PriFor 2011

SHIP FORUM THE PRIMARY HEALTHCARE PARTNERSHIP FORUM THE P

People, Practice, and Policy

Sheraton Hotel Newfoundland
St. John's, Newfoundland & Labrador
December 1st & 2nd, 2011

Presented by the Primary Healthcare Research Unit, the Atlantic Practice Based Research Network, the Centre for Rural Health Studies, and the Faculty of Medicine, Memorial University of Newfoundland

rogram & Abstracts **Program & Abstracts** Program & A

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Welcome Messages

Dean of Medicine

Welcome to PriFor 2011. The growing interest in this meeting reflects the recognition of the importance of Primary Healthcare Research as we work together to meet the needs of Canadians. This Forum has grown to the level that it will have a strengthening impact on improving patient care locally, regionally and nationally.

This conference provides an exciting opportunity for those professionals at the forefront of delivering primary healthcare meeting with those doing research and those who make policy and administrative decisions. This sharing of ideas can inspire the best research and is an important part of knowledge mobilization in order to impact what we do in so many important areas, from chronic disease management, to access to care, to health services utilization, to medical education research.

I am delighted by how this has developed under the leadership of Dr. Marshall Godwin and the Primary Healthcare Research Unit. By partnering with the Atlantic Practice Based Research Network, the Centre for Rural Health Studies and Memorial University, the Primary Healthcare Research Unit is bringing together practitioners and researchers in the many fields of primary health care.

I hope you enjoy the conference and I look forward to seeing you all back again for PriFor 2012.

—Dr. James Rourke

Director of the Primary Healthcare Research Unit

Last year in my welcome address I explained how we would hold PriFor every two years. It turns out the demand was so high that we decided to hold it every year. So here we are again—welcome to PriFor 2011! The PriFor conferences are as large and as useful as you make them. This year we received over 70 abstracts for posters, oral presentations, and workshops.

Our theme this year is People, Practice, and Policy. The theme means that PriFor is about people interested in primary healthcare getting together to network and learn what each other is doing. It means it is about practice—caring for people. And it means it is about policy in primary healthcare delivery. The content themes are mainly based on what you have submitted in your abstracts. This year the sessions are about Healthcare Delivery, Breastfeeding, Diabetes, Chronic Disease Management, the Electronic Medical Record, Medical Education, and Participatory Research. We didn't choose them, you did!

However the planning committee did choose the plenary sessions: Dr. Mary Ann McColl, an occupational therapist and professor from Queen's University will be telling us about her research on primary care for people with disabilities. Dr. Eileen Hutton, a midwife from Ontario, will be talking about midwifery in Canada. And Dr. Mohamed Ravalia, who is a family physician from Twillingate and also Assistant Dean for the Rural Medical Education Network, will tell us about practicing and teaching in rural Newfoundland and Labrador.

So enjoy this year's conference, and plan to return next year for PriFor 2012!

—Dr. Marshall Godwin

Director of the Centre for Rural Health Studies

It gives me great pleasure to welcome you all to St. John's and to the third annual Primary Healthcare Partnership Forum. I have witnessed firsthand the extraordinary amount of work that Marshall and his team have put into this venture to ensure its success, and I am very excited to experience the final product.

This conference brings together a broad range of experts from across Atlantic Canada and beyond. Together, we will explore issues as diverse as the education of medical students, residents and health policy researchers, clinical research, the experiences of clinicians in overseas, occupational health and complementary and alternative medicine. Although diverse topics, these are all central to primary care and help to separate it from other clinical practice. This conference will help foster collaborations between these interdisciplinary experts with the goal of improving the strength of primary care.

I have had the good fortune to work alongside Marshall at the Primary Healthcare Research Unit. I can tell you from personal experience that he is passionate about primary care and research and this conference promises no less than a demonstration of that passion. I look forward to meeting you all!

—Dr. Kris Aubrey

Plenary Session
Thursday morning, Dec. 1
8:45–9:45 a.m.

