generic tool that can also provide rigorous appraisal of studies in public health.

Thinking outside the box to support decision-making when only low level of evidence is available

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Background: In evidence-based medicine (EBM), evidences are ranked based on a hierarchy taking into account study design and validity of findings. Systematic reviews (SR) of randomized controlled trials provide the highest level of evidence. However, decision-making needs to be informed even when only low level of evidence is available.

Objective: To assess catheter pressure tolerance limits of standard versus high-pressure (HP) central venous catheter (CVC) after power injection of contrast media (CM) in radiology.

Methods: SR was performed in multiple databases to retrieve relevant studies. Mathematical model to estimate intracatheter pressure based on various parameters was developed by fluid dynamics engineers. Outcomes included rupture and movement of CVC.

Results: Apart from experimental studies mainly on standard CVC and expert consensus, no SR or comparative study was found. No catheter rupture was reported when high flow rate injection of CM was performed under usual clinical condition. However, catheter displacements were reported with power-injectable PICC. Catheters tolerated higher pressures than what is recommended by manufacturers. Results from pressure simulation under various conditions were consistent with those of experimental studies.

Conclusions: Results suggest that standard CVC could be used safely for power injection of CM. Despite low level of evidence and the uncertainty level, EBM may support decision-making.

**** Evaluating the quality of neuroimaging studies**

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Background: Study quality is an important consideration for meta-analysis research. To evaluate methodological quality, a number of quality assessment scales have been developed. While these assessment scales have been developed to score the quality of both (randomized studies and non-randomized studies, no scales exist to assess trials in neuroimaging. Given that neuroimaging research has been scrutinized for its lack of methodological quality, this study represents an important contribution to this field of study.

Objectives: To develop a quality assessment scale for the evaluation of neuroimaging studies in Post-Traumatic Stress Disorder (PTSD).

Methods: The quality assessment scale was developed based on the criteria of Panesar, et.al (2009). 66 neuroimaging studies in PTSD were retrieved and scored using the quality assessment scale.

Results: All trials were graded using the developed quality assessment scale. Scores ranged from 4 to 25 with a mean quality score of 16.76 (SD= 4.41). Veritas plots were constructed as a visual representation of the six dimensions of study quality presented herein.

Conclusions: There was a wide range of scores across studies showing considerable variability in the study quality of PTSD neuroimaging trials. This study affirms that additional work is needed in the evaluation of study quality in the neuroimaging field.

Meta-analysis is not always appropriate: the case of carbon dioxide insufflation in colonoscopy

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Background: Concerns are raised in clinical practice about the validity of findings of meta-analysis (MAs) performed without consideration of clinical heterogeneity. We reviewed the case of carbon dioxide (CO2) insufflation for post-colonoscopy pain reduction.

Objectives: To assess if statistical and clinical heterogeneity among randomized controlled trials (RCTs) are limiting factors to carry out MA.

Methods: Literature search was performed in multiple databases to retrieve systematic reviews and RCTs on efficacy and safety of CO2 insufflation in colonoscopy. Data selection, quality assessment and extraction were performed independently by two reviewers. The primary outcome was pain relief.

Results: Eleven RCTs were considered. Aggregation of results was not performed because of high level of statistical heterogeneity (I2 ≥ 50 %) and clinical heterogeneity. Differences between study population, use of sedation, choice of effect measure, time and method of pain relief and other outcomes measurement were found among RCTs. Results suggest a slight pain reduction in immediate post-colonoscopy with CO2 compared to room air.

Conclusions: Unlike MAs already published on this topic, a data reanalysis did not conducted to aggregation of RCTs. Because no global effect can be measured, this appraisal led to less enthusiastic conclusion than previous Mas.

**** The Use of Methodological Quality Measures in Clinical Specialties**

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Background: Strengthening the validity of scientific evidence, or minimizing bias, is a key feature of scientific research and an interesting methodological issue in meta-analysis. To address this issue, methodological quality measures have been developed to quantify sources of bias. Over the years, many quality assessment measures have been developed to accommodate a wide variety of study designs ranging from non-experimental designs to randomized controlled trials (RCTs). Moher (1995) located 34 measures of study quality for RCTs; Deeks et. al., (2003) found nearly 200 assessments for non-randomized intervention studies. With many options available, unanswered questions remain regarding the quality assessment measures used in actual practice as well as applications of quality scores in data analyses.

Objective: To study the use of quality appraisal measures in clinical endocrinology/neurology research

Methods: Four clinical endocrinology and 6 neurology journals were selected for analysis between 2008-present. We located 376 systematic reviews/meta-analyses through a comprehensive PubMed search. These articles were coded to identify the particular quality appraisal measures as well as to evaluate the ways in which these were used in analysis.

Results: A variety of measures of noted, and several uses of quality scores were found, including sensitivity analysis and study removal.

Conclusion: Quality measures should be incorporated into meta-analyses.

