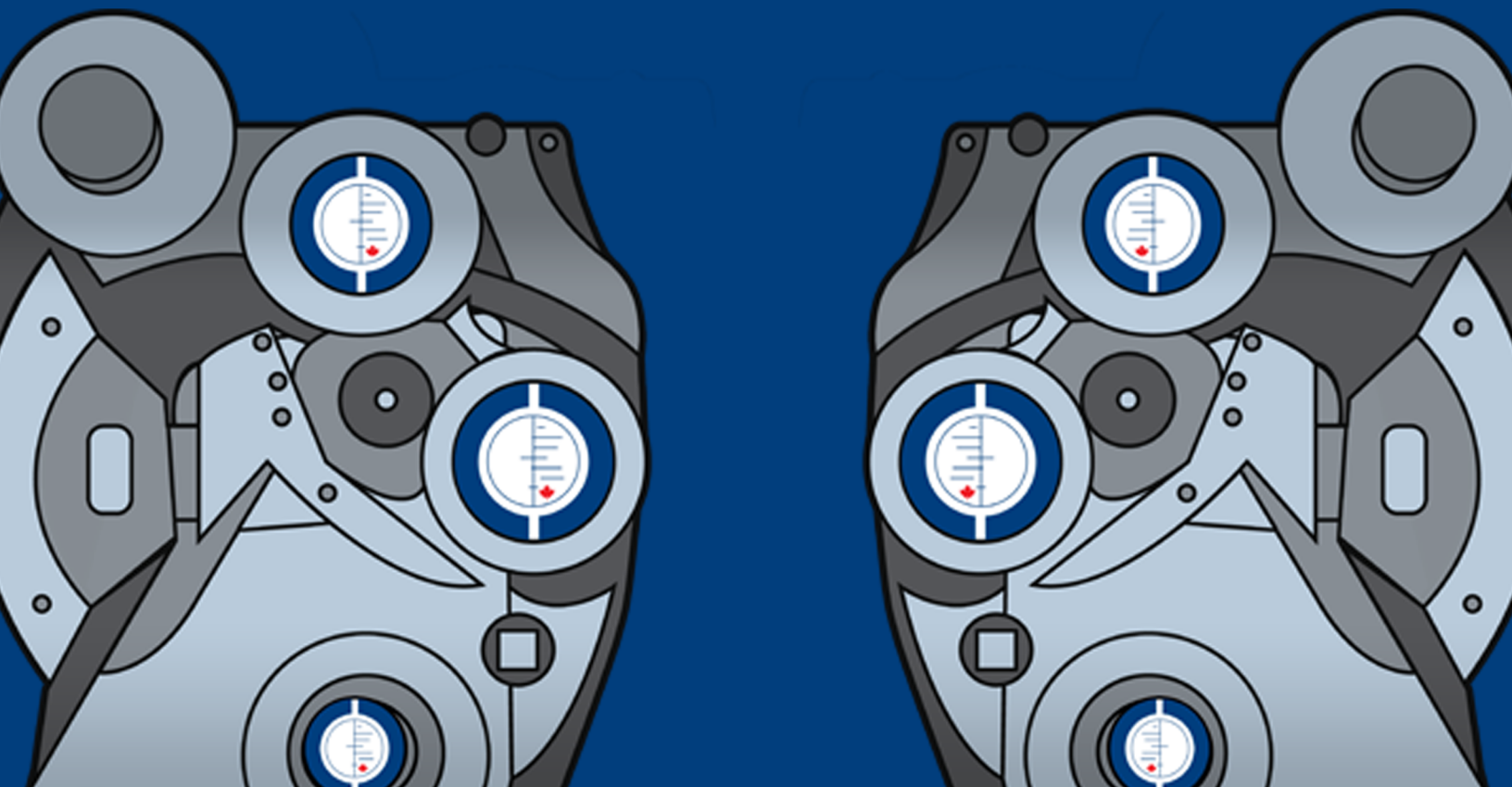
11th Annual Cochrane Canada Symposium

Ottawa, ON
24-25 April 2014

20/20 Vision: Cochrane in the Next Decade



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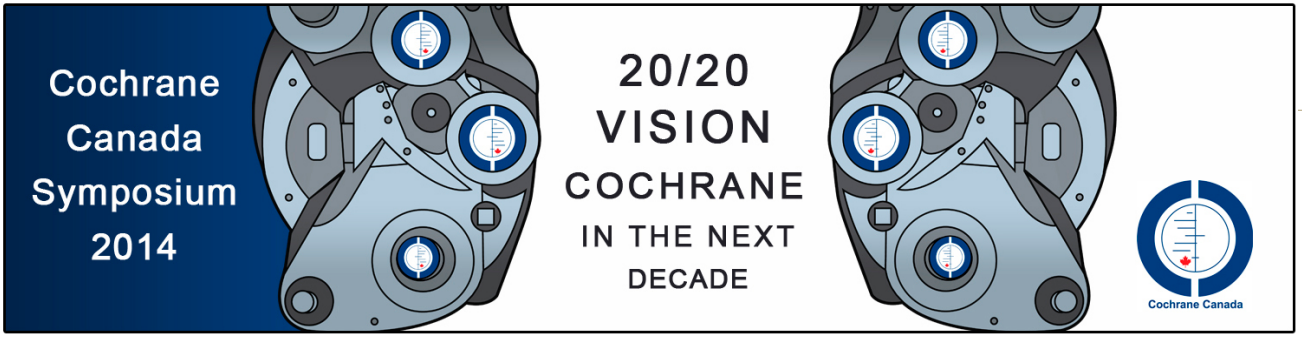

Welcome from our Chair

Dear Colleagues,

We are delighted to welcome you to Ottawa for the 11th Annual Cochrane Canada Symposium! After hosting the International Cochrane Colloquium in Québec City in 2013, we are pleased to again offer our Canadian partners and colleagues a more intimate event – the Symposium. This year's theme, *20/20 Vision: Cochrane in the Next Decade*, is about how all evidence producers (including Cochrane) must understand the needs of evidence users and work closely with those making decisions on the ground in order to meaningfully meet their expectations and information needs.

It is important to bring together both users and producers of research to discuss shared issues from various viewpoints. For example, what level of quality is required on which to base good decisions? Which priority areas of greatest impact for health do we need to focus on? Where are the knowledge gaps, and how do we fill them? What do we do with the evidence once it is generated? How do we create and capitalize on meaningful and diverse partnerships to enhance health in Canada and around the world?

Symposium planning centred on these themes:

- Integrated Knowledge Translation, including knowledge users in knowledge creation;
- Moving Methodology Forward in areas such as updating reviews, different types of reviews and dealing with complexity in reviews;
- Global Health and Health Systems, and strategies for implementing best evidence; and
- Cochrane into Adulthood and what's next in publishing strategies, and quality and accessibility initiatives.

This event would not be a success without the dedication to excellence of many: we thank the Canadian Cochrane Centre staff – also known as the Organizing Committee – for their commitment to making this a great experience for all participants. We thank the Abstracts Committee for their time in vetting the numerous abstracts we received. We thank the plenary speakers, oral session and workshop presenters and posters presenters for contributing to the themes and learning objectives of this Symposium.

Whether this is your first Cochrane Canada Symposium or your eleventh, we welcome you and hope you enjoy a time of learning, making new connections, renewing old ones and exploring the lovely city of Ottawa in the spring!

Best wishes,
Mary Ellen Schaafsma
Executive Director, Canadian Cochrane Centre

Thank You

Cochrane Canada recognizes our Symposium Committees

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Lisa McGovern
Catherine McNair
Adele Pontone
Lori Tarbett
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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). The Canadian Cochrane Centre and all of Cochrane Canada would have not achieved the success we have today without the dedicated support of CIHR.

About the Canadian Cochrane Centre

The Canadian Cochrane Centre (CCC) is one of 14 global, independent, not-for-profit Centres of The Cochrane Collaboration. The CCC 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. The CCC 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 Cochrane Centre is part of Cochrane Canada which encompasses six Review Groups, one Field, two Methods Groups, and 18 Regional Sites. More information about the Canadian Cochrane Centre can be found at ccc.cochrane.org.

Our Exhibitors

Canadian Agency for Drugs and Technologies in Health (CADTH): Celebrating 25 years of supporting informed health care decisions in 2014

We are an independent, not-for-profit producer and broker of health technology assessments. We support health care decision-makers across Canada by providing them with the evidence, analysis, advice, and recommendations they need to make informed policy and practice decisions about drugs and other health technologies.

Stop by our booth during the annual Cochrane Canada Symposium and:

- Meet with a CADTH Research Officer or Liaison Officer.
- Review samples of our health technology assessment reports, including formulary reviews, optimal use and therapeutic reviews, rapid response reports, and environmental and horizon scans.
- Learn how to access our reports and services.
- Learn about our free resources, including literature search tools and guidelines for the economic evaluation of health technologies.
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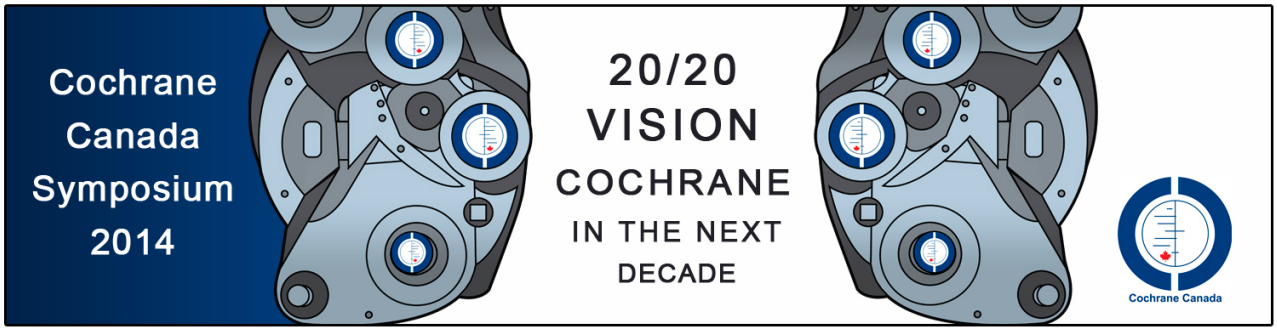
Cochrane Canada Entities' Tables

Meet the groups that make up the activity engine of Cochrane Canada!
There are sixteen groups who are active in The Cochrane Collaboration and are hosted within a Canadian organization, of which 11 are funded by the Canadian Institutes for Health Research.
Come by the 'Cochrane Canada Entities Tables' in the Victoria Ballroom North during exhibit times to learn how to get involved and find out more about the activities and products of:

- Back Review Group
- Bias Methods Group
- Campbell and Cochrane Equity Methods Group
- Canadian Cochrane Centre
- Child Health Field
- Cochrane Policy Liaison Office
- Effective Practice and Organization of Care Review Group
- Hypertension Review Group
- Inflammatory Bowel Disease and Functional Bowel Disorders Review Group
- Musculoskeletal Review Group
- Québec Branch of the Canadian Cochrane Centre

Program-at-a-Glance



11th Annual Cochrane Canada Symposium
20/20 Vision: Cochrane in the Next Decade

Thursday, 24 April 2014

Time	Session	Location
7:30-8:50 a.m.	Registration	Ballroom Foyer
	Poster/Exhibit Set-up	Victoria Ballroom South
9-10:30 a.m.	**Opening and Welcoming Remarks** **Plenary I: The Importance of Partnership in Evidence Informed Health Care (IKT)** (Moderator: Mary Ellen Schaafsma) *Presenters: Lee Fairclough & Louise Zitzelsberger* Facilitating integrated knowledge translation at the system level: the Partnership model *Presenter: Paul Moayyedi* Working with guideline developers to improve the use of best evidence *Presenter: Lawrence Mbuagbaw* Enhancing evidence uptake through stakeholder involvement: a global perspective	Victoria Ballroom North (2nd Floor)
10:30-11 a.m.	Refreshment Break; Exhibitors & Posters	Victoria Ballroom South

11AM-12:30PM	**Parallel Session I**	
	Oral Session 1: Moving Methodologies Forward (Moderator: John McDonald) *Presenter: Joseph Beyene* Higher-order asymptotics for random effects meta-analysis: An empirical evaluation *Presenter: Emma Reid* Managing the incidence of selective reporting: A survey of Cochrane review groups *Presenter: Joel Gagnier* Investigating clinical heterogeneity in systematic reviews	Wellington Salon
	Oral Session 2: Integrated Knowledge Translation; KT Methods (Moderator: Tamara Rader) *Presenter: Nadine Tremblay* Increasing Knowledge Transfer through the translation of the Cochrane Standard Author training into French *Presenter: Michiko M Maruyama* Creating Educational Video Resources in Plastic Surgery for Undergraduate Medical Students *Presenter: Karmela Krleza-Jeric* Environmental Scan of Repositories of Clinical Trial Data; Identifying Features Facilitating Public Disclosure of Individual Participant Data (IPD)	Victoria Ballroom North
	Workshop 1: Moving Methodologies Forward *Presenter: Marion Doull* Integrating Sex/Gender Analysis into Systematic Reviews	Dalhousie Salon
	Workshop 2: Integrated Knowledge Translation *Presenters: Lori Tarbett, Catherine McNair* Making impact with an online presence: Introducing the basics of social media	Alta Vista Salon
	Workshop 3: Moving Methodologies Forward *Presenters: Alain Mayhew, Jordi Pardo Pardo* Linking Risk of Bias, GRADE tools and Summary of Findings Tables - Moving from Single Trees to the Forest	Rideau Salon

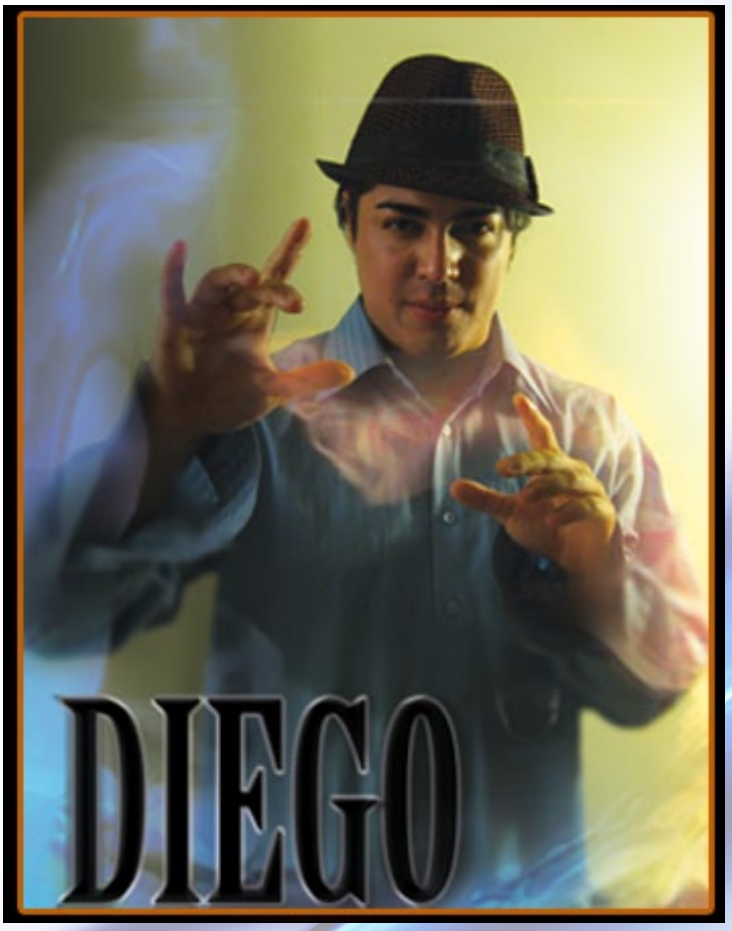
12:30-1:30 p.m.	Lunch	Victoria Ballroom North and Foyer
1-1:30 p.m.	Exhibitors & Posters	Victoria Ballroom South
1:30-3 p.m.	**Parallel Session II**	
	Oral Session 3: Moving Methodologies Forward; Searching (Moderator: Ciprian Jauca) *Presenter: Matt Vassar* Examining the Comparative Retrieval of Five Academic Search Engines for Systematic Reviews *Presenter: William Witteman* Unbiased use of a biased tool: Using Google search for grey literature searches and environmental scans *Presenter: Lun Li* Poor reporting and inadequate searches were apparent in network meta-analysis	Wellington Salon
	Oral Session 4: Global Health & Global Health Systems (Moderator: Jordi Pardo Pardo) *Presenter: Michael Wilson* The Global Stock of Research Evidence Relevant to Health Systems Policymaking *Presenter: Denis Ako-Arrey* Health System Guidance Appraisal - Better Guidance For Better Health Systems *Presenter: François-Pierre Gauvin* An online repository linking policy-relevant documents and Cochrane Reviews: Canada's Evidence-Informed Healthcare Renewal Portal *Presenter: Lisa Waddell* An evidence informed evaluation of M. paratuberculosis, a controversial public health issue	Victoria Ballroom North
	Workshop 4: Moving Methodologies Forward *Presenter: Vivian Welch* Guidance for conducting and reporting equity related systematic reviews	Dalhousie Salon

