



KNOWLEDGE TRANSLATION CANADA

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**KT CANADA
ANNUAL SCIENTIFIC
MEETING PROGRAM**

June 2018

Knowledge Translation Canada Annual Scientific Meeting 2018

Thursday, June 7 – Friday, June 8

Coast Coal Harbour Hotel
Vancouver, BC, Canada

The Planning Committee would like to welcome you to the ninth KT Canada Annual Scientific Meeting.

The main theme of this year's meeting is 'Advancing the methods of patient-oriented knowledge translation research'. Both of our plenary speakers – Drs. Nick Bansback and Tammy Hoffmann - have had "hands on" experience with this important topic. Interspersed throughout the days are oral presentations and panel discussions on various topics that are linked to patient-oriented knowledge translation and to KT research including:

1. Optimising knowledge distillation;
2. Understanding the determinants of knowledge use;
3. Selecting, tailoring and evaluating effectiveness and efficiency of KT interventions; and,
4. Sustaining KT.

The poster session is an opportunity for all participants to see firsthand some of the exciting KT research being conducted nationally and internationally in a relaxed, informal session that facilitates networking.

We would also like to thank the Michael Smith Foundation for Health Research and the BC SPOR SUPPORT Unit for their generous support of this event.

We are very excited about the opportunity to host this annual scientific meeting in KT and about the program! We think that you will find the program exciting and look forward to hearing your suggestions for future meetings and developing next year's program with the same enthusiasm! We thank all of you for your interest in this meeting and for sharing your expertise and experience. We also thank our coordinator, Meghan Storey for organizing this event.

Sincerely,

France Légaré, Janet Curran, Bev Temple, Melissa Brouwers, Terry Klassen, David Johnson,
Linda Li, Bev Holmes, Genevieve Creighton, Donna Angus and Sharon Straus.

Agenda

“Advancing the methods of patient-oriented knowledge translation research”

Coast Coal Harbour Hotel, Vancouver, BC
1180 W Hastings St.

Thursday, June 7, 2018

Time	Session	Location
8:00-9:00	Registration	Coal Harbour Ballroom Foyer
	Poster Set Up – Posters can remain up for the duration of the meeting (2 days)	Coal Harbour B
	Breakfast & networking	Coal Harbour A, Foyer
9:00-9:15	Welcome and Introductions: Dr. Dawn Stacey (University of Ottawa)	Coal Harbour A Ballroom
9:15-10:15	Opening Lecture: <i>Introduced by Dr. Dawn Stacey</i> Dr. Tammy Hoffmann - Professor of Clinical Epidemiology, Bond University <i>“Patient-oriented knowledge translation: When does it start and when does it end?”</i>	Coal Harbour A Ballroom
10:15-10:45	Coffee break & networking	
10:45-11:45	Oral Presentations: Session 1 <i>Chaired by Dr. Kathryn Sibley (University of Manitoba)</i> <ul style="list-style-type: none"> Janet Curran (Dalhousie University) <i>Using the Behaviour Change Techniques Taxonomy Version 1 (BCTTv1) to Identify Components of Pediatric Emergency Discharge Communication Interventions</i> Monika Kastner (North York General Hospital) <i>An Idea Worth Sustaining: Evaluating the sustainability potential of the Choosing Wisely initiative across Ontario-based community hospitals and affiliated family health teams</i> Janet Squires (Ottawa Hospital Research Institute) <i>The Context for Implementation Framework: Progress to date and plans for the future</i> H. Tom Stelfox (University of Calgary and Alberta Health Services) <i>A Controlled Before and After Trial of a Knowledge Translation Intervention to Improve Guideline Concordant Venous Thromboembolism Prophylaxis in Critically Ill Patients</i> 	Coal Harbour A Ballroom
11:45 – 1:45	Lunch / Posters / Networking	Lunch: Coal harbour A, foyer Posters: Coal Harbour B
12:45 – 1:45	Networking time* <i>*Those who are presenting posters should be with their poster during this time for judging. Poster judges should be in the poster area (Coal Harbour B)</i>	
1:45 – 3:35	Panel Discussion <i>Moderated by Dr. Jayna Holroyd-Leduc (University of Calgary)</i> Alison Hoens - Knowledge Translation Specialist, BC SUPPORT Unit Dr. Ainsley Moore - Associate Professor of Family Medicine, McMaster University Dr. Melissa Brouwers - Professor and Lead of Health Services Research, Dept of Oncology, McMaster University Dr. Dawn Stacey - Professor, School of Nursing, University of Ottawa <i>“Evaluation of patient engagement - part 1”</i>	Coal Harbour A Ballroom
3:35 – 3:50	Coffee Break	

Thursday, June 7, 2018 (Continued)

Time	Session	Location
3:50-4:50	<p>Oral presentations: Session 2 <i>Chaired by Dr. Deborah Marshall (University of Calgary)</i></p> <p>Khara Sauro (Cumming School of Medicine, University of Calgary) <i>When current care is not best care: Is it time to move beyond guidelines?</i></p> <p>Leah Crockett (University of Manitoba) <i>Engaging patients and the public in health research: Knowledge, experiences and training needs among Manitoba health researchers</i></p> <p>Roberta Woodgate (University of Manitoba) <i>Using the Arts to Advance the Translation of Patient-Oriented Research</i></p> <p>Nadia Minian (The Centre for Addiction and Mental Health) <i>Personalized patient alerts and care pathways to prompt interventions for at-risk alcohol use among tobacco users in primary care</i></p>	Coal Harbour A Ballroom
5:00-6:30	KT Consults & networking (optional)	Vancouver Room

Friday, June 8, 2018

Time	Session	Location
8:00-9:00	Breakfast & networking	Coal Harbour A, Foyer
9:00-9:15	Welcome Back Dr. Dawn Stacey (University of Ottawa)	Coal Harbour A Ballroom
9:15-10:15	<p>Plenary Session: <i>Introduced by Dr. Linda Li (University of British Columbia)</i></p> <p>Dr. Nick Bansback - Associate Professor, School of Population and Public Health, University of British Columbia</p> <p><i>"Engaging patients in health economics research"</i></p>	Coal Harbour A Ballroom
10:15-11:15	<p>Oral Presentations: Session 3 <i>Chaired by Dr. Linda Li (University of British Columbia)</i></p> <p>Jennifer Baumbusch (University of British Columbia) <i>Co-creating a knowledge translation intervention with families in long-term residential care: methodological insights and dilemmas</i></p> <p>Pascale Marier Deschenes (Laval University) <i>Sexuality information toolkit for adults with moderate to severe TBI: a codevelopment project</i></p> <p>Julia Moore (Li Ka Shing Knowledge Institute, St. Michael's Hospital) <i>Methods for developing printed educational materials: Co-creation or usability testing?</i></p> <p>Shannon Scott (University of Alberta) <i>Usability results of art-based knowledge translation tools for pediatric acute gastroenteritis and croup</i></p>	Coal Harbour A Ballroom
11:15-12:30	Lunch & networking	Coal Harbour A, Foyer
12:30-2:00	KT Consults & networking	Vancouver Room
1:45 – 2:00	Coffee break	

Friday, June 8, 2018 (Continued)

Time	Session	Location
2:00 – 3:30	<p>Panel Discussion <i>Moderated by Dr. Bev Holmes Michael Smith Foundation for Health Research)</i></p> <p>Dr. Clayon Hamilton - postdoctoral research fellow, Dept of Physical Therapy, University of British Columbia and Arthritis Research Canada</p> <p>Cheryl Koehn - founder and president of Arthritis Consumer Experts</p> <p>Dr. Deborah Marshall – Professor, Dept of Medicine, University of Calgary</p> <p>“Evaluation of patient engagement - part 2”</p>	Coal Harbour A Ballroom
3:30 – 3:45	Wrap up and Evaluation	

*Thank you to our sponsors,
the Michael Smith Foundation for Health Research
and the BC SUPPORT Unit!*



BC SUPPORT Unit
Advancing patient-oriented research

Program at a Glance

Program at a Glance	Title
Opening Lecture	
Dr. Tammy Hoffmann	Patient-oriented knowledge translation: When does it start and when does it end?
Plenary Sessions	
Dr. Nick Bansback	Engaging patients in health economics research
Panel Discussions	
Alison Hoens, Dr. Ainsley Moore, Dr. Melissa Brouwers, Dr. Dawn Stacey	Evaluation of patient engagement - part 1
Dr. Clayton Hamilton, Cheryl Koehn, Dr. Deborah Marshall	Evaluation of patient engagement - part 2
Oral Presentations	
Janet Curran	Using the Behaviour Change Techniques Taxonomy Version 1 (BCTTv1) to identify components of pediatric emergency discharge communication interventions
Monika Kastner	An idea worth sustaining: Evaluating the sustainability potential of the Choosing Wisely initiative across Ontario-based community hospitals and affiliated family health teams
Janet Squires	The Context for Implementation Framework: Progress to date and plans for the future
H Tom Stelfox	A controlled before and after trial of a knowledge translation intervention to improve guideline concordant venous thromboembolism prophylaxis in critically ill patients
Khara Sauro	When current care is not best care: Is it time to move beyond guidelines?
Leah K Crockett, Kathryn Sibley	Engaging patients and the public in health research: Knowledge, experiences and training needs among Manitoba health researchers
Roberta L. Woodgate	Using the arts to advance the translation of patient-oriented research
Nadia Minian	Personalized patient alerts and care pathways to prompt interventions for at-risk alcohol use among tobacco users in primary care
Jennifer Baumbusch	Co-creating a knowledge translation intervention with families in long-term residential care: Methodological insights and dilemmas
Pascale Marier Deschênes	Sexuality information toolkit for adults with moderate to severe TBI: A codevelopment project
Julia Moore, Danica Buckland	Methods for developing printed educational materials: Co-creation or usability testing?
Shannon Scott	Usability results of art-based knowledge translation tools for pediatric acute gastroenteritis and croup

Program at a Glance	Title
Posters	
Shannon Scott	Knowledge translation tools for parents on child health topics: A scoping review
Alyson Campbell	Experiences of a doctoral trainee interviewing parents about acute pediatric illnesses
Iva Cheung	Improving mental health act rights advice in BC: A patient-oriented integrated knowledge translation project
Julia Moore	Partners in Research: A patient-oriented research capacity building initiative for patients and researchers
Melissa Demery Varin	The influence of individual characteristics and organizational context on the use of research evidence by nurses in residential long-term care settings
Maoliosa Donald	Self-management interventions in chronic kidney disease: Patients' and caregivers' experiences and preferences
Meghan Elliott	Long-term perceived engagement and research priorities among chronic kidney disease stakeholders: A qualitative study
Sarah Elliott	Establishing parent priorities in child health: A pilot study
Kirsten M. Fiest	Partnering with family as agents of change at the bedside and beyond: Feasibility of family delirium detection in the critically ill
Myriam Gagné	Impact of a continuing education activity targeted at chronic obstructive pulmonary disease case managers on patient health outcomes: A pre- and post-intervention study
Myriam Gagné	Impact of adding an educational video to patient education on quality of life in adults with atrial fibrillation: A pilot randomized controlled trial
Geneviève David, Alexandre Grégoire	Evaluating patient partnerships formed within Quebec's SPOR Support Unit at the research project, network and governance levels
Andrea Gruneir	Effectively evolving together: Lessons on citizen engagement in a large health services research team
Shannon Scott	Cultural adaptation of knowledge translation tools for parents of children with acute illnesses
Kelly Mrklas, Femke Hoekstra	A review protocol on integrated knowledge translation and research partnerships: A coordinated multicenter team approach
Karen Hurtubise	Identifying barriers and enablers in the delivery of an evidence-based self-management interdisciplinary intervention for youth using knowledge translation frameworks
Karen Hurtubise	Understanding why interventions are modified once implemented: Advancing the methodology
Monika Kastner	Underlying mechanisms of complex interventions addressing the care of older adults with multiple chronic conditions: A realist review
Sobia Khan	The Ontario Drug Policy Research Network's Citizens' Panel: Mechanisms and processes of consulting the public in health policy research
Jasmin Ma	ProACTIVE SCI intervention: Using the knowledge-to-action cycle to develop a physiotherapist-led physical activity toolkit for clients with spinal cord injury
Ciana Maher	Feasibility and ACceptability of a mobile Technology intervention to Support post-abortion care FACTS

Program at a Glance	Title
Posters (Continued)	
Ciana Maher	It's Not In Your Head: Campaign to raise awareness about provoked vestibulodynia
Falcon O'Hara	One size doesn't fit all: Incorporating KT, intersectionality, and the perspectives of older adults
José Massougbodji	Overviews on knowledge translation implementation strategies: A content analysis
Salima Meherali	Scaling up of knowledge translation tools to improve child health outcomes in low-middle-income countries: A mixed-methods usability evaluation
Jayna Holroyd-Leduc	Barriers and facilitators to diagnosing, treating, and managing apathy in Parkinson's disease: A qualitative study
Kimberly Miller	Exploring the usefulness and perceived impact of interactive educational outreach sessions applying the knowledge-to-action framework
Julia Moore	How do I involve thee? Let me count the ways: Assessing the objectives and designs of patient and public engagement initiatives
Sarah Munro	Knowledge translation strategies to accelerate uptake of mifepristone-induced medical abortions in Canada: A mixed methods investigation of barriers and facilitators
Sarah Munro	The feasibility and acceptability of implementing two shared decision-making interventions for contraceptive methods: A qualitative investigation involving the theoretical domains framework
Ruth Ndjaboué	Integrating patient's knowledge, wisdom and power into health professions education to foster optimal diabetes care
Patricia Roche	Advancing conceptual frameworks for patient and public involvement in health research: Preliminary results from a qualitative examination of a trauma-informed, intersectional, and reflexive approach
Shannon Scott	Developing interactive infographics as consumer-oriented knowledge translation tools for acute pediatric conditions
Shannon Scott	Engaging with parents to develop innovative e-tools that merge research and story
Marta Shaw	Assessing the effectiveness of an integrated knowledge translation initiative to improve patients' knowledge, understanding of Advance Care Planning engagement
Shaun Shepherd	Internet-Based Interventions to Improve Adherence to Cardiac Rehabilitation: a systematic review and meta-analysis
Kathryn Sibley	Physiotherapist experiences of a theory-based intervention and perceptions of reactive balance and its measurement: A qualitative study
Alison Thompson	Parents' experiences with and information needs of childhood fever: A systematic review
Gabrielle Zimmermann	Patient-Oriented Research (POR) – Publish or it may perish?

Plenary Speakers



Dr. Nick Bansback

Nick Bansback is trained in health economics and decision science. He is an Associate Professor at the School of Population and Public Health, University of British Columbia, the Co-Lead of the BC SUPPORT Unit Health Economics and Simulation Modelling Methods Cluster, and a CIHR New Investigator. His research seeks to maximize value in health care - both the value the patients derive from their own decisions, and the value the whole population derives from the decisions around the public investment in health.



Dr. Tammy Hoffmann

Tammy is Professor of Clinical Epidemiology at the Centre for Research in Evidence-Based Practice, Bond University in Australia. She directs the Centre for Evidence-Informed Health Decisions, with her research spanning many aspects of shared decision making, evidence-based practice, knowledge translation, informed health decisions, and minimising waste in research. Her clinical qualification is as an occupational therapist and in 2017 she became an inaugural Fellow of the Occupational Therapy Australia Research Academy.

She has over 200 publications, including multiple articles in leading journals such as JAMA, BMJ, JAMA Internal Medicine, CMAJ, and BMC Medicine. Tammy is also the lead author of a widely used inter-disciplinary evidence-based practice book (Evidence-Based Practice across the Health Professions), that is now in its 3rd edition. She is currently leading international initiatives in two main areas: 1) to more closely align shared decision making and evidence-based practice, and assist patients and the public to make evidence-informed decisions about health, and 2) to improve the reporting and uptake of effective non-pharmacological interventions into practice (including development of the TIDieR statement).

Panel Speakers

Dr. Melissa Brouwers, McMaster University

Dr. Melissa Brouwers is a Professor and Lead of Health Services Research in the Department of Oncology, McMaster University; Deputy Director and Scientist, Escarpment Cancer Research Institute, McMaster University; associate member in the Department of Clinical Epidemiology and Biostatistics, McMaster University and the Provincial Director (Scientific) of the Program in Evidence-based Care (PEBC), Cancer Care Ontario (CCO).

She holds a PhD in Psychology from the University of Western Ontario. Melissa is an active and leading member of various national and international health services research groups with a special focus on practice guidelines including the Principal Investigator of the AGREE Enterprise – a research program aimed to improve the quality and implementability of guidelines; the Knowledge Translation Lead of the CanIMPACT project – a national program of research aimed to improve outcomes for people affected by cancer; and a member of the KT-NET Advisory Committee of the Ontario Institute for Cancer Research (OICR). She is also the McMaster University co-lead for the National KT-STIHR (Strategic Training Initiative in Health Research) grant and a member of KT Canada.

Dr. Clayton Hamilton, University of British Columbia

Dr. Clayton Hamilton is a MSFHR-funded postdoctoral research fellow in the Department of Physical Therapy at the University of British Columbia and at Arthritis Research Canada, where he does Knowledge Translation Research. He obtained a masters and PhD in Health and Rehabilitation Science from Western University. His research focuses on supporting 'Patient Engagement in Research' as a form of the Integrated Knowledge Translation (IKT). Presently, he is using a combined qualitative and quantitative study design to explore the phenomenon of meaningful patient engagement in research, and to develop and test a measure to evaluate for degrees of meaningful patient engagement in research.

Ms. Alison Hoens, BC SUPPORT Unit

Alison Hoens is the Knowledge Translation Specialist for the Methods Clusters at the BC SUPPORT Unit on secondment from her positions as (1) the Knowledge Broker for the Department of Physical Therapy, Faculty of Medicine at the University of British Columbia and (2) the Research, Education and Practice Coordinator for Physiotherapy at Providence HealthCare. Alison lives with rheumatoid arthritis and autoimmune gastroparesis and is the mother of a 19 year old daughter who was recently diagnosed with rheumatoid arthritis. Her passion for patient engagement in research is founded on the combination of her training and experience as a researcher, clinician, knowledge broker/translation specialist, patient, and caregiver for multiple family members of different generations living with chronic disease.