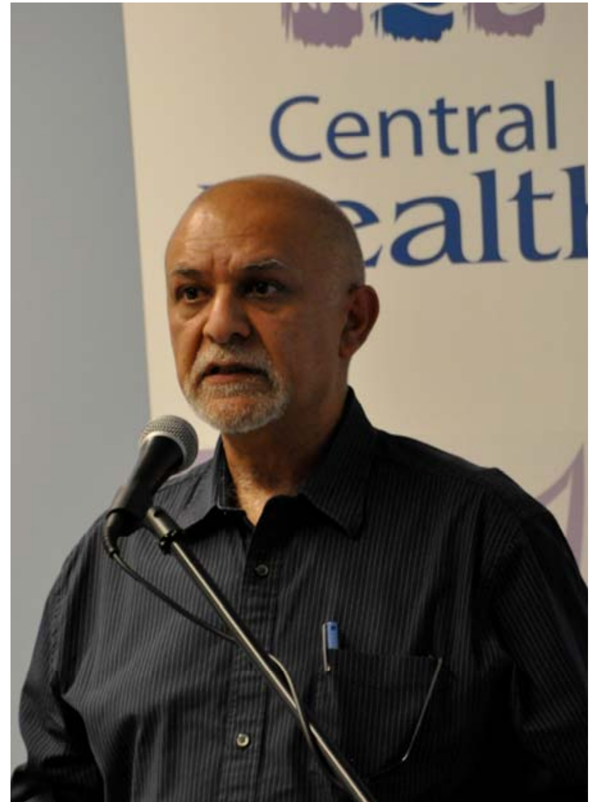
Primary Care for People with Disabilities
Dr. Mary Ann McColl

Mary Ann McColl is Associate Director at the Centre for Health Services and Policy Research, Queen's University. She is also a Professor in the School of Rehabilitation Therapy and in the Department of Community Health & Epidemiology. Dr. McColl's research interests include access to health services for people with disabilities, disability policy, spirituality and health, and community integration/social support. Before coming to Queen's in 1992, she was Associate Professor at the University of Toronto, Department of Occupational Therapy, and Director of Research at Lyndhurst Spinal Cord Centre in Toronto. She is currently the Academic Lead for the Canadian Disability Policy Alliance, an association of academic, community and policy partners committed to understanding and enhancing disability policy in Canada.

Plenary Session
Thursday afternoon, Dec. 1
1:15–2:15 p.m.

Rural Practice and Teaching in Newfoundland: The Past, Present, and Future

Dr. Mohamed Ravalia



Dr. Ravalia completed his medical training at the Godfrey Huggins school of medicine at the University of Rhodesia (currently the University of Zimbabwe Medical School). He did his internship in Zimbabwe at Harare Central Hospital and served there as a senior house officer in obstetrics and gynecology. He first came to Canada in 1984 to fill a family practice locum in Arcola, Saskatchewan. Later that same year, he first practiced in Twillingate as a family physician and anaesthesiologist at the Notre Dame Bay Memorial Hospital. He completed the residency program in anesthesia at Memorial University's Faculty of Medicine in 1988 and practiced in various communities in the province before settling in Twillingate.

Mohamed Ravalia has a passion for teaching. In April 1999, he began a full-time appointment with the faculty to work with residents and teaching via distance technologies from Notre Dame Bay Memorial Hospital (now Notre Dame Bay Memorial Health Centre) in Twillingate, where he is the senior physician and a popular teacher with medical students and residents. He has twice received the Community Physician Teaching Award from the graduating class of medical students. In 2004, Dr. Ravalia was chosen as Family Physician of the Year by the Newfoundland and Labrador Chapter of the College of Family Physicians. That same year, he was also honoured as one of the ten recipients of the Family Physician Award by the College at the national level. In January 2010, he was appointed Assistant Dean of the newly developed Rural Medical Education Network (RMEN), a critical part of the expansion of Faculty of Medicine at Memorial University.

Dr. Ravalia's research interests include lipid disorders, asthma, and drugs and the elderly. In his spare time, Dr. Ravalia likes to play chess, tennis, golf and squash, and enjoys building model aircraft.

Plenary Session
Friday, Dec. 1
8:30–9:30 a.m.