	Workshop 5: Integrated Knowledge Translation *Presenter: Nicole Prestley* Effective Engagement: Optimizing Twitter for the Health Research Audience	Rideau Salon
	Workshop 6: Moving Methodologies Forward *Presenter: Joseph Beyene* Network Meta-Analysis: Concepts, Methods and Applications	Alta Vista Salon
3-3:30 p.m.	Refreshment Break; Exhibitors & Posters	Victoria Ballroom South
3:30-4:15 p.m.	**Poster Viewing Session**	Victoria Ballroom South
4:15-5:45 p.m.	**Annual Stakeholder Meeting**; an open meeting of Cochrane Canada groups, partners, regional sites – and anyone interested in learning more about us.	Wellington Salon
6-7 p.m. (cocktails) **7-9 p.m. (dinner)**	Networking Magic and Dinner	Victoria Ballroom Gallery (3rd Floor; cocktails) Victoria Ballroom North (dinner)

11th Annual Cochrane Canada Symposium

Networking Event

Magic & Dinner



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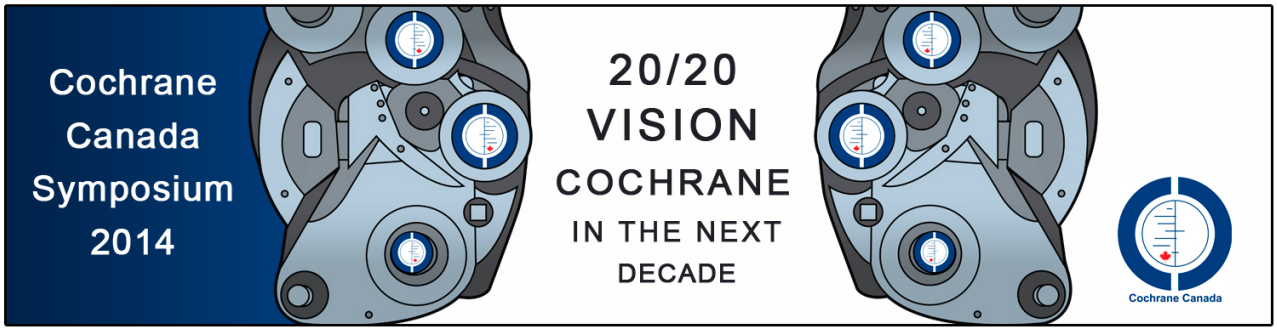
Cocktails & Magic
6 p.m.
Victoria Ballroom Gallery (3rd Floor)

Dinner
7-9 p.m.
Victoria Ballroom North

Included in your registration is an evening of dinner and entertainment on Thursday, 24 April 2014. Join us at 6:00PM for a networking cocktail hour on the 3rd floor in the North Gallery (turn right off of the elevators). Mix, mingle, laugh and share, and prepare to be surprised when our special guest approaches to amaze and enthral you. A cash bar will be available. At 7:00PM we move one floor down into the Victoria Ballroom North where a delicious dinner from the Marriott's new menu will be served. We hope you enjoy the food and the company!



Friday, 25 April 2014

Time	Session	Location
9-10:30 a.m.	**Plenary II: New Methods in the Pipeline to Enhance Best Evidence** (Moderator: David Moher) Presentation of Awards: • Cochrane Review of the Year Award • Graduate Student Poster Award *Presenter: Mike Clarke* New methods to enhance best evidence: the SWAT programme of research to improve research *Presenter: Holger Schünemann* GRADE and new advances for best evidence *Presenter: George Wells* Network Meta-analysis	Victoria Ballroom North (2nd Floor)
10:30-11 a.m.	Refreshment Break; Exhibitors & Posters	Victoria Ballroom South
11 a.m.-12:30 p.m.	**Parallel Session III**	
	Oral Session 5: Integrated Knowledge Translation (Moderator: Heather Colquhoun) *Presenters: Becky Skidmore and Renée Dupuis-Leon* When Change is Evident: A Review of Canadian OB/GYN Guidelines *Presenter: Michael Wilson* Canadian knowledge users' views about and experiences with 27 evidence briefs and policy dialogues	Wellington Salon

	Presenter: Jenny Leese Engaging knowledge users in a knowledge translation event using social media *Presenter: Kathryn Bennett* Guidelines for Practice Guidelines in Child and Youth Mental Health: Do They Meet Current Standards?	
	Oral Session 6: Integrated Knowledge Translation (Moderator: Jennifer O'Neill) *Presenter: Lori Tarbett* Café Scientifique – Knowledge translation through public dissertation *Presenter: Mary Brachaniec* Expanded Consumer Roles on a Cochrane Review Team to Enhance Knowledge Translation Activities and Evidence Uptake *Presenter: Marilyn Walsh* Consumer support and education beyond national borders: phase 3	Victoria Ballroom North
	Workshop 7: Moving Methodologies Forward *Presenter: George Wells* Assessing confounding and the risk of selection bias in a systematic review which includes non-randomized studies (NRS)	Dalhousie Salon
	Workshop 8: Integrated Knowledge Translation *Presenter: Darci Rosalie* Tell Me, Teach Me, Involve Me: Effective Application of Interprofessional Collaborative Practice (ICP) using a Patient Process Bookmark	Rideau Salon
	Workshop 9: Cochrane into Adulthood – What's Next *Presenter: Becky Gray* What's new in 2014 for Managing Editors of Cochrane Review Groups?	Alta Vista Salon
12:30-1:30 p.m.	Lunch	Victoria Ballroom North and Foyer
1-1:30 p.m.	Exhibitors & Posters	Victoria Ballroom South

1:30-3 p.m.	**Parallel Session IV**	
	Oral Session 7: Moving Methodologies Forward (Moderator: Alain Mayhew) *Presenter: Kendra Lawrence* Should Cochranites Adopt a Specific Hierarchy of Outcomes? *Presenter: Joel Gagnier* Quality of clinical heterogeneity investigations in systematic reviews: An assessment of Cochrane and non-Cochrane reviews *Presenter: Ahmed Abou-Setta* Author bias can underestimate objective outcome measures in meta-analysis: An exploratory analysis	Wellington Salon
	Workshop 10: Cochrane into Adulthood – What's Next *Presenter: Mike Clarke* Core outcome sets for healthcare research	Dalhousie Salon
	Workshop 11: Integrated Knowledge Translation *Presenter: Eileen Vilis* Consumers Communicating Cochrane Reviews: developing a standardized knowledge translation program delivered by consumers	Rideau Salon
	Workshop 12: Moving Methodologies Forward *Presenter: Joseph Beyene* Methods and strategies to dealing with heterogeneity and "non-standard" studies	Alta Vista Salon
3-3:30 p.m.	Refreshment Break; Exhibitors & Posters	Victoria Ballroom South
3:30–4:30 p.m.	**Plenary III: Cochrane in Adulthood: A Mature Look Forward** (Moderator: Krista Connell) *Presenter: Peter Tugwell* Your review is finished: who cares? *Presenter: Jeremy Grimshaw* Cochrane Canada 20/20; past and future *Presenter: David Tovey* Cochrane Strategy to 2020; the way we go forward	Victoria Ballroom North

Plenaries

Plenary I: The Importance of Partnership in Evidence Informed Health Care (IKT)

9-10:30 a.m., Victoria Ballroom North, 24 April 2014

Moderator: Mary Ellen Schaafsma

- **Lee Fairclough** & **Louise Zitzelsberger**, Canadian Partnership Against Cancer:
  Faciliating integrated knowledge translation at the system level: the Partnership model

In Canada, the cancer community is working together on a coordinated cancer control strategy to reduce the impact of cancer in the population now and in the future. By working together more can be achieved and the uptake of evidence will be accelerated. Grounded in and informed by the experiences of those most affected by cancer, the Canadian Partnership Against Cancer (CPAC) plays a unique role in coordinating this strategy; CPAC works with partners to support multi-jurisdictional uptake of the knowledge emerging from cancer research and best practices in order to optimize cancer control planning, and drives improvements in quality of practice across the country. The measurement of outcomes is a key focus of the work and grounds the collaborative efforts. Examples of how the partnership model is resulting in improved knowledge translation for change will be presented.

- **Paul Moayyedi**, Cochrane Upper Gastrointestinal and Pancreatic Diseases (UGPD) Group:
  Working with guideline developers to improve the use of best evidence

My talk will summarize how the Cochrane UGPD Review Group is involved with various Gastrointestinal societies in supporting guideline development. I will outline the key features that lead to successful partnerships and how harbouring these relationships can be mutually beneficial to The Cochrane Collaboration and the specialist societies.

- **Lawrence Mbuagbaw**, South African Cochrane Centre:
  Enhancing evidence uptake through stakeholder involvement: a global perspective

My talk will cover the roles and responsibilities of stakeholders in evidence creation, the pros and cons of partnerships with stakeholders and best practices for various situations.

Plenary II: New Methods in the Pipeline to Enhance Best Evidence

9-10:30 a.m., Victoria Ballroom North, 25 April 2014

Moderator: David Moher

- **Mike Clarke**, Queen's University, Belfast:
  New methods to enhance best evidence: the SWAT programme of research to improve research

Hundreds of thousands of randomized trials have been done in health care, but the number of empirical studies that compare different methods for this research is only likely to run into the hundreds. This does not mean that we already know the best ways to do trials. Far from it. We still have much to learn and this talk will explore how such embedded research might be done. It will introduce the SWAT (Study Within A Trial) programme as a means to identify areas of uncertainty in the conduct of trials, and to design, conduct and report studies to tackle these.

- **Holger Schünemann**, McMaster University Health Scienecs Centre:
  GRADE and new advances for best evidence

The Cochrane Applicability and Recommendations Methods Group, in collaboration with members of the Grading of Recommendations Assessment, Development and Evaluation (GRADE) Working Group, have recently focused their attention on alternate formats of presenting Summary of Findings Tables in the Cochrane Methods Innovation research initiatives and on Evidence to Recommendation frameworks in the DECIDE project (Developing and Evaluating Communication strategies to support Informed Decisions and practice based on Evidence). These new tools are supported by IT solutions that facilitate diagnostic and therapeutic decision making. We are exhilarated to showcase these new developments with practical examples.

- **George Wells**, University of Ottawa; Ottawa Health Research Institite; University of Ottawa Heart Institute:
  Network Meta-Analysis: Evidence Networks and Enhancing Best Evidence

Current design and analysis of evidence networks will be discussed; a brief jaunt through the historical development of network meta-analysis considered and musings "through the looking glass" formulated about the future.

Plenary III: Cochrane in Adulthood: A mature look forward

3-4:30 p.m., Victoria Ballroom North, 25 April 2014

Moderator: Krista Connell

- **Peter Tugwell**, Cochrane Musculoskeletal Group; Campbell and Cochrane Equity Methods Group: *Your review is finished: who cares?*

Systematic reviews have moved from infancy to adulthood. But it is no longer enough to publish reviews. We need this information to reach the final users, and provide the right message for each type of audience. We will look critically to the findings of the reviews, how we can increase its impact, and how our messages might change when we look to our reviews using an equity lens.

- **Jeremy Grimshaw**, Canadian Cochrane Centre: *Cochrane Canada 20/20; past and future*

The presentation will focus on the achievements of Cochrane Canada over the last decade and challenges and opportunities for the next five years.

- **David Tovey**, *The Cochrane Library*: *Cochrane Strategy to 2020; the way we go forward*

I will discuss the Cochrane Strategy to 2020 and what this means in terms of changes within Cochrane and the impact of the strategy on its products for users. I will touch on the individual targets, how they will be addressed and what the deliverables will be. I will talk about how evidence is changing: creating a need for more sophisticated systematic reviews, including new review types, and also how producers such as Cochrane can do more to ensure that their reviews impact on health policy and practice. This will include discussion of the challenges and opportunities for open access, plus the need for greater efforts at prioritization, to ensure relevance and timeliness, combined with a needs based approach to updating. I will also cover new means of producing and presenting systematic reviews and delivering the findings to different user groups in new ways, and how this might impact healthcare delivery, build trust between patients and clinicians, and lead to more rational decision-making.

Meet our Speakers

Plenary I: The Importance of Partnership in Evidence Informed Health Care (IKT)

Lee Fairclough is the Vice-President of Strategy, Knowledge Management and Delivery at the Canadian Partnership Against Cancer. Ms Fairclough is passionate about working with partners to determine how pan-Canadian actions to advance cancer control can have a measurable impact for Canadians.

Ms Fairclough has a diverse background which includes clinical experience as a radiation therapist, health research and informatics experience, systems planning and policy, and institutional board membership. Before joining the Partnership, she served as Director, Toronto Regional Cancer Programme, and Informatics and Administration Director of the Clinical Research Unit at Princess Margaret Hospital - part of the University Health Network in Toronto.

Ms Fairclough has an undergraduate biology and mathematics degree from McMaster University and a Master of Health Science degree in health administration from the University of Toronto. She was the recipient of the Robert Wood Johnson Award for her graduate studies.

Louise Zitzelsberger has been with the Canadian Partnership Against Cancer since April 2007, currently in the role of Evidence, Synthesis and Guidelines Specialist. She has a PhD in Education with a focus on methodology. Since 1999, the majority of her work has been focused on practice guidelines in oncology. Her research interests include the use of evidence and knowledge translation in cancer control.

Paul Moayyedi is the Director of the Division of Gastroenterology at McMaster University, Hamilton, Canada and holds the rank of Professor of Medicine. He qualified from Bristol University in 1988 and trained in Gastroenterology at Leeds' General Infirmary. He obtained a PhD and Masters in Public Health from the University of Leeds. He was appointed Professor of Gastroenterology Health Services Research at the University of Birmingham in 2001 and then moved to McMaster University to be the first recipient of the Richard Hunt/AstraZeneca Chair of Gastroenterology in 2004.

Dr Paul Moayyedi has published approximately 270 peer-reviewed articles and book chapters. He is a proponent of evidence-based medicine and is the joint Co-ordinating Editor of the Cochrane Upper Gastrointestinal and Pancreatic Diseases Review Group. He has been involved with guideline development in the UK, US and Canada in many areas of gastroenterology.

Lawrence Mbuagbaw is a Cameroonian Public Health Physician. He trained at the Faculty of Medicine and Biomedical Sciences (FMBS) in Cameroon (MD; 2005) and the Hebrew University of Jerusalem (MPH; 2009) and did a post-doctoral fellowship with the Canadian Institutes of Health Research Canadian HIV Trials Network (CTN; 2010). He is currently completing a PhD in Health Research Methodology (specializing in clinical epidemiology) at McMaster University, Canada. He works as a researcher at the Centre for the Development of Best Practices in Health (CDBPH) and an Associate Staff of the South African Cochrane Centre.

His research interests are mother and child health, HIV care, health systems research and health research methodology. He is involved in many capacity building initiatives for evidence synthesis on the African continent, and mentors first time authors of systematic reviews.

Meet our Speakers

Plenary II: New Methods in the Pipeline to Enhance Best Evidence

Mike Clarke has 25 years of experience in the design and conduct of rigorous assessments of healthcare interventions. He has worked on some of the world's largest randomized 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 Director of the Hub for Trials Methodology Research at Queen's University, Belfast; and a founder of Evidence Aid, improving access to evidence in disasters and humanitarian emergencies. He has initiated the SWAT (Study Within A Trial) program to encourage research that will improve the conduct of trials. He is also working to improve the communication of research findings to patients, practitioners, policy-makers and the public.

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 (MD in 1993), epidemiology (PhD in 2000), preventive medicine/public health, and internal medicine, which he practices at McMaster University. He has authored over 300 peer-reviewed publications—many of them focusing on guideline methodology and systematic reviews. He co-convenes the Cochrane Applicability and Recommendations Method Group, is co-chair of the GRADE Working Group, is a 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 a member of or chaired various guideline panels at the WHO, the American College of Physicians, the American College of Chest Physicians and the American Thoracic Society. He has consulted or provided training on guideline development for many organizations including NICE in the UK, various ministries of health and Kaiser Permanente.

George Wells is a professor of the Departments of Epidemiology and Community Medicine and Department of Medicine at the University of Ottawa. He is also Senior Scientist at the Ottawa Health Research Institute and Director, Cardiovascular Research Methods Centre at the University of Ottawa Heart Institute.

Dr Wells' interests are in the design and analysis of multicentre clinical trials, methodology related to healthcare delivery, systematic reviews and network meta-analysis, and the development and assessment of decision support technologies for patients and clinicians. In particular, he has provided methodological and biostatistical leadership in conceiving, implementing and conducting systematic reviews and meta-analysis. As a methodologist, he co-convenes The Cochrane Collaboration's Nonrandomized Studies Methods Group and is a member of the Statistics Methods Group editorial. He is also on the editorial committee of the Cochrane Musculoskeletal Review Group. As a reviewer, Dr Wells is involved in over 50 Cochrane Reviews and has published over 30 systematic reviews outside of Cochrane in refereed journals including the BMJ, JAMA, Spine and Endocrine Review. He has published methodological guidelines related to systematic reviews and has given workshops nationally on the statistical and methodological procedures for conducting systematic reviews and meta-analysis. Dr Wells has been on the executive and steering committees of national and international research

Continued on next page . . .