Ms. Cheryl Koehn, Arthritis Consumer Experts

Ms. Cheryl Koehn is an arthritis advocate, community leader, published author and rheumatoid arthritis survivor for 29 years. Ms. Koehn has dedicated her life to helping others living with arthritis as well as people with other chronic diseases. She is the founder and president of Arthritis Consumer Experts, a national, patient-led organization that provides science-based information and education programs in both official languages to people with arthritis. She served as Co-Chair of the Summit on Standards for Arthritis Prevention and Care, and Co-Founded the Best Medicines Coalition, and was the two-time Chair of the Better Pharmacare Coalition. Ms. Koehn served as the immediate past consumer representative Board Member of the Arthritis Alliance of Canada, is a past board member of the Arthritis Research Canada, and served in a leadership capacity on numerous other national organizations and committees. As one of North America's leading arthritis advocates, Ms. Koehn provides a patient perspective on arthritis health and policy issues across Canada to governments, private payers, healthcare professionals, and media. She is frequently invited to speak at national and International arthritis and health-related conferences. With her team at Arthritis Consumer Experts, Ms. Koehn has led the development of numerous information and education innovations to the arthritis community, including the ArthritisID and Arthritis ID PRO iPhone apps, the blog site Arthritis Broadcast Network, the annual report card on provincial formulary performance for inflammatory arthritis medications, Canada's Best Workplaces for Employees Living with Arthritis Award, and most recently, JointHealth Education, a series of on-line "courses" graduating today's modern arthritis patient.

Dr. Ainsley Moore, McMaster University

Ainsley Moore (MD, MSc, CFPC) is a family physician and Associate Professor of Family Medicine at McMaster University. Her clinical, teaching and research focus on preventive health includes an appointment with the Canadian Task Force for Preventive Health Care.

Dr. Dawn Stacey, University of Ottawa

Dawn Stacey RN PhD holds a Research Chair in Knowledge Translation to Patients and is a Professor in the School of Nursing at the University of Ottawa. She is a Senior Scientist and Scientific Director of the Patient Decision Aids Research Group at the Ottawa Hospital Research Institute. She is an invited member of the College of the Royal Society of Canada in recognition of her research. Her research program focuses on: a) patient decision aids; b) decision coaching; c) implementation of evidence into practice; d) telephone-based care, and e) interprofessional approaches to shared decision making. She has given over 100 invited national and international presentations. For more information visit her research program website <http://decisionaid.ohri.ca>.

Dr. Deborah Marshall, University of Calgary

As a Canada Research Chair, Health Services and Systems Research and the Arthur J.E. Child Chair in Rheumatology, Dr Marshall's research programme is focused on the assessment of the value of health care interventions through measurement of patient preferences, cost-effectiveness analysis, and simulation modeling of health care delivery systems. She has experience in technology assessment agencies, academia and pharmaceutical and diagnostics industry research settings in Canada, the United States, and Europe. Dr. Marshall is the co-lead of the Economics platform for UCAN CANDU – Canada-Netherlands Personalized Medicine Network in Childhood Arthritis and Rheumatic Disease funded by the CIHR Personalized Medicine in Inflammation Network.

Oral Presentations

In order of presentations

Using the Behaviour Change Techniques Taxonomy Version 1 (BCTTv1) to identify components of pediatric emergency discharge communication interventions

A Bishop, A Gallant, C Cassidy, J Egar, J Curran

Presenter:

Janet Curran

Institution:

IWK Health Centre

Twitter:

@JCurran_lab; @ABishopPhD

Background:

Understanding the components that comprise a successful intervention provides important information for the development of future interventions, and can result in more efficient use of health care resources. Combining both intervention classification and health behaviour theory, the Behaviour Change Technique Taxonomy version 1 (BCTTv1) provides consistent language for identifying and evaluating the active ingredients of interventions. Findings from a recent narrative synthesis of pediatric emergency discharge communication interventions found that the majority of interventions across both acute and chronic illness presentations were aimed at improving parent comprehension of important health information. Many of these discharge communication interventions include multiple intervention functions (e.g., education, environmental restructuring, modeling) and targets (e.g., patient and family, health care provider), making it difficult to discern which intervention component, or interaction of multiple components, resulted in the measured outcome. The aims of this study were to: (1) identify behaviour change techniques (BCTs) present in pediatric emergency discharge communication interventions aimed at parents and health care providers and (2) identify areas where intervention content descriptions are currently deficient.

Methods:

We conducted a secondary analysis of 45 experimental and quasi-experimental studies included in a narrative synthesis of discharge communication interventions in pediatric emergency care. Four trained BCT coders independently reviewed each discharge communication intervention and used the BCTTv1 to identify relevant BCTs in the studies. Similar to other BCT studies, we applied a priori rules to guide coding and reviewer consensus. A consensus meeting was then held to review coding discrepancies. BCTs were analyzed using frequency statistics to determine the frequency of the 93 individual BCTs and 16 BCT categories for parent/patient and health care provider interventions. Subgroup analyses were also performed to determine if certain BCTs were more common for specific illness presentations or interventions targets. Effect direction data for each article was analyzed to infer potential effectiveness.

Results:

We identified BCTs in 41 of the discharge communication interventions. The majority of these interventions targeted parents (n=31). Common BCTs for parent interventions included: 4.1-instruction on how to perform the behaviour, 3.2-social support (practical), and 5.1-information about health consequences. The commonly coded BCTs for provider interventions included: 4.1-instruction on how to perform the behaviour, 5.1 – information about health consequences, and 7.1-prompts/cues. Overall, 20 out of a possible 93 BCTs were identified, suggesting that some BCTs are commonly used in interventions to improve discharge communication practices. As BCTs could only be coded based on the details provided in the studies, a lack of consistency in reporting across studies affected how many BCTs were ultimately identified.

Conclusions:

The BCTTv1 proved to be a useful tool to provide a foundational understanding of the common mechanisms used in these interventions. Future research is needed to explore the utility of the remaining 73 BCTs to improve the effectiveness of pediatric emergency discharge communication interventions and to prospectively design interventions. It is critical that intervention descriptions be standardized to ensure consistency in reporting, the ability to discern and evaluate successful intervention components, and to improve replicability moving forward.

An idea worth sustaining: Evaluating the sustainability potential of the Choosing Wisely initiative across Ontario-based community hospitals and affiliated family health teams

M Kastner, J Makarski, K Mossman, K Harris, D Sharma

Presenter:

Monika Kastner

Institution:

North York General Hospital

Background:

Evidence shows that 30% of healthcare services are unnecessary and unlikely to benefit patients (or even be harmful). Choosing Wisely (CW) Canada is a physician-initiated, national campaign aimed at addressing unnecessary medical care through the provision of evidence-based resources and clinical guidance. The success of the ongoing implementation and spread of such initiatives is dependent on their sustainability potential. Our objectives were to evaluate the sustainability potential of CW at five Ontario community hospitals and affiliated family health teams (FHT).

Methods:

We conducted a 12-month, mixed-methods study to address our objectives involving three phases. Phase 1: Identification and recruitment of implementation teams (and their priority CW areas) across four Ontario community hospitals and their affiliated FHTs. Eligible participants were hospital/FHT staff members who were directly involved in the implementation of their CW initiative (administrative professionals, clinical chiefs, directors, health information management professionals, managers, nurses, pharmacists, physicians). Phase 2: the administration of a validated sustainability survey to CW team members aimed at identifying their implementation/sustainability determinants (challenges, opportunities for improvement and successes). The survey was administered at three time points: T0 (baseline), T1 (6 months), and T2 (12 months); Phase 3: We conducted 30 focus groups in total: 15 focus groups two weeks after completing the sustainability survey at T0 (to discuss challenges and facilitators identified on the survey, and to co-create an action plan to address them); 15 focus groups two weeks after completing the second survey at T1 (to discuss the action plan's implementation and any new challenges). Sessions were audio recorded and transcripts were analyzed by two reviewers using content analysis.

Results:

78 participants representing 15 CW teams across four hospitals and six FHTs participated in the study (completion of surveys at T0, T1, T2 and participation in 30 focus groups at T0, T1). Three de-adoption priority areas were investigated by teams: de-prescribing of proton pump inhibitors (PPIs), and reducing pre-op testing and BUN/Urea lab testing. The mean team sustainability scores ranged 61-73% (PPI), 87-89% (BUN/Urea), and 82-92% (Pre-Op), which were above the threshold of what is considered a sustainable innovation (score 55%). The top sustainability facilitators identified were clinical leadership engagement and fit with organization's strategic aims/culture; the top challenges were adaptability of improved processes and infrastructure for sustainability. Identified reasons for lower scores in PPI de-prescribing compared with other CW priority areas were related to implementation complexity (i.e., PPI de-prescribing requires the use of an algorithm by providers to determine eligibility, benefits of de-prescribing are not seen immediately, and prescription is

influenced by patients). All teams identified at least one challenge (during T0 focus groups) for which all co-designed (T0) and implemented (T1) an action plan to address them (range 1-3 plans per team) aimed at maximizing the sustainability potential of their CW priority areas.

Conclusions:

Evaluating sustainability potential is critical to ensure that innovations have the best potential for impact. Our work highlights that implementation teams can be empowered to influence their implementation efforts, and to realize positive outcomes for their healthcare services and patients.

The Context for Implementation Framework: Progress to date and plans for the future

JE Squires, J Lapenskie, M Demery Varin, AM Hutchinson, K Bashir, J Lavis, AE Sales, J Curran, JM Grimshaw, J Francis, S Michie, J Brehaut, N Ivers, J Vine, T Noseworthy, M Hillmer, ID Graham

Presenter:

Janet Squires

Institution:

Ottawa Hospital Research Institute

Background:

There is growing recognition that “context” can and does modify the effects of knowledge translation strategies aimed at increasing healthcare professionals’ use of research evidence in clinical practice. However, conceptual clarity about what exactly comprises “context” is lacking. The purpose of this study was to develop and refine a framework of context that identifies its key attributes (and their features) which can facilitate or hinder healthcare professionals’ use of research evidence.

Methods:

A multi-phased investigation using multiple methods was conducted. The first phase was a concept analysis of context using published literature. The second phase was a secondary analysis of 145 interviews with healthcare professionals across 11 individual studies in 2 countries on their perceived barriers and enablers to using research evidence in clinical practice. The third phase involved conducting interviews with 39 health system stakeholders and change agents in four countries. Results from all three phases were triangulated to create the Context for Implementation Research Framework. The resulting framework was mapped to three commonly used knowledge translation frameworks to identify its unique contribution: 1) Tailored Implementation for Chronic Disease (TICD) Checklist, 2) Consolidated Framework for Implementation Research (CFIR); and Theoretical Domains Framework (TDF).

Results:

A total of 20 key attributes with 138 unique features of context were identified from the 3 study phases. There was consistency across study phases at the attribute level with 15 of the 20 (75%) attributes being identified in all 3 study phases: 1) patient population, 2) clinician group, 3) people, 4) units/organizations, 5) leadership, 6) economic, 7) culture, 8) governance, 9) physical infrastructure, 10) social infrastructure, 11) support networks, 12) communication and relationships, 13) climate, 14) evaluation, and 15) politics and power. Substantially greater variation was evident at the context feature level, with only 25 (18%) of the 138 features identified in all 3 study phases. While 34 (25%) additional features were found in two study phases, the majority (n= 79, 57%) were unique to a single phase: concept analysis (n=52), healthcare professional interviews (n=12); and stakeholder interviews (n=15). With respect to the mapping of the attributes and features in our framework to existing frameworks, all attributes, with one exception (change processes), mapped to one or more of the frameworks: 16 (80%) attributes to TICD, 17 (85%) to CFIR, and 12 (60%) to TDF. At the context feature level, only 69 (50%) mapped to one or more of the frameworks: 54 (39%) to TICD, 37 (27%) to CFIR, and 28 (20%) to TDF. In total, we identified 69 new context features not included in these 3 widely used knowledge translation frameworks.

Conclusions:

The Context for Implementation Research Framework emerging from this study is a comprehensive framework of key context attributes and their features. The framework represents a shared understanding of context beyond what is available in existing knowledge translation frameworks. Next steps include a Delphi and testing of an interview guide developed based upon the Context for Implementation Research Framework to identify which context features in the framework are core to different implementation scenarios.

A controlled before and after trial of a knowledge translation intervention to improve guideline concordant venous thromboembolism prophylaxis in critically ill patients

HT Stelfox, R Brundin-Mathers, A Soo, KM Sauro, DJ Niven, J Parsons-Leigh, KM Fiest, CJ Doig, SE Straus, DJ Cook, SM Bagshaw

Presenter:

H Tom Stelfox

Institution:

Department of Critical Care Medicine, University of Calgary and Alberta Health Services

Twitter:

@StelfoxTom

Background:

Randomized controlled trials and economic analyses of venous thromboembolism (VTE) prophylaxis in critically ill patients have reported low molecular weight heparin (LMWH) to be more efficacious in preventing pulmonary embolism (PE) than unfractionated heparin (UFH), to have similar or better outcomes for deep vein thrombosis (DVT), heparin-induced thrombocytopenia (HIT), bleeding and mortality, with similar or lower hospital costs. International guidelines recommend LMWH rather than UFH for VTE prophylaxis in critically ill patients, but observational studies suggest that patient care in many ICUs is not guideline concordant. We sought to implement and evaluate a multi-pronged knowledge translation (KT) intervention to facilitate LMWH adoption for VTE prophylaxis in critically ill patients.

Methods:

Prospective controlled before and after study of 12,342 consecutive adult patients admitted to 11 ICUs in nine hospitals in two cities May 1, 2015 to April 30, 2017 with no documented contraindication to pharmacological VTE prophylaxis and an ICU stay of more than 24 hours. A multi-pronged KT intervention comprising education, clinical decision support, reminders, and audit and feedback was developed using both the theoretical domains framework and MRC framework for complex interventions, tailored to local facilitators and barriers and implemented May 1, 2016 in five ICUs in one city (intervention group), but not the six ICUs in the other city (control group). We examined temporal changes in VTE prophylaxis (data aggregated by month) using interrupted time series analysis. DVT, PE, bleeding (transfusion of 2+ units of packed red blood cells within 24 hours), HIT, death and hospital costs were examined using logistic and linear regression with Generalized Estimating Equations. Outcomes were evaluated for ICU (VTE prophylaxis, bleeding) and overall hospital (DVT, PE, HIT, death, costs) stays.

Results:

After implementing the KT intervention, there was an immediate significant increase in the absolute proportion of days patients received LMWH in the intervention group (+11.6%, 95% CI +4.5% to +18.6%) and a significant decrease in the control group (-7.5%, 95% CI -14.1% to -0.9%). Subsequently there were significant changes over time in the absolute proportion of days patients received LMWH in the intervention group (+1.9% per month; 95% CI, +0.9% to +2.9%), but not in the control group (-0.9% per month; 95% CI, -1.9% to 0.2%). From study start to end, the use of LMWH increased from 45.9% to 78.3% of patient days in the intervention group and from 37.9% to 53.3% in the control group (intervention and control group absolute increases of 32.4% vs. 15.4%, $p=0.001$). No significant changes were observed in DVT, PE, HIT, bleeding or mortality in either group. Costs of hospital care did not significantly change in the intervention group (ratio of means 1.00, 95% CI 0.94 to 1.06) and decreased in the control group (ratio of means 0.91, 95% CI 0.87 to 0.96).

Conclusions:

Our KT intervention was associated with a moderate change in clinical practice. Adoption of LMWH for pharmacological VTE prophylaxis appeared to be safe and with no increase in hospital costs, but did not reproduce the benefits reported in randomized clinical trials.

When current care is not best care: Is it time to move beyond guidelines?

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Background:

Clinical practice guidelines (guidelines) can facilitate the provision of evidence-based care and can lead to improvements in processes of care and clinical outcomes. Guideline implementation is often less than optimal and therefore the potential of guidelines is not reached. Several guidelines exist for prophylaxis of venous thromboembolism (VTE), a leading cause of preventable in-hospital deaths, among neurocritical care patients. However, evidence from a provincial improvement initiative for VTE prophylaxis in the ICU suggests that VTE prophylaxis among neurocritical care patients remains a challenge. The objective of this study was to determine if current VTE prophylaxis practices among neurocritical care patients were similar to the recommended care outlined in several guidelines for neurocritical care conditions.

Methods:

Population-based administrative data and electronic medical records were linked to retrospectively audit VTE prophylaxis practices among neurocritical care patients admitted to ten adult medical-surgical/neurological ICUs in Alberta in 2014. Neurocritical care patients were identified using admission diagnosis (e.g. ischemic stroke, aneurysmal subarachnoid hemorrhage, intracranial hemorrhage, neuromuscular disorder, traumatic brain injury, spinal cord injury, seizures, spinal and other neurological surgery, brain tumor, etc.). Data included: demographic characteristics, form of VTE prophylaxis, contraindication for pharmacological VTE prophylaxis and outcomes of care. Guideline concordance was evaluated using the proportion of ICU days where care was similar to the 20 recommendations outlined across four guidelines for VTE prophylaxis among neurocritical care patients.

Results:

Of 7,669 admissions, 16.5% were neurocritical care patients. Neurocritical care patients had a mean age of 56 years; most were male (61%) without comorbidities (52.3%), and had a mean APACHE II score of 17. Guideline concordant care varied by recommendation, but was generally lower for recommendations for pharmacological only (62% of the eligible ICU days, n=9 recommendations) and higher for mechanical only (84% of the eligible ICU days, n=5 recommendations) or a those that recommended any form of VTE prophylaxis (96% of the eligible ICU days, n=6 recommendations). This was further supported by the finding that neurocritical care patient were more likely to receive mechanical (90.3% ICU days) than pharmacological VTE prophylaxis (74.1% ICU days). Those who received mechanical prophylaxis in the absence of pharmacological VTE prophylaxis were more likely to develop a VTE during their hospital stay (OR=1.54; 95% CI: 1.33, 1.79).

Conclusions:

One-third of neurocritical care patients do not receive guideline concordant pharmacological VTE prophylaxis, which increases the odds of developing a VTE. Our findings suggest current VTE prophylaxis prescribing practices may reflect uncertainty around risks associated with VTE prophylaxis among neurocritical care patients that are not adequately addressed in the existing guidelines. Future work in this area will focus on adapting and collating existing guideline recommendations for VTE prophylaxis among neurocritical care patients, to the local context. Key stakeholders (patients/caregivers/family members, decision makers, healthcare providers) will participate in a novel application of consensus methodology to develop a local guideline simultaneously with KT strategies with the goal of improving the implementation of the guidelines into clinical practice.