Midwifery in Canada
Dr. Eileen Hutton

Eileen Hutton, RN, RM, PhD, is Assistant Dean of the Faculty of Health Sciences and Director of Midwifery at McMaster University in Hamilton, Ontario, where she holds an appointment as Associate Professor in the Department of Obstetrics and Gynecology. In 2011, Dr. Hutton was appointed Professor of Midwifery Science at Vrije University in Amsterdam, Netherlands, where she holds a part-time endowed chair position. In taking this position, she is the first midwife ever to hold a professorship in the Netherlands. Her undergraduate degree is from Queen's University School of Nursing (BNSc). Dr. Hutton is a graduate of the University of Toronto, School of Nursing (MScN) and Institute of Medical Science - Clinical Epidemiology (PhD). She practiced midwifery both before and following regulation of the profession in Ontario. She held a Canadian Institutes of Health Research (CIHR) New Investigator Award (2004–2009) and was a recipient of a Michael Smith Foundation for Health Research Scholar award. She is currently involved in four large multicentre randomised controlled trials funded by CIHR. She has expertise in clinical trial methodology, systematic review and meta-analysis, clinical epidemiology, and implementing evidence-based practice. Her particular interest is in clinical trials with a focus on normal childbirth. She has published on a variety of topics relevant to midwifery and obstetrics including external cephalic version, late and early clamping of the umbilical cord in term neonates, vaginal birth after caesarean section, sterile water injections for labour pain relief and home birth. Dr. Hutton is a member of the CIHR Fellowship Awards Committee. She was the founding editor of The Canadian Journal of Midwifery Research and Practice, and is on the editorial board of the Journal of Obstetrics and Gynecology Canada. She is an instructor for the Society of Obstetricians and Gynaecologists of Canada's (SOGC) Advances in Labour and Risk Management (ALARM) programme, both nationally and internationally, and is co-chair of the International Women's Committee of the SOGC.

Highlights and Key Points

- Thank you to our sponsors. Please visit their booths in the exhibit and poster area.
- Conference starts with registration and continental breakfast @ 7:30 a.m. on Thursday.
- All breaks are in the Court Garden with the posters and exhibitors/sponsors.
- Thursday lunch will be served in the Court Garden; seating is provided in the combined Avalon & Battery rooms and The Narrows. The award for Primary Care Researcher of the Year will be presented during lunch.
- Hot breakfast served Friday morning starting at 7:30 a.m. in the pre-function area. Seating is provided in the Fort William Room (Salons B, C, & D combined).
- Posters
  There are three half-day poster sessions. Those people presenting their posters in the morning sessions should have their posters up on their designated poster board in the Court Garden before the plenary session starts and down by 12:45 p.m. Poster presenters are asked to stand by their posters during the designated time for their poster (9:45–10:30 a.m. for the Thursday morning session, 2:15–3 p.m. for the Thursday afternoon session, and 9:30–10:15 a.m. for Friday morning session).
- Oral Presentations
  There are four rooms with presentations/workshops running concurrently on Thursday and three on Friday. The rooms are Salons B, C, and D, and the Garrison/Signal Room on Thursday only. All presenters should have received a letter indicating the room and time of their presentation. Please give your presentation (on USB stick or CD/DVD) to your room monitor or one of the IT people at least an hour before the block of sessions in which your presentation is scheduled.
- Three Plenary Sessions in the Fort William Room:
  - On Thursday morning, Dr. Mary Ann McColl, an occupational therapist and professor from Queen's University, will present on access to primary care for people with disabilities.
  - On Thursday afternoon, Dr. Mohamed Ravalia, a family physician from Twillingate and Assistant Dean for the Rural Medical Education Network, will talk about practicing and teaching in rural Newfoundland and Labrador.
  - On Friday morning, Dr. Eileen Hutton, a midwife from Ontario, will be talking about midwifery in Canada.
- Three concurrent 90-minute workshops will be held on Thursday afternoon, and one 3-hour workshop will be held on Friday.
- The Canadian Forces are offering a special Search and Rescue presentation at 11:15 on Friday morning.
- On Thursday at the end of the afternoon session, there will be a Cocktail Reception for all registrants. This runs from 4:30–6:30 p.m., and will be held in the Court Garden.
- Please feel free to approach any of the conference staff if you need help. They will be wearing **RED** nametags.