Meet our Speakers

Continued from last page . . .

programs, external safety and efficacy monitoring committees, scientific grant review committees, editorial committees and scientific advisory committees. He is currently the associate editor of the Journal of Clinical Epidemiology and is on the Editorial Committee of the Canadian Medical Association Journal. He has worked extensively with national and international government and non-government research organizations.

Plenary III: Cochrane in Adluthood: A mature look forward

Peter Tugwell is Professor of Medicine and Professor of Epidemiology and Community Medicine at the University of Ottawa and is a practicing rheumatologist at The Ottawa Hospital. In 2001, he became director of the Centre for Global Health at the Institute of Population Health. He has built a research program and multidisciplinary team around his Canada Research Chair in Health Equity.
Dr Tugwell is co-director of the World Health Organization Collaborating Centre for Knowledge Translation & Health Technology Assessment in Health Equity. He is coordinating editor of the Cochrane Musculoskeletal Review Group and founding co-convenor of the Campbell and Cochrane Equity Methods Group. Dr Tugwell also serves on the Steering Committee of the Campbell Collaboration. Dr Tugwell's publication record includes over 500 journal articles, monographs and book chapters.

Jeremy Grimshaw received an MBChB (MD equivalent) from the University of Edinburgh, UK. He trained as a family physician prior to undertaking a PhD in health services research at the University of Aberdeen. He moved to Canada in 2002. His research focuses on the evaluation of interventions to disseminate and implement evidence-based practice. Dr Grimshaw is a senior scientist in the Clinical Epidemiology Program at the Ottawa Hosptial Research Institute, a full professor in the Department of Medicine, University of Ottawa and a Tier 1 Canada Research Chair in Health Knowledge Transfer and Uptake. He is director of the Canadian Cochrane Centre and co-ordinating editor of the Cochrane Effective Practice and Organisation of Care Review Group. He is also the principal investigator of Knowledge Translation Canada (KT CANADA)—a CIHR- and CFI-funded interdisciplinary network of over 50 knowledge translation researchers from six academic health science centres in three provinces. He has over 350 peer-reviewed publications.

David Tovey has been the Editor in Chief of *The Cochrane Library* since January 2009. He currently leads the Cochrane Editorial Unit (CEU), based in London, UK. The focus of the CEU is to ensure the quality and relevance of Cochrane Reviews and to support initiatives aimed at increasing their impact on decision-makers.
He worked previously as editorial director for the BMJ Evidence Centre, which is the division of the BMJ Group that produces Clinical Evidence and its counterpart for the public Best Treatments, BMJ Point of Care, and Best Practice. He continues to act as the series editor for the BMJ Uncertainties series.
Dr Tovey worked as a general practitioner in an urban practice in South London for 15 years until 2003 and is a fellow of the UK Royal College of General Practitioners. During his time in practice he also undertook roles in continuing professional development for primary care professionals.

Awards

Cochrane Review of the Year Winner

Combined and alternating paracetamol and ibuprofen therapy for febrile children

Wong, Tiffany; Stang, Antonia S; Ganshorn, Heather; Hartling, Lisa; Maconochie, Ian K; Thomsen, Anna M; Johnson, David W

Review Abstract:

Background

Health professionals frequently recommend fever treatment regimens for children that either combine paracetamol and ibuprofen or alternate them. However, there is uncertainty about whether these regimens are better than the use of single agents, and about the adverse effect profile of combination regimens.

Objectives

To assess the effects and side effects of combining paracetamol and ibuprofen, or alternating them on consecutive treatments, compared with monotherapy for treating fever in children.

Search methods

In September 2013, we searched Cochrane Infectious Diseases Group Specialized Register; Cochrane Central Register of Controlled Trials (CENTRAL); MEDLINE; EMBASE; LILACS; and International Pharmaceutical Abstracts (2009-2011).

Selection criteria

We included randomized controlled trials comparing alternating or combined paracetamol and ibuprofen regimens with monotherapy in children with fever.

Data collection and analysis

One review author and two assistants independently screened the searches and applied inclusion criteria. Two authors assessed risk of bias and graded the evidence independently. We conducted separate analyses for different comparison groups (combined therapy versus monotherapy, alternating therapy versus monotherapy, combined therapy versus alternating therapy).

Main results

Six studies, enrolling 915 participants, are included.

Compared to giving a single antipyretic alone, giving combined paracetamol and ibuprofen to febrile children can result in a lower mean temperature at one hour after treatment (MD -0.27 °Celsius, 95% CI -0.45 to -0.08, two trials, 163 participants, moderate quality evidence). If no further antipyretics are given, combined treatment probably also results in a lower mean temperature at four hours (MD -0.70 °Celsius, 95% CI -1.05 to -0.35, two trials, 196 participants, moderate quality evidence), and in fewer children remaining or becoming febrile for at least four hours after treatment (RR 0.08, 95% CI 0.02 to 0.42, two trials, 196 participants, moderate quality evidence). Only one trial assessed a measure of child discomfort (fever associated symptoms at 24 hours and 48 hours), but did not find a significant difference in this measure between the treatment regimens (one trial, 156 participants, evidence quality not graded).

In practice, caregivers are often advised to initially give a single agent (paracetamol or ibuprofen), and then give a further dose

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Awards

Continued from last page . . .

of the alternative if the child's fever fails to resolve or recurs. Giving alternating treatment in this way may result in a lower mean temperature at one hour after the second dose (MD -0.60 °Celsius, 95% CI -0.94 to -0.26, two trials, 78 participants, low quality evidence), and may also result in fewer children remaining or becoming febrile for up to three hours after it is given (RR 0.25, 95% CI 0.11 to 0.55, two trials, 109 participants, low quality evidence). One trial assessed child discomfort (mean pain scores at 24, 48 and 72 hours), finding that these mean scores were lower, with alternating therapy, despite fewer doses of antipyretic being given overall (one trial, 480 participants, low quality evidence)

Only one small trial compared alternating therapy with combined therapy. No statistically significant differences were seen in mean temperature, or the number of febrile children at one, four or six hours (one trial, 40 participants, very low quality evidence).

There were no serious adverse events in the trials that were directly attributed to the medications used.

Authors' conclusions

There is some evidence that both alternating and combined antipyretic therapy may be more effective at reducing temperatures than monotherapy alone. However, the evidence for improvements in measures of child discomfort remains inconclusive. There is insufficient evidence to know which of combined or alternating therapy might be more beneficial.Future research needs to measure child discomfort using standardized tools, and assess the safety of combined and alternating antipyretic therapy.

Graduate Student Poster Award Candidates

Application of the Excess Significance Bias Test in Randomized Controlled Trials of Mindfulness-Based Mental Health Interventions: A Cross-sectional Study
Coronado-Montoya, Stephanie

Examining Publication Bias in PTSD Neuroimaging Research
Day, Joshua

Implementation of Evidence-Based Clinical Practice Guidelines for Walking Programs in the Management of Osteoarthritis: Participant Exercise Preference Design
Lowe, Laurianne

The Proactive Patient: An Interactive Online Tool for Patients to Access Evidence-Based Information about Arthritis and its Comorbidities
Rai, Sharan

Using Network Geometry to Address Issues of Study Selection Across Similar Meta-Analyses
Carr, Branden

WORKSHOP Abstracts

Please note: the names of workshop presenters appear in bold

Workshop 1: Moving Methodology Forward

Integrating Sex/Gender Analysis into Systematic Reviews

Doull, Marion; Puil, Lori; Coen, Stephanie; Shea, Beverly; Tudiver, Sari; Welch, Vivian; and Working Group on Sex and Gender. *School of Population and Public Health, University of British Columbia*

11 a.m.-12:30 p.m., Dalhousie Salon, Thursday, 24 April 2014

Learning Objectives:
1) Understand the rationale for including sex/gender analysis (SGA) in systematic reviews, including the relation of SGA to health equity.
2) Become familiar with applying existing methods and tools for SGA in systematic reviews.
3) Identify the strengths/limitations of available tools, and ways to improve methods for SGA.
Description: Sex/gender analysis is an analytic framework that can be used to determine differential effects of health care interventions. Calls to include sex/gender analysis in health research are increasing. This workshop will introduce systematic review authors to the relevance of SGA in systematic reviews, and methods and tools they can use to integrate SGA.
How you will engage participants: Two strategies, interactive dialogue and small group exercises, will be employed. Facilitators will provide an overview of the impact of sex/gender on the effectiveness of health interventions, and introduce the key concepts of SGA. After open discussion of these concepts, the available methods and tools for SGA in systematic reviews will be introduced. Participants will then break into groups to apply these tools to case examples. A final discussion/question period will allow participants to provide feedback on the usefulness of the tools, gaps in their application, and ways to improve methods for the use of SGA in systematic reviews.

Workshop 2: Integrated Knowledge Translation

Making impact with an online presence: Introducing the basics of social media

Tarbett, Lori; **McNair, Catherine**
Canadian Cochrane Centre

11 a.m.-12:30 p.m., Alta Vista Salon, Thursday, 24 April 2014

Learning Objectives: This workshop will introduce those without or with very little knowledge of social media to two platforms: Facebook and Twitter. Participants will leave with:

- basic understanding of social media (what it is, how it is used)
- skills to create and manage their own social media accounts
- an understanding of how to use social media safely and appropriately

Description: Presenters will introduce participants to Facebook and Twitter and describe how the mediums operate using the 5Ws: who, what, when, where and why. Online safety, social media policies and social media strategies will be discussed. Pros and cons of using social media will be addressed. Participants will learn how to create their own Facebook and Twitter accounts and receive advice ranging from appropriate online behavior to how often to post online.
How you will engage participants: Presenters will offer support as participants create their own accounts and post information relevant to the workshop, Cochrane, or health evidence. Twenty minutes will be devoted to a Q&A session.
Level of knowledge required: Iintroductory; Participants require very little knowledge of social media to participate in this workshop.

Workshop 3: Moving Methodology Forward

Linking Risk of Bias, GRADE tools and Summary of Findings Tables - Moving from Single Trees to the Forest

Mayhew, Alain; Santesso, Nancy; **Pardo Pardo, Jordi**
Cochrane Bias Methods Group; Cochrane Musculoskeletal Review Group

11 a.m.-12:30 p.m., Rideau Salon, Thursday, 24 April 2014

Learning Objectives:
1) To review components of the Cochrane Risk of Bias (RoB) and Grading of Recommendations, Assessment, Development and Evaluation (GRADE) tools, and Summary of Findings (SoF) tables in systematic reviews and practice guidelines.
2) To practice using the Cochrane RoB tool, focusing on selection and performance biases, applying GRADE criteria and creating SoF tables.
Description: Interest continues to grow for the use of RoB and GRADE tools but challenges remain with incorporating these tools to improve the quality of reviews and guidelines. A brief overview of these tools and how they fit together will be presented. Using studies from a systematic review, participants will have an opportunity to assess, evaluate and discuss selection and performance bias using the RoB tool and integrate their findings using the GRADE tool and SoF tables. If time permits, other criteria in the RoB and GRADE tools will be explored.
How we will engage participants: Engagement will include topic review and discussion with participants; small group hands-on work to assess and evaluate performance and selection bias; sharing and discussion of interpretations of bias components and the rationale for recommendations and decision making. If possible, participants will be grouped based on expertise in the topics to be discussed.
Level of knowledge required: Introductory and Intermediate

Workshop 4: Moving Methodology Forward

Guidance for conducting and reporting equity related systematic reviews

O'Neill Jennifer; Welch, Vivian; Petticrew, Mark; Tugwell, Peter
Campbell and Cochrane Equity Methods Group

1:30-3 p.m., Dalhousie Salon, Thursday, 24 April 2014

Learning Objectives: Participants will:

- Understand how to incorporate equity considerations into their systematic reviews
- Understand how to report equity considerations completely and transparently

Description: Guidance for conducting and reporting equity-relevant and equity-focused systematic reviews is available. We have defined these reviews as those that meet one or more of the following criteria: 1. the intervention is targeted at a disadvantaged population; 2. the intervention is aimed at reducing the social gradient in health across populations; or 3. the intervention is not aimed at reducing inequity but important equity effects are likely. We will introduce participants to the 10 steps for conducting equity-relevant reviews and the 20 items that should be reported for these reviews. Special consideration will be given for including children and the elderly. We will briefly introduce the five questions to consider when planning the knowledge translation strategy for an equity-relevant review.
How you will engage participants: Participants will be divided into small groups and will discuss the methods available for considering equity as included in the example systematic reviews. This workshop will allow participants to develop their skills in equity methods so that they may consider adding equity into their next systematic review.
Level of Knowledge Required: Introductory

Workshop 5: Integrated Knowledge Translation

Effective Engagement: Optimizing Twitter for the Health Research Audience

Prestley, Nicole; Leese, Jesse; Rai, Sharan; Carruthers, Erin; Prestley, Nadia; Townsend, Anne
Arthritis Research Centre of Canada, Patient Advisory Board & Women's Health Research Institute (BC Women's Hospital & Health Centre)

1:30-3 p.m., Rideau Salon, Thursday, 24 April 2014

Learning objectives: Participants will be able to effectively access, share, discuss and promote health research on Twitter.
Description: This interactive learning session will provide a range of strategies and tools to support consumers, researchers, clinicians and other knowledge users to engage with health research using Twitter. We will initially focus on basic Twitter functionality; namely, enhancing interaction and extending reach, through the use of "mentions", "retweets" and "hashtags". We will then demonstrate how Twitter can be used as a valuable resource to access, share, discuss and promote health research, such as Cochrane's summaries. Participants of all levels of experience in using Twitter are welcome to attend.
How you will engage participants: The workshop will include a

presentation of basic strategies and tools to enhance participants' engagement with the Twitter community. An interactive session will follow where small groups will discuss challenges of using Twitter to engage in health research. Groups will then work with workshop facilitators to find strategies to these challenges before presenting their solutions to the entire group. The workshop will conclude with an open group discussion moderated by the Arthritis Research Centre's Social Media Committee.
Level of Knowledge required: Introductory

Workshop 6: Moving Methodology Forward

Network Meta-Analysis: Concepts, Methods and Applications

Beyene, Joseph
McMaster University

1:30-3 p.m., Alta Vista Salon, Thursday, 24 April 2014

This workshop presents an introduction to network meta-analysis using the generalized linear model (GLM) as an overarching framework. This framework allows modeling a wide range of health outcomes commonly encountered in medical research including binary (e.g., dead/alive), count (e.g., number of falls over a specified time) and continuous (e.g., cholesterol level). With emphasis on conceptual issues rather than mathematical detail, the workshop introduces essential methods, assumptions and key results. Estimation of relative treatment effects and rank probabilities for competing interventions will be presented. Methodological challenges and issues surrounding implementation of the methodology will be discussed. Several case studies with different outcome types will be presented as applications.

Workshop 7: Moving Methodology Forward

Assessing confounding and the risk of selection bias in a systematic review which includes non-randomized studies (NRS)

Wells, George; Shea, Beverley; Reeves, Barnaby; Tugwell, Peter
University of Ottawa Heart Institute

11 a.m.-12:30 p.m., Dalhousie Salon, Friday, 25 April 2014

Learning Objective: To improve awareness of key issues about confounding and the risk of selection bias when including non-randomized studies (NRS) in systematic reviews [to answer questions about the beneficial effects] of interventions.
Description: This workshop is aimed at review authors intending to include NRS in Cochrane Systematic Reviews and editors involved with such reviews. The Collaboration 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 randomized controlled trials (RCTs) but where the question addressed is considered a priority. Evaluations of public health and non-pharmacological interventions may have these characteristics.
How we will engage participants: Participants will mainly work in small groups to apply a checklist recommended by the non-randomized studies methods group (NRSMG) to a small number of NRS and, having completed the checklist, to make judgements about whether studies are at high or low risk of bias in the selection bias domain. The implications of varying amounts and quality of information from primary NRS will be discussed. Varying amounts and quality of information is also the norm for systematic reviews of RCTs, so the discussion will contrast the implications for systematic reviews of NRS and RCTs.
Level of knowledge required: Introductory

Workshop 8: Integrated Knowledge Translation

Tell Me, Teach Me, Involve Me: Effective Application of Interprofessional Collaborative Practice (ICP) using a Patient Process Bookmark

Darci, Rosalie; Prestley, Nicole; Perrin, Sandy; Adler, Leonie; Bested, Alison
BC Women's Hospital & Health Centre

11 a.m.-12:30 p.m., Rideau Salon, Friday, 25 April 2014

Learning Objectives: Participants will: 1. Understand ICP principals and tools; 2. Apply ICP principals to individual practice settings; 3. Use ICP principals to create a Patient Process Bookmark.
Description: Involving patients within a healthcare team is a core principal of ICP. The Complex Chronic Disease Program (CCDP) serves patients with Myalgic Encephalomyelitis, Fibromyalgia and Lyme disease, and was created to address the unique needs of this population. The CCDP's ICP model validates patient experiences and empowers them to be an active partner in their healthcare.
How you will engage participants: We will demonstrate how this model can be applied in clinic settings, using the format: "Tell", "Teach" and "Involve". The workshop will begin with a presentation describing ICP and highlight its benefits such as: applying team members' experiences and evidence

(for example Cochrane Reviews) into practice, focusing on members' strengths across disciplines and clarifying roles. Facilitators will divide participants into groups, where they will collectively examine patients' access to health care and describe their organization's readiness for change in their own practice setting. Lastly, participants will be given Venn Diagrams and Patient Process Bookmarks to create their individualized team and process using ICP Principals, which will be presented to the group.
Level of Knowledge required: Introductory

Workshop 9: Cochrane into Adulthood: What's Next

What's new in 2014 for Managing Editors of Cochrane Review Groups?