Engaging patients and the public in health research: Knowledge, experiences and training needs among Manitoba health researchers

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Background:

The significance of patient and public engagement (PPE) has been widely embraced in health research, exemplified by many funding agencies now requiring explicit consideration of PPE in their submissions. Such requirements have charged health researchers with leading PPE efforts, but evidence suggests that this practice is still evolving. Little research attention has been given to the experiences and training needs of health researchers. The goals of this study were to establish a baseline understanding of researchers' current knowledge, attitudes, self-efficacy and experiences of PPE in health research, and to identify needs and strategies for support.

Methods:

A cross-sectional online survey was distributed using a multi-phase purposive sampling strategy targeting health researchers in Manitoba. Informed by the Theoretical Domains Framework and the Determinants of Implementation Behavior Questionnaire, the 50-item survey was designed to explore the stated objectives.

Results:

Responses from 61 health researchers were included. The 51 researchers who had engaged patients and the public in health research were more likely to be mid-career researchers (n=19, 44.2%), conduct research in the university setting (n=29, 37.4%) and use mixed-methods as their primary research methodology (n=22, 41.5%). The majority of the 10 respondents who had never engaged were early-career investigators (n=9, 90%) using quantitative research methodologies (n=7, 70%). Most participants had engaged patients and the public in some way in their own research (n=51, 83.6%) and reported having little (n=10, 20.9%), some (n=22, 45.8%) or extensive (n=16, 33.3%) experience with this process. Most engaged by informing, consulting or involving (81.3%, 64.6% and 54.2% respectively), while fewer engaged by collaborating (37.5%) or through patient directed means (12.5%). Researchers were most likely to engage with patients (n=38, 82.6%) and families/caregivers (n=25, 54.4%), followed by community organizations (n=21, 45.6%) or patient or health issue organizations (n=20, 43.5%), all which were recruited using a number of modalities and engaged throughout various phases of the research process. Participants identified a range of barriers to engaging patients and the public in health research, including funding, time, compensation, logistics, recruitment, motivation at both the patient and researcher level, and skills of researchers to engage. All respondents generally agreed on the importance, usefulness and value of PPE to improve research and the healthcare system. Most participants felt the need for additional supports to effectively engage patients and the public in their research (n=43, 81.1%). Others specified the need for funding to develop community partnerships and more generous financial support and timelines given the intensive and lengthy process of engagement. Similarly, the majority of participants indicated interest in participating in PPE training (n=40, 75.5%). Lack of time (n=21, 39.62%) and feeling capable of engaging patients and the public in research (n=13, 24.5%) were reasons for disinterest in training.

Conclusions:

Manitoba health researchers engage patients and the public in health research across varying stages of the research process and at varying levels of involvement. Findings suggest a need to address barriers to effective PPE and support the need for targeted training and supports for health researchers.

Using the arts to advance the translation of patient-oriented research

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Background:

In striving to promote more nuanced understandings of the lived experiences of research participants, researchers are increasingly using novel arts-based knowledge translation (KT) approaches to communicate the results of research. Arts-based KT approaches can be particularly helpful for sharing experiences around health issues that are frequently confronted by fear and stigma, such as issues around mental health. The aim of this presentation is to describe the process of transforming research results into an artistic creation from the study titled “Youth’s Voices: Their Lives and Experiences of Living with an Anxiety Disorder.”

Methods:

In this study, 58 youth (10-22 years) diagnosed with anxiety shared their stories of living with anxiety through in-depth interviews. Youth also took part in the photovoice process which involved giving them digital cameras to document their experiences of living with anxiety by way of photography. Photovoice was a powerful tool for amplifying the voices of youth in the study and helped to bring creative insights to the research. Analysis involved several steps with the aim of striving for a detailed narrative account of the essence of youth’s experiences of living with anxiety.

Results:

Findings highlighted in this presentation depict how anxiety shapes daily life for youth as represented by five themes: Hiding the Struggle; Fear of the Unknown; Taking up Space; Feeling Different; and Can’t You See I’m Struggling. To further advance an understanding of the five themes, video vignettes were created that featured the themes as captured through dance.

Conclusions:

This study provided youth the opportunity to reflect more deeply on their personal experiences and in their own voice about what it is like to live with an anxiety disorder and how anxiety can shape aspects of their everyday lives, including social interactions, family and peer relationships, school, and leisure activities. As a medium, dance communicates emotion in a very powerful way and can help to translate patient-oriented research to a wider audience of policy makers, health care practitioners, researchers, as well as the general community. The video vignettes that resulted from this collaborative process provide compelling and thought-provoking narratives through a visually beautiful multi-artistic experience, and contribute to addressing the stigma around mental health. The videos are also used to encourage youth to reach out, to seek and offer support and to listen to the experiences of youth. The presentation will end with a showing of one of the videos.

Personalized patient alerts and care pathways to prompt interventions for at-risk alcohol use among tobacco users in primary care

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Background:

Combined tobacco and alcohol use present multiplicative risk for aerodigestive cancers. In Ontario, 34% of smokers consume five or more drinks per occasion at least once per month, compared to 17% of non-smokers. Reducing alcohol consumption improves smoking cessation outcomes and reduces cancer risk. Therefore, targeted programs for smokers who drink above Canadian Cancer Society (CCS) alcohol guidelines (Women: less than 1 drink a day; Men: less than 2 drinks a day) are needed. However, in primary care settings, risky alcohol consumption and smoking are often treated separately despite concurrent treatment potentially leading to better outcomes. There is potential to address this gap by implementing a clinical decision support system (CDSS). The objective of this study was to examine whether a CDSS influences health care practitioner delivery of a brief intervention to smokers drinking at risky levels.

Methods:

Across Ontario, 221 primary care clinics, implementing an existing smoking cessation program were blindly allocated to receive CDSS (intervention) versus standard practice (control).

Health care practitioners working in clinics randomized to the intervention arm received computer alerts when a patient reported consuming alcohol above CCS guidelines, and were guided to provide the patient with a brief intervention and an educational resource. Clinics randomized to the control arm had access to the same educational resources available to practitioners in the intervention group, but did not receive computer alerts. Appropriate provision of the brief intervention was measured by tracking the number of times practitioners offered the educational resource to smokers drinking at risky levels. This primary outcome variable was compared between clinics randomized to the CDSS versus those in the control group. The secondary outcome measured patient's likelihood of accepting educational resource that was offered.

Results:

Between April 2016 and September 2017, 15,222 smokers in 221 primary care clinics were enrolled in the smoking cessation program and screened for alcohol use at baseline, whereby 38% reported drinking above CCS alcohol guidelines. Of these, 45% were offered an educational resource by their practitioner. There was no significant difference between groups (CDSS versus control) in practitioners' likelihood of offering educational resources to appropriate patients [OR=1.19 (0.88–1.64), p=0.261]. However, a significantly greater proportion of patients in the intervention group accepted the offered educational alcohol resource [OR=1.48 (1.01–2.16), p=0.045].

Conclusions:

It is feasible to integrate alcohol interventions in a primary care setting with smokers making quit attempts. Use of a CDSS had no influence on practitioner behavior in offering an educational resource when prompted. However, the observed increase in patients accepting the offered resource in the CDSS group suggests that it may change practitioner behavior in other ways that the current study did not measure. Further studies are needed to identify the contexts in which CDSS is most effective from the perspective of health care practitioners and patients.

Co-creating a knowledge translation intervention with families in long-term residential care: Methodological insights and dilemmas

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Background:

By 2038, families of individuals living in long-term residential care (LTRC) will be contributing over 107 million hours of care. Although families are a cornerstone of care in this sector, there is a paucity of intervention research with this group. Of those published, it is evident that interventions can enhance family-staff relationships, improve health outcomes for family members, and result in better quality care for residents. Following an extensive search of the literature, we were unable to identify any knowledge translation interventions with this group. Furthermore, research about co-creation with families in this sector is almost nonexistent.

Methods:

To begin to address this gap, and building on findings from an ongoing critical ethnography, researchers and family members co-created a knowledge translation intervention. The Support, Education, Networking & Sustained Engagement (SENSE) Workshop Series was piloted in the Spring of 2017 at a publicly-owned facility in Vancouver, British Columbia. Thirty-eight (46% response rate) pre-surveys, which assessed interest in attending the workshops and current family involvement, were returned. Eleven family members committed to participating in the workshops and completed process and summative evaluations involving participant observations, interviews and post-intervention surveys. Concurrent with the implementation of the intervention, we examined the co-creation process among a group of clinicians, family members and researchers, of which there were four family members. Data were collected via semi-structured interviews and participant observations. Data were thematically analyzed.

Results:

We found that developing a shared understanding of co-creation takes time, as many participants, including the researchers, were not familiar with this approach to research. As well, throughout the process there persisted a privileging of certain types of knowledge (e.g. clinical, empirical) in relation to family member's experiential knowledge. Lastly, power relations among co-creators, particularly family members and expert clinicians were evident in verbal and non-verbal interactions.

Conclusions:

We will discuss how challenges were navigated (or not) and provide recommendations for further methodological explorations involving co-creation. As we enter a new era emphasizing patient and family-oriented research, this study provides useful insights into how to navigate this terrain in long-term residential care.

Sexuality information toolkit for adults with moderate to severe TBI: A codevelopment project

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Background:

Individuals with traumatic brain injury (TBI) are more likely to deal with sexual dysfunctions (drive, arousal, and orgasm) (Downing, Stolwyk, & Ponsford, 2013), to engage in sexual activities less frequently (Simpson & Baguley, 2012) and to report a diminished sexual quality-of-life and satisfaction (Moreno et al., 2014) than healthy adults. Accordingly, addressing potential sexual issues during the rehabilitation of these patients is recommended by two clinical practice guidelines (INESSS-ONF, 2016; New Zealand Guidelines Group, 2006). Despite these recommendations, Quebec rehabilitation professionals rarely discuss sexual health issues with these patients (INESSS-ONF, 2017; Moreno, Gan, Zasler, & McKerral, 2015). To support a change in professional practice, representatives from Quebec traumatology rehabilitation programs, invited to a consensus consultation in 2017, highlighted the need for implementation tools. A first step to addressing this need was the coconstruction of sexuality information tools matching the interests and needs of adults with moderate to severe TBI (MSTBI).

Methods:

Two series of focus groups and individual interviews were held. Participants were asked about their preferences for the tools' content and form during the first round of consultations.

Researchers were actively involved in the discussion to facilitate the process. This led to the development of a first tool prototype. During the second round of consultations, participants' impressions of the prototype and needs for modifications were documented. Changes were made accordingly and additional tools were created. The evaluation of user experience of the tools will be achieved during a third round of consultation.

Results:

Five adults with MSTBI and two spouses participated in the codevelopment of the tools. They first identified the main subjects to be covered, including changes in desire, arousal and orgasm, fatigue, depression, changes in self-esteem and emotions, medication, disinhibition, contraception, family planning and changes associated with age versus TBI. Participants preferred video content to written information, but still showed interest for a leaflet, a checklist and a card that could be shared with professionals to subtly express their willingness to have a discussion about sexuality. Considering these preferences, a 17 minute narrated Prezi presentation was first developed based on participants' priorities. Narrated capsules had a mean duration of 25.5 seconds. During the second round of consultations, participants mentioned that, while the content was appropriate, there was too much condensed information and the presentation was too long. In contrast, they identified additional subjects to be covered. They also confirmed their need for complementary tools to the presentation. This led to the repartition of the subjects between shorter and more specific Prezi presentations. They were intended for either men or women, single or in a relationship. In the process, each capsule's content was reformulated. A leaflet, a checklist, and a discussion card were also created.

Conclusions:

This patient-oriented project, based on an integrated approach of knowledge transfer, led to the development of a sexuality information toolkit likely to match the interests and needs of adults with MSTBI. The evaluation of the user experience to be done shortly will help confirm or refute this assumption.

Methods for developing printed educational materials: Co-creation or usability testing?

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Background:

Printed education materials (PEMs) targeted to patients are a common resource used by guideline developers and clinicians. There is growing interest in co-creation, defined as the active participation of patients as collaborators with clinicians and researchers in PEM development processes. It is important to evaluate whether co-creation provides added value over clinician-developed PEMs that undergo usability testing only. We compared a prostate specific antigen (PSA) PEM that was co-created with patients to a clinician-developed PEM, which engaged patients during usability testing, to determine impact on patients' decisional conflict, knowledge, and screening preferences.

Methods:

The co-created PEM was created using a phased approach, including: qualitative interviews to assess patient understanding of PSA screening (n=10); coding identified barriers and facilitators to following PSA screening recommendations using the theoretical domains framework and linking to the capability, opportunity, motivation-behaviour theory; and forming a PEM development committee consisting of nine patients, a clinician, and a PEM developer. The committee attended an in-person meeting to co-create a PEM on PSA screening harms and benefits. Following the meeting, two PEM prototypes were developed. Patients provided feedback on the prototypes using online software and a final version was created. English-speaking Ontario men aged 40+ years who were not diagnosed with prostate cancer and did not work in healthcare were recruited to evaluate the co-created PEM compared to a clinician-developed PEM (NCT03222466). The primary outcome was decisional conflict (measured using the Decisional Conflict Scale); secondary outcomes included knowledge, screening preferences, and PEM preference. Consenting participants were randomized to view either the co-created PEM (Intervention) or the clinician-development PEM (Control). A sample size of 352 (176 in each arm) was calculated to detect a 0.3 difference in mean change from baseline in the primary outcome between the two groups with 80% power at 0.05 level of significance. Assuming 20% attrition, the total number required was 422. Chi-square or binomial tests were used for categorical and binary outcomes. Comparative analysis was performed to assess change from baseline between the two groups.

Results:

453 participants completed the survey (Intervention n=230; Control n=223). The majority of participants were between 55 and 69 years of age (59%; n=268). Between the two groups, there were no significant differences in decisional conflict (p=0.763, 95% CI -2.046 to 2.789), knowledge of PSA tests (p > 0.05, OR = 1.10), and screening preferences (p=0.581, 95%CI -0.091 to 0.163). Both groups had similar changes across outcomes post-exposure, including more correct responses to knowledge questions (Intervention $X^2(1)=55.02$, p = 0.0001; Control $X^2(1)=37.74$, p = 0.0001) and a shift to not wanting or unsure about getting screened for prostate cancer (Intervention p=0.001, 95%CI 0.0112-0.235; Control p=0.001, 95%CI 0.097-0.226). Despite significant changes in screening preferences, exposure to both PEMs increased decisional conflict (Intervention p=0.001, 95%CI 3.223-6.818; Control p=0.001, 95%CI 3.419-7.385). However significantly more participants preferred the co-created PEM (p=0.001, Cramer's V=0.409).

Conclusions:

Both co-created PEMs and clinician-developed PEMs with usability testing are effective tools to improve knowledge and shift screening preferences; however, they may increase decisional conflict. Depending on available resources and context, co-creating PEMs can provide a resource that more closely aligns with patient preferences.

Usability results of art-based knowledge translation tools for pediatric acute gastroenteritis and croup

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Background:

Acute gastroenteritis (AGE) and croup are amongst the most common causes of childhood hospitalization, globally. Despite the prevalence of these illnesses, there continues to be considerable variations in clinical practice regarding treatment and management. Using the principles of patient engagement, we developed some innovative KT tools with parents. Arts-based knowledge translation (KT) tools in child health that communicate complex health information to parents have the potential to reduce unnecessary emergency department (ED) utilization and improve health outcomes by communicating knowledge, creating understanding, and sustaining interest by generating meaningful connections for parents. However, further implementation and evaluation is needed to guide their application. We recently conducted studies to develop and refine the usability of a whiteboard animation video and an e-book for parents about AGE, and a whiteboard animation video about childhood croup.

Methods:

Using a qualitative descriptive approach, interviews were conducted with parents whose child recently had AGE or croup. Thematic analysis of these data informed the development of a composite narrative for each tool. Prototypes of each tool were developed then vetted by medical experts. After refinements, each tool was then evaluated by parents, who were recruited to participate in an electronic usability survey in three ED waiting rooms in three provinces/territories representing urban (Alberta), rural (Manitoba), and remote (Northwest Territories) health regions. Parents were randomized to evaluate only one of the three tools. The 5 point Likert scale usability survey contained 8 questions that assessed the user experience of each tool: 1) usability; 2) aesthetics; 3) language; 4) level of engagement; 5) quality of information; 6) length; 7) preference of form over traditional dissemination venues; 8) value-added. Parents were then purposively recruited to participate in one focus group in each of the three regions. Descriptive statistics and t-tests were used to analyze the survey data. Content analysis was employed to analyze the focus group data.

Results:

82 parents participated in the usability evaluation (n=63 survey participants; n=19 focus group participants). In general, participants gave favorable and similar scores for the AGE video and e-book. However for three components (future use, parent satisfaction and use enjoyability), parents had statistically significant preferences for the AGE video as compared to the AGE e-book. Scores for the croup video were favorable on all usability elements. Common themes identified by parents (n=19) for the AGE and croup videos revealed the videos were informative, clear and useful. While parents found the AGE e-book informative, they preferred the video. Parents also highlighted that the AGE e-book, while informative, was not as impactful or preferred as the videos.

Conclusions:

This study demonstrates that parents are highly supportive of innovative art and narrative based mediums for communicating complex health information. The model we have developed for patient engagement and the creation of innovative and relevant KT tools is highly successful and scalable to other conditions.

Poster Presentations

Knowledge translation tools for parents on child health topics: A scoping review

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Background:

Knowledge translation (KT) research has shifted focus towards health consumers, particularly in child health. KT tools provide health consumers with research knowledge to inform health decision-making and may foster 'effective consumers'. The purpose of this scoping review was to identify effectiveness research on child health-related KT tools for parents/caregivers, a sub-set of the health consumer population.

Methods:

A health research librarian developed and implemented search strategies in 8 databases. One reviewer conducted screening using pre-determined criteria. A second reviewer verified 10% of screening decisions. Data extraction was performed by one reviewer. A descriptive analysis was conducted and included patient-important outcome classification, WIDER Recommendation checklist, and methodological quality assessment.

Results:

7952 independent titles/ abstracts were reviewed, 2267 full-text studies were retrieved, and 18 articles were included. A variety of KT tools, including single- (n=10) and multi-component tools (n=10), were evaluated spanning acute (n=4), chronic (n=5) and public/population health (n=9) child health topics. Study designs included: cross-sectional (n=4), before-after (n=1), controlled before-after (n=2), cohort (n=1), and RCTs (n=10). The KT tools were evaluated via single primary outcome category (n=11) and multiple primary outcome categories (n=7). Two studies demonstrated significant positive effects on primary outcome categories; the remaining studies demonstrated mixed effects (n=9) and no effect (n=3). Overall, methodological quality was poor; studies lacked a priori protocols (n=18) and sample size calculations (n=13). Overall, intervention reporting was also poor; KT tools lacked description of theoretical underpinnings (n=14), end-user engagement (n=13), and preliminary/developmental research (n=9) to inform the current effectiveness evaluation.