Program Schedule

Thursday morning, Dec.1

Time	Session			
7:30–8:30 a.m.	Registration & Continental Breakfast *Fort William (Salons B,C, & D)*			
8:30–8:45 a.m.	Welcome & Opening Remarks **Dr. James Rourke, Dean of Medicine** *Fort William (Salons B,C, & D)*			
8:45–9:45 a.m.	Plenary Session: Primary Care for People with Disabilities **Dr. Mary Ann McColl** *Fort William (Salons B,C, & D)*			
9:45–10:30 a.m.	Refreshment Break/Research Poster Viewing/Exhibitor Viewing *Court Garden*			
10:30 a.m.–12:30 p.m.	Concurrent Oral Sessions:			
	Primary Healthcare Delivery *Salon B*	A Variety Pack *Salon C*	Breastfeeding *Salon D*	PHC Data Access & Quality *Garrison/Signal*
			Diabetes *Salon D*	Health Services Utilization *Garrison/Signal*
12:30–1:15 p.m.	Lunch **Primary Care Researcher of the Year Award Presentation** *Avalon/Battery/The Narrows*			

Thursday afternoon, Dec. 1

Time	Session			
1:15–2:15 p.m.	Plenary Session: Rural Practice and Teaching in Newfoundland: The Past, Present, and Future **Dr. Mohamed Ravalia** *Fort William (Salons B,C, & D)*			
2:15–3 p.m.	Refreshment Break/Research Poster Viewing/Exhibitor Viewing *Court Garden*			
3–4:30 p.m.	Concurrent Workshops:			Oral Session:
	Electronic Medical Record Program *Salon B*	Reconsidering the Role of Testing in Type II Diabetes *Salon C*	Chronic Disease Self-Management *Salon D*	Social Determinants of Health *Garrison/Signal*
4:30–6:30 p.m.	Cocktail Reception *Court Garden*			

Friday, Dec. 2

Time			
7:30–8:30 a.m.	**Hot Breakfast** *Court Garden*		
8:30–9:30 a.m.	**Plenary Session: Midwifery in Canada** **Dr. Eileen Hutton** *Fort William (Salons B,C, & D)*		
9:30–10:15 a.m.	**Refreshment Break/Research Poster Viewing/Exhibitor Viewing** *Court Garden*		
10:15 a.m.–1:15 p.m.	**Workshop:**	**Concurrent Oral Sessions:**	
	Participatory Research *Salon B*	**Medical Education Programs** *Salon C*	**Community Primary Healthcare Programs** *Salon D*
			Canadian Forces: Search & Rescue *Salon D*
1:15 p.m.	**Conference Adjourns**		

Sessions in Detail

Thursday morning, Dec. 1

Primary Healthcare Delivery		
Location: **Salon B**	Session Facilitator: **Gary Tarrant**	Room Monitor: **Justin Oake**
10:30–10:50 a.m.	Enabling Primary Health Care Through Telehealth	Joanne Reid *See abstract on page 24*
10:50–11:10 a.m.	Does a Dementia Unit Reduce Polypharmacy in a Veteran's Pavillion?	Roger Butler *See abstract on page 23*
11:10–11:30 a.m.	Patient to Population: Engagement of Community Family Physicians in Population Health	Brenda Hefford *See abstract on page 28*
11:30–11:50 a.m.	The Association of Continuity of Family Physician Care with Health Care Services Utilization and Costs in Newfoundland and Labrador	John C. Knight *See abstract on page 30*
11:50 a.m.–12:10 p.m.	Effect of Vaginal Self-sampling on Cervical Cancer Screening Rates: A Community Based Study in Newfoundland and Labrador	Pauline Duke *See abstract on page 24*
12:10–12:30 p.m.	The Golden Years: The Potential Impact of an Aging Population on Ambulance Services in Western Newfoundland	Madison Muggridge *See abstract on page 31*