Gray, Becky
Cochrane Editorial Unit

11 a.m.-12:30 p.m., Alta Vista Salon, Friday, 25 April 2014

Learning Objectives: To share and discuss information on recent technology and policy developments within the Collaboration.
Description: This will be an interactive/discussion workshop specifically targeted at Managing Editors (MEs) and Assistant MEs (AMEs) of Cochrane Review Groups (CRGs). It will be facilitated by a ME Support person. Topics for discussion will be agreed in advance with participants and may include the latest developments in Archie, editorial policy, and publishing policy, as well as wider Collaboration initiatives relevant to MEs/AMEs (e.g., technology roadmap, Strategy to 2020, commercial sponsorship policy).
How you will engage participants: Participants will be polled in advance about topics for discussion. Workshop format will be interactive discussion.
Level of knowledge required: All levels of knowledge and experience are welcome, but the workshop is specifically targeted at MEs and AMEs.

Workshop 10: Cochrane into Adulthood: What's Next

Core outcome sets for healthcare research

Clarke, Mike
Queen's University Belfast

1:30-3 p.m., Dalhousie Salon, Friday, 25 April 2014

Learning Objectives:

- To understand the need for core outcome sets in healthcare research
- To be able to identify various means for developing core outcome sets

How I will engage participants: This workshop will comprise a mixture of presentations and participant discussion. A presentation will set the scene for several key issues and the participants will then be given specific Cochrane Reviews to look at. They will work in groups to identify examples of non-standardized selection, measurement and reporting of outcomes, and 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.
Level of knowledge required: Introductory or Intermediate

Workshop 11: Integrated Knowledge Translation

Consumers Communicating Cochrane Reviews and Resources: developing a standardized knowledge translation program for delivery by consumers

Vilis, Eileen; Lyddiatt, Anne; Brachaniec, Mary; Walsh, Marilyn; Gunderson, Janet; Radar, Tamara
Canadian Cochrane Centre

1:30-3 p.m., Rideau Salon, Friday, 25 April 2014

Objectives:
1) Provide information about knowledge translation (KT) strategies and resources currently used to share Cochrane Reviews, and develop ways to increase review dissemination and use through developing a consumer presentation module.
2) Discuss resources and tools needed for development of a standardized, consumer delivered KT presentation to enhance awareness and use of *The Cochrane Library* by lay audiences.
3) Encourage and maintain consumer involvement in the development, implementation and evolution of this standardized KT program following the workshop.
Description: This highly interactive workshop will engage consumer stakeholders to provide input on content and structure for a standardized consumer driven KT presentation for lay audiences. Training models for implementation of the program, such as train-the-trainer, peer mentoring, and self-directed webinars, will be explored.
How you will engage participants: Using structured discussion and brainstorming process, the consumer perspective and

experience will guide the development and training elements of a consumer KT program. Implementation of this program will extend the reach, use and impact of Cochrane Reviews and resources to Canadian consumers. Ongoing consumer stakeholder engagement in program development, training and implementation is an integral component to move the program forward following the workshop.
Level of knowledge required: All levels

Workshop 12: Moving Methodology Forward

Methods and strategies to dealing with heterogeneity and "non-standard" studies

Beyene, Joseph
McMaster University

1:30-3 p.m., Alta Vista Salon, Friday, 25 April 2014

This workshop addresses two commonly encountered and methodologically challenging issues in meta-analysis. First, we will address methods and strategies to dealing with heterogeneity. We will discuss some potential sources of between-study variability, and overview some methods for identifying whether heterogeneity poses a problem in a particular set of studies. We then will focus on issues related to dealing with study variability once it has been identified including meta-regression. Second, we will discuss approaches to dealing with "non-standard" studies and data. Typical examples are: (i) study designs, such as cross-over trials or cluster-randomized trials; (ii) types of outcome data, such as count and time-to-event data. RevMan offers a 'generic inverse variance' outcome type that can, in principle, be used to perform meta-analyses in all of these 'non-standard' situations.

ORAL Abstracts

Please note: The names of oral presenters appear in bold

Oral Session 1: Moving Methodology Forward

(Moderator: John MacDonald)

Higher-order asymptotics for random effects meta-analysis: An empirical evaluation

Beyene, Joseph
McMaster University

11 a.m.-12:30 p.m., Wellington Salon, Thursday, 24 April 2014

Background: Traditional first-order asymptotic random-effects modeling approach may be inaccurate with small number of studies.
Objectives: To empirically evaluate performance of higher-order asymptotic methods in random effects meta-analysis.
Methods: We applied higher-order asymptotic methods to a series of meta-analyses using continuous outcomes and compared traditional methods with a second-order likelihood method based on Skovgaard's statistic. We have also used a signed-likelihood ratio test approach as an additional comparison. We investigated three effect measures (mean difference (MD), standardized mean difference (SMD), Ratio of Means (RoM)), and three methods of estimation for the heterogeneity parameter.
Results: A total of 66 meta-analyses were used in which the effect measure was MD. The largest average discrepancy in p-values was between the Skovgaard's method and a p-value based Z test and ML estimator (mean difference = 0.05, SD of difference = 0.09). For SMD, 106 meta-analyses were available for analysis. Once again the largest discrepancy occurred between Skovgaard's and Z test with ML (mean difference = 0.03, SD of difference = 0.04). The results for ROM are similar to that of the SMD.
Conclusions: Traditional first-order asymptotic methods in random-effects model might not be reliable when the number of studies is small. Higher-order asymptotics methods are available and need to be assessed in parallel.

Managing the incidence of selective reporting: A survey of Cochrane Review Groups

Ried, Emma; Tejani, Aaron; Huan, Nichoe; Egan, Gregory; O'Sullivan, Cait; Lawrence, Kendra
University of British Columbia

11 a.m.-12:30 p.m., Wellington Salon, Thursday, 24 April 2014

Background: Selective reporting bias (SRB) leads to overestimation of treatment effects and underestimation of treatment harms. All Cochrane Systematic Reviews must assess the risk of SRB, achieved in part by applying the Cochrane Risk of Bias Tool to each included randomized trial. *The Cochrane Handbook for Systematic Reviews of Interventions* outlines strategies for a comprehensive assessment, but the extent to which these are followed by CRGs is unclear.
Objectives: To determine methods CRGs require of their authors to address SRB within systematic reviews and how SRB risk assessments are verified.
Methods: A cross-sectional survey was developed and distributed electronically to 50 CRGs involved in interventional reviews.
Results: Preliminary results from 33 responding CRGs suggest the majority refer their authors to the *Cochrane Handbook* for specific instruction regarding assessments of SRB. The Handbook strategies remain variably enforced, with 59% (22/33) of CRGs not requiring authors to search for included trial protocols, and 30% (11/33) not requiring that contact with individual study authors be attempted. Approximately half of groups consistently verify review authors' assessments of the risk of SRB to ensure completeness.
Conclusions: A range of practices are used by CRGs for addressing SRB, with many steps outlined in the *Cochrane Handbook* being encouraged but not required.

Investigating clinical heterogeneity in systematic reviews

Gagnier, Joel
University of Michigan

11 a.m.-12:30 p.m., Wellington Salon, Thursday, 24 April 2014

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

Oral Session 2: Integrated Knowledge Translation; KT Methods

(Moderator: Tamara Rader)

Increasing Knowledge Transfer through the translation of Cochrane Standard Author Training into French

Tremblay, Nadine; Witteman, William; Gagnon, Marie-Pierre
Centre hospitalier universitaire de Québec

11 a.m.-12:30 p.m., Victoria Ballroom North, Thursday, 24 April 2014

Background: Since the update of the new Standard Author Training (SAT) materials, Cochrane training is becoming more dynamic and exciting for Cochrane authors. Standard Author Training (SAT) materials are currently only available in English, Korean and Spanish.
Objectives: With 200 million French speakers worldwide, we sought to engage this population with the Cochrane Collaboration.
Results: In Québec City we have developed a strong pool of Cochrane trainers proficient in Cochrane methods who conduct their activities in French. We translated the SAT materials into French. Since 2008, eight Québec City-based Cochrane trainers have delivered 11 SAT sessions in French to 136 people from 17 fields ranging from teaching to political science. They collectively authored 14-first-author reviews, five protocols and two registered titles within 13 Cochrane Review Groups over the last five years.
Conclusions: The formation of the Cochrane trainer's network and the Cochrane Branch in Québec City offer an opportunity to reach out the community of researchers in Québec and French speakers around the world. This will promulgate Cochrane Reviews and advocate their methods throughout our French-speaking networks, including the local health system, government Ministries, patient advocacy groups and stakeholders throughout the French-speaking world.

Creating Educational Video Resources in Plastic Surgery for Undergraduate Medical Students

Maruyama, Michiko, M; Verchere, Cindy; Neufeld, Megan; Duffy, Damian; O'Hara, Nathan
University of British Columbia

11 a.m.-12:30 p.m., Victoria Ballroom North, Thursday, 24 April 2014

Background: Lights, Camera, Surgery! is a creative and novel project where teams of medical students work together with surgical preceptors to produce instructional videos of basic surgical procedures or topics. These videos are uploaded to an educational resource website for medical students to use during their surgical clerkship.
Objectives: To create an online educational video resource library to supplement the traditional style of textbook learning. To provide opportunities for medical students to explore a career in various surgical specialties.
Methods: Teams consisted of two-three students and one surgical preceptor. Each team created a list of topics, learning objectives and storyboards. After completing a workshop in filming, lighting and video editing, each team worked together to transform their storyboards into videos.
Results: At the end of the summer project, each team produced

four-six high-quality, carefully edited, educational videos. Three Plastic Surgery videos were selected for further discussion, including "The Hand Examination", "Suturing 101" and "Nail Bed Repair".
Conclusions: Unlike traditional textbook studying, educational videos uniquely combine visual and audio modalities of learning. Students can pause, rewind and review the videos multiple times and watch at their own convenience. In addition, students in rural-based medical programs are able to watch and learn about surgical specialties that may not be available at their location.

Environmental Scan of Repositories of Clinical Trial Data; Identifying Features Facilitating Public Disclosure of Individual Participant Data (IPD)

Krleza-Jeric, Karmela; Ufholz, Lee-Anne
Ottawa Group-IMPACT

11 a.m.-12:30 p.m., Victoria Ballroom North, Thursday, 24 April 2014

Background: Inclusion of IPDs in Cochrane Reviews would increase the reliability of produced evidence. Currently it is difficult to get such raw data but the open data principle would make it possible. However the lack of methodologies and standards for data preparation and of relevant repositories are major gaps preventing its realisation.
Objectives: Explore essential features and practices of repositories that accept clinical trial data and facilitate their sharing and public disclosure. This environmental scan will inform a development of methods and standards for public disclosure of IPDs.
Methods: Environmental scan of repositories that harvest and enable public disclosure of CT data. A list of headings was developed to capture features of selected repositories. We reviewed the literature, searched catalogues of data repositories, and analysed respective websites.
Results: Selected repositories are general, institutional, or topic oriented. We analyzed pre-defined features of these repositories including citability and reuse of data. There are no universal standards of data curation and management across repositories but they are open to implement such standards if these are defined.
Conclusion: Increasingly repositories host IPDs., but there is a need to develop methods and standards for public disclouse of such data. The Cochrane collaboration can contribute to this process in the next period and thus move forward the methodology and use of evidence.

Oral Session 3: Moving Methodology Forward; Searching

(Moderator: Ciprian Jauca)

Examining the Comparative Retrieval of Five Academic Search Engines for Systematic Reviews

Vassar, Matt; Day, Joshua; Carr, Branden; Martin, Dohn; Kash-Holley, Melissa; Linsenmeyer, Machelle; Franklin, Johnathan; Holzmann, Matt
Oklahoma State University Center for Health Sciences

1:30-3 p.m., Wellington Salon, Thursday, 24 April 2014

Background: The use of Google Scholar (GS) as a search engine for systematic reviews as well as GS's comparative recall, coverage, and precision with PubMed have been recently studied, yet additional research is needed to determine the extent to which comparative retrieval exists with other popular academic search engines.
Objectives: The objective of this study is to determine the comparative retrieval of five academic search engines: GS, PubMed, Scopus, Web of Science, and ScienceDirect.
Methods: Reviews from the Cochrane Database of Systematic Reviews reporting the use of the aforementioned search engines and providing reproducible search strategies were located. Searches were recreated to examine recall, coverage, and precision.
Results: Descriptive statistics regarding study outcomes (recall, coverage, and precision) are reported for each search engine. The authors also report on the outcomes of improved search strategies.
Conclusions: Given differences in the information retrieved, researchers should use multiple search engines and targeted, well-defined search strategies when conducting searches for systematic reviews.

Unbiased use of a biased tool: Using Google search for grey literature searches and environmental scans

Witteman, William; Giguère, Anik
Centre hospitalier universitaire de Québec

1:30-3 p.m., Wellington Salon, Thursday, 24 April 2014

Background: The Google search engine is the most popular tool for searching the web. However, the search algorithm that ranks the search results changes hundreds of times a year, and

the web being searched is changing and growing constantly. Because of these factors a set of Google search results cannot be considered stable or replicable. Nevertheless, in a grey literature search or an environmental scan, a Google search may be essential in surveying the web. In that case, how do we use Google search in a way that is rigorous, evidence-based and sensible, given the limitations of the tool?
Methods: We outline a set of procedures and tools that allow the use of Google search so that the bias in the tool is minimized, the effort in mining the search results is reduced, and a thorough audit of the process and the results is produced.
Results: Using the procedures outlined a Google search can be repeated somewhat reliably by any other group, and the results can be comprehensively compared to expose both new value added and bias within the tool.
Conclusion: Google search cannot be used in a stable, replicable way, but it can be used with its strengths intact and its weaknesses and biases accounted for.

Poor reporting and inadequate searches were apparent in network meta-analysis

Li, Lun; Tian, Jinhui; Li, Lun; Tian, Hongliang
Ottawa Hospital Research Institute

1:30-3 p.m., Wellington Salon, Thursday, 24 April 2014

Background and objective: The search for network meta-analysis is very critical, as network meta-analysis aims to rank interventions based on all available randomized controlled trials (RCTs). So it is necessary to assess the conduct and reporting of search in network meta-analysis.
Methods: Published network meta-analysis were retrieved by searching databases and hand-searching other sources. Two independent reviewers conducted search, selected studies, abstracted data. Statistical analyses were conducted using SPSS version 15.0 for Windows.
Results: The searches in network meta-analysis were not adequate, although 85.2% searched databases and hand-searched one or more other resources. The median number of databases was three (inter-quartile range [IQR] 3-5). MEDLINE, Embase, and CENTRAL are the most common used three databases. 3.39% (8/236) used the included studies in specific systematic reviews. Hand-searching other resources and unpublished data were not well conducted. The reporting of the search in network meta-analysis was not adequate. 51.27% (121/236) studies reported how to combine the search terms, but only 17.80% (42/236) studies reported the details of search strategy in the article and 28.39% (67/236) studies used appendix or additional file to present the search strategy.
Conclusions: The searches in network meta-analysis were not adequate, and the reporting for search was poor and inadequate.

Oral Session 4: Global Health Global Health Systems

(Moderator: Jordi Pardo Pardo)

The Global Stock of Research Evidence Relevant to Health Systems Policymaking

Wilson, Michael; Moat, Kaelan; Lavis, John
Department of Clinical Epidemiology & Biostatistics, McMaster University

1:30-3 p.m., Victoria Ballroom North, Thursday, 24 April 2014

Background: Policymakers need immediate access to many types of research evidence to make informed decisions about the full range of questions they may have about health systems.
Objectives: To examine all types of research evidence about health system arrangements, and about implementation strategies within health systems contained in Health Systems Evidence (HSE).
Methods: We describe the distribution of eight types of research evidence across health system topics and domains, trends in their production over time, as well as (for systematic reviews) their methodological quality and the availability of user-friendly summaries.
Results: HSE contains 140 review-derived products (evidence briefs for policy and overviews of systematic reviews), 2629 systematic reviews of effects, 614 systematic reviews addressing other questions, 283 systematic reviews in progress, 186 systematic reviews being planned, 1669 economic evaluations, 1092 health reform descriptions, and 209 health system descriptions. Most reviews address topics related to delivery arrangements (n=2663) or implementation strategies (n=1653). 2928 systematic reviews have been quality appraised with moderate AMSTAR ratings found across all topic areas and half (n=1584, 49%) were conducted within the last five years.
Conclusions: Greater effort needs to focus on ensuring systematic reviews correspond to policy priorities, updating existing reviews and increasing their quality.