Conclusions:

Many child health KT tools have been developed for parents/caregivers, a unique group of health consumers; however, numerous outcomes were used to assess impact with limited evidence demonstrating effectiveness. Methodological rigor and reporting of effectiveness studies was limited. Careful tool development involving end-users and preliminary research, including usability testing and mixed methods, prior to large-scale studies is important to advance KT for parents/caregivers specifically and for health consumers broadly.

Experiences of a Doctoral Trainee Interviewing Parents about Acute Pediatric Illnesses

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Purpose:

To describe the challenges and experiences of a doctoral trainee interviewing parents discussing their experiences and information needs caring for a child with bronchiolitis or a urinary tract infection (UTI).

Background:

Translating Emergency Knowledge for Kids (TREKK) is a national knowledge mobilization network established in Alberta to address critical knowledge gaps and improve emergency care for children in Canada. One goal of the TREKK initiative is to empower families to make informed pediatric healthcare decisions by creating knowledge translation (KT) tools tailored to their needs and references. To achieve this, multi-phase research projects have been conducted based on patient engagement principles. Currently, Translating Evidence in Child Health to advance Outcomes (ECHO) research team at the University of Alberta are conducting semi-structured qualitative interviews (Phase 2 of 4) for two studies exploring parent experiences and information needs caring for a child with bronchiolitis and a UTI. Engaging parents through interviews about health conditions concerning their own child recognizes them as experts with unique experiences and knowledge to contribute. However, various contextual challenges arise when conducting interviews (i.e. contacting participants, scheduling conflicts, encouraging open dialogue). These challenges can impede data collection and prolong the research process. A doctoral trainee working with this project at ECHO discusses her experiences and challenges conducting qualitative interviews with participants.

Methods

Two of these multi-phase research studies are currently being undertaken exploring parents experiences, preferences and information needs in caring for a child with bronchiolitis or a UTI. Phase 1) systematically review the current literature on parent information needs and experiences caring for a child with bronchiolitis or a UTI. Phase 2) explore parent experiences and information needs caring for a child with bronchiolitis or a UTI through semi-structured interviews. Phase 3) creation and dissemination of a KT tool with family input based on the results of phases 1 and 2. Phase 4) usability and evaluation of the tool. To date, Phase 1) of each study has been completed, and Phase 2) is currently underway. Potential interview participants are recruited through the emergency department of a pediatric tertiary care center.

Findings:

Despite the large volume of participants being recruited, conducting interviews has proven to be challenging. Challenges include connecting with participants to schedule an interview and finding a mutual date, time and location to conduct the interview. Additional challenges experienced with interviewing include language barriers and encouraging open and detailed dialogue from participants. Potential strategies to help overcome these challenges include: being flexible as a researcher with date, times and locations to conduct the interview to better accommodate participants, conducting interviews in person as opposed to over the phone, having multiple options to contact participants (i.e. phone, email, text) and conducting interviews at the time of recruitment.

Conclusions:

While interviewing parents is both valuable and essential to provide enhanced insight and understanding about managing common pediatric illnesses, the challenges involved with understanding their experiences cannot go unrecognized. Anticipating these challenges encourages researchers to develop strategies to help mitigate them in the future.

Improving mental health act rights advice in BC: A patient-oriented integrated knowledge translation project

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Background:

A 2011 survey of mental health patients in British Columbia found that, among respondents who were certified as involuntary patients, 43% said that their rights under the Mental Health Act were not explained to them in a way they could understand. Possible reasons for this gap include: •inconsistent rights-advice practices, •rights advice given when patients are not cognitively receptive to new information, and •an ineffective communication tool. In addition to upholding patients' civil liberties, Mental Health Act rights advice can play an important therapeutic role. Giving involuntary patients a sense of procedural justice reduces their feelings of coercion and learned helplessness, and it increases the likelihood that they will engage in their own recovery. Currently, BC uses a government form to give rights advice to involuntary patients, but that document had never been tested for effectiveness with users. Further, rights advice is given mostly by clinicians who may not always consider it a priority in a person's treatment.

Methods:

This patient-oriented integrated knowledge translation project incorporated feedback about certified patients' information needs from people who have experienced involuntary hospitalization. The project team included two patient partners, a clinician knowledge user, a legal expert, and three researchers, and they co-created a new suite of patient-centred communication tools. Those tools were tested with people with lived experience via think-aloud user testing. The project team also developed a training program to help clinicians who deliver rights advice implement those communication tools in the clinical setting. The team's goals are to increase patients' understanding of their rights and to foster a rights-centred culture among clinicians that will improve therapeutic relationships. The program will be evaluated with the CPD-Reaction Questionnaire before and after the training session.

Results:

The user-testing interviews were analyzed for themes. The analysis revealed that participants preferred the new suite of communication tools to the existing government form, and they appreciated the accessibility of the language and visual elements. The potential of the tools to encourage dialogue between patients and clinicians about their rights was also a key theme. The training program is still being developed and evaluation results are not yet available.

Conclusions:

Offering patients several modes of rights information, all in accessible language, shows promise in helping to reduce the anxiety and trauma associated with involuntary hospitalization. Next steps include further research into implementing the tools and evaluating their effectiveness in clinical settings.

Partners in Research: A patient-oriented research capacity building initiative for patients and researchers

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Presenter:

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Background:

In the past decade, patient-oriented research (POR) has come to the forefront of healthcare research, placing importance on making research and guideline recommendations more relevant to the populations they target. However, despite the growing interest in POR, there is a lack of capacity among researchers and patients in how to conduct POR. To meet the POR capacity-building needs of patients and researchers, we received funding from the Ontario Support for Patient-Oriented Research Unit (OSSU) to develop and implement an online course in POR called Partners in Research (PiR). We propose to describe the process of co-creating PiR and provide preliminary results from the first 2 cohorts of PiR participants.

Methods:

The co-creation of PiR was overseen by a steering committee of patients and researchers and was operationalized by a working group with equal representation of patients, researchers, and educators. Working group members were recruited based on expertise in POR and capacity building; members were from Ontario, New Brunswick, and the United Kingdom. We used SPOR's Patient Engagement Framework (i.e., principles of inclusiveness, support, mutual respect and co-building) to inform our collaboration practices. This framework helped ensure patient and researcher perspectives were integrated into curriculum design and priority-setting. The course structure and delivery were informed by theory and best practices in adult education, and designed to facilitate interaction between participants as well as provide opportunities to practice new skills. Principles of andragogy were used to increase motivation and self-directed behaviour to engage in and/or conduct POR. PiR was designed as a 2-month online course with 4 real-time webinars, each 2 hours long. Webinar topics include an introduction to POR, introduction to health research, ethical considerations in POR, and communication and collaboration techniques. The course aimed to recruit 20 patients and 20 researchers per cohort (i.e., a maximum of 40 participants), to come together to learn how to collaborate as partners in health research. We evaluated the impact of PiR on participants' knowledge, self-efficacy, attitudes, intentions, and use of POR using surveys at baseline, immediately and 6 months after the course. Quantitative results will be analyzed using descriptive statistics and ANOVA in SPSS v.20 and open-ended responses will be analyzed qualitatively using a framework approach.

Results:

In 2017, two cohorts completed PiR (cohort 1: 18 patients, 18 researchers; cohort 2: 17 patients, 23 researchers). For cohort 1, 7-8 patients (39-44%) and 6-8 researchers (33-44%) completed surveys at each time point. For cohort 2, time points 1 and 2 have been collected from 11-12 patients (65-71%) and 6-8 researchers (26-35%). Participant outcomes, including knowledge, self-efficacy, intentions, use of POR, and course satisfaction from cohorts 1 and 2 will be available in June 2018. The average satisfaction score was 6.29 (Time 2) in Cohort 1 and 6.43 (Time 2) in Cohort 2 out of a possible 7-point scale.

Conclusions:

We will describe the PiR course, a co-created course on building POR capacity among patients and researchers. Interest in participating in this course has been high and early results show high participant satisfaction.

The influence of individual characteristics and organizational context on the use of research evidence by nurses in residential long-term care settings

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Background:

Little scientific attention has been focused on understanding the use of research evidence in long-term care settings and almost none on regulated nurses' use of research in nursing homes. Therefore, the purpose of this study was to assess individual characteristics and organizational context (work environment) features that influence nurses' self-reported use of research evidence in nursing homes.

Methods:

An analysis of data from Phase 2 of the Translating Research in Elder Care Program was conducted. A total of 756 regulated nurses (308 Registered Nurses (RNs) and 448 Licensed Practical Nurses (LPNs)) working in 89 nursing homes in three Canadian provinces (Alberta, Manitoba, and British Columbia) were included in the analysis. Generalized Estimating Equation modeling was used to account for the correlated structure of the data and to identify which individual characteristics and organizational context features predict, at statistically significant levels ($p < .05$), three kinds of self-reported research use: instrumental (direct) research use, conceptual (indirect) research use, and persuasive (also indirect) research use.

Results:

At the individual level, three factors were statistically significant predictors of instrumental research use: having presented research results previously ($\beta = 0.604$), problem solving ability ($\beta = .344$), and a positive attitude towards research ($\beta = 0.290$). At the organizational context level, significant predictors of instrumental research use were availability of structural and electronic resources ($\beta = 0.146$), engaging in formal interactions ($\beta = -0.117$), and better perceptions of organizational slack-staff ($\beta = -0.167$). Significant predictors of conceptual research use at the individual level were a positive attitude towards research ($\beta = .476$), self determination (empowerment) ($\beta = 0.168$), and job efficacy (burnout) ($\beta = 0.141$). At the organizational context level, only one predictor was significant – availability of structural and electronic resources ($\beta = 0.117$). Significant predictors of persuasive research use at the individual level were positive attitude towards research ($\beta = .336$), belief suspension (implement) ($\beta = 0.176$), organizational citizenship behaviour ($\beta = .215$), self determination (empowerment) ($\beta = 0.242$), and job efficacy (burnout) ($\beta = 0.140$). At the organizational context level, significant predictors were availability of structural and electronic resources ($\beta = 0.132$), evaluation (feedback mechanisms) ($\beta = 0.205$) and better perceptions of organizational slack-time ($\beta = -0.232$). Only two factors predicted all three kinds of research use: a positive attitude towards research (individual level) and availability of structural and electronic resources (organizational context level). All factors that predicted conceptual research use also predicted persuasive research utilization but with persuasive research utilization also having additional predictors.

Conclusions:

Our study suggests that both individual and organizational context features play important roles in professional nurses' use of research evidence in nursing homes. Individual characteristics played a more prominent role than organizational context in predicting conceptual and persuasive use of research evidence, while instrumental research use, a more task-oriented form of research use, was predicted equally by individual and organizational factors.

Self-management interventions in chronic kidney disease: Patients' and caregivers' experiences and preferences

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Background:

Fostering the ability of patients to self-manage their chronic kidney disease (CKD), with support from caregivers and providers, may improve health outcomes and is a research priority identified by patients. However, patients with CKD are rarely consulted regarding their preferences and needs for development and evaluation of self-management interventions, particularly for patients not requiring renal replacement therapy. With engagement of our patient partners (Canadians Seeking Solutions and Innovations to Overcome CKD, Can-SOLVE CKD Network) we aimed to address this gap in knowledge. Objective: To describe the experiences and perspectives of patients with CKD and their caregivers regarding self-management interventions.

Methods:

We conducted focus groups and semi-structured telephone interviews with a purposive sample of patients with CKD (Categories 1 to 5, not on renal replacement therapy) and their caregivers across Canada. Data were analyzed using conventional content analysis (i.e. coding and grouping similar concepts and developing themes). Patient partners were involved in developing the interview guide, reviewing the transcripts, and interpreting our findings.

Results:

We conducted six focus groups (n= 37) and interviews with 11 participants across Canada. The majority were female (62%), under the age of 65 years (54%) and residing in both urban and rural areas. There was patient representation from all 5 CKD categories, with most patients (70%) diagnosed with CKD within the last 10 years. Our preliminary findings suggest that patients with CKD and their caregivers perceive a variety of needs related to managing CKD including the need for self-management information, support with navigating resources and managing the impact of CKD on daily life. Specifically, participants identified issues with finding, interpreting and "state of readiness" for information. In addition, they expressed frustrations around restrictions and limitations related to diet, medical management, symptoms experienced and ability to work or go to school.

Conclusions:

Given the importance placed on self-managing CKD, attention to the experiences of patients and caregivers is essential to support their efforts. These findings will inform a larger Can-SOLVE CKD study that will aim to develop, test and evaluate a tailored self-management intervention ensuring that patient values guide the content and format.

Long-term perceived engagement and research priorities among chronic kidney disease stakeholders: A qualitative study

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Background:

Patients and stakeholders are increasingly engaging in chronic kidney disease (CKD) research in various capacities. We previously undertook a multi-stakeholder project using the James Lind Alliance approach to identify the top 10 CKD research priorities, and compared a traditional in-person workshop to an online wiki-like platform for ranking the final priorities. The aims of this study were to explore among CKD stakeholders from our prior priority-setting project: (1) participants' long-term perceptions of engagement in research; and, (2) participants' long-term views on the final identified CKD research priorities using a qualitative descriptive approach.

Methods:

Participants (non-dialysis CKD patients, caregivers, healthcare professionals and policymakers) from our CKD research priority setting project two years prior were eligible for inclusion. In-depth, semi-structured interviews were conducted with eligible participants. Through an inductive, thematic analysis approach, coding of transcripts was done in duplicate and themes were developed in relation to the objectives.

Results:

We conducted 23 interviews across stakeholder groups (8 patients, 4 caregivers, 8 healthcare professionals, and 3 policymakers) and types of involvement (7 wiki, 8 workshop only, 6 workshop and steering committee, and 2 steering committee only). For the perceived engagement objective, we identified 4 themes: (1) Roles and expertise – the perceived value and limitations of patient engagement; (2) CKD community – an integrated CKD community through research engagement; (3) Knowledge – learning about others' experiences with CKD; and, (4) The 'engaged' persona – participants engage in patient-centered CKD care and research but not necessarily as a consequence of this project. For the research priorities objective, we identified 3 themes related to priorities and the process: (1) Priorities over time (the what, why and for whom?) – participants agreed overall with the group priorities even though their individual priorities may have changed; (2) Research prioritization (the how?) – participants considered the priorities valid because of the systematic and inclusive process through which they were derived; and (3) Application and applicability of research priorities (the where?) – participants had variably applied the priorities and viewed them as variably applicable.

Conclusions:

Our findings highlight the complex interplay between research engagement, priorities, CKD care, and the lived experience of CKD. Although participants may experience engagement in research prioritization differently, they share a desire to contribute meaningfully to a process they perceive as important and to feel that their contributions are valued. We have identified key considerations around role clarity, representation, and communication that may help optimize future research engaging patients as stakeholders.

Establishing parent priorities in child health: A pilot study

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Background:

Determining what health care topics are important for study is often determined by funding agencies and decided upon by researchers, whose priorities may differ from those of health care users (patients, parents and caregivers). However, there is now a shift towards patient-orientated research and an increasing awareness of the role patients can play in shaping research agendas. Engaging patients in setting research priorities may lead to funding of research that is of high relevance to them and their families. In child health-related research, the perspectives of parents are rarely acknowledged. The objective of this pilot study was to engage parents in developing a priority list of research topics related to child health.

Methods:

Members of our Alberta Paediatric Parent Advisory Group (P-PAG) were invited to participate (n=14). A list of topics relating to child health was developed in collaboration with stakeholders (Cochrane Child Health, clinical researchers) and included priority topics set forth by Alberta Health and Alberta Health Services' Maternal Newborn Child and Youth Strategic Clinical Network. This list was sent to parents via an anonymous online survey. The survey asked parents to rank the topics by rating the degree to which they agreed the topic was a priority for child health research. Ratings were based on a 5-point Likert scale (1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree) and space was also provided for parents to suggest additional topics. All topics that were rated 4 ("Agree") or 5 ("Strongly Agree") by $\geq 70\%$ of respondents were retained for discussion during the focus group meeting. Using deliberative dialogue and a modified nominal group technique, parents discussed and re-ranked their priority topics. All topics that were rated greater than 4 by $\geq 70\%$ of parents made the final priority list.

Results:

Five active members of our P-PAG participated. Forty-six child health-related topics were identified by our stakeholders and ranked by parents. Thirteen topics were highly rated and discussed at the focus group meeting. Eight topics were then identified as high priority to parents and were related to: Patient Safety and Quality of Care, Trauma and Injuries, Obesity and Weight Management, Vaccines, Alcohol and Other Drug Use, Pain, Childhood Cancers, and Abuse. Two common themes identified through qualitative focus group discussion synthesis were "family dynamics" and "communication". Additional, in depth discussions around these themes are planned and will provide more specificity to the topics identified.

Conclusions:

Utilising the knowledge and experience of our P-PAG, a list of priority topics in child health was developed. This list highlights the areas where funding and research should be directed, to improve the patient care experience and child health outcomes that are important to parents. Upscaling this project with a wider parent audience and involving children and youth will help establish common priorities and provide an opportunity for patients to be actively engaged in child health research.

Partnering with family as agents of change at the bedside and beyond: Feasibility of family delirium detection in the critically ill

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Background:

The use of family-administered delirium detection tools has not been assessed in the intensive care unit (ICU) where patients are critically ill and frequently intubated. Family members may be able to detect changes in patient cognition and behavior from pre-illness levels earlier than unfamiliar providers. These tools may be a valuable diagnostic adjunct in the ICU. Our primary objective was to determine the feasibility of employing family-administered delirium detection tools in the critically ill. Secondly, we describe the experience of engaging former ICU patients and families directly as researchers on the study team.

Methods:

Consecutive patients and family members (dyads) in the largest adult ICU in Calgary, Canada were recruited by research assistants and patient and family researchers (Aug. 9-Sept. 11, 2017). Inclusion criteria were: patients with a Richmond Agitation Sedation Scale (RASS) ≥ -3 ; no primary brain injury and Glasgow Coma Scale score of ≥ 9 ; ability to provide informed consent (patient/surrogate); and remain in ICU for 24 hours. Data were collected for up to 5 days. Family-administered delirium assessments were completed once daily (Family Confusion Assessment Method & Sour Seven). To assess feasibility, we assessed the proportion of eligible patients recruited and percent family member enrollment. Barriers to enrollment were categorized. Two former ICU patients and ICU patient family members were trained as researchers to in participant recruitment, consent procedures, and data collection. Field notes from study research assistants were recorded and content analysis employed to analyze the results. The benefits and risks to partnering with former ICU patients and family members in the conduct of critical care research are described.