Examining the Prevalence of Osteopathic Manipulative Research in Cochrane Systematic Reviews

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Background: Doctors of Osteopathic Medicine represent one of the fastest growing healthcare professions in the United States. Furthermore, Osteopathic Manipulative Medicine (OMM) is experiencing international growth. For example, Canadian applicants to osteopathic colleges is expected to grow with increased awareness of the profession. Due to this increase in OMM training and practice, we wanted to examine the presence of OMM evidence in Cochrane systematic reviews to date.

Objective: To evaluate the extent to which OMM research is incorporated into Cochrane SRs related to manual medicine.

Methods: Cochrane review groups that focus on manual medicine were identified and all systematic reviews published by these groups were retrieved and evaluated for inclusion of OMM research. An information specialist next conducted a search for systematic reviews of manipulative treatments.

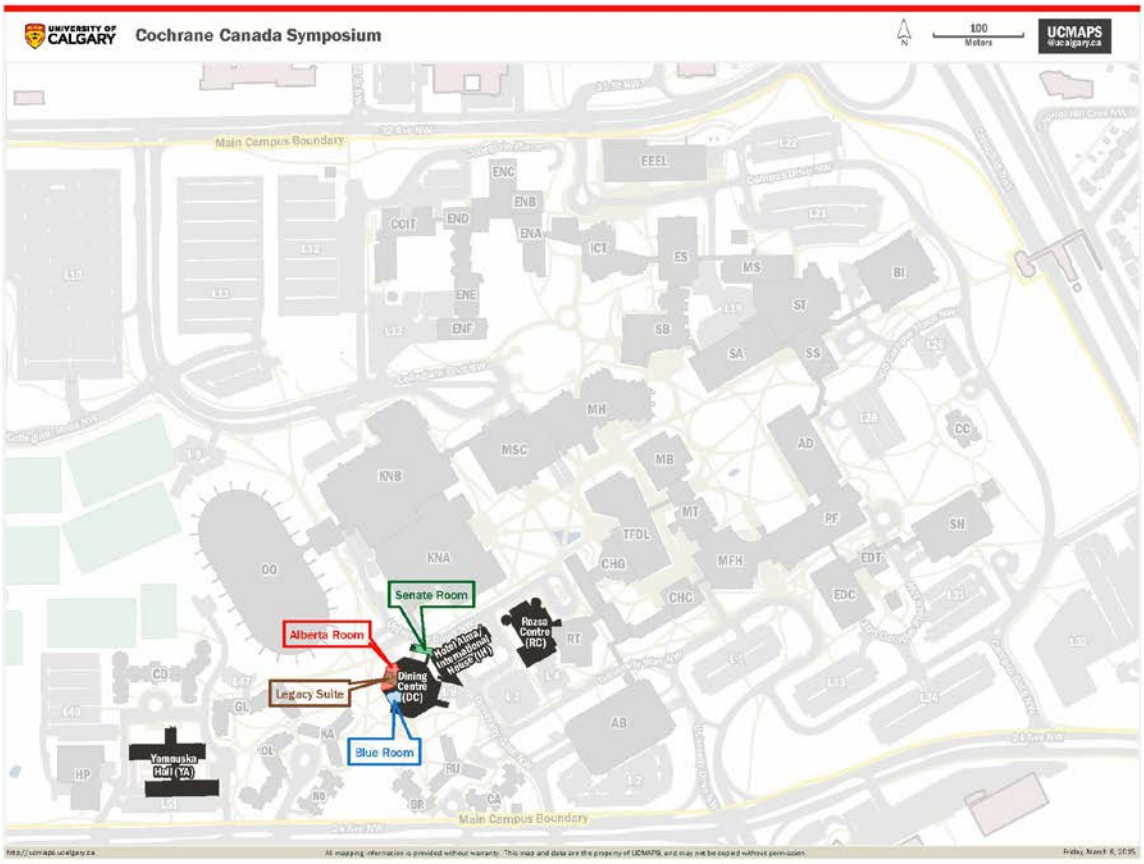
Results: Results suggest that OMM was under represented among SRs published in the Cochrane library. Descriptive statistics will be presented to detail these findings.

Conclusion: From our sample, we found OMM researched underrepresented in systematic reviews. Since OMM represents one of the fastest growing healthcare professions in the US, representation of OMM research should be considered in SRs.

Maps

Campus Map

Symposium Location



Plenary sessions and lunch:	Alberta Room, Dining Centre Building
Registration, Information and Posters:	Alberta Room Foyer
Breakout rooms:	Blue Room, Dining Centre Building Legacy Suite, Dining Centre Building Senate Room, Hotel Alma, 7th Floor CIBC Hub Room, Rozsa Centre (3-5 minute walk) Evans Room, Rozsa Centre (3-5 minute walk) Yamnuska Hall, Academic Lounge (5 minute walk)

Visiting Calgary

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The University of Calgary is located in the North West quadrant of the city. It's near many popular tourist destinations and easily accessible by public transit.

The Calgary Tower
At 1228 metres above sea level, the Calgary Tower is home to the highest 360° observation deck in the world and is your gateway to Calgary's art, culture, entertainment, and nightlife. Visit http://www.calgarytower.com/ for more information!

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For more information about The City of Calgary, visit http://www.calgary.ca/ or for tourism information logon to http://www.visitcalgary.com/


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