A Variety Pack		
Location: **Salon C**	Session Facilitator: **Shirley Solberg**	Room Monitor: **Shannon Aylward**
10:30–10:50 a.m.	Duty to Warn: A Case Report	Kathy Hodgkinson *See abstract on page 23*
10:50–11:10 a.m.	Injury Epidemiology and Consumer Product-Related Risk in Newfoundland and Labrador	Kayla Collins *See abstract on page 26*
11:10–11:30 a.m.	The Epidemiology of Cardiomyopathy and Sudden Cardiac Death in Newfoundland	Kathy Hodgkinson *See abstract on page 31*
11:30–11:50 a.m.	"So, you're collaborating?": Patients' Perspective of Interprofessional Patient Centred Collaboration	Silvano Mior *See abstract on page 19*
11:50 a.m.–12:10 p.m.	A New Patient e-Tool for Symptom Assessment and Management	Gillian Bartlett *See abstract on page 19*
12:10–12:30 p.m.	Development and Evaluation of the Health Professional Collaborative Competency Perception Scale	Deborah Kopansky-Giles *See abstract on page 22*

Thursday morning, Dec. 1

Breastfeeding

Location: **Salon D**	Session Facilitator: **Lisa Bishop**	Room Monitor: **Mandy Peach**
10:30–10:50 a.m.	Assessing Attitudes and Knowledge towards Breastfeeding in Students at Memorial University of Newfoundland	Sandra Cooke-Hubley *See abstract on page 21*
10:50–11:10 a.m.	How Infant Feeding Decisions are Made: Formula Feeding Mothers in Newfoundland and Labrador Provide Insight	Valerie Ludlow *See abstract on page 26*
11:10–11:30 a.m.	Improving Breastfeeding Rates in Newfoundland and Labrador: What Challenges do Urban and Rural Family Physicians Face?	Amanda Pendergast *See abstract on page 26*

Childhood Diabetes

Location: **Salon D**	Session Facilitator: **Lisa Bishop**	Room Monitor: **Mandy Peach**
11:30–11:50 a.m.	History of Caesarean Section Associated with Childhood Onset of T1 Diabetes Mellitus in Newfoundland and Labrador, Canada	Leigh Anne Newhook *See abstract on page 25*
11:50 a.m.–12:10 p.m.	The Newfoundland and Labrador Diabetic Ketoacidosis Project—Part One: Focus Group Sessions	Leigh Anne Newhook *See abstract on page 32*

Primary Healthcare Data: Access and Quality

Location: **Garrison/Signal**	**Session Facilitator: Norah Duggan**	Room Monitor: **Richard Cullen**
10:30–10:50 a.m.	The Interactive Atlas on Chronic Diseases and Mental Health	Alain Vanasse *See abstract on page 32*
10:50–11:10 a.m.	Building Primary Health Care Data and Research Capacity in Canada	Patricia Sullivan-Taylor *See abstract on page 21*
11:10–11:30 a.m.	Advancing Primary Health Care Through Better Information	Patricia Sullivan-Taylor *See abstract on page 19*

Health Services Utilization

Location: **Garrison/Signal**	Session Facilitator: **Norah Duggan**	Room Monitor: **Richard Cullen**
11:30–11:50 a.m.	The Use of Acute Health Care Services by Mentally Ill Seniors in NL: A Quantitative Investigation	Lisa Adams *See abstract on page 30*
11:50 a.m.–12:10 p.m.	Medical Care Utilization and Barriers of Elderly Chinese Immigrants Living in Canada	Jing Wang *See abstract on page 27*
12:10–12:30 p.m.	Diabetes Care Management in Patients with Depression	Patricia Sullivan-Taylor *See abstract on page 22*

Sessions in Detail

Thursday afternoon, Dec. 1

Wokrshop A		
Location: **Salon B**	Session Facilitator: **Katherine Stringer**	Room Monitor: **Lisa Grant**
3–4:30 p.m.	The Vision, Promise of an Electronic Medical Record Program and Opportunities for Primary Health Care Research	Ian Hodder *See abstract on page 49*
Workshop B		
Location: **Salon C**	Session Facilitator: **Stephen Lee**	Room Monitor: **Justin Oake**
3–4:30 p.m.	From Research to Policy and Practice: Reconsidering the Role of Testing in Type II Diabetes	Stephanie Young *See abstract on page 48*
Workshop C		
Location: **Salon D**	Session Facilitator: **Roger Butler**	Room Monitor: **Mandy Peach**
3–4:30 p.m.	Chronic Disease Self-Management Program (CDSMP) in NL	Darlene Ricketts *See abstract on page 48*
The Social Determinants of Health		
Location: **Garrison/Signal**	Session Facilitator: **Sharon Buehler**	Room Monitor: **Réanne Meuse**
3–3:20 p.m.	Helping Older Workers Remain in Employment Longer: Legislation, Policies, and Contracts	Valerie Darmonkow *See abstract on page 24*
3:20–3:40 p.m.	From the Ground Up: Using Asset Mapping to Address Chronic Pain in the Community	Shirley Solberg *See abstract on page 24*