Results:

Of 99 admitted patients with family, 37 (37%) met inclusion criteria and 17 (46%) dyads consented. 20% of admitted patients did not have family and were ineligible. 73% of enrolled dyads assessed delirium at least once, with a median of 5 (of 10 total) assessments. The most common reason for non-enrollment was refusal by the family, who commonly reported feeling overwhelmed. Barriers with nurses were encountered, including not providing access to patients. We revised our initial training approach to ensure engaged supervision when partnering with patients and families as research team members. We perceived frustration on behalf of patient researchers with the constraints of the research process and an under-appreciation of the ethical and privacy considerations of clinical research. Study participants expressed great satisfaction with the involvement of former ICU patients and families in the recruitment and data collection process.

Conclusions:

These data suggest that employing family-administered delirium detection tools in the ICU is feasible. Future studies will validate the use of these tools in the ICU, decrease modifiable barriers to enrollment, and test strategies to overcome attitudinal barriers towards employing these tools. Former patients and families can be successfully engaged as researchers with the appropriate training and supervision.

Impact of a continuing education activity targeted at chronic obstructive pulmonary disease case managers on patient health outcomes: A pre- and post-intervention study

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Background:

Therapeutic patient education (TPE) improves quality of life and reduces healthcare utilization among patients with chronic obstructive pulmonary disease (COPD). However, benefits from TPE might depend on the performance of COPD case managers and training is needed to ensure the delivery of effective TPE interventions. Based on the framework by Moore et al. (2009), our aim was to evaluate the impact of a passive continuing education (CE) activity on TPE in COPD case managers on patient health outcomes.

Methods:

We conducted a pre- and post-intervention study. The present study was part of a larger trial that aimed to compare the impact of two CE activities on TPE in COPD case managers (NCT02870998). These CE activities shared a common learning objective (to be able to deliver effective TPE interventions), but differed in their learning activities. For the present study, COPD case managers, who attended a 7-hour lecture on TPE, invited COPD patients to participate in the study. In COPD patients who met the newly trained case managers, we assessed self-reported health outcomes, using interviewer-administered questionnaires before the TPE intervention and six months after. The following self-reported outcomes were measured: (1) quality of life (Activity and Impact components of the St. George's Respiratory Questionnaire for COPD patients, or SGRQ-C; score 0–100, a lower score indicated better quality of life); (2) health-directed behaviours (Health Education Impact Questionnaire, or heiQ; score 1–4, a higher score indicated better health-directed behaviours); and (3) the number of unscheduled doctor visits, emergency room visits, and hospitalizations (Survey on Living with Chronic Diseases in Canada, or SLCDC). Statistical analyses evaluated changes before and after TPE using either linear or Poisson mixed models.

Results:

Out of the 22 healthcare professionals who attended the CE activity and who performed TPE interventions in their work setting, four agreed to invite COPD patients. Out of 59 eligible COPD patients, 42 persons were enrolled (age, mean±SD: 69±8; women: n=20). From baseline to follow-up, COPD patients' quality of life improved. In regard to the SGRQ-C Activity component, mean scores were 69.8/100 (95% confidence interval, or CI: 61.7–77.9) at baseline and improved to 60.0/100 (95% CI: 50.2–69.9) at 6-month follow-up (mean difference, or MD=-9.8, 95% CI: -17.9--1.6, P=0.02). SGRQ-C Impact component scores were 42.3/100 (95% CI: 34.8–49.7) at baseline and improved to 30.5 (95% CI: 22.8–38.2) at 6-month follow-up (MD=-11.8, 95% CI: -19.6--4.0, P=0.004). Health-directed behaviour scores increased from 2.8/4 (95% CI: 2.5–3.0) at baseline to 3.1/4 (95% CI: 2.9–3.4) at follow-up (MD=0.4, 95% CI: 0.10–0.7, P=0.01). The number of unscheduled doctor visits, emergency room visits, and hospitalizations were not different between baseline and follow-up.

Conclusions:

Our results suggest that a passive CE activity on TPE in COPD case managers might benefit COPD patient outcomes. Nonetheless, an active CE activity on TPE could enhance the performance of COPD case managers and, in turn, have a further positive impact on health resource utilization.

Impact of adding an educational video to patient education on quality of life in adults with atrial fibrillation: A pilot randomized controlled trial

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Background:

Objectives of atrial fibrillation (AF) management include improvement of patients' quality of life. In this context, we explored whether adding a video to standard face-to-face education improved quality of life, and knowledge, among adults with AF.

Methods:

This was a pilot parallel clinical trial. Educators randomly allocated participants to the education+video (experimental) or education (comparison) group. Eligible participants were aged ≥ 18 years, and had cardiologist-diagnosed AF. As part of the education component of the interventions, educators stimulated a face-to-face discussion with each participant on: (1) conduction system of the heart; (2) normal heartbeat versus AF; (3) types of AF, and (4) risk factors for, (5) symptoms of, (6) complications from, (7) treatment of AF. Education was tailored to each participant's educational needs. In the experimental group, participants watched, in addition, an eight-minute educational video. On the video, (1) conduction system of the heart and (2) normal heartbeat versus AF were described using an orchestra conductor for simile. (3) Types of AF, in addition to (4) risk factors for, (5) symptoms of, and (6) complications from AF were animated. (7) Pharmacological and non-pharmacological treatment options for AF were also illustrated. To assess quality of life (primary outcome), we used the Atrial Fibrillation Effect on Quality-of-life Questionnaire (AFEQT, score 0 to 100, a higher score was better). Knowledge of AF was evaluated using a questionnaire adapted from the Knowledge of Atrial Fibrillation (KAF) Test and tailored to the study intervention content (score 0 to 25, a higher score was better). Outcomes were measured at baseline, immediately after the intervention, or at one-month post-intervention. Between the different time points, within- and between-group changes were estimated by linear mixed effects models.

Results:

Sixty participants (age: 56 ± 13 years; men: $n=41$) were randomly allocated to the education+video group ($n=30$) or education group ($n=30$). At baseline, mean quality of life scores were $58.7/100$ (95% confidence intervals, or CI: $49.2-68.3$) in the education+video group and improved to $71.2/100$ (95% CI: $62.7-79.7$) at one-month post-intervention (within-group mean difference, or MD= 12.4 , 95% CI: $5.0-19.9$, $P=0.001$). In the education group, mean quality of life scores were $56.6/100$ (95% CI: $47.0-66.1$) at baseline and increased to $70.2/100$ (95% CI: $61.7-78.6$) one month after the intervention (within-group MD= 13.6 , 95% CI: $6.1-21.0$, $P=0.0006$). Improvements were not different between groups. At baseline, mean knowledge scores were $16.7/25$ (95% CI: $15.0-18.4$) in the education+video group and improved to $20.4/25$ (95% CI: $19.2-21.7$) immediately after the intervention (within-group MD= 3.8 , 95% CI: $2.5-5.0$, $P<0.0001$). In the education group, mean knowledge scores were $17.5/25$ (95% CI: $15.8-19.2$) at baseline and increased to 19.0 (95% CI: $17.8-20.3$) immediately after the intervention (within-group MD= 1.5 , 95% CI: $0.2-2.8$, $P=0.02$). Improvements were higher in the education+video group than in the education group (between-group MD= 2.3 , 95% CI: $0.5-4.1$, $P=0.014$).

Conclusions:

Adding a video to standard face-to-face education may have a further positive impact on knowledge of AF immediately after the educational intervention. Hence, the video may be used during education interventions to strengthen knowledge gains.

Evaluating patient partnerships formed within Quebec's SPOR Support Unit at the research project, network and governance levels

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Background:

The Canadian Institutes for Health Research (CIHR)'s Strategy for Patient-Oriented Research (SPOR) supports a transformation of patients' roles from research participants to active partners in research. However, the conceptualization and measurement of patient partnership in research is poorly developed, where complexity or weak study designs are cited as reasons for low reporting levels. Quebec SPOR SUPPORT Unit aims to build a sustainable research support infrastructure for patient-oriented research (POR) across the province through its Strategy on Partnership with Patients and the Public (SPPP). Patient partnership capacity building is managed by the four Integrated University Health Networks (IUHN) (McGill University, Université de Montréal, University of Sherbrooke and Laval University), each co-led by a patient-researcher tandem, and trained by the SPPP. One of the SPPP's objectives is to support patient and public partnership science through evaluation and continuous improvement of patient partnership methods. The evaluation (1) assesses the SPPP's capacity to support and implement a partnership strategy across research projects, as well as understand the evolution of partnerships that are being formed within the SPOR SUPPORT Unit and the IUHN, and (2) is driven by the need to increase available robust evidence on which to base future interventions. This study will thus describe the ways partnerships will be evaluated and how evaluation data will be communicated in the aim of improving practices.

Methods:

The main objectives of the SPPP evaluation are to: (1) monitor and understand engagement practices through the "life-course" of funded research projects; (2) assess the experience of patients and researchers collaborating as partners; and (3) understand factors that influence perceived partnership success, including characteristics of research context and partnership support. The Centre of Excellence on Partnerships with Patients and the Public (CEPPP) and the SPPP have developed a framework to evaluate the context, process and outcomes of patient partnership. The framework was co-designed and validated with the four IUHN. The evaluation will assess changes in the implementation of patient partnerships within Quebec SPOR Support Unit over three years (initiation, consolidation, and sustainability). Using a concurrent triangulation mixed-methods design, data collected will be a mix of document review, surveys and semi-structured interviews. The integration of patients as partners will be assessed at three levels within the Quebec SPOR SUPPORT Unit: provincial governance, IUHN teams and research projects.

Results:

Preliminary results from each phase will be reported to Quebec SPOR SUPPORT Unit levels to adjust and adapt the support given to research teams. Data will be reported back by a face to face workshop during which SPPP and IUHN members, including patient partners, will have the opportunity to share comments and discuss recommendations on how to best use evaluation results.

Conclusions:

The results of this evaluation will serve to continuously improve partnership support tools and partnership processes that are developed by the SPPP. In addition, the evaluation results communicated to the higher levels of governance within the Quebec SPOR SUPPORT Unit will help improve patient partnership practice across all levels of the organization, and mobilize change within Quebec research networks.

Effectively evolving together: Lessons on citizen engagement in a large health services research team

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Background:

Translating Research in Elder Care (TREC) is a pan-Canadian team of health services researchers and decision makers, established in 2007, committed to improving the quality of life for residents and quality of work life for staff in nursing homes. VOICES is the citizen advisory committee to TREC and is a relatively new addition to the team. VOICES is comprised of 11 individuals who are either living with dementia or a family caregiver to someone residing in a nursing home. In this presentation, we will describe VOICES and the process of encouraging engagement within an existing research program.

Methods:

In recognition of the need to include patient and caregiver perspectives in TREC's operations, VOICES was created as a citizen advisory committee in 2016. The operational structure, including mandate, membership, leadership, and meeting frequency are outlined in the committee-approved Terms of Reference. VOICES is co-chaired by one member and one TREC investigator. All meetings, whether face-to-face or by teleconference, are extensively documented, as is regular feedback from VOICES and research team members. We have identified a number of successes, as well as on-going challenges, in the full integration of VOICES into TREC.

Results:

From the beginning, there was enthusiasm about the potential of VOICES, despite some uncertainty regarding how VOICES would advise an existing research program with studies in-progress. Questions such as "how can we help?" were regularly raised at early meetings, without clear responses from investigators, and there was often the sense that VOICES was separate from the larger team. In response, we undertook several strategic activities, including more frequent communications and review of key terms, creation of an action plan, and targeted inclusion of VOICES members at meetings. We now find there is less distance between VOICES and the larger team, greater readiness to include VOICES members on research activities (including grant proposals and new project discussions), and distinct roles are beginning to emerge. On-going challenges include managing communications and further developing individual roles for VOICES members.

Conclusions:

Ensuring meaningful engagement is an on-going process fostered through relationship building across the team, open discussion about roles and expectations, and regular communication. Although it has taken nearly two years of dialogue, "how can we help?" is becoming increasingly clear and VOICES is becoming more fully integrated into TREC.

Cultural adaptation of knowledge translation tools for parents of children with acute illnesses

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Background:

With more than 2.3 million visits in Canada, the emergency department care of children results in considerable financial, emotional, and resource implications for families, health systems and society. Knowledge translation (KT) initiatives aimed at helping parents can inform their decision-making and influence healthcare utilization. Our team has developed KT tools for parents; the tools use innovative modes of delivery and integrate art and parent narratives to optimize their appeal. The tools were initially developed in English. To broaden the reach of our work to different linguistic and cultural contexts, we are exploring how to adapt the tools for three non-English-speaking groups.

Methods:

We selected three languages to pilot the translation process: 1) French due to our work with a National Center of Excellence and interest in providing materials in both official languages; 2) Tagalog (national language of the Philippines) based on local immigration statistics showing this language to be the most common second language spoken in the home; and 3) an Indigenous language, still to be determined based on ongoing consultations with stakeholder groups. We engaged a digital media company who provided a translation of the script for the whiteboard animation video. We engaged individuals within our stakeholder groups to verify the script for accuracy, particularly around clinical terminology. The company hired a narrator to produce a voice-over in the selected language. The company edited the video images so that the words on the video appeared in the language of interest. For Tagalog, the company re-drew the images to reflect ethnic differences in appearance.

Results:

To date we have produced a whiteboard animation video in French and are in the process of producing the video in Tagalog. We found it was essential to involve representatives of the groups in question at all stages of developing the materials. For example, the script required close review prior to recording the voice-over, selecting a narrator required care to ensure the voice and accent were appropriate, and editing of the images needed careful consideration to ensure the characters and background images resonated with the group in question. Questions arose during the process regarding whether the initial tool's format and mode of delivery was most appropriate for each group. Careful project management was required to adhere to budgets and timelines in light of emergency issues. We are in the process of reflecting on the most appropriate means for evaluation.

Conclusions:

Our pilot work translating KT tools developed in English for other languages uncovered a number of considerations. Time and care needs to be taken to ensure that all aspects of the tools are relevant to the stakeholder group. The translation of KT tools for other languages and cultures can be time consuming and costly. Efforts to examine how tools can be developed at the outset that resonate with multiple cultural groups are warranted.

A review protocol on integrated knowledge translation and research partnerships: A coordinated multicenter team approach

KJ Mrklas, F Hoekstra, KM Sibley, T Nguyen, C Neilson, M Vis-Dunbar, LK Crockett, ID Graham, HL Gainforth

Presenter:

Kelly Mrklas and Femke Hoekstra

Institution:

Alberta Health Services and The University of British Columbia

Background:

Integrated knowledge translation (IKT), is a collaborative approach involving researchers and stakeholders working in partnership, and is becoming a key component of research, knowledge translation, and implementation. Despite its growing use, a comprehensive understanding of IKT principles, strategies, outcomes and impacts, and its position within the partnered research literature is lacking. Generating high-quality research in IKT is challenging due to the breadth and diversity of relevant literature. We established a Coordinated Multicenter Team approach to identify and synthesize the IKT literature and increase our understanding of the evidence base. This review protocol outlines an innovative approach to reviewing and synthesizing the literature in IKT and research partnerships.

Methods:

The Coordinated Multicenter Team developed a consensus-driven conceptual framework to guide our reviews. A review of reviews will comparatively describe and synthesize key domains (principles, strategies, outcomes, and impacts) for different research partnership approaches, within and beyond health. After identifying commonly used search terminology, a standardized scoping review approach will describe and synthesize further, these domains in IKT and the health research partnership literature. Finally, we will amalgamate and reflect on the collective findings and identify research gaps and future directions. The Coordinated Multicenter Team will develop a collaborative review methodology including search efficiencies, terminology standardization, and the division of screening, extraction, and synthesis to optimize feasibility and literature capture. A series of synthesis and scoping manuscripts will emerge from this Coordinated Multicenter Team approach.

Discussion:

Comprehensively describing and differentiating IKT terminology and its domains among other research partnership approaches will address well-documented knowledge gaps in the literature. These efforts will contribute to and improve the quality, conduct, and reporting of IKT and research partnership literature. The collaborative review methodology will help identify and establish common terms, lever efficiencies (e.g. expertise, experience, search and protocol design, resources) and optimize research feasibility and quality. Our approach also allows for enhanced scope and inclusivity of all research user groups and domains, thereby contributing uniquely to the literature. This multicenter, efficiency and quality-focused approach may serve to inspire researchers across the globe in addressing similar domain challenges, as exist in this rapidly expanding field.

Identifying barriers and enablers in the delivery of an evidence-based self-management interdisciplinary intervention for youth using knowledge translation frameworks

K Hurtubise, K Mrklas, A Brousselle, C Camden

Presenter:

Karen Hurtubise

Institution:

Université de Sherbrooke

Background:

Interdisciplinary healthcare interventions are complex to implement, and those in rehabilitation are no exception. Identifying the unique barriers and facilitators to implementing evidenced-based interventions into clinical programs can inform theory-driven intervention design or modification. In combination, The Consolidated Framework for Implementations Research (CFIR) and Theoretical Domains Framework (TDF) provide an a priori structure for investigating potential barriers to evidence-based practice, and allow for a systematic and comprehensive examination of influences on implementation that can inform knowledge translation interventions. The aim of this study was to use the CFIR and the TDF to identify the barriers and facilitators as perceived by a multi-stakeholder group (including youth and their parents) in delivering an evidenced-informed self-management intervention for youth with disabilities. The ultimate intent was to inform an implementation plan to sustain this evidence-based intervention.

Methods:

This analytical process used a qualitative, descriptive research design. Individual and small group semi-structured interviews were conducted with 13 stakeholders (including patients) involved in the interdisciplinary self-management intervention. Discussions were audio-recorded, transcribed, de-identified, and analyzed using a combined, modified coding template comprised of TDF and CFIR domains. Coded themes were validated with a second coder. Thematic analysis was used to report coded domains, barriers and facilitators, drawing comparisons between clinician and patient perspectives.

Results:

Seven clinicians, two healthcare managers, two youth and two caregivers participated in the interview process. Clinicians voiced confidence in their capacities to deliver the evidence-informed program, yet key identified barriers included a lack of knowledge about the therapeutic dose required, the skills related to group-based interventions and self-management education. A mismatch between clinicians perceived understanding of the patient needs and resources and those voiced by the youth and parents interviewed was also underscored. Finally, although the design quality and packaging of the interventions seemed well understood, it was perceived to have a significant adaptability, yet the clinicians had difficulty detailing the core components of the program.