Health System Guidance Appraisal - Better Guidance For Better Health Systems

Ako-Arrey, Denis; Brouwers, Melissa; Lavis, John
McMaster University

1:30-3 p.m., Victoria Ballroom North, Thursday, 24 April 2014

Background/Objectives: Health Systems Guidance (HSG) assists in addressing a HS challenge, but there is a dearth of high quality HSG on policies and interventions that impact HS performance/efficiency. Our goal is to develop a HSG Appraisal Tool (HSG-AT) that will be used to direct the development, reporting, and appraisal of HSG
Methods:
Stage 1: Conduct a knowledge synthesis to generate a list of items for the HSG-AT. A draft list of candidate items will be generated.
Stage 2: Evaluate the importance of the candidate items and identify any missing components through focus groups discussions. A Beta-version of the tool will emerge.
Stage 3: Test the face validity of the instrument to determine its feasibility of application. Surveys will be carried out. A refined HS guidance tool will be generated.
Results: Stage 1 is complete (manuscript is ready). No existing appraisal tool was identified. Authors identified the need for a high quality tool aimed to systematically evaluate HSG. Fifteen concepts were identified that may be relevant to the appraisal of HSG. We are currently developing the focus group discussion sessions and the survey. Tentative findings will be ready for the symposium.
Conclusion: Objectively discriminating between good and poor guidance is an arduous task since HSG quality can be regarded upon as an inherently subjective assessment.

An online repository linking policy-relevant documents and Cochrane Reviews: Canada's Evidence-Informed Healthcare Renewal Portal

Gauvin, Francois-Pierre; Moat, Kaelan; Lavis, John; Wilson, Michael
McMaster Health Forum, Cochrane Policy Liaison Office

1:30-3 p.m., Victoria Ballroom North, Thursday, 24 April 2014

Background: The Cochrane Policy Liaison Office, hosted by the McMaster Health Forum, has developed Health Systems Evidence (HSE) for promoting and disseminating synthesized research evidence. HSE was recently expanded with the addition of Canada's Evidence-Informed Healthcare Renewal (EIHR) Portal.
Objectives: To describe how the EIHR Portal was developed, how it allows timely access to policy-relevant documents, and how it prompts users to look at Cochrane Reviews and other research evidence.
Methods: We followed rigorous procedures for the referral, assessment and coding process, and calculated descriptive statistics about content and usage.
Results: As of January 2014, 958 documents are included in the EIHR Portal. The top three types of documents are situation analysis (n=372), health and health system data (n=174) and stakeholder position paper (n=93). The top three national priority areas addressed in the documents are health human resources (n=724), quality as a performance indicator (n=472) and information technology (n=366). There are 1700, 130 and 945 systematic reviews that address these same priority areas in HSE, and users are prompted to consult them with links.
Conclusion: The EIHR Portal provides policymakers in Canada with easy access to the range of policy-relevant evidence while promoting Cochrane Reviews through linkages to HSE.

An evidence informed evaluation of M. paratuberculosis, a controversial public health issue

Waddell, Lisa; Rajić, Adrijana; Stärk, Katharina; McEwen, Scott
Public Health Agency of Canada

1:30-3 p.m., Victoria Ballroom North, Thursday, 24 April 2014

Background: Canada has one of the highest reported prevalence estimates (161- 319/ 100 000) of Crohn's disease. The multi-factorial etiology of Crohn's is not well understood; Mycobacterium avium subsp. paratuberculosis is the leading infectious disease candidate.
Objectives: To evaluate the zoonotic potential of M. paratuberculosis and human exposures to M. paratuberculosis using a mixed method approach.
Methods: Research was evaluated and summarized using a stakeholder-engaged scoping review and systematic review-meta-analysis. Additional insights were solicited through administration of an international expert survey.
Results: The evidence from 110 studies on the zoonotic potential of M. paratuberculosis and 235 studies examining human exposure to M. paratuberculosis will be presented, along with the results from 171 completed expert surveys (54% response rate). The stakeholders were instrumental in defining the many sources of human exposure to M. paratuberculosis; ruminants, environment, water and food whose relative contributions will be presented.
Conclusions: After 30 years there are still important knowledge gaps including uncertainty about M. paratuberculosis' role

in Crohn's disease and poor sensitivity of diagnostic tests. In agreement with the experts, evidence and knowledge gaps, M. paratuberculosis remain a low priority public health issue globally. This project provides transparent, contextualized evidence informed inputs for our stakeholders and public health decision makers.

Oral Session 5: Integrated Knowledge Translation

(Moderator: Heather Colquhoun)

When Change is Evident: A Review of Canadian OB/GYN Guidelines

Skidmore, Becky; **Dupuis Leon, Renée**; Chari, Radha; Wilson, Doug; Blake, Jennifer
Society of Obstetricians and Gynaecologists of Canada

11 a.m.-12:30 p.m., Wellington Salon, Friday, 25 April 2014

Background: The Society of Obstetricians and Gynaecologists of Canada (SOGC) produces approximately 15 clinical practice guidelines (CPGs) per year. SOGC has recently established a Quality Management and Oversight Committee (QMOC) to review CPG policies, standards and development processes, including selecting a new system (e.g., GRADE) for grading quality of evidence and strength of recommendations to replace the one currently used.
Objectives: To improve quality by analyzing and appraising existing SOGC guidelines, thereby informing decisions regarding changes to CPG policies and procedures.
Methods: We will examine all guidelines published from 2009-2013 inclusive. The following information will be extracted: publication date; CPG type; sub-specialty addressed; word count; number of recommendations; level of evidence; strength of recommendations; number of experts/groups/endorsers; databases/sources searched; citation count; Cochrane Reviews cited; conflicts/grants or sponsorship; and, where possible, time to publication. Using two reviewers per guideline, we will appraise all or some of these guidelines using the Appraisal of Guidelines for Research and Evaluation (AGREE II) instrument.
Results: We have pilot tested our data abstraction sheet on 10 CPGs. Appraisal work is ongoing.
Conclusions: Analysis/appraisal of current SOGC guidelines will highlight strengths, gaps and deficiencies in current policies and procedures, and inform future quality improvement efforts.

Canadian knowledge users' views about and experiences with 27 evidence briefs and policy dialogues

Wilson, Michael; Moat, Kaelan; Lavis, John
Department of Clinical Epidemiology & Biostatistics, McMaster University

11 a.m.-12:30 p.m., Wellington Salon, Friday, 25 April 2014

Background: Policy dialogues provide stakeholders with the opportunity to bring their tacit knowledge and their own views and experiences to bear on a pressing health system problem, three options to address it and implementation considerations. Each dialogue is informed by an evidence brief that mobilizes the best available research evidence about each of these components.
Objectives: To survey dialogue participants about their views about and experiences with evidence briefs policy dialogues.
Methods: Participants from each of the 27 dialogues convened by the McMaster Health Forum were surveyed about a brief before participating in a dialogue and about the dialogue immediately afterwards and 8-10 months later.
Results: 395 respondents completed the evidence briefs survey, 388 respondents completed the policy dialogues survey, and 156 completed the follow-up survey. Respondents held very favourable views about the briefs and dialogues. Respondents reported strong intentions to act on what they learned and continued to hold very positive views about the dialogue 8-10 months afterwards and 145 of 156 gave specific examples of how they had acted.
Conclusions: Greater effort needs to be directed to examining how issues and context influence assessments, how participants are selected, and how follow-up action can be supported.

Engaging knowledge users in a knowledge translation event using social media

Leese, Jenny; Kerr, Sheila; McKinnon, Annette; Carruthers, Erin; Backman, Catherine; Prestley, Nicole; Rai, Sharan; Townsend, Anne
Arthritis Research Centre of Canada

11 a.m.-12:30 p.m., Wellington Salon, Friday, 25 April 2014

Background: Using social media in knowledge translation (KT) supports public involvement in research, accelerates uptake of

findings, and enables collaboration among patients, researchers and healthcare professionals (HCPs).
Objective: To evaluate how social media affects the reach of a KT event.
Methods: A collaborative, interdisciplinary and multi-perspective KT forum brought together patients, researchers and healthcare professionals to discuss emerging ethical issues in e-health. Social media was an essential tool before, during and after the event. Speakers addressed an on-site audience with simultaneous webcast and twitter feed which enabled additional interaction using online platforms. Social media analytics were used to gauge interactions and measure the geographical distance and level of engagement of the event's reach.
Results: Participants from across Canada and internationally engaged in online conversations about research findings and ethical implications of e-health in practice for patients and HCPs. Challenges and benefits were identified, lessons learned and solutions proposed to problems encountered in hosting a simultaneous face-to-face and social media KT event.
Conclusions: Social media makes it possible to tap into a global community, extending the reach of research, provoking discussion, and engaging diverse stakeholders in sharing their experiences and insights. This changes the way we perceive and conduct KT.

Guidelines for Practice Guidelines in Child and Youth Mental Health: Do They Meet Current Standards?

Bennett, Kathryn; Gorman, Daniel; Brouwers, Melissa; Gagliardi, Anna; Cheung, Amy; Szatmari, Peter; Duda, Stephanie
McMaster University

11 a.m.-12:30 p.m., Wellington Salon, Friday, 25 April 2014

Background: Clinical Practice Guidelines (CPG) aim to increase the use of effective health services and eliminate the use of ineffective or harmful ones. However, despite the proliferation of CPG, their use in child and youth mental health (CYMH) is not the norm. Concerns about variable CPG quality and implementability require investigation.
Objectives:
(i) What guidelines do guideline developers use in CYMH?;
(ii) Do the guidelines for guidelines used align with Appraisal of Guidelines, Research, and Evaluation (AGREE-II) and Guideline Implementability Framework (GIF) criteria?
Methods: CPG published in four leading CYMH peer-reviewed journals (2008-2013) were identified. The guidelines used to produce each one were quality appraised using the AGREE-II tool and GIF.
Results: The main gap found centres on the synthesis methods recommended for assembling and quality appraising relevant scientific literature. In addition, the national associations represented by the journals reviewed were limited in leadership and resources to support the production and implementation of CPG.
Conclusions: A strategy to strengthen CPG in CYMH is recommended that: i) includes the adoption of a common methodologic framework aligned with current CPG standards; and ii) is supported by all relevant national associations and individuals committed to producing and implementing high-quality CPG in CYMH.

Oral Session 6: Integrated Knowledge Translation

(Moderator: Jennifer O'Neill)

Café Scientifique – Knowledge translation through public dissertation

Tarbett, Lori
Canadian Cochrane Centre

11 a.m.-12:30 p.m., Victoria Ballroom North, Friday, 25 April 2014

Background: The Café Scientifique program is a Canadian Institutes of Health Research initiative. Cafés bring researchers and the public together to spark discussion about interesting Canadian research.
Objectives: The Canadian Cochrane Centre applied to the program to hold a Café titled, "Health information in the age of the internet. Why Google your health questions when you can Cochrane them?" The goal was to inform the public about a valuable online resource providing reliable health treatment evidence: *The Cochrane Library*. Given one in three adults search health information online, it is crucial to provide them with reputable websites with the best evidence to aid in decision-making.
Results: The application was successful, ranking sixth out of 82 approved applications. The Café was a success with 73 attendees and 100 per cent positive feedback. It was held just after working hours in a pub which provided an ideal time and atmosphere. Many participants inquired as to when we would hold our next Café.
Conclusions: The Café provided an atmosphere where participants were comfortable engaging with scientists/researchers/physicians with whom they often do not have the opportunity to speak. Cafés are a great venue to engage the public in learning about health evidence.

Expanded Consumer Roles on a Cochrane Review Team to Enhance Knowledge Translation Activities and Evidence Uptake

Brachaniec, Mary; Gunderson, Janet; Rader, Tamara; Bidonde, Julia; Busch, Angela; Dal Bello-Haas, Vanina; Pardo Pardo, Jordi; Ward, Nicole
Cochrane Musculoskeletal Review Group

11 a.m.-12:30 p.m., Victoria Ballroom North, Friday, 25 April 2014

Background: Ensuring stakeholder involvement is essential to facilitate knowledge translation and evidence uptake. Consumers representing a key stakeholder group have collaborated in producing Cochrane Systematic Reviews on physical activity for fibromyalgia, and are working with review team members to refine a dissemination strategy.
Objective: To summarize outcomes of a recent workshop led by consumer review team members on consumer-friendly ways to disseminate Cochrane Reviews.
Methods: A modified Delphi approach was used to gather feedback on optimal ways to share review results with people with fibromyalgia.
Results: Two groups of eight participants generated and ranked several knowledge tools and communication vehicles to share systematic review results with people with fibromyalgia. Recommendations included print materials (plain language summaries, booklets, snail mail, press releases), mass media (hosted television and radio shows), and computerized media (websites, social media, blogs, webinars, and podcasts). Communication vehicles included: fibromyalgia, arthritis or pain support networks; community forums; and local libraries. Knowledge uptake barriers for consumers, such as concerns about the trustworthiness of information, and facilitators, including narratives and real patient experiences, must be considered.
Conclusion: Consumer participation on a systematic review team and knowledge translation activities can help identify tools and barriers for evidence uptake, and novel dissemination approaches for lay audiences.

Consumer support and education beyond national borders: phase 3

Walsh, Marilyn; Vanderheyden, Alfretta; Rader, Tamara; Pardo Pardo, Jordi
Cochrane Musculoskeletal Review Group/Upper Gastrointestinal and Pancreatic Diseases Review Group

11 a.m.-12:30 p.m., Victoria Ballroom North, Friday, 25 April 2014

Background: When diagnosed, consumers sometimes turn to patient organizations for support; however, the quality of treatment-related information is variable. Phase 3 of this project illustrates how consumers with The Cochrane Collaboration have enabled the dissemination of Cochrane Summaries for gastroenterology-related conditions to consumers and compares results with phase 1 and 2 which involved dissemination of *The Cochrane Library* within English speaking arthritis-related patient organizations.
Objective: To disseminate Cochrane Summaries to English speaking gastroenterology-related patient organizations worldwide.
Method: An internet search was performed to locate English speaking gastroenterology-related not-for-profit national and international organizations representing conditions within the remit of the four gastroenterology-related Cochrane groups. These organizations were provided with an article regarding The Cochrane Collaboration and Cochrane Summaries and asked to promote both via newsletter/Facebook/Twitter.
Results: In total, 64 organizations were located and contacted. Twenty-five confirmed receipt of article. Of those, six (five national within US, UK, Australia and Canada and one international) agreed to promote Cochrane Summaries in some way.
Conclusions: Consumers can effectively disseminate Cochrane Reviews by promoting *The Cochrane Library* and Cochrane Summaries through patient organizations. This presentation will illustrate differences between groups, limitations of this system and how it might translate to promotion through other Cochrane groups.

Oral Session 7: Moving Methodology Forward

(Moderator: Alain Mayhew)

Should Cochranites Adopt a Specific Hierarchy of Outcomes?

Lawrence, Kendra; Mintzes, Barbara; Jauca, Ciprian; Tejani, Aaron; Kwok, Chanel; Musini, Vijaya
Therapeutics Initiative

1:30-3 p.m., Wellington Salon, Friday, 25 April 2014

Background: Cochrane authors may not be choosing the most appropriate outcomes for their reviews. The root cause may be undue reliance on outcome selection and reporting in randomized controlled trials (RCTs).
Objectives and Methods: Development of a specific Hierarchy of Outcomes for Cochrane Reviews may assist authors in assessing treatment effects. Drawing on evidence in Therapeutics Letters that use Cochrane methods to assess treatment outcomes, we point to flaws in outcome reporting in RCTs. A number of "worst case scenarios" are explored in order to learn from previous, harmful mistakes.
Results: In a small 2013 survey (n=34), 71% of participants indicated that Cochrane authors' selection of primary outcomes did not reflect the most important outcomes for patient health. Preliminary findings suggest that a focus on key patient outcomes within a specific hierarchy could allow for superior assessment of net treatment benefit and harm. This exploratory study presents draft outcome hierarchies for a range of treatments assessed in Cochrane Reviews.
Conclusions: A specific Hierarchy of Outcomes could increase the value and impact of Cochrane Reviews. Whereas a dichotomized approach separates expected beneficial outcomes from unexpected harmful effects, focus on net benefit within a treatment-specific hierarchy could greatly benefit systematic review methodology.

Quality of clinical heterogeneity investigations in systematic reviews: An assessment of Cochrane and non-Cochrane reviews.