Friday morning, Dec. 2

Workshop		
Location: **Salon B**	Session Facilitator: **Roger Chafe**	Room Monitor: **Richard Cullen**
10:15 a.m.–1:15 p.m.	Getting Public, Providers and Stakeholder Perspectives: How and Why to Conduct Deliberative Consultations for a Participatory Approach	Gillian Bartlett *See abstract on page 49*
Medical Education Programs		
Location: **Salon C**	Session Facilitator: **Pauline Duke**	Room Monitor: **Shannon Aylward**
10:15–10:35 a.m.	Teaching an Interprofessional Approach to the Management of Musculoskeletal Problems in Primary Care—A Pilot Study (Part 1)	Deborah Kopansky-Giles *See abstract on page 29*
10:35–10:55 a.m.	Teaching an Interprofessional Approach to the Management of Musculoskeletal Problems in Primary Care—A Pilot Study (Part 2)	Deborah Kopansky-Giles *See abstract on page 29*
10:55–11:15 a.m.	An Evaluation of a Psychotherapy Skills Training Program	Gary Tarrant *See abstract on page 20*
11:15–11:35 a.m.	Learning the Ropes of Well-baby Care with the Rourke Baby Record eLearning Module	Leslie Rourke/Sarah Hann *See abstract on page 27*
11:35–11:55 a.m.	Refining Clinical Assessment, Treatment, and Research through Intensive Interactive Case Study: Learning from Children in Foster Care	Dennis Kimberley *See abstract on page 28*
Community Primary Healthcare Programs		
Location: **Salon D**	Session Facilitator: **Kris Aubrey**	Room Monitor: **Réanne Meuse**
10:15–10:35 a.m.	An Evaluation of the Vial of Life Program in Rural Newfoundland	Erica Parsons *See abstract on page 20*
10:35–10:55 a.m.	The New Hope Clinic: A Primary Health Care/ Mental Health Collaborative	Dawn Gallant *See abstract on page 32*
10:55–11:15 a.m.	Applying the Expanded Chronic Care Model in Western Health	Darla King *See abstract on page 21*
Canadian Forces Presentation		
Location: **Salon D**	Session Facilitator: **Kris Aubrey**	Room Monitor: **Réanne Meuse**
11:15 a.m.–Noon	Canadian Forces: Search and Rescue	MCpl Mark Vokey

Poster Presentations
Thursday morning, Dec. 1
9:45–10:30 a.m.
Room Monitors: Andrea Pike and Emily Eaton

Poster Board	Title	Presenter	Abstract on page
1	Home visits Optimizing Medical care in the Elderly (HOME Study): A pilot study	Katherine Stringer	39
2	The Eldercare Study: Evaluation of a Nurse-based Program of Care	Marshall Godwin	46
3	Health Care Use at the End of Life in Atlantic Canada Report	Terri Brophy	39
4	The Canadian Survey of Health, Lifestyle, and Aging with Multiple Sclerosis: A Preliminary Report	Michelle Ploughman	44
5	Expectations and Realities: Supports and Challenges for Stroke Survivors Living at Home	Jared Clarke	38
6	Innovative Mixed Methods Approach to Age Friendliness in the Community of St. John's	Devonne Ryan	40
7	The Importance of Monitoring Folic Acid Fortification: How Much are we Really Consuming	Jennifer Colbourne	46
8	Fibre Consumption in the Adult Population of Newfoundland and Labrador: How Much is Being Consumed and Which Food Groups are Contributing?	Natasha Baker	38
9	Food Consumption Patterns in Newfoundland and Labrador, Canada: A Cross-sectional Telephone Survey	Lin Liu	38
10	Physician Referral Patterns: A Focus on Computed Tomography in Eastern Health	Katie Little	43
11	Diagnostic Imaging: Wait Times, Urgency Classification and Attendance Status by Modality	Charlene Reccord	36

Thursday afternoon, Dec. 1
2:15–3 p.m.