Conclusions:

Using the CFIR and TDF proved useful in identifying clinician, intervention, implementation process, and context-specific barriers and facilitators to implementing an evidence-based self-management intervention for youth. The results will be used to inform clinician-targeted and context-specific implementation strategies.

Understanding why interventions are modified once implemented: Advancing the methodology

K Hurtubise, A Brousselle, C Camden

Presenter:

Karen Hurtubise

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Université de Sherbrooke

Background:

Modifications to evidence-based interventions frequently occur during the implementation process. These adjustments can range from subtle changes to the removal of key intervention components, and can be conscious, unintentional or reactionary. These modifications can have a tremendous impact on the intended outcomes of the intervention. Current research often identifies the barriers and facilitators to the intervention implementation process, or reports if the intervention has been implemented as planned. However, rare are the descriptions of the modifications and/or the documentation of the reasoning behind them. Furthermore, few have compared and contrasted these changes against stakeholders (including patients) expectations and experiences. The objective of this poster is to share an approach we developed to fill these gaps, and the lessons that emerged from its application in our context.

Methods:

Through a case example, we will describe our four-step systematic approach, which includes: 1) the recruitment of participants representative of the various stakeholder groups (including patients) involved in the intervention; 2) semi-structured interviews with participants guided by a Think Aloud protocol; 3) the thematic analysis of the transcribed interview manuscript using the Consolidated Framework for Implementations Research and Theoretical Domains Framework; and finally 4) the comparison and contrasting of themes between the stakeholder groups.

Results:

The open-ended structure of the Think Aloud protocol, a method previously used to uncover what and how information is structured during problem-solving tasks, was inclusive of, and easy to conduct with all stakeholder groups. The Theoretical Domains Framework helped detail the individual clinician characteristics, while the Consolidate Framework for Implementation Research assisted in highlighting those related the intervention, its implementation, and the context. These frameworks provided the structure necessary for a comprehensive multi-level exploration of the intervention modification drivers. Finally, the inclusion of representatives from the various stakeholder groups allowed for the contrasting of assumptions of one stakeholder group with the expectations and experiences of another, leading to questioning the reasoning behind some modifications.

Conclusions:

Our proposed systematic stakeholder-inclusive approach to describing intervention modifications and to documenting the reasoning behind them proved easy, quick, and adaptable to the various participant groups. It demonstrated usefulness in unveiling the multi-level drivers and additional evidence, which challenged the assumptions and the reasoning behind some intervention adaptations. However, further research is required to explore its reproducibility and generalizability to other interventions, circumstances and environments.

Underlying mechanisms of complex interventions addressing the care of older adults with multiple chronic conditions: A realist review

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Presenter:

Monika Kastner

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Background:

Older adults (age 65+ years) are the fastest growing proportion of our population, about 2/3rds have multimorbidity, yet only half receive appropriate care. In response, different chronic disease management interventions have been created, but these have shown varying effectiveness. This may in part be explained by interventions primarily focusing on a single disease. We conducted a systematic review to identify effective multi-chronic disease (MCD) interventions. However, to understand how and why these interventions influence health outcomes, we conducted a realist review to explore the underlying mechanisms and contexts by which MCD interventions work.

Methods:

Our realist review methods were guided by the RAMESES criteria. In addition to our systematic review search strategy, we performed iterative searches in Medline and Embase to explain findings of our systematic review. Two rough programme theories were identified from published and unpublished literature and input from our stakeholders. Data extraction was driven by our need to refine our programme theories so that they contained context-mechanism-outcome (CMO) configurations. We considered any study design for inclusion. Relevance was assessed by reviewer pairs who read full-text articles independently. We created a 3-step synthesis process (adapted from meta-ethnography) aimed at separating units of data from individual articles by reviewer pairs, and developing CMO synthesis statements across them: 1) independent extraction of relevant excerpts from included studies; 2) sorting of excerpts by concept, and developing consolidated CMO statements for each; 3) and comparing consolidated CMO statements across studies to derive final programme theories to explain our data.

Results:

Of the 2435 potentially relevant citations screened for relevance, 124 articles were reviewed in full-text, and 106 articles contributed to the data analysis. We refined our analysis into three program theories that contained CMO configurations which explained the outcome patterns of our systematic review: 1) care coordination interventions are effective for multimorbidity because they represent a structured approach to comprehensive care; 2) in multimorbidity management, patients prioritize the condition that is associated with the most undesired symptoms, while providers consider the condition that most threatens morbidity and mortality; and 3) multimorbidity management requires clinical management and patient self-management, each having a different set of challenges depending on the perspective of those affected by them. In addition to refining our programme theories, we generated a conceptual model to explain our multimorbidity management programme theory, which suggest that it requires both clinical management and patient self-management, each of which have different set of challenges depending on the perspective of those affected by them (patient, provider, or the system).

Conclusions:

Overall, we found that care coordination interventions in primary care have the potential to be effective, given the right context, for older adults with multimorbidity because they represent a structured approach to comprehensive care. Our findings also contribute to the limited knowledge of the underlying mechanisms of complex chronic disease management interventions for older adults.

The Ontario Drug Policy Research Network's Citizens' Panel: mechanisms and processes of consulting the public in health policy research

S Khan, A Mascarenhas, T Gomes, D Flaherty, M Tadrous, S Straus, JE Moore

Presenter:

Julia Moore

Institution:

St. Michael's Hospital

Background:

Public engagement in healthcare decision making ensures accountability, transparency, and responsiveness of the health system to public needs. While inclusive approaches are becoming widespread, there is an absence of evidence on what drives good engagement, or what is referred to as a conceptually-driven evaluation. Since 2013, the Ontario Drug Policy Research Network (ODPRN) conducted 12 comprehensive drug class reviews and developed policy recommendations for each review for the Ontario Public Drug Programs (Ministry of Health and Long-term Care). To make recommendations implementable for policy makers working in the provincial drug programs, the ODPRN and the Knowledge Translation Program (Li Ka Shing Knowledge Institute, St. Michael's Hospital) developed and convened the ODPRN Citizens Panel (CP), a long-term strategy to engage members of the public regarding their insights on policy recommendations from a citizen and health system user perspective. Our objective is to report on findings from a conceptually-driven evaluation of CP processes.

Methods:

CP design was based on deliberative dialogue concepts to support group decision making on policy recommendations for each drug class under study. We recruited CP members on an ongoing basis over two years to participate in 10 consultations. Each consultation was a modified Delphi consisting of a pre-survey, phone meeting, and post-survey that required CP members to assess and rank the acceptability of policy recommendations. After the end of the drug class reviews, we evaluated the CP using an online survey based on a stakeholder engagement framework founded on deliberative dialogue concepts, and a focus group. The evaluation survey was analyzed using descriptive statistics and the focus group was double-coded in NVivo 10 and interpreted by the research team.

Results:

Sixteen CP members were initially selected; after year 1, 3 members dropped out, and an additional 8 members were recruited for a total of 21 members. A median of 6 people attended each meeting [interquartile range (IQR)= 2.75] and completed pre-meeting surveys (IQR = 3.75). A median of 5 people completed post-meeting surveys (IQR = 3.5). Fourteen CP members (63.6 %) responded to the evaluation survey. CP members provided favorable ratings on most aspects of the engagement framework. Exceptions were items related to CP members' perceptions of: the value of their opinions to policy makers; the overall impact of the CP process at the policy level, and; logistics of the process including time to review materials and communication with the facilitators. Eight survey respondents participated in the focus group. Competence was the most dominant theme in focus group discussion. Acquiring more knowledge comprised the primary motivation for joining the CP and was the reason for seeing the benefit of the panel, but was also a reason for disengagement when members felt they lacked knowledge to participate.

Conclusions:

The ODPRN purposefully recruited and engaged with a CP for a two-year period to take part in a research process intended to inform health policy. Key lessons learned from this evaluation have informed the ODPRN's continued engagement efforts and can guide other researchers and decision makers embarking on public engagement.

ProACTIVE SCI intervention: Using the knowledge-to-action cycle to develop a physiotherapist-led physical activity toolkit for clients with spinal cord injury

JK Ma, O Cheifetz, KA Martin Ginis, ProACTIVE Expert Panel

Presenter:

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Background:

A promising strategy to increase physical activity (PA) levels in people with spinal cord injury (SCI) is to engage physiotherapists as key PA information deliverers. However, physiotherapists do not always possess the tools and resources to prescribe and promote PA to their clients with SCI. The purpose of this study was to i) adapt the Knowledge-To-Action Cycle to engage two end-user populations and ii) to develop the ProACTIVE SCI toolkit to facilitate physiotherapist-led prescription and promotion of PA to clients with SCI.

Methods:

A 5-step integrated knowledge translation process guided by the Knowledge-To-Action Cycle was leveraged to inform the content, format, and delivery of the toolkit. 1) Two systematic reviews were completed: i) a review of reviews of barriers and facilitators to PA participation in populations with physical disability and; ii) a meta-analysis of PA behaviour change techniques used in people with SCI. 2) National online surveys of physiotherapist barriers, needs, and preferences to effectively promote PA to their clients both with and without SCI were conducted (n=244). 3) Semi-structured interviews were conducted targeting the perspectives of clients with SCI regarding effective strategies for physiotherapist-led PA promotion (n=26). 4) A stakeholder expert panel reviewed the evidence and provided final recommendations to inform the development of the toolkit (n=12). 5) The toolkit was evaluated for its feasibility and effectiveness to change physiotherapists' PA promotion knowledge and skills (n=20).

Results:

Over 300 physiotherapists, clients with SCI, and researchers were engaged to develop this PA toolkit. The toolkit assists physiotherapists in choosing the appropriate PA promotion strategy to implement based on the client's motivation and preferences, the physiotherapist's skills, and the feasibility within the physiotherapy clinic setting. These strategies include three key domains for PA promotion: 1) education; 2) referral, and 3) tailored prescription. Results from the toolkit evaluation showed physiotherapist SCI-specific PA knowledge was higher compared to control ($M_i=15.1\pm 2.1$ vs $M_c=10.3\pm 1.6$ correct answers out of 20, $p<0.001$) and was deemed to be acceptable for implementation in practice.

Conclusions:

The Knowledge-To-Action Cycle was successfully adapted to engage two end-user populations and the first evidence-based resource to target physiotherapist-led PA promotion that is specifically tailored to clients with SCI was developed. The ProACTIVE SCI toolkit resulted in significant improvements in physiotherapist SCI-specific PA knowledge and was deemed to be acceptable for use in practice. The toolkit will be evaluated for effectiveness in improving PA behaviour and health outcomes in people with SCI.

Feasibility and ACceptability of a mobile Technology intervention to Support post-abortion care FACTS

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Presenter:

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Background:

Individuals who have undergone an abortion have expressed there is a lack of follow-up care, especially those who live in rural and remote areas. Some women travel great distances for services and return to their communities with the potential for minimal, ineffective or nonexistent follow-up care. While follow-up care after an abortion is not necessary, offering women an accessible means of support through technology, has the potential to encourage women to engage in their own self-care.

Methods:

This is a 3 phase study. Research participants were recruited from abortion clinics in Vancouver Lower Mainland. The first phase included exploratory work to determine how women use technology, access health information, and what pieces were important for them to have in a web-enabled platform to support their follow-up care following an abortion. This data was collected using waiting room surveys at the clinic, and telephone interviews. The results of phase I were used to create storyboards to map out what functionality and content should be included in the web-enable platform. A developer was chosen and a responsive website prototype based on the storyboards was developed. Testing and revisions of the website took place until the site was ready for usability testing. Phase II involved usability testing of the website with end-users. Women who had previously undergone an abortion procedure were recruited to take part in usability testing sessions. Their feedback was collated and changes were made to the beta site. Phase III will test the website as a feasible and acceptable resource for follow-up care following an abortion procedure. Phase III: 60 women will be recruited for the pilot. They will have access to the website for 30 days post-procedures and receive email notifications during the 30 days to prompt them to use the various support resources on the website. Study participants will be sent an evaluation survey at the end of the 30 days, and have the option to complete an exit interview over the phone. A secure and confidential metrics platform will track how many times each feature/pages of the website were visited by users.

Results:

Phase I: 85% of women would like to use their mobile phones to access clinical care, and support. Privacy and Security was a pertinent issue for this population. Most women prefer to correspond with health professionals via email rather than phone. Phase II: Participants found the website easy to use, and fit for purpose. Some functionality could be improved. Phase III: A total of 60 participants recruited (ages 14 – 45) from two urban abortion clinics. Preliminary results demonstrate that myPostCare.ca is both feasible and acceptable by women to support follow-up care after an induced abortion. Features that are the most popular include the Emotional Support Tool, Book a Counsellor feature and Sexual Health Tool.

Conclusions:

This study demonstrates that communities and individuals are important co-collaborators to development of mobile innovations to facilitate access to high quality patient-centered abortion care. We envision this study will change practice by demonstrating the utility of technological interventions to support clinical care and provide an innovative approach to address health behaviours and improve women's reproductive and sexual health in Canada and globally.

It's Not In Your Head: Campaign to raise awareness about provoked vestibulodynia

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Background:

Chronic genital pain affects up to 12% of women and is characterized by painful, distressing, and anxiety-evoking intense sensations when the vulva/vagina is touched. An multidisciplinary team at the University of British Columbia completed a grant-funded trial of group psychological skills training (mindfulness and CBT) for women with this condition and found both experimental treatments to lead to statistically and clinically meaningful improvements for women. In an effort to close the 17 year gap between new important findings, and when it actually reaches the public the research team applied for a knowledge translation grant to develop an educational infographic about these findings, and create a wide-spread dissemination plan to inform and education women about this condition, and the psychological therapies which are effective in managing the painful symptoms of this condition.

Methods:

We developed a 90-second infographic video (#ItsNotInYourHead) together with a media design partner, and engaged patients in the development of this video. The video conveys two compelling messages: (1) chronic genital pain is common and you are not alone; and (2) there is evidence that psychological treatments can be very effective in managing symptoms. A dissemination strategy was developed to reach the target audience, which is primarily women (patients) who may experience chronic genital pain, but also to women's partners, health care providers, hospital policy makers, and the general public. The dissemination strategy included a social media outreach campaign; and partnering with a social media communications company to amplify our own efforts. The campaign started in Oct 2017, and will end in April 2018. And the end of the campaign we will survey women to find out if their knowledge of this conditions and its treatments have improved as well as the creation of a campaign report to detail the reach of the video during the campaign.

Results:

To date, social media channels have been set up for the campaign, and a social media toolkit has been created. The video has been viewed 500 times, in 11 different countries. We hosted a successful twitter party which had 200K+ impressions. Google and twitter analytics are being used to capture metrics associated with various forms of social media used to distribute the video. A full report of the results from various social media events will be completed at the end of April 2018.

Conclusions:

Closing the 17 year gap of when new scientific information is discovered until it reaches those who need to know about it is essential. Social media is a powerful platform for translating scientific information to the masses in an accessible way. This campaign and video has the potential to facilitate the update of scientific evidence from our grant-funded trial by women (and other key stakeholders) who can directly utilize the new knowledge.

One size doesn't fit all: Incorporating KT, intersectionality, and the perspectives of older adults

JE Moore, C Kelly, K Sibley, D Kasperavicius, A Mascarenhas, M Zahid, R Sayal, SE Straus

Presenter:

Julia Moore

Institution:

Knowledge Translation Program, Li Ka Shing Knowledge Institute, St. Michael's Hospital

Background:

Intersectionality posits that social categories (e.g., gender, sexuality) intersect at the micro-level of individual experience to reflect multiple unique systems of structural disadvantage. Knowledge Translation (KT) has neglected intersecting social categories when developing interventions for older adults. Our 3-year project objective is for KT practitioners to use intersectional approaches when creating interventions for older adults. In year 1, we engaged a group of older adults, scholars, and practitioners to prioritize 3 stages of the Knowledge-to-Action Cycle (KTA) that would most benefit from intersectional approaches. This presentation describes the process and outcomes of our prioritization exercise using Deverka's conceptual model on the inputs, methods, and outputs for effective stakeholder engagement.

Methods:

Inputs: We recruited diverse older adults, KT scholars/practitioners, and intersectionality scholars through snowball sampling, online advertisements, and partner organizations. We prioritized marginalized perspectives (e.g., racialized groups). **Consensus Methods:** The Nominal Group Technique (NGT) was used to allow all individuals to share their input within a group dynamic. Participants engaged in a facilitated workshop about intersectionality and KT. In small groups participants individually shared ideas in a clockwise fashion, then discussed all ideas in small and large groups, and finally ranked the KTA stages using Qualtrics®. After the first ranking, a second set of small groups followed the same format and all participants ranked the KTA stages again. **Outcomes:** To generate Deverka's "respect" and "fairness" outcomes, meetings were held in-person and via web/teleconference; ranking surveys were completed online, via phone, or via email; and participants self-identified participation supports. To produce the "competence" outcome, we championed all types of expertise; before meetings, all participants received an audience-specific pre-brief; and plain language was used throughout the pre-briefs and meetings. To achieve "trust" and "respect" outcomes, we used techniques from Weaver's 'The Long Table' to create a safe space; set collaboration ground rules; provide participants the opportunity to self-identify accommodation actions; and encourage all voices.

Results:

Inputs: 37 participants from across Canada participated in the NGT (16 older adults, 5 KT scholars, 8 KT practitioners, 8 gender/intersectionality scholars). Older adults self-identified as people of colour, part of the LGBTQ+ community, and newcomers, among other dimensions. **Outputs:** Participants prioritized the KTA stages of: define the gap, assess barriers and facilitators to implementation, and select implementation strategies. **Outcomes:** Older adults described the prioritization activity as a "very fair process." They appreciated "the opportunity to have a voice in the project" and "the freedom to be ourselves, learn and allow other people to share their views." A key lesson learned was to increase support of the meta-criteria of "legitimacy" and "competency" by outlining how older adult perspectives will be utilized in future project stages. If successful, we will invite an older adult participant to co-present.

Conclusions:

Creating a safe space and empowering full participation fostered Deverka's process outcomes of "trust," "fairness," and "respect" and therefore led to the successful engagement of older adults. Overall, this collaborative prioritization will result in more appropriate use of implementation resources, as identified by a diverse group of knowledge and end-users.