Gagnier, Joel; Chess, Lara
University of Michigan

1:30-3 p.m., Wellington Salon, Friday, 25 April 2014

Background: Systematic reviews frequently have heterogeneity between included studies, a source of which are clinical variables. Recently a set of consensus-based recommendations for investigating clinical heterogeneity were developed.
Objective: To apply recommendations for investigating clinical heterogeneity to a sample of systematic reviews to highlight the methods being used for such investigations and to make recommendations on how such investigations can be improved.
Methods: We collected the 100 most recent Cochrane Reviews and 100 non-Cochrane reviews published within 24 months prior to February 2012. We assessed each review on the recommendations for investigating clinical heterogeneity items. We calculated means and applied regression analyses to data.
Results: A total of 317 systematic reviews were reviewed of which 199 were included. A total of 81% of Cochrane and 90% of non-Cochrane reviews chose to explore clinical characteristics and described their planned methods. Cochrane Reviews were more likely to: contact authors, acknowledge reporting issues, and explore the planned clinical variables. Non-Cochrane reviews were more likely to: include a meta-analysis, describe the review team, include more studies, use aggregate data, describe plans to investigate clinical heterogeneity, assess statistical heterogeneity, and show caution in making inferences.
Conclusions: Systematic reviews must improve their methods and reporting of these investigations. This will improve the applicability of systematic reviews for clinical decision-making.

Author bias can underestimate objective outcome measures in meta-analysis: An exploratory analysis

Abou-Setta, Ahmed; Lix, Lisa; Zarychanski, Ryan
Centre for Healthcare Innovation

1:30-3 p.m., Wellington Salon, Friday, 25 April 2014

Background: Biased trial data in a meta-analysis of randomized trials can be difficult to identify, especially for objective outcomes such as mortality.
Objectives: To determine if meta-regression can be used to detect systematic errors by authors.
Methods: With trial-level data used in a meta-analysis demonstrating an association between use of hydroxyethyl starch and mortality, we linked individual authors to their trial data. Using a mixed-effects stepwise meta-regression model with mortality as the dependent variable and trial author as a model covariate, we calculated the ratio of odds ratios (ROR) for each author. We used the I2 statistic to quantify the percent variation due to between-author differences.
Results: Number of deaths with hydroxyethyl starch and comparators were extracted from 35 trials, with 235 unique authors. Nine investigators authored more than one trial report. We found mortality to be underestimated by the authors of one research team (ROR 0.68, 95% confidence intervals: 0.46 to 1.00; I2: 59%; 7 trials; p= 0.049). For other authors/author teams, ROR variations did not achieve statistical significance.
Conclusions: Author bias can be detected using a meta-regression model. Further studies are needed to examine the sensitivity of this model and its optimal use for detecting author bias.

POSTER Abstracts

Please note: The names of poster presenters appear in bold
Candidates eligible for the Graduate Student Poster Award have been identified with an asterisk (*)

There will be an exclusive poster session from 3:30-4:15 p.m. in the Victoria Ballroom South on Thursday, 24 April 2014. Poster presenters will also be at their posters during breaks to discuss their work on Thursday, 24 April and Friday, 25 April 2014.

Theme 1: Global Health and Global Health Systems

Accredited CPD activities do not target clinical behavior change

Légaré, France; Freitas, Adriana; Thompson-Leduc, Philippe; Borduas, Francine; Luconi, Francesca; Boucher, Andrée; Witteman, Holly; Jacques, André
Centre Hospitalier Universitaire de Québec and Université Laval

Background: Continuing professional development (CPD) is the method most commonly used by physicians to improve their knowledge and skills. However, despite regular physician attendance at these activities, change in clinical behavior is rarely observed.
Objectives: We sought to identify which of Bloom's domains are targeted by the learning objectives of CPD activities offered by medical associations, regulatory bodies, and academic institutions in the province of Québec, Canada.
Methods: We evaluated the objectives of 110 accredited CPD activities offered to physicians and other health professionals from November 2012 to March 2013. We extracted the objectives of each activity and classified them into learning domains using Bloom's taxonomy (cognitive, affective or psychomotor).
Results: Ninety-six percent of the learning objectives analyzed targeted the cognitive domain, which consists of six levels of increasing complexity: knowledge, comprehension, application, analysis, synthesis and evaluation. Half (47%) targeted knowledge and comprehension, while only 26% aimed to improve skills in analysis, synthesis and evaluation.
Conclusions: We concluded that accredited CPD activities within this sample were generally not designed to promote clinical behavior change because the focus of these activities is on remembering and understanding information instead of preparing physicians to put knowledge into practice by analyzing information, evaluating new evidence, and planning operations that lead to behavior change.

Theme 2: Integrated Knowledge Translation

A collaborative approach to infrastructure development for a patient-led, evidence-based arthritis blog

Carruthers, Erin; Rai, Sharan; Prestley, Nicole; Leese, Jenny; Prestley, Nadia; Townsend, Anne
Arthritis Research Centre of Canada

Background: Web 2.0 tools, such as social networking sites and blogs, allow patients to become actively engaged in their own health care by providing a platform in which to share experiences, offer support and learn about their conditions. As such, these tools offer researchers a unique venue through which to disseminate health research findings directly to the patient community. To facilitate knowledge translation, we have developed a patient-led, evidence-based arthritis blog supported by a national research organization.
Objectives: 1) To build a blogging platform that will promote patient engagement and interaction; 2) To facilitate the dissemination of research results directly to the arthritis community; 3) To foster nation-wide connections among patients.
Methods: The Arthritis Research Centre of Canada (ARC) supports the Patient Advisory Board (PAB), a group of volunteers who collaborate with researchers to ensure the patient voice is represented in research. PAB assembled a panel of writers, designated an administrative team, and sourced web development to build this blog.
Results: PAB has successfully developed an interactive blogging platform, led by patients and linked to a national research organization, which will allow people living with arthritis and their families to engage with research.
Conclusions: This initiative represents an innovative blog that will facilitate knowledge translation and promote collaboration within the arthritis community.

A pilot evaluation of getting a grip on arthritis online, an evidence-based continuing health education program

Lyddiatt, Anne; Fleet, Lisa; Brooks, Sydney; Bell, Mary; Badley, Elizabeth; Curran, Vernon; Kirby, Fran; Moore, Lynn; Tugwell, Peter; Sweezie, Raquel; Ziesmann, Ed
Patient Partners in Arthritis

Background: Primary care providers (physiotherapists, occupational therapists, nurses, family physicians) are often challenged with delivering optimal arthritis care and accessing relevant up-to-date information.
Objectives: To evaluate a pilot of an online continuing health education program developed to address gaps in arthritis care.
Methods: Published arthritis clinical practice guidelines served as the basis for the content for two online modules (rheumatoid arthritis and osteoarthritis). The need for this content was validated by a primary care provider (knowledge user) needs assessment. Content was then further developed by nine subject matter experts, including five knowledge users. Pilot locations: two rural areas with high arthritis prevalence and limited arthritis management resources.
Results: Each online module was pilot tested with at least 30 knowledge users. Participants (>85%) agreed that the modules addressed learning needs and were relevant to practice. Satisfaction and confidence with ability to manage arthritis improved significantly post-pilot ($P<0.05$). Participant feedback highlighted the need for additional content relevant to professions other than physicians to better capture the importance of inter-professional care.
Conclusions: This online education program improved participants' satisfaction and confidence in their ability to manage arthritis in rural communities. Changes to the content based on feedback will be incorporated prior to its national launch in 2014.

Development of a simple 12-item theory-based instrument to assess the impact of continuing professional development on clinical behaviors

Légaré, France; Borduas, Francine; Freitas, Adriana; Jacques, André; Godin, Gaston; Luconi, Francesca; Grimshaw, Jeremy
Centre Hospitalier Universitaire de Québec and Université Laval

Background: Decision-makers in continuing professional development (CPD) organizations have identified the need for routine assessment of its impact on practice.
Objective: We sought to develop a theory-based instrument for evaluating the impact of CPD activities on health professionals' clinical behaviors.
Methods: After a systematic review and analysis of existing instruments assessing healthcare professionals' intentions and behaviours, an inventory of instruments based on socio-cognitive theories was created. Items most relevant to the constructs of an integrated theoretical model were selected from this inventory to devise a new tool. An e-Delphi study with experts from different domains was conducted to check its face validity and likely acceptability in CPD settings. A test-retest validation was done among 138 physicians attending a CPD activity over a two-week period.
Results: Out of 72 potentially relevant instruments, 47 were analyzed. Of the 1218 items extracted from these, 16% were discarded as improperly phrased and 70% discarded as duplicates. Two iterations of the Delphi process produced consensus on a provisional 40-item questionnaire. Exploratory factorial analysis following test-retest resulted in a 12-item questionnaire. Cronbach's coefficients for the constructs varied from 0.77 to 0.85.
Conclusion: A 12-item theory-based instrument for assessing the impact of CPD activities on health professionals' clinical behaviors showed adequate validity and reliability.

If you plan it, will they come? Lessons learned about participant recruitment and retention for Cochrane webinars

Ueffing, Erin; McNair, Catherine; Cuervo, Luis Gabriel; **Pontone, Adele**
Canadian Cochrane Centre

Background: Cochrane Canada released The Cochrane Collaboration's first webinar series in 2009, covering numerous topics relevant to people with beginner or advanced knowledge of The Cochrane Collaboration, Cochrane Reviews and *The Cochrane Library*. Though participants gave positive evaluations and said webinars were their preferred choice for Cochrane training, attendance levels had not increased since 2009, and a proportion of registrants did not attend.
Objectives: To improve recruitment and retention for our webinars.
Methods: We expanded our audience beyond current Cochrane contributors. We increased our advertising campaigns: posting on Cochrane and external websites (including social media); sending advertisements to Canadian medical schools; sending to listservs; and targeted emails to stakeholders asking them to invite their constituents. To improve retention, we've made changes to our registration process. Participants can add events directly to Google or Outlook calendars, we send reminders to registrants, and we've emphasized time zone converters in our materials to prevent people from registering at unrealistic times.
Results: We significantly increased the numbers of registrants

and attendees, and have seen substantial uptake for webinars for which we set up Facebook events; data will be presented.
Conclusions: Advertising/marketing strategies improved recruitment and retention. These strategies can be - and have been - adopted by others organizing online Cochrane training.

Implementation of evidence-based clinical practice guidelines for walking programs in the management of osteoarthritis: participant exercise preference design*

Loew, Laurianne; De Angelis, Gino; Brosseau, Lucie; Wells, George A
University of Ottawa

Background: Osteoarthritis is the most common disabling disorder affecting knees. Even though evidence suggests that walking provides clinical benefits, older people diagnosed with mild to moderate osteoarthritis avoid physical activity.
Objectives: We implemented a knowledge translation strategy, in order to improve adherence and ensure the maintenance of clinical outcomes.
Methods: A total of 69 participants with a confirmed diagnosis of knee were recruited. This is a nine-month supervised walking program with a three-month follow-up period based on a participant exercise preference model.
Results: Adherence to walking exercise was assessed. Conceptual knowledge use (e.g. level of intention, motivators/reasons to continue walking) and instrumental knowledge use (e.g. adoption of new strategies to maintain walking goal) were measured. We evaluated clinical outcomes to examine the impact on participants and verify if favourable effects were demonstrated among participants who presented a preference, and who obtain their preferred choice of program compared to participants who did not obtain their choice.
Conclusion: This proposed randomized controlled trial will address a new knowledge gap by concentring on questions of clinical and scientific importance to improve the understanding related to strategies to adopt long-term adherence of community-based walking programs. It will assist knowledge promoters through their decision-making process by implementing an evidence-based walking program in existing health organizations.

Interprofessional collaborative practice: integrating evidence at inception in a clinic for fibromyalgia, lyme disease and myalgic encephalomyelitis patients

Prestley, Nicole; Rosalie, Dacri; Perrin, Sandy; Adler, Leonie; Bested, Alison
Arthritis Research Centre of Canada, Patient Advisory Board & Women's Health Research Institute (BC Women's Hospital & Health Centre)

Background: Over 100,000 British Columbians are affected by Lyme disease, Fibromyalgia and Myalgic Encephalomyelitis. BC Women's Hospital created the Complex Chronic Diseases Program (CCDP) using an integrative healthcare model to help patients from these disease groups. The CCDP created an opportunity to integrate an Interprofessional Collaborative Practice (ICP) model of care from the program's inception
Objectives: Our aims: 1) to define ICP within the CCDP, 2) to evaluate readiness for ICP integration within the CCDP and 3) to develop an ICP Action Plan.
Methods: CCDP staff was invited to participate in an "Advancing Interprofessional Collaborative Practice" workshop from Michael Smith Foundation funding.
Results: Participating in the workshop has allowed the CCDP to integrate ICP into their model of care. Recent program changes include: improved role clarification allowing for the reassignment of workload, the Point Person role creation to provide support for patient involvement in their health care and the development a Patient Flow "Bookmark" to optimize engagement with patients during their CCDP health experience.
Conclusion: ICP integration provides better patient care by encouraging effective patient participation and communication with their health care team. Support from administration is critical to the ongoing evaluation process and environment for incorporating evidence into clinical practice.

Manual therapy and exercise: a systematic review update and knowledge translation tool

Gross, Anita; Miller, Jordan; Graham, Nadine; Goldsmith, Charlie; Burnie, Stephen; Kay, Theresa; Bronfort, Gert; Hoving, Jan
McMaster University

Background: Manual therapy and exercise (MT/Ex) are commonly used to treat neck pain (NP). A knowledge translation (KT) tool for clinicians has been developed.
Objective: To determine if MT/Ex improves pain, function/disability, global perceived effect (GPE) and quality of life (QoL) for adults with NP and the acceptability, barriers and facilitators of a clinical tool-kit for physiotherapists.
Methods: Computerized searches were updated up to June 2013. Two reviewers independently conducted data abstraction and assessed quality using GRADE. Pooled standardized mean differences (pSMD) were calculated. A survey of 10 physiotherapists was run to determine the acceptability, barriers, and facilitators of a KT clinical tool-kit.
Results: 33% (8/24) of trials had low risk of bias. High quality evidence suggests MT/Ex provides greater short-term pain relief than exercise alone [pSMD-0.30(-0.50,-0.10)], but no difference in long-term pain, function, GPE, or QoL for non-specific NP. Moderate quality evidence indicates MT/Ex improves short-term pain [pSMD-0.97(-1.32,-0.63)], but not function for acute whiplash. MT/Ex improved long-term pain and function for subacute/chronic NP when contrasted against MT alone. Physiotherapists found the tool-kit acceptable albeit barriers and facilitators were identified.
Conclusion: A KT tool appears acceptable for disseminating MT/Ex systematic review data.

Nonsteroidal anti-inflammatory drugs use in colorectal surgery: a case of HTA knowledge transfer in risk management

Blouin, Mélissa; St-Germain, Pascal; Coulombe, Martin; **Rhainds, Marc**
Centre hospitalier universitaire de Québec

Background: Nonsteroidal anti-inflammatory drugs (NSAIDs) are recommended as a component of the enhanced recovery after surgery (ERAS) protocols to reduce opioid requirement in colorectal surgery. Concerns about the risk of anastomotic leaks with NSAIDsadministration were raised to the HTA unit by an interdisciplinary group (IG) of colorectal surgery experts at the CHU de Québec.
Objectives: To support an evidence-based clinical pathway approach about NSAIDs use in colorectal surgery.
Methods: A systematic review was conducted in multiple databases and the grey literature. Studies evaluating the incidence of anastomotic leak with NSAIDs use were included. Selection, quality assessment and data extraction were performed by two independent reviewers. Synthesis review was shared with the IG.
Results: One systematic review and four observational studies were included. Although not statistically significant, use of NSAIDs in bowel surgery could increase the risk of developing anastomotic leak according to the available trials. Following an appraisal process with the IG, it was recommended not to include NSAIDs in the ERAS protocols for colorectal surgery and to limit their use on an individual basis after careful risk appraisal.
Conclusions: Despite initial divergences among IG's experts, HTA approach was helpful to standardize clinical practice based on best available evidences.

Rituximab for rheumatoid arthritis: a systematic review to inform knowledge users

McGahan, Lynda; Lopez-Olivo, Maria Angeles; Amezaga, Matxalen; Pollono, Eduardo N; Suarez-Almazor, Maria E
L. McGahan Consulting

Background: While rituximab (RTX) is used in combination with methotrexate (MTX) to treat refractory rheumatoid arthritis (RA), reimbursement is criteria-based. Evidence was systematically reviewed to inform clinicians, consumers and policy makers regarding safety and efficacy.
Objectives: To assess whether RTX alone or with disease modifying anti-rheumatic drugs (DMARDs) is a safe, effective RA treatment.
Methods: Searching electronic databases and references from reviews identified published literature. Two reviewers independently selected studies and assessed quality. Safety and efficacy data were extracted and dichotomous data were pooled as relative risk (RR).
Results: Of 2,100 citations, 10 studies met inclusion criteria. Five of seven studies did not report the randomization method or allocation concealment. American College of Rheumatology (ACR) rates and Disease Activity Scores (DAS) improved in RTX users compared to controls, with no difference in severe adverse events (SAEs). At 24 weeks, 29% (RR: 3.3, 95% CI: 2.3, 4.6) of RTX+MTX users achieved ACR50 and 70% (RR: 1.2, 95% CI: 1.0, 1.4) showed no disease progression compared to 9% and 59% of MTX users, respectively.
Conclusions: RTX alone or with MTX improves RA symptoms and prevents disease progression compared to MTX monotherapy; however, the evidence holds potential for bias and may overestimate effect.