Room Monitors: Andrea Pike and Emily Eaton

Poster Board	Title	Presenter	Abstract on page
1	Cervical Screening Initiatives: Utilizing Primary Health Care—A Win-Win Approach	Vera Lynn Alteen	34
2	Nurse Practitioner Faculty Led Student Well Women Screening Clinic	Wanda Emberly Burke	41
3	Current Growth Patterns and Prevalence of Overweight and Obesity in NL Preschool Children by the New WHO Standards, and Changes Over 20 Years	Lynn Frizzell	35
4	Development of a Local Breastfeeding DVD Resource for Young Inuit Families in Upper Lake Melville, Labrador	Dee Dee Voisey	36
5	Is it normal for my baby to…? Parent Resources for Well-Baby Visits	Leslie Rourke/Laura Butler	41
6	Pre-Conception Health Social Marketing Campaign	Lorraine Burrage	43
7	Predicting Parental Compliance with an Early Intervention Program	Dana Noseworthy	43
8	Achieving a Balance: Strategies to Improve Heart Health for Multi-Tasking Women	Jill Bruneau	34
9	Evaluating Cardiovascular Comorbidities in Psoriasis Patients in Eight NL Dermatology Practices	Boluwaji Ogunyemi	37
10	The State of Primary Care Research In Grand Falls-Windsor	John Campbell	47
11	Residential Proximity and Hospital Level of Service for Canadian Obstetrics Patients	Kris Aubrey-Bassler	44

Poster Presentations
Friday, Dec. 1
9:30–10:15 a.m.
Room Monitors: Andrea Pike and Emily Eaton

Poster Board	Title	Presenter	Abstract on page
1	Recruitment and Retention of Doctors of Chiropractic In Rural NL, Canada, 1999–2010	Laurie Goyeche	44
2	The Effects of Lavandula Angustifolia Mill Infusion on Depression in Patients using Citalopram: A Randomized Control Trial Study	Naziheh Assarzadegan	45
3	Oral Health Status in Institutionalized Schizophrenic Patients in Shahrekord, Iran: A Cross-sectional Study	Naziheh Assarzadegan	42
4	The NL Alcohol and Other Drug Monitoring Pilot Project: A Focus on Cocaine Usage	Charlene Reccord	47
5	Creating Community Dialogues: Exploring Public Opinions about Genetics Research in Newfoundland	Holly Etchegary	35
6	Dyslipidemia and Lipid Profiles in NL: A Comparison of Laboratory and EMR Data	Justin Oake	37
7	Geographic Variations of the Lipid Profiles of Newfoundlanders	Scott Lee	39
8	The Effectiveness of Low Glycemic Index Diets in the Management of Blood Lipids: A Systematic Review and Meta-Analysis	Patrick Fleming	45
9	Perceived Influence of Electronic Medical Records on Family Medicine Resident Learning—A Primer for Clinical Teachers	Alison Sinnott Drover	42
10	Interventions Performed by Community Pharmacists In Newfoundland and Labrador	Lisa Bishop	40
11	The Researcher Development Program: Strategies to Enhance Research Capacity in Rural Family Medicine	Cheri Bethune	47

Oral Presentations

"So, you're collaborating?" Patients' perspective of interprofessional patient-centred collaboration

Silvano Mior

Background: Patients are at the centre of health care, yet traditionally they have had limited or no real voice. Attention has typically focused on assessing pain and disability; however, there is a growing realization of the importance of assessing the patients' view of the inherent qualities of the clinical encounter. Qualities that lay hidden within the 'internal' and 'external' context of the human experience that may only be accessible by exploring the deeper meaning of their experience.

Research Questions: This study explored patients' collective perception, attitudes, and opinions of care provided corroboratively between chiropractors and physicians.

Description: Methods: Qualitative study using focus group methodology. Six 2-hour focus groups were held with patient recruited from a collaboration study stratified by location and referral course using purposeful sampling. Results: Emergent themes related to the referral process, extent of provider collaboration, and patient