Overviews on knowledge translation implementation strategies: A content analysis

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Background:

Given the persistent gap between the production of evidence-based knowledge and its application in routine health care practice, a growing attention has been paid to knowledge translation, and more specifically to its implementation strategies, with a substantial increase in studies examining their effectiveness. The scientific literature on the topic is so flourishing that many overviews aiming at further synthesising this literature have been published over the last 30 years. However, despite all this focus given on implementation strategies, evidence is still not well established regarding their effectiveness according to these overviews. Our aim was to identify potential reasons for their shortcomings in providing the best evidence.

Methods:

We performed a rapid literature review to include overviews investigating the effects of any knowledge translation implementation strategies on patients and healthcare professionals' outcomes irrespective of the healthcare settings. MEDLINE (Ovid), EMBASE, Web of Science, PsycINFO and CINAHL were searched (from inception date on March 2017). In addition, reference lists of included papers were screened. Data on the type of interventions, outcomes, methodological quality, results and limits were extracted from each overviews and a content analysis of data was performed.

Results:

In total, we identified 12 overviews which met our inclusion criteria. These overviews covered a very wide range of implementation strategies (unimodal or multifaceted), and clinical domains (health in general (8/12), primary care (2/12), mental health (1/12) or cancer (1/12)). All overviews were reported as narrative synthesis without meta-analysis. Of the four overviews concluding firmly on the effectiveness of particular strategies (e.g., audit and feedback, educational outreach visits, reminders), only one assessed systematically the strength of evidence. The common limits recognised by authors themselves were: a) the fact that overviews relied heavily on the judgements of the systematic reviews' authors regarding the report and the interpretation of the underlying primary evidence (6/12) b) the heterogeneous nature of included primary studies and reviews in terms of topic area, health conditions, type of analysis (3/12) c) the significant overlap of included original studies (3/12), and d) concerns about generalisability across different healthcare settings (6/12).

Conclusions:

There is an abundance of overviews evaluating knowledge translation implementation strategies within a wide variety of healthcare contexts. However, only a few have reported conclusive results due to methodological limits. From this content analysis of the existing overviews, a more rigorous methodology is needed for their design and conducting.

Scaling up of knowledge translation tools to improve child health outcomes in low-middle-income countries: A mixed-methods usability evaluation

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Presenter:

Salima Meherali

Institution:

University of Alberta

Background:

On national and international stages, strategies to close the gap between what we “know” (research) and what we “do” (practice) have been consistently identified as a priority. Despite the interest in knowledge translation (KT), the gap between research and practice is still wide in low-middle-income countries (LMICs), where there are limited and scarce resources. It is well-established that healthcare decisions based on the best available research are crucial for ensuring high quality patient care, optimal health outcomes and quality and safety in health care systems. A wealth of research evidence is available from developed countries; however much less attention has been paid to how to deliver or scale it up so that people in LMICs can use it. In this project we evaluated the process of scaling up of digital art and story-based KT tools developed for Canadian parents on acute otitis media (AOM) to be used by parents in Pakistan, a LMIC.

Methods:

A multi-methods design was used to develop, refine and evaluate the usability of digital arts-based KT tools for pediatric AOM. Stage 1: Systematic Review A systematic review was conducted on AOM parental information needs. Findings from this review illustrate that the information needs of parents of children with AOM is not adequately addressed by health care providers, which contribute to parental anxiety, and inappropriate utilization of health care services. Stage 2: Qualitative Study Qualitative individual interviews were conducted with parents seeking care for AOM in ED. Findings indicate that AOM has considerable negative outcomes for both children and families and that parents would benefit from having more evidence-based resources. Stage 3: Development of KT tools prototypes Based on the results of the systematic review and parent interviews, KT tools for Canadian parents were developed. Stage 4: Scaling up the KT tools for use in a Pakistani Context To expand the use of evidence-based interventions and to foster a greater public health impact and reduce health care costs, we augmented the KT tools developed for Canadian parents so that they could be used by parents in Pakistan. To scale up the KT tools for a different cultural context, we revised the tools to integrate relevant cultural and health practices and beliefs, and to accommodate for language, literacy level/educational background, the availability of technology, and other factors which impact parent’s ability to use these tools. Stage 5: Usability evaluation of translated KT tools Before the wide dissemination of these tools, a mixed-methods study was conducted to determine their usability, usefulness and cultural appropriateness for Pakistani parents. The usability findings of translated tools reveals that KT tools (i.e. whiteboard video and infographic) are useful and effective in communicating health information to parents and these tools will help them to make healthcare decisions for their children.

Conclusions:

This study provides valuable insight into how to scale up KT tools for a culture other than the one for which they were originally intended. The process that was explored in this study regarding culturally adapting the KT tools generated important new knowledge that will contribute to the science of KT.

Barriers and facilitators to diagnosing, treating, and managing apathy in Parkinson's disease: A qualitative study

B Mele, Z Goodarzi, H Hanson, J Holroyd-Leduc

Presenter:

Dr. Jayna Holroyd-Leduc

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Background:

While Parkinson's disease (PD) is primarily considered a movement disorder, non-motor symptoms such as depression and apathy may also be present. People with apathy show a lack of emotion, passion, and motivation. Between 17 to 70% of persons with PD have apathy; the extreme heterogeneity in these estimates is due to limited knowledge on how to make a diagnosis of apathy in PD. The lack of a clear diagnostic process, further limits understandings on how to treat and manage apathy in PD. A recent scoping review of apathy in PD identified only one qualitative study investigating this symptom. It was our primary objective to assess perceived barriers and facilitators to diagnosing, treating, and managing apathy in PD, as described by key stakeholders.

Methods:

This research applied qualitative methodology, utilizing focus groups and interviews with health care practitioners (HCPs), persons with PD, and caregivers. Evidence gathered from a scoping review on the apathy in PD literature informed discussions that took place with focus group and interview participants. Data collection and analysis was conducted using framework analysis, applying the Theoretical Domains Framework and Behaviour Change Wheel. Three researchers conducted analysis of transcripts, including coding and indexing codes within the TDF.

Results:

A total of ten HCPs and three persons with PD/caregivers participated. Data were divided into three main categories based on barriers and facilitators to diagnosis, treatment, and overall management of apathy in PD. Themes included interdisciplinary teams and communication with family to facilitate diagnosis and treatment, and the use of education and increased awareness of apathy to facilitate management. Themes surrounding barriers included lack of initiative and motivation to maintain treatment plans, and a lack of evidence for apathy specific pharmacologic and non-pharmacological interventions. Themes identified in the HCP group reflect the theoretical domains Knowledge, Skills, and Memory, Attention and Decision Processes. Themes identified in the patient groups reflect the theoretical domains Environment, Context and Resources, and Social/Professional Role and Identity. While a key barrier identified was the lack of information HCPs have to give on how to manage apathy; persons with PD and their caregivers would prefer to receive a diagnosis of apathy, even with limited methods for management. Thus education and awareness about apathy were noted as two of the most important facilitators, overall.

Conclusions:

These findings suggest that the process of diagnosing, treating, and managing apathy in PD requires interdisciplinary teams, which also include family, caregivers. We identified that where HCPs perceive lack of knowledge as a barrier to making a diagnosis, persons with PD and caregivers find being given a diagnosis facilitates overall understanding. These findings highlight the importance of qualitative research that involves persons with PD and apathy, caregivers, as well as HCPs who aid in management of this symptom. Barriers reported suggest future research must aim to identify apathy specific treatments, both pharmacologic and non-pharmacologic.

Exploring the usefulness and perceived impact of interactive educational outreach sessions applying the knowledge-to-action framework

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Presenter:

Kimberly Miller

Institution:

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Background:

Didactic lectures are the most common approach in medical rounds for disseminating new evidence for practice. However, they are known to have limited impact on practice due to challenges applying the evidence in complex clinical settings. In BC variations exist between the province's cardiac centres in the implementation of evidence for coronary revascularization treatment in diabetic patients with multi-vessel coronary artery disease. This study explored the usefulness and perceived impact of interactive educational outreach sessions applying the Knowledge-to-Action implementation science framework, directly addressing barriers to use of evidence in practice from the perspectives of point-of-care knowledge users.

Methods:

In partnership with Cardiac Services BC, a multidisciplinary team led interactive educational outreach sessions with cardiac services teams (physicians, nurses/triage coordinators and administrators) at the five specialist BC cardiac centres. Evidence and feedback on coronary revascularization treatment variations were presented to teams. In addition, the concepts of barriers and facilitators at evidence, patient, practice, setting/department, and organization or systems levels were introduced. Participants were encouraged to identify key barriers and facilitators and to actively generate solutions as a team. Immediately afterward, physicians as primary decision-makers for treatment were invited to complete the Continuing Professional Development (CPD) Reaction questionnaire items from 1-7 (1=low to 7=high) to evaluate their perceived intentions to use the evidence in practice. All team members were invited to document key barriers/facilitators they identified for implementation of the evidence in practice.

Results:

In total approximately 100 cardiac team members attended the five interactive educational outreach sessions. The sessions were observed to facilitate discussion and open problem-solving between team members. Informal comments suggested these processes were perceived to be of value for participants. Forty-four of the 52 attending physicians and residents completed the CPD questionnaire. Median (IQR) ratings were high for intention to implement coronary revascularization evidence in practice (6 [6-7]), beliefs about usefulness/benefits (6 [6-7]) and ethics of implementing this evidence in practice (6 [6-7]). Ratings were marginally lower for confidence/capability to implement (5.6 [4.75-7]) and social influence/norms (5.9 [5-7]). Surveys of key barriers/facilitators were completed by 68 cardiac team members including 44 physicians and residents, four clinician nurse specialists/cardiac triage coordinators and two administrators. Identified systems-level barriers included limited availability of specialists and associated surgical waitlists, siloing of care and remunerative structures; with a heart team approach, changes to workflow and remuneration structures suggested as potential solutions. Patient preferences were influential and development and implementation of tailored patient information resources and shared decisions tools were suggested to address misconceptions about coronary revascularization treatments and support participation in evidence-informed decision-making with physicians.

Conclusions:

The interactive education outreach sessions were associated with high intentions by attending physicians and residents to use the evidence for coronary revascularization treatment in diabetic patients with multi-vessel coronary artery disease in practice. While their impact on practice variations in BC remains to be evaluated, applying the Knowledge-to-Action framework in the interactive educational outreach sessions identified barriers from a front-line perspective and potential solutions, and provided useful information to inform future knowledge translation and implementation strategies.

How do I involve thee? Let me count the ways: Assessing the objectives and designs of patient and public engagement initiatives

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Presenter:

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Background:

Patient/ public engagement is valuable for enhancing the usefulness of research evidence and its implementation in healthcare, but engagement designs vary. Moreover, it is difficult to ascertain when and why certain patient/ public engagement approaches should be used for particular research objectives. The Knowledge Translation (KT) Program at the Li Ka Shing Knowledge Institute (St. Michael's Hospital) collaborates with researchers on various health system KT initiatives, and has taken the lead on multiple projects with patient/public engagement components. Our objective is to highlight a diverse set of projects to describe engagement designs and lessons learned.

Methods:

We selected 7 KT projects (4 projects focused on KT science; 3 projects focused on KT practice) conducted in collaboration with health system researchers. Patient engagement objectives and methods were abstracted from project protocols. These data were mapped to the Public Participation spectrum to understand the level of patient involvement. In addition, data were abstracted from the final reports of 4 of the projects that reached completion to identify lessons learned using content analysis.

Results:

Two overall objectives for patient/public engagement were identified. In 3 KT science projects, the objective of patient engagement involved gathering patient input on research protocols and interventions through group discussion (e.g., focus groups, meetings). In 3 KT practice projects, patient/public input was integrated in products or decisions (e.g., policy recommendations, clinical guideline recommendations, quality indicators). Each of these 3 projects used a modified Delphi method involving surveys and group discussion to iteratively collect input and enable patient/public partners to modify their responses. One project had multiple objectives: gathering patient input on research through panel discussion, and incorporating patient input into products through usability testing. Overall, KT science projects tended to be consultative (i.e., gathering advice, experiences or recommendations) while KT practice projects tended to be deliberative (i.e., capturing decisions through comprehensive multi-way discussion). Consultative approaches suited projects when the engagement purpose was to confirm or adapt protocols, and to gain insight on results or interventions. Projects requiring patient input to be integrated into a decision or product tended to rely on multiple sources of data and iterative methodology delivered over longer period of time compared to consultation. There were key common lessons learned. Patient/public partners required sufficient non-technical information to enable comprehension without "dumbing down" the information, which prohibits meaningful participation. Sufficient time was warranted to plan, facilitate, and support participants throughout the process, having a point-person with whom patient/public partners could direct questions to enhanced the experience. Ensuring that everyone involved (including researchers and patient/public partners) understands the objectives of the exercise and how the process enables partners to meet objectives was key.

Conclusions:

Patient and public engagement can vary in terms of level of involvement. However, whether consultative or deliberative, involvement should be meaningful for all participants by incorporating the needs and preferences of patient/public participants. Our key lessons learned from a varied cross-section of projects that we collaborated on can help researchers, practitioners and decision makers better plan for patient and/or public engagement.

Knowledge translation strategies to accelerate uptake of mifepristone-induced medical abortions in Canada: A mixed methods investigation of barriers and facilitators

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Background:

In January 2017, mifepristone-induced medical abortion was made available in Canada. However, regulatory restrictions posed barriers to uptake among providers. In this study, we sought to: (1) understand the facilitators and barriers to the implementation of mifepristone across Canada, (2) assess the impact of a “community of practice” clinical and health service support platform, and (3) engage in integrated knowledge translation (KT) activities aimed to improve health policy, systems, and service delivery issues to enhance patient access to mifepristone in real-time.

Methods:

This prospective mixed-methods implementation study involved a national sample of physicians and pharmacists, recruited via an online training program and a Community of Practice website. Surveys were conducted at baseline and at 6 months and qualitative data were collected from electronic interactions. Survey participants and a purposeful sample of decision makers were invited to participate in in-depth interviews. Descriptive analyses were conducted for quantitative data. Thematic analysis guided interpretation of qualitative data. Findings were compared and contrasted using narrative triangulation. Using principles of KT and an innovative web-based “Community of Practice” we aimed to identify and mitigate health policy, system and service barriers in order to support effective implementation of mifepristone medical abortion. We engaged in and assessed KT activities, which included engaging Canada’s leading health system and health professional leaders in the design and conduct of the research, hosting a national investigators’ and partners’ monthly discussion forum, and implementing targeted strategies including: evidence briefs and GIS-maps, face-to-face meetings, and regular electronic exchanges and interactions.

Results:

From January 2017-18, 354 physicians and 424 pharmacists completed a baseline survey; 554 practitioners joined the Community of Practice; and we conducted in-depth interviews with 105 stakeholders. Among physician survey participants, 32% had never provided abortion before, and 8% worked in communities with no prior abortion service. Barriers included: mandated physician-only dispensing and pharmacist training, inadequate payment mechanisms, and confusion about changing regulations. Analysis of interviews suggests that knowledge brokering enabled rapid detection and timely removal of practice and policy barriers. The “Community of Practice” platform facilitated practice through sharing of contact information for dispensing pharmacies, clinical decision support forms and tools for physicians and pharmacists, and exchange of case studies and advice between new abortion providers and experts. KT activities at the health system and policy levels contributed to successful removal of federal requirements for observed dosing, practitioner training, practitioner registration, and physician-only prescribing and dispensing.

Conclusions:

This study provides critical evidence about the effect of the full range of health policy, system, and service determinants on access to medical abortion. Ongoing KT activities where decision makers and practitioners are actively involved in collecting, analyzing, and interpreting our study data have accelerated the implementation of mifepristone in Canada. The rapid uptake of our study findings into practice and policy may facilitate increased access to equitable, safe, confidential abortion care. Our future research will explore the specific mechanisms that contributed to the successful impact of KT activities.

The feasibility and acceptability of implementing two shared decision-making interventions for contraceptive methods: A qualitative investigation involving the theoretical domains framework

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Background:

Despite the potential benefits of shared decision-making (SDM) there is limited evidence on how to implement SDM interventions in routine practice. We conducted a qualitative study, embedded within a 2x2 factorial cluster randomised controlled trial, to assess the acceptability and feasibility of two SDM interventions for providers in contraceptive counselling.

Methods:

Participants included providers and staff aged 18 years or older who worked in one of the 12 intervention arm clinics, had email access, and consented to being audio recorded. Semi-structured phone interviews were conducted from January to April 2017 following completion of intervention implementation. Audio-recordings were transcribed verbatim. The Theoretical Domains Framework (Cane et al., 2012), which proposes 14 domains relevant to the successful implementation of provider behaviour change interventions, informed data collection and thematic analysis.

Results:

Interviews (n=29) indicated that participants had confidence in their skills to use the interventions and described them as aligned with their professional roles. Implementation of the interventions appeared to be facilitated by flexible behaviours, participants' previous use of similar interventions, and adapting the interventions to fit routine workflow. Providing the interventions to patients pre-clinical encounter was described by some as challenging due to limited resources and time pressure. Clinics that had a study champion or a team-based organizational culture found these social supports had a positive role in implementing the interventions.

Conclusions:

This study contributes important theory-based insights into the acceptability and feasibility of patient and provider-targeted SDM interventions and, in particular, the behaviours and processes that facilitate intervention implementation.

Integrating patient's knowledge, wisdom and power into health professions education to foster optimal diabetes care

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Presenter:

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Background:

Patient-to-patient education has helped improved diabetes management in Canada. Including patients' expertise in medical education could lead to more patient-centered, culturally-competent, and non-stigmatizing chronic disease care. However, studies evaluating knowledge translation from patients to health professionals are scarce and the effectiveness of such knowledge translation remains unclear. This study aims to fill this gap in diabetes context. This study aims to identify areas for improvement relevant to diabetes care from the perspectives of people living with diabetes.

Methods:

We conducted video interviews with 10 men and 11 women living with diabetes (called patients). Patients were from diverse backgrounds, including Indigenous people and immigrants to Canada. Patients were recruited through the Diabetes Action Canada, a national Patient-Oriented Research network. To be a patient partner within Diabetes Action Canada network, patients should have significant lived experience and be able to reflect on lessons from their own experience that apply outside their own life. We used a qualitative descriptive approach to analyze data, especially inductive content analyses and Framework analyses.

Results:

From patients' perspectives, the main area for improvement in diabetes care concerns the communication between health professionals and patients. Patients pointed to the need for health professionals to communicate with patients openly, respectfully and with empathy. Also, health professionals should focus on putting patients' lives and experience with diabetes in a broader context and understanding the impact of psychosocial factors, spirituality, culture, and sociopolitical history (e.g., burden on family, settler colonialism) on patient's health. Further, patients urged health professionals should update their diabetes-specific knowledge on diabetes and learn other worldviews and practical knowledge on diabetes management. Finally, it's crucial for health professionals to engage themselves and their patients in teamwork.

Conclusions:

From patients' perspectives, there are areas for improvements in diabetes care that can be acted upon individually by health professionals and collectively through collaboration with patients and other members of the care team. In our ongoing research, we are developing online education modules from the video interviews and will evaluate their effects among health professionals and health professions students. Learning from patients' expertise may complement current health professions education and lead to better care.

Advancing conceptual frameworks for patient and public involvement in health research: Preliminary results from a qualitative examination of a trauma-informed, intersectional, and reflexive approach

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Background:

Patient and public partners have told us that current strategies for engagement do not address the complexities and context of people's lives, and continue to exclude voices traditionally less heard in health research. To address this gap, and building on CIHR'S SPOR Patient Engagement Framework, we proposed an enhanced Valuing All Voices Framework, incorporating core skills and qualities (Trust, Self-Awareness, Empathy, and Relationship-Building) essential for inclusive, collaborative research teams who seek to integrate trauma-informed, intersectional, and critical reflexive practice in their work. The goal of this study was to refine the draft framework with stakeholders in Manitoba who represent some of the voices traditionally less heard in health research, including mental health communities; immigrant, refugee, and newcomers; and Inuit people.

Methods:

Consistent with the proposed framework, we used a trauma-informed, intersectional approach involving integrated knowledge translation and qualitative inquiry. This iterative methodology evolved in response to feedback from community leaders and participants. Eligible individuals included people with lived experience (either directly or as a caregiver) of a health issue who identified as members of one or more of the mental health (MH); immigrant, refugee, and newcomer (IRN); and Inuit communities. One-on-one interviews or group discussions were conducted, as directed by community leaders.

Results:

Though all participants liked the title "Valuing All Voices" and felt it captured the essence of the work, they also asserted that the framework needed to be in plain language. When exploring definitions of the four core qualities, Trust was defined by Inuit participants primarily in terms of emotions (love, happiness); MH participants' definitions focused on actions (listening, compromise); and IRN participants' definitions had a mix of both feelings and actions. Across groups, participants felt a disconnect between their experiences and the proposed definition of Self-Awareness, preferring to use their own definitions that included "understanding ones' self" and words like education and knowledge. Participants from both MH and Inuit communities felt that the term 'Empathy' was problematic, and had difficulty expressing reasons for this and deliberated on replacement terms. The Inuit group suggested 'Understanding' instead of 'Empathy', which was also used by all groups in their definitions of this quality. Another common phrase used to describe Empathy was "walk a mile in my shoes." Relationship-Building was discussed by participants from Inuit and IRN communities as relying on the other qualities. MH and Inuit participants both included concepts of equality in their definition of Relationship-Building. All groups expressed the need for sharing, openness, and community in Relationship-Building, through different words and phrases. Finally, most participants felt that definitions in themselves were not useful, and that explanatory or 'how to' items needed to be added.

Conclusions:

Throughout the 3 communities, overarching commonalities included the sentiment that this framework is important, but needs to be made more accessible; feelings and actions are important considerations that need to be better incorporated into the language of the framework; and that understanding one another is a key overarching principle needed to address this gap in patient and public involvement in health research.

Developing interactive infographics as consumer-oriented knowledge translation tools for acute pediatric conditions

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Presenter:

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Background:

Infographics are an innovative, visually engaging medium to communicate information and hold great potential for making health research more accessible and understandable to the general public. Interactive infographics can make information sharing more engaging by introducing a sense of exploration while simultaneously having the capacity to tailor the information to the user's information needs. In this presentation we will discuss our process of developing interactive infographics as parent-oriented knowledge translation tools to empower parents with the best available research evidence.

Methods:

To date we have developed 4 interactive infographics for acute pediatric conditions (procedural pain, pediatric chronic pain, acute otitis media and fever). The infographic content is based upon the results of targeted knowledge syntheses as well as qualitative studies on parents' experiences and information needs specific to the clinical focus of the tool. Once prototypes of each interactive infographic have been developed they are shared for feedback with health experts through the Translating Emergency Knowledge for Kids (TREKK) knowledge mobilization network and our team's parent advisory group. Parental feedback and health care provider perspectives are integrated into the final version of the tools. Prior to dissemination we complete usability testing to assess parents' perceptions of the tool on 8 evaluation elements, including: 1) usability; 2) aesthetics; 3) language; 4) level of engagement; 5) quality of information; 6) length; 7) preference of form over traditional dissemination venues; 8) value-added. In addition we also collect user behavior data while parents navigate through the infographic to improve tool navigation and functionality.

Results:

We have recently completed usability testing in two of our TREKK sites. In this presentation will share the results of our usability testing, as well as our experiences in developing these parent-oriented knowledge translation tools. Interactive infographics are beginning to emerge as innovative consumer-oriented interventions to enhance knowledge sharing to parents and caregivers.

Engaging with parents to develop innovative e-tools that merge research and story

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Background:

With more than 2.3 million visits annually in Canada, the emergency department (ED) care of children results in considerable financial, emotional, and resource implications for families, health systems and society. Many visits are for minor conditions that could be more aptly treated in other settings or at home (e.g., sore throats, ear infections); moreover, 1 in 5 non-admitted ED visits could be avoided. Knowledge translation (KT) initiatives that target parents and emphasize their role as a partner in health, can inform their decision-making, shape treatment expectations, and influence healthcare utilization. We have built a successful model of developing, evaluating, and disseminating effective KT tools (eBooks, whiteboards) based on the best available synthesized research evidence and the power of the arts and story to increase parent confidence and knowledge on the most prevalent conditions for which children seek care in Canada. Purpose: To demonstrate: 1) our model of engaging parents in developing, evaluating and disseminating KT e-tools, 2) our KT e-tools, and 3) results from the usability testing.

Methods:

Using our national parental needs assessment results (n=1097) we selected priority health conditions. Using qualitative methods, we interview parents about their experiences having a child with the conditions under study. Concomitantly we conduct systematic reviews of the best available research for management of the conditions. Working with creative writers and graphic designers, we develop composite narratives and then integrate synthesized research evidence to develop e-books, whiteboard videos and interactive infographics. Once we have a prototype, we conduct iterative feedback and refinement cycles with pediatric emergency health care professionals and parents. Refinements are made to the tools and then we conduct usability testing of each tool in ED waiting rooms. Usability testing assesses 10 aspects on a 5-point Likert scale (e.g., aesthetics, functionality, understandability). Once usability testing is completed, additional refinements are conducted and the e-tools are embedded in national platforms for pediatric healthcare (www.trekk.ca; www.echo.ualberta.ca; www.arche.ca). Targeted social media is completed to further enhance dissemination and uptake. Google analytics is regularly assessed and the research evidence underpinning each tool is re-examined every 4 months.

Results:

To date, we have developed 9 KT tools for parents focused on croup, gastroenteritis, chronic pain, procedural pain, acute otitis media and fever. We are currently developing tools for parents with a child with bronchiolitis and urinary tract infections. Our focus on developing KT tools for parents is novel and complements other initiatives that target healthcare providers. The model we have developed is transferable to clinical areas beyond the pediatric ED, is scalable to international contexts, and simultaneously leverages significant economies-of-scale.

Assessing the effectiveness of an integrated knowledge translation initiative to improve patients' knowledge, understanding of Advance Care Planning engagement

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Presenter:

Marta Shaw

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Background:

Advance Care Planning (ACP) is a process of communication between patients and clinicians about patients' values and preferences regarding medical care and GCD are medical orders that describe the focus of care consistent with those preferences and patients' clinical context. ACP is a vital component of patient centered care. Without it, patients receive care incongruent with their wishes (up to 70% incongruent care in Canada, have worse quality of life, receive more aggressive treatment at end of life and experience longer hospitalizations. Despite the benefits, there continue to be low rates of ACP engagement between Albertans and clinicians. Integrating regular ACP into existing workflow has been challenging. ACP processes are inconsistently followed, even though clinicians recognize the benefits Objective: This Integrated knowledge translation (iKT) project has sought to enhance ACP and goals of care designation (GCD) practice in a cardiac in-patient unit to improve patient, clinician and process outcomes over a 4-month intervention period.

Methods:

This quasi-experimental study utilized an iKT approach with Quality Improvement methods to enhance and standardize ACP process in an in-patient unit. A formal process evaluation, utilizing a mixed methods approach following the 32-week study period, was applied gain insight into clinician experiences of the implementation process, assess any change in known ACP barriers and aid with interpretation of the results. Population: This project took place on one acute cardiac in-patient unit in Calgary, Alberta. iKT team members consisted of the researchers, front-line staff, clinical educators and unit managers. Intervention: iKT is a research method that engages knowledge users and decision makers as co-investigators throughout a study in order to optimize the relevance and applicability of research implementation. The knowledge-to-action (KTA) cycle was used to guide the development, implementation, evaluation and sustainability of the intervention aimed at closing the knowledge-practice gap. This overarching theoretical framework provides a practical and evidence-informed stepwise knowledge generation and implementation process. Intervention elements, which were developed in collaboration with the unit clinicians, were selected using the Theoretical Domains Framework (TDF) and behavior change wheel. Intervention elements included: 1. Development of an ACP protocol during admission/discharge, 2. Skill development using simulation learning (AHS eSIM), 3. Formal education sessions 4. Prompting 5. Electronic medical record system updates, 5. Monthly progress feedback to clinicians.

Results:

Process and patient outcome data was collected and analyzed using an Interrupted time series design. Data was collected weekly for 32 weeks (7 weeks pre-intervention, 15 weeks during intervention and 10 weeks post-intervention). Data was collected using 1) chart audit and 2) patient survey. Primary process measures were: 1. Use of ACP Tracking record to record conversations, 2. Providing of green sleeves containing ACP documentation to patients. Primary outcomes were: 1. Patient knowledge of their GCD and 2. Patient reporting of having been engaged in ACP during hospital stay. Data will be analyzed using segmented regression analysis..

Conclusions:

This analysis will: 1. Demonstrate the degree to which iKT was effective in the improving ACP clinical process; 2. Provide a framework for the use of iKT research in healthcare (filling a void in current models) 3. Create a scalable "Change template" for further ACP uptake across Alberta Health Services.

Internet-based interventions to improve adherence to cardiac rehabilitation: A systematic review and meta-analysis

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Presenter:

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Background:

Cardiac rehabilitation is a component of secondary cardiac therapy and promotes healthy lifestyle and exercise. Chronically suboptimal adherence to cardiac rehabilitation programs limits patients from realizing the full benefits of therapy. Internet-based cardiac rehabilitation programs deliver program components through internet-connected means, such as through mobile applications or websites. Internet-based cardiac rehabilitation may improve patient adherence to cardiac rehabilitation programs. Objectives To determine the effect of internet-based cardiac rehabilitation programs on adequate adherence to the rehabilitation program. Secondary outcomes included assessing mean differences in LDL, HDL, total cholesterol and BMI in internet-based cardiac rehabilitation programs.

Methods:

We included unconfounded randomized control trials of internet-based cardiac rehabilitation, measuring both adequate attendance to cardiac rehabilitation and clinical outcomes. Independent, parallel, assessments of risk of bias and data extraction were conducted by two review authors in accordance with the Cochrane Handbook for Systematic Reviews of Interventions. We assessed the quality of the evidence using the GRADE framework and summarised our findings in 'Summary of Findings' tables.

Results:

A total of 10 studies were included in this review with a combined study population of 1197 participants. Our meta-analysis found low-quality evidence of a moderate effect [OR 0.31 (0.89-0.10)] favouring the intervention. Secondary outcomes were assessed with separate meta-analysis. The overall effect for LDL outcomes ($p=0.001$), total cholesterol outcomes ($p=0.47$), and BMI ($p=0.13$) was significant. However, the evidence for outcomes was low quality due to small study sample.

Conclusions:

The evidence suggests that the internet-based cardiac rehabilitation programs improve adherence, and reduce LDL, total cholesterol, and BMI levels.

Physiotherapist experiences of a theory-based intervention and perceptions of reactive balance and its measurement: A qualitative study

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Background:

The complex and multi-disciplinary nature of rehabilitation represents a unique implementation context. However, there is a dearth of rehabilitation implementation research, and existing evidence is based primarily on passive, non-theoretical approaches that lack demonstrated effectiveness. In 2015-16 we administered a 12-month multi-component intervention based on the Theoretical Domains Framework (Sibley et al. 2016) to physiotherapists treating adults with balance impairment at three rehabilitation hospitals. The goal of the intervention was to increase measurement of reactive balance— a critical and under-assessed consideration for fall prevention. The intervention included interactive didactic, practice and check-in sessions, onsite local champions, and health record modifications. Reactive balance measurement was greater during the intervention than the baseline period (Sibley et al. submitted). The objective of this study was to explore participant experiences with the intervention and perceptions of reactive balance and its measurement.

Methods:

In-depth semi-structured interviews were conducted with 28 physiotherapist participants following completion of the intervention. Questions explored participant reflections on study participation and perceptions of reactive balance measurement. A qualitative descriptive approach was used for data analysis. Data analysis followed a deductive approach; codes were generated using sensitizing concepts (based on the research question and previous literature) and discussed and refined by all members of the research team. Final coding to generate overall themes and interpretation to identify key findings involved individual analysis and several analysis team meetings.

Results:

Participants described feeling supported throughout the study through multiple approaches. Practice sessions, check-in sessions (especially those early in the intervention) and supplemental resources developed in response to check-in discussions were identified as particularly helpful by multiple participants. The only intervention component not standing out as very helpful was the local champion component of the intervention, whose role participants perceived as largely administrative. Potential intervention modifications suggested by multiple participants included offering practice with representative patients, providing additional guidance on scoring interpretation and treatment options, and shortening the administration form in the health record modification. Participants discussed the general importance of reactive balance, in some cases citing it as the basis for their interest in the study. However, multiple participants questioned the appropriateness of reactive balance measurement in regard to their caseload at the time of the study. Reactive balance was described by some as a "higher level" skill that was sometimes triaged over more immediate priorities. When probed about the perceived influence of the intervention on the practices and decision-making processes, participant responses were diverse. Several participants identified greater awareness of reactive balance as an issue, but limited impacts due to caseload appropriateness. Multiple participants described adopting aspects of reactive balance in a modified way or with a specific subset of their caseload. Some participants indicated that their decision-making was not significantly influenced by the intervention.

Conclusions:

Overall, participants described a positive experience with the study. Participant intervention feedback and described perceptions of reactive balance highlighted opportunities to refine future iterations of the intervention and suggested some factors that may have influenced intervention effectiveness.

Parents' experiences with and information needs of childhood fever: A systematic review

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Presenter:

Alison Thompson

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Background:

Episodes of fever are an expected occurrence in childhood and yet parents frequently express fears and uncertainty about how to best care for a febrile child. Researchers have suggested that parents' low levels of knowledge and high levels of anxiety are responsible for the prevalence of suboptimal fever management strategies and the overuse of health care resources. The purpose of this systematic review is to systematically identify and synthesize current evidence on the experiences and information needs of parents and caregivers for managing fever in children.

Methods:

Systematic review of quantitative and qualitative studies examining the experiences, beliefs, practices, and information needs of parents caring for a febrile child. The review followed an a priori protocol with inclusion and exclusion criteria. Data analysis was completed using a narrative synthesis approach. Critical appraisal of included studies was performed and reported.

Results:

Twenty-eight quantitative and seven qualitative studies were eligible for a total of thirty-five included articles. Quantitative themes included, 1) presence of inadequate knowledge, misconceptions and anxiety, 2) varied fever assessment and management practices, 3) information seeking behaviours and preferred sources, and 4) influence of context on parent information needs and health practices. Synthesis of the qualitative studies followed three primary themes, 1) responsibility coupled with vulnerability, 2) seeking support and information, and 3) tension between logic and emotion.

Conclusions:

Inclusion of both quantitative and qualitative methodologies allowed us to develop a clear description of parents' knowledge gaps as well as map the drivers in the dynamic process of child health decision-making. Although parental knowledge was generally low and anxiety levels were heightened during febrile illness, parents reported a desire to learn about childhood fever and to increase confidence in their caregiving actions. Our review highlights the need for parent-centered interventions about childhood fever which may target misconceptions and the diverse contextual drivers of behaviour and decision-making.

Patient-Oriented Research (POR) – Publish or it may perish?

GL Zimmermann, S Cunningham, H Chorzempa, Patient-Oriented Research Working Groups

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Background:

The Canadian Institutes of Health Research (CIHR) defines Patient-oriented research (POR) as a “continuum of research that engages patients as partners, focusses on patient-identified priorities and improves patient outcomes. This research, conducted by multidisciplinary teams in partnership with relevant stakeholders, aims to apply the knowledge generated to improve healthcare systems and practices.” POR has been conducted worldwide for more than two decades but it is difficult to identify in the literature using standard search criteria. An important part of advancing the methods of patient oriented knowledge translation (KT) research is having a consistent classification of POR in the literature. This is especially important for any knowledge synthesis of POR. This project aimed to explore the development of a POR classification system to enable a standard way to search for, identify, assess and communicate about POR.

Methods:

Alberta Innovates led an international working group with representatives from CIHR, Patient-Centered Outcomes Research Institute, UberResearch, the University of Alberta, and the Alberta SPOR SUPPORT Unit for this study. Our POR classification process involved manually identifying and coding a sample of peer-reviewed publications written with clearly displayed POR characteristics. This dataset was intended to facilitate the development of a POR keyword search algorithm to be used in baseline bibliometric analyses.

Results:

It became clear that an algorithm was not going to be possible at this point in time for a number of reasons: 1) The language currently being used in POR-type publications is very subtle with regard to the difference between doing research ‘with/by’ patient/public versus ‘about/on/for/to’ patient/public, 2) the variability in labels being used to describe this approach, and 3) the fact that authors do not label or describe their work as being POR in their abstracts (electing to more commonly focus on the topic). Our rigorous approach of machine learning and human verification has enabled the development of a suitable preliminary common language for POR and its likeminded counterparts in other countries.

Conclusions:

There needs to be a shared understanding and common definition of what POR is and is not. A culture shift is required to adopt a POR common language and consistently report on it by all researchers doing POR, including KT researchers. This will enable the future development of an effective POR keyword search algorithm which would facilitate knowledge synthesis and impact assessment. Only then can we fully express the value and contribution of POR to improving health outcomes.