Should antiinfective coated central venous catheter be more widespread to reduce nosocomial infections?

Bussières, Martin; Blouin, Mélissa; Gonzalez Montpetit, Stéphanie; **Rhainds, Marc**
CHU de Québec

Background: Central venous catheters (CVC) are used on a large scale basis in hospital settings. CVC are associated with catheter related bloodstream infection (CRBSI). Lower rates of CRBSI have been reported with antiinfective coated CVC.
Objectives: To assess efficacy and safety of antiinfective CVC (chlorhexidine or minocycline-rifampin) use to prevent CRBSI.
Methods: This project was carried out with an interdisciplinary group of experts (nurses, physicians, managers) and our hospital-based HTA unit. A systematic literature search was performed in multiple databases and grey literature. Specific local context of CVC use and synthesis review were shared with the group to enhance the appraisal and knowledge transfer.
Results: Nine systematic reviews and 11 case series were included. Antiinfective coated CVCs seemed more effective than standard CVCs to prevent CRBSI. However, available studies are insufficient to determine which patients and settings would benefit most from this device. Sixteen cases of anaphylactic shock following insertion of a chlorhexidine-coated CVC have been reported.
Conclusions: Access to antiinfective-coated CVCs should be limited for specific medical conditions until new data are available. Although chlorhexidine-coated CVC appeared to be safe, the risk of anaphylactic shock must be taken into account before considering their introduction on a larger scale.

The efficacy and safety of different kinds of laparoscopic cholecystectomy: a network meta-analysis of 43 randomized controlled trials

Li, Lun; Tian, Jinhui; Tian, Hongliang
Ottawa Hospital Research Institute

Background and objective: We conducted a network meta-analysis (NMA) to compare different kinds of laparoscopic cholecystectomy [LC] (single port [SPLC], two ports [2PLC], three ports [3PLC], and four ports laparoscopic cholecystectomy [4PLC], and four ports mini-laparoscopic cholecystectomy [mini-4PLC]).
Methods: PubMed, the Cochrane library, EMBASE, and ISI Web of Knowledge were searched. Direct pair-wise meta-analysis (DMA), indirect comparison meta-analysis (ITC) and NMA were conducted to compare different kinds of LC.
Results: We included 43 RCTs. The risk of bias of included studies was high. DMA showed that SPLC was associated with more postoperative complications, longer operative time, and higher cosmetic score than 4PLC, longer operative time and higher cosmetic score than 3PLC, more postoperative complications than mini-4PLC. Mini-4PLC was associated with longer operative time than 4PLC. ITC showed that 3PLC was associated with shorter operative time than mini-4PLC, and lower postoperative pain level than 2PLC. 2PLC was associated with fewer postoperative complications and longer hospital stay than SPLC. NMA showed that SPLC was associated with more postoperative complications than mini-4PLC, and longer operative time than 4PLC.
Conclusion: The rank probability plot suggested 4PLC might be the worst and the best one might be mini-4PLC or SPLC. But more studies are needed to determine which will be better between mini-4PLC and SPLC.

The proactive patient: an interactive online tool for patients to access evidence-based information about arthritis and its comorbidities*

Rai, Sharan; Prestley, Nicole; Carruthers, Erin; Leese, Jenny; Prestley, Nadia; Townsend, Anne
Arthritis Research Centre of Canada

Background: Arthritis is the leading cause of disability in Canada and carries with it a substantial comorbidity burden. There are few resources available where patients can easily and interactively access relevant, up-to-date, and evidence-based information on arthritis and its comorbidities. The Proactive Patient is an online research dissemination tool aimed to fill this gap.
Objectives: 1) To develop an interactive platform for dissemination of arthritis research findings; 2) To involve patient research collaborators in platform development and dissemination processes; 3) To facilitate engagement in research by arthritis patients and other knowledge users.
Methods: Design and development of the tool is being provided through a collaboration between the Vancouver Institute of Media Arts and the Arthritis Research Centre of Canada's (ARC) Patient Advisory Board (PAB). PAB is a dedicated group of collaborators who bring the patient perspective to arthritis research and disseminate research to the arthritis community.
Results: The Proactive Patient is an animated character created by combining the well-recognized homunculus with a cartoon skeleton. Users can access plain-language, evidence-based information on arthritis and its comorbidities by clicking on the various body regions of this character.
Conclusion: The Proactive Patient is a patient-led, interactive, online research dissemination tool that will promote and facilitate access to reliable and plain-language research findings on arthritis and its comorbidities.

Translating knowledge from systematic reviews: evaluation of infographics and critical appraisals

Hartling, Lisa; Katelynn Crick; **Denise Thomson**
University of Alberta

Background: Systematic reviews provide a rigorous synthesis of available evidence on a clinical question. Knowledge users need this information in formats that allow for quick reference with key messages highlighted.
Objectives: To examine and compare two formats for summarizing the results of systematic reviews for knowledge users.
Methods: We developed an infographic and a critical appraisal to summarize the results of a Cochrane Systematic Review of drugs for treating acute migraine headaches in children. Knowledge users (n=58) attending a national meeting completed a questionnaire regarding their impressions of the two formats.
Results: On a scale of 1 to 10 (10 most preferable), the infographic was rated 7.0 for clarity, 7.0 for comprehensibility, and 7.3 for aesthetic appeal. The critical appraisal was rated 7.8 for clarity, 7.6 for comprehensibility, and 5.0 for aesthetic appeal. Respondents commented that the infographics were engaging, attractive, easy to read, and captured a lot of information; however, some found them too busy and difficult to interpret and determine the take home message. Respondents found the critical appraisals to be clear, directive, professional, and concise; however, they also found them more technical and less visually appealing.
Conclusions: This information can guide the development of user-friendly summaries of Cochrane Systematic Reviews.

Working together: an exploration of professional relationships in medicine

George, Mary; Ruddiman, Alan; Viccars, Deborah
British Columbia Medical Association

Background: The BC Medical Association identified an opportunity to examine professional relationships in medicine. Rapid changes have influenced health care and the professional relationships.
Objectives: Delivery of quality care and patient experience relies on a complex network of relationships. A physician group was identified to develop policy on professionalism. Improving professional relationships requires support and participation by all stakeholders. A behavioural and systems view framework was used to identify relationships. Data was collected through a stakeholder forum and a survey of physicians. Results were used to develop a policy paper. All stakeholders were invited to participate in the review of the paper prior to publication.
Results: Respondents agreed that professionalism is expressed and experienced through working relationships. It was agreed that individual behaviours and the health care system shape each other, and that relationships among individuals and the health care system are symbiotic. Physicians reported an evolving professional role and increased expectations. Relationships with fewer direct individual interactions were seen as the most troubled.
Conclusion: The findings of the study were used to develop BCMA policy. Implementation of included the development of a rigorous knowledge translation process. The dissemination plan included distribution of hard copies of the policy paper, speaking engagements, and presentations to BC collaborative committees. Ongoing evaluation of implementation is planned.

Working with knowledge users to improve evidence-based medicine prescribing and use: developing training for using a database of systematic reviews

Helis, Eftyhia; Colquhoun, Heather; Lowe, Dianne; Taylor, Michael; Hill, Sophie; Belanger, Denis; Worswick, Julia; Mayhew, Alain; Grimshaw, Jeremy
Ottawa Hospital Research Institute, Centre for Practice Changing Research

Background: Rx for Change is a publicly available, Cochrane-supported, online database that provides quick access to systematic reviews regarding best practices for prescribing and using medicines. Providing database training developed with knowledge user (KU) input may facilitate the uptake of evidence among health care providers, policy makers and consumers.
Objectives: To describe the development and implementation of a KU-informed, Rx for Change training program for four medicine-focused organizations in Canada and Australia.
Methods: Interviews with key informants were conducted in each organization. A directed content analysis of interview transcripts was performed and emerging themes were used to develop generic and tailored training content. Further feedback was elicited from KUs and the training was implemented.
Results: The KU-informed training module included (i) an invitation/foundational information video introducing the training (viewed on participants' own time); ii) a 60-minute face-to-face workshop (didactic, hands-on and interactive components); iii) two post-training reminders. The participants' evaluations of the training and changes in database use before and after the training will be discussed.
Conclusions: Active involvement of KUs in shaping the training content and format required significant time and resources. Evaluation of the training package will determine the value of KU involvement and subsequent uptake of the database evidence.

Theme 3: Moving Methodology Forward

A priori assessment of study methodological quality: a judicious method to increase the appropriateness of systematic review conclusions

L'Espérance, Sylvain; Blouin, Mélissa; Coulombe, Martin; **Rhainds, Marc**
HTA unit, Centre hospitalier universitaire de Québec - Hôpital St-François-d'Assise

Background: Methodological quality of studies included in systematic reviews (SRs) is generally inconsistent. However, there is increasing evidence that trial quality can affect estimates of intervention efficacy.
Objective: To investigate the impact of an a priori method for trial quality assessment, add to eligibility assessment step, on the effect estimate measurement and findings regarding the implications for the clinical practice.
Methods: A SR was conducted in multiple databases and grey literature to identify studies on probiotics and the prevention of necrotizing enterocolitis (NEC). Selection, quality assessment and data extraction of studies were performed by two independent reviewers. Assessment of the risk of bias (RoB) was used as an inclusion criterion.
Results: Nine relevant randomized controlled trials (RCTs) among 25 from seven (SRs) were considered as high quality based on RoB evaluation. Selected trials had a larger sample size and less clinical heterogeneity. Limiting the analysis to high quality studies did not negatively modify statistical heterogeneity, resulted in better risk ratio estimation, and contributed to a better appraisal of clinical significance regarding the probiotics use.
Conclusions: A priori evaluation of trial quality may be useful to reduce development of biased conclusions and may increase the quality of the SR.

A systematic review of published methods for designing KT interventions

Colquhoun, Heather; Squires, Janet; Kolehmainen, Niina; Fraser, Cynthia; Grimshaw, Jeremy
Ottawa Hospital Research Institute

Background: Systematic reviews consistently indicate that interventions to change healthcare professional (HCP) behaviour are haphazardly designed and poorly specified, limiting their replicability. Clarity about methods for designing and specifying interventions is needed.
Objectives: 1) to identify published methods for designing and specifying interventions to change HCP behaviour and 2) determine the gaps in the literature about such methods.
Methods: A search of Embase, PsycINFO, and Medline was conducted from 1996 to April 2013. Using inclusion/exclusion criteria, a broad screen of abstracts by one rater was followed by a strict screen of full papers by three raters. A pre-specified form was used to extract data about each method, including: the patient/HPC/setting of use, intervention design stage(s) covered (e.g. problem/target identification, technique selection), approaches to the use of theory and tailoring, and engagement of the knowledge users the intervention targets.
Results: 2,907 records were screened to yield 11 papers included in the review. Six of the methods were developed within a specific context, the rest were generic. Nine targeted change at the individual HPC-level and included problem/target identification and knowledge-user engagement. Only two included tailoring.
Conclusions: The review highlighted scarcity of methods specifically for tailoring, and targeting organization and system level change.

Application of the excess significance bias test in randomized controlled trials of mindfulness-based mental health interventions: a cross-sectional study*

Coronado-Montoya, Stephanie; Levis, Alexander; Kwakkenbos, Linda; Steele, Russell J; Turner, Erick H; Thombs, Brett D
Lady Davis Institute for Medical Research, Jewish General Hospital

Background: Reporting biases in non-pharmaceutical interventions, such as mindfulness-based therapies (MBTs), are difficult to detect due to small primary study samples and small numbers of studies in published reviews.
Objectives: To test for excess significance in published randomized controlled trials (RCTs) of MBT and evaluate MBT trial registrations to assess possible influences of publication bias and selective outcome reporting on excess significance.
Methods: CINAHL, Cochrane CENTRAL, EMBASE, ISI, PsycInfo, MEDLINE, and SCOPUS databases were searched through 4 July 2013 for published RCTs comparing MBT to inactive controls on mental health outcomes; ClinicalTrials.gov, the Standard Randomized Controlled Trial Number Register, and the World Health Organization International Clinical Trials Registry Platform were searched through 31 December 2010

for MBT trial registrations with publication within 30 months assessed. Ioannidis' excess significance test was applied.
Results: 108 of 124 published RCTs were positive, which was significantly greater ($p<0.05$) than expected based on estimated effect sizes d=0.25 (expected number of positive trials=21.8;) and d=0.50 (expected=58.6). Only 21 MBT trials were registered, of which only 12 were published. No MBT trial registrations were adequately registered with clearly defined primary outcomes.
Conclusions: Reporting biases appear to be common in MBT trials and reduce confidence in effect estimates.

Defining and addressing complicating factors in systematic reviews and meta-analyses of biomarker levels during pregnancy or following acute medical conditions

Cohen, Jacqueline; Rabinovich, Anat; Beddaoui, Margaret; Kahn, Susan
McGill University

Background: Biomarker studies may provide important information about the etiology of incompletely understood medical conditions and risk of future outcomes. Systematic reviews seeking to combine available evidence face a number of unique challenges.
Objectives: Describe complicating factors in systematic reviews and meta-analyses of biomarker levels during pregnancy or following acute medical conditions, and strategies for addressing them.
Methods: Carried out a series of reviews of the associations between biomarker levels and risk of post-thrombotic syndrome and antioxidant levels in pregnancy and risk of preeclampsia and small for gestational age birth.
Results: We have noted complicating factors broadly categorized as (1) variation in methodology and reporting in reviewed studies, e.g. timing of measurement, statistical methods for analyzing biomarker data, presentation of summary data, and (2) adequately summarizing research findings, i.e. meta-analysis of heterogeneous data, assessing risk of confounding, summarization in the absence of statistical pooling.
Conclusions: Careful consideration of challenges presented in biomarker studies will result in improved protocol development. Accountability to a protocol more fully addressing anticipated challenges will ultimately lead to less biased systematic reviews and meta-analyses. When changes to approach are needed to develop meaningful ways to summarize the body of evidence, reporting protocol revisions will improve transparency.

Establishing evidence-based definitions for the purposes of policy decision-making: Developing a novel approach using systematic review methodology

Horsley, Tanya; DeRossia, Stefanie; Smith, Rebekah; Taber, Sarah; Frank, Jason
Royal College of Physicians and Surgeons of Canada

Background: Systematic review methods ensure a transparent process for the identification of a comprehensive set of studies using established methods that aim to reduce bias. Historically, systematic reviews have been used to estimate effectiveness of an intervention; however, recent advancements have seen SR methods adapted to a broad range of research questions.
Objectives: To describe the application of a novel mixed-method approach for establishing evidence-based definitions for two medical education terms.
Methods: Searches identified English-language publications of any type or design. Duplicate assessment was used to identify relevant records. Definitions were analyzed using a method of theoretical saturation which sought to sample published definitions as defined by Strauss & Corbin (1998). Saturation was defined as '. . . reaching the point in the research where collecting additional data seemed counterproductive'.
Results: Reviews to define 'competency-based education' and 'generalism' have been conducted. Methods have evolved iteratively, in part, to address feasibility concerns given that few search 'limits' can be applied when searching for a 'term'. Following theme saturation text was analyzed to establish formal definitions for consideration to advance the field of medical education.
Conclusion: This work introduces a novel method for consideration by those seeking to define ambiguous terms. Exploring limitations of our approach will be examined going forward.

Evaluating risk of bias in non-randomized studies: case study of drospirenone-containing oral contraceptives and venous thromboembolic risks

Mintzes, Barbara; Fisher, Anat
School of Population and Public Health, UBC

Background: Venous thromboembolism (VTE) is the most frequent serious adverse event with oral contraceptive (OC) use. Some studies have found higher risks with drospirenone (DRSP)-containing OCs; others have found no difference.

Objectives: To examine and compare risk of bias tools in studies of VTE risk of DRSP-containing OCs.
Methods: We carried out a systematic review of VTE in DRSP vs. other OCs. Included designs were RCTs (N≥1000), cohort and case-control studies. We developed a standardized 'risk of bias' tool for cohort and case-control studies, based on an AHRQ review. Eight criteria were assessed for high, low, or unclear risk of bias, and compared with the Newcastle-Ottawa Scale (NOS), and the EPHPP tool.
Results: Five cohort and four case-control studies met inclusion criteria. Design elements affecting risk estimates were representativeness, outcome definition, age and duration modeling, blinding, and funding. Summary judgments were consistent for the three scales for seven studies; inconsistent for two, of intermediate quality. Risk differences were highest for high quality studies.
Conclusions: A standardized 'risk of bias' tool can be practically applied to non-randomized studies.

Examining publication bias in PTSD neuroimaging research*

Day, Joshua; Vassar, Matt; Carr, Branden; Holzmann, Matthew
Oklahoma State University Center for Health Sciences

Background: Publication bias is a methodological concern across many academic disciplines and a source of frustration among data synthesis researchers. While this issue has garnered attention recently within the neuroimaging literature, unanswered questions remain regarding the prevalence of publication bias in domain–specific areas of neuroimaging research.
Objectives: The objective of this work was to assess publication bias within the neuroimaging research of posttraumatic stress disorder (PTSD).
Methods: Relevant search engines were used to locate studies of functional neuroimaging in PTSD that met criteria (such as reporting appropriate information for effect size conversion). Eligible studies were analyzed for the presence of publication bias.
Results: Funnel plots were constructed to visually depict the extent of publication bias. Follow up Macaskill regressions were also conducted.
Conclusions: Publication bias should continue to be examined in neuroimaging research and greater effort should be made to report these findings.

How can systematic reviews of school-based youth suicide prevention be strengthened?: findings from a systematic review of reviews

Bennett, Kathryn
McMaster University

Background: We conducted a systematic review of reviews to provide recommendations to the CIHR Evidence on Tap program regarding what school-based interventions are effective in preventing suicidal behaviours in youth. Here we report on individual review quality and content gaps.
Objectives: i) To assess the methodologic quality of eligible reviews; ii) to assess the alignment of review content with knowledge-user needs; and iii) to provide recommendations for strengthening systematic reviews of school-based youth suicide prevention.
Methods: Inclusion criteria: i) systematic review or meta-analysis; ii) School-based suicide prevention; iii) peer-reviewed English literature. Quality was assessed using AMSTAR. Content was evaluated as follows: review question rigor, key outcomes presented in summary of findings (SOF) tables; recommendations for knowledge-users included. Screening, quality assessment and data extraction were conducted in duplicate.
Results: AMSTAR scores ranged from 2-6.5/11 among 10 eligible reviews. No review: i) posed a PICO formatted synthesis question; ii) summarized findings for key outcomes in SOF tables; iii) summarized findings for specific intervention types; and iv) provided recommendations for decision-makers.
Conclusions: Improvements in methods and content are needed to ensure systematic reviews of youth suicide prevention interventions are scientifically rigorous and provide guidance to decision-makers on how to strengthen policies and programs.

Identifying documents relevant to nebulous topics: The case of a "palliative approach"

Sawatzky, Richard; Dixon, Duncan; Stajduhar, Kelli; Lee, Joyce
Trinity Western University

Background: A palliative approach pertains to the integration of principles of palliative care in contexts of care for people with chronic life-limiting illnesses. Locating relevant sources is challenging because (a) the term itself is infrequently used and (b) there are many related terms, or combinations of terms, that implicitly refer to a palliative approach.

Objectives: We implemented a comprehensive literature search strategy and selection process to identify documents that represent the full scope of information regarding a palliative approach.
Methods: In collaboration with a large knowledge translation team, we identified search terms pertaining to "palliative care principles" and "chronic life-limiting conditions". A comprehensive database search yielded 190,204 documents. The diffuse nature of the terminology made further delineation of the search impossible. We subsequently designed and implemented a computer-assisted approach to documents similar to a reference set of highly relevant documents.
Results: Using the computer-assisted approach we identified a heterogeneous sample of 5,159 potentially relevant documents for hand-screening. The resulting 338 documents covered a wide range of contexts and concepts relevant to a palliative approach.
Conclusions: A computer-assisted approach for identifying similar documents can be helpful when review topics cannot be effectively delineated by search terms.

Implications of rapid review methodology for literature searching efficiency

Holubowich, Corrine; Schaink, Alexis K; Brener, Stacey S; Chambers, Alexandra; Kaulback, Kellee; McMartin, Kristen I; Nikitovic, Milica; Sikich, Nancy
Health Quality Ontario

Background: Health Quality Ontario (HQO) functions in part to promote health care supported by the best available evidence. This includes the development of a Rapid Review (RR) method to synthesize evidence within significant time constraints to support policy decision making. For this type of evidence, the priority is expediency while retaining methodological efficiency in all aspects of the review, including the literature search. To date the literature search process has not been aligned to reflect the RR approach.
Objectives: To determine the impact of searching a reduced number of medical literature databases in the systematic search for RRs.
Methods: A retrospective review of HQO RRs was conducted to assess the proportion of literature that would be captured by searching only Medline and the Cochrane databases.
Results: Fourty-Four RRs were examined. Thirty-Five were based on peer-reviewed literature retrieved from the search strategies and despite eliminating Embase and CINAHL, a return rate of 94.2% was attained. None of the RRs with missing articles would have been empty reviews.
Conclusions: Searching a subset of databases was found to have a minimal impact on the literature retrieved for RRs. Having quantified the risk, augmenting literature searching efficiency is suitable for this type of evidence product.

On beyond endnote

Witteman, William
Centre hospitalier universitaire de Québec

Background: Your search results represent more than just days or weeks of hard work - they are also data, locked in several formats and difficult to analyze, re-purpose or transform.
Objectives: This poster demonstrates a collection of software tools that allow access to this data, as well as couple of example applications.
Results: The first application is a tool for comparing the keywords in a set of references, generating Venn diagrams of the keywords in common to the citations. When developing search strategies for systematic review we often begin with two or more references that exemplify what we hope to include in our review. This software allows the systematic examination of the keywords used in a set of references. The second application is a tool for exporting a set of references to a spreadsheet. More than once I wished for a way to send references to colleagues without bibliography-management software - but they did have access to a spreadsheet program and furthermore they knew how to use it. Also, by transforming search results into a spreadsheet format they are vastly easier to import into statistical software for analysis.
Conclusions: This poster will discuss these and other potential applications, the tools needed to build them, and the source code of all the tools discussed.

Required methodological advances in randomized controlled trials to test medication adherence interventions: findings from a Cochrane Systematic Review update

Nieuwlaat, Robby; Wilczynski, Nancy; Navarro, Tamara; Jeffery, Rebecca; Keepanasseril, Arun; Agoritsas, Thomas; Iorio, Alfonso; Sivaram, Bhairavi; Iserman, Emma; Mustafa, Reem; Haynes, Robert, Brian
McMaster University

Background: About half of patients do not take medications as prescribed, and do not receive full health benefits. We updated a Cochrane Systematic Review to summarize RCT evidence for interventions to improve medication adherence up to January 2013.

Objectives: To describe needed methodological improvements in medication adherence research.
Methods: We included unconfounded RCTs with less than 20% of follow-up attrition evaluating the effect of adherence interventions on both medication adherence and clinical outcomes. Study and intervention characteristics, methodology, risk of bias and effects were assessed.
Results: In total 183 RCTs were included, representing a wide variety in medical conditions, medication types, interventions and outcomes, which precluded meaningful meta-analysis. Interventions were often impractically complex. Without evident improvement in recent RCTs, many studies lacked power to detect a potentially meaningful effect on medication adherence, or failed to specifically recruit poor adherers or measure baseline adherence. Adherence measures typically had a high risk of bias, and clinical outcomes were mostly surrogate measures. Studies were often reported with insufficient detail to reliably determine risk of bias.
Conclusions: Despite a recent substantial increase in adherence intervention RCTs, many important methodological limitations prevent reliable conclusions. Advances in the conduct and reporting of adherence RCTs are required.

Using network geometry to address issues of study selection across similar meta-analyses*

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

Background: Network geometry has been used to graphically display multiple intervention comparisons for a particular disorder to provide a holistic picture regarding the current state of evidence. Given the increasing prevalence of multiple meta-analyses on the same topic in the literature, we applied this architecture to five meta-analytic studies of the neuroimaging of brain activation/co-activation in individuals with posttraumatic stress disorder (PTSD). The graphical display enables researchers to better understand issues regarding study selection in meta-analysis.
Objectives: To apply network geometry to five meta-analyses on PTSD neuroimaging in order to graphically display the degree of overlap and uniqueness of the 82 individual studies chosen for inclusion among the five meta-analyses.
Methods: We catalogued individual studies from five meta-analyses and applied network analysis to these studies to visually display patterns in study selection.
Results: Across five meta-analyses, we noted vast differences in study selection. No single study was chosen in all five meta-analyses. Nine studies were chosen in four of the meta-analyses, 10 of the studies had an overlap among three of the meta-analyses, 17 of the studies had an overlap among two of the studies, and 46 studies were only used once.
Conclusions: With the proliferation of multiple meta-analyses, study selection should be carefully examined.

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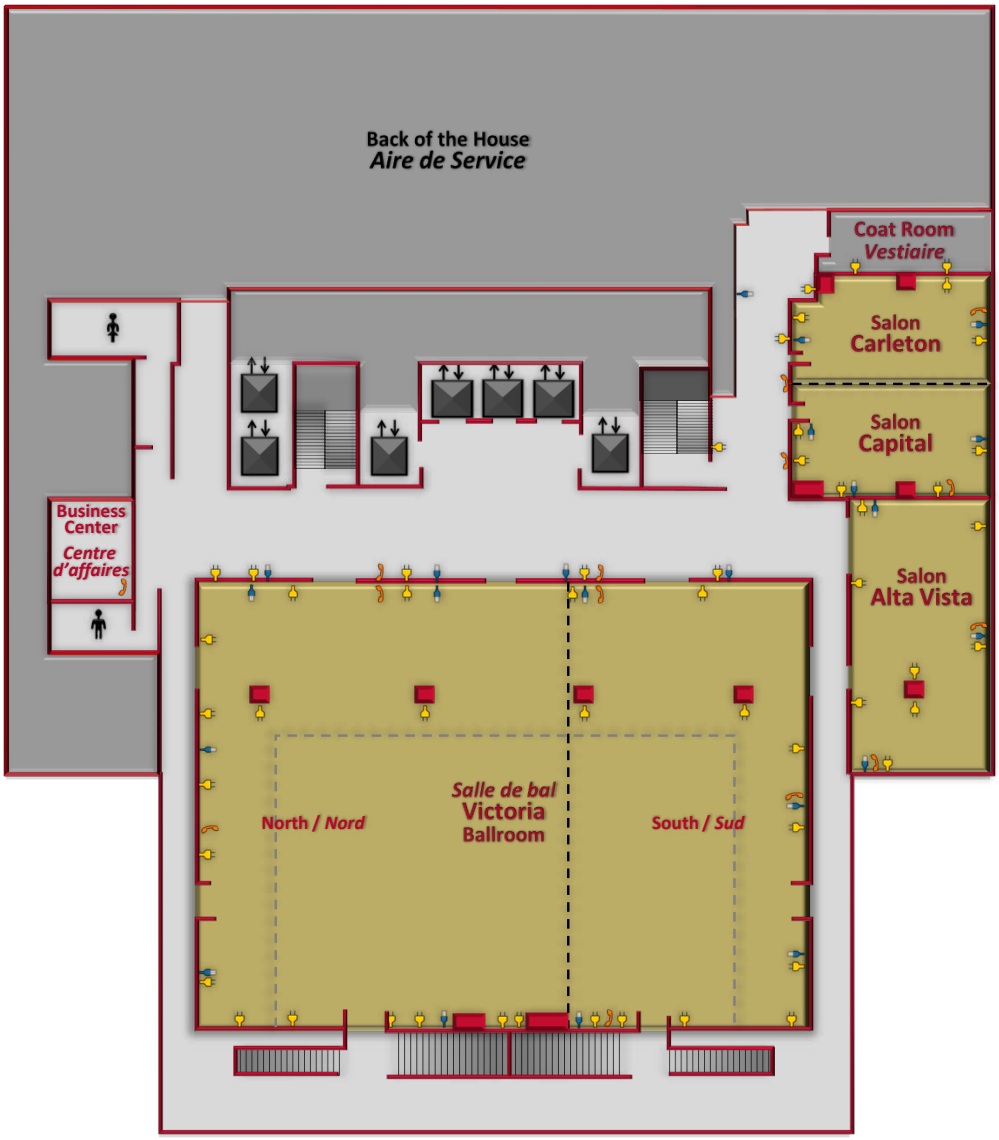

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2

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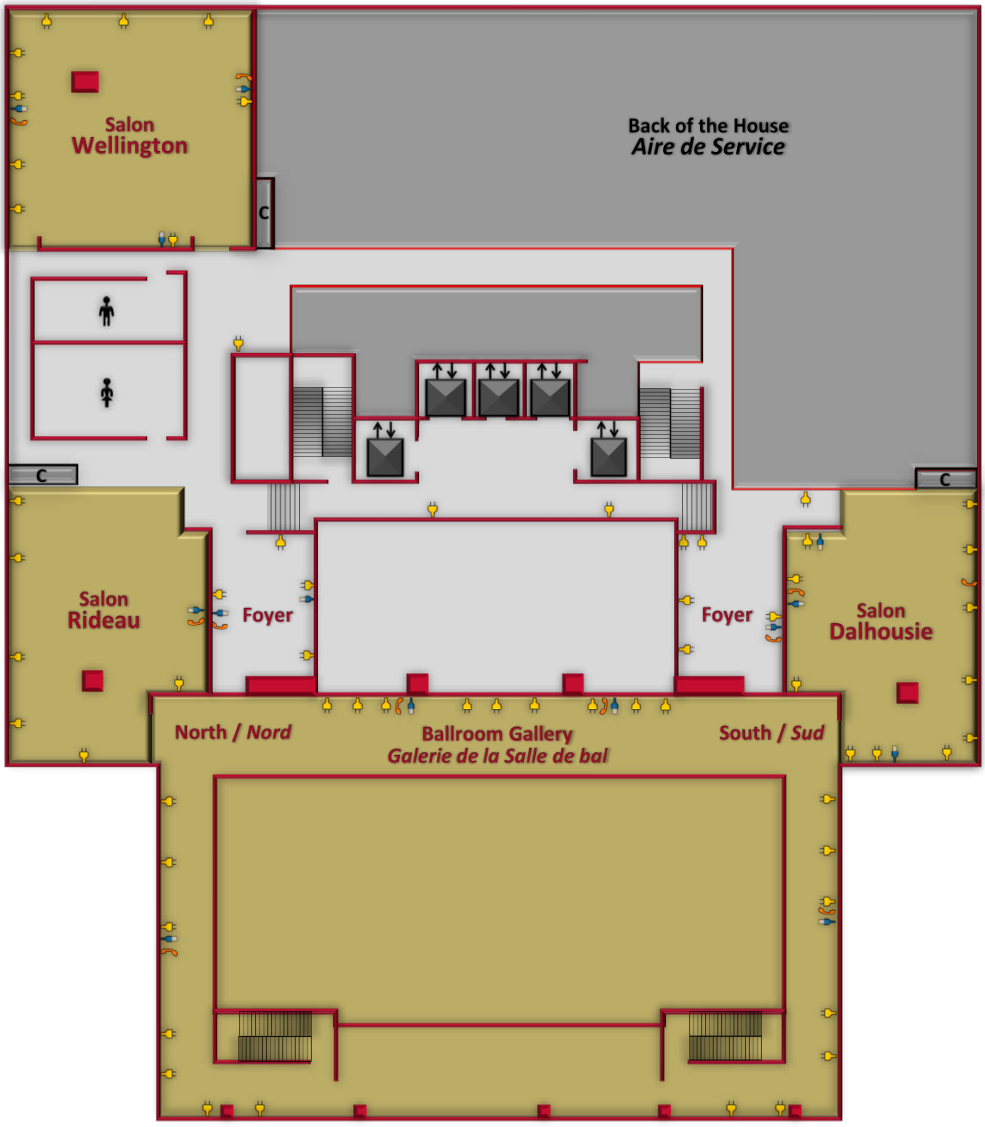

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3

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- Canadian Museum of Civilization
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- Canadian Museum of Nature
- Canadian War Museum
- Royal Canadian Mint
- and many more!

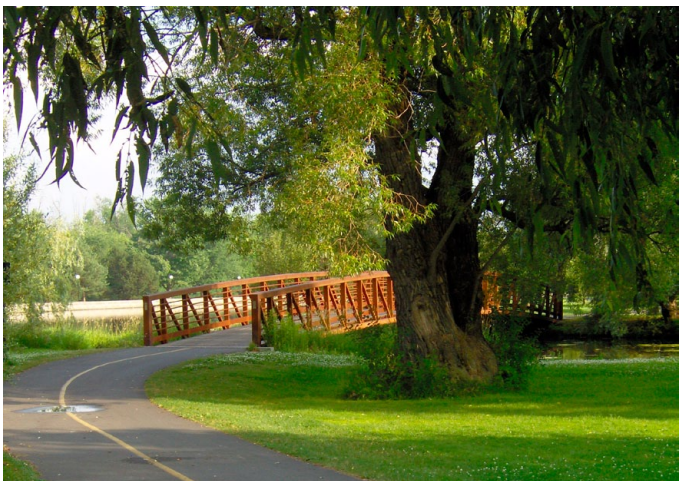
Find out more about Ottawa's museums at ottawa.ca/en/residents/arts-culture-and-community/museums.

The Byward Market

The Byward Market is located in the heart of downtown Ottawa and is an experience that all visitors should enjoy. The market is filled with unique fashion boutiques, art galleries and restuarants. There are many outdoor patios where you can enjoy a pint in the afternoon, and the market comes alive at night with its many dance clubs and lounges. For a full directory of the Byward Market, visit www.byward-market.com.

Sightseeing

There are numerous sightseeing options in the capital, where you can explore the city by bus, boat, bicycle or feet! Ottawa is home to one of the largest pathway networks in North America, with more than 300km of recreational paths that link gorgeous parks, gardens, museums and attractions. You can walk along the Rideau River or book a amphibus tour and see the city on land and in water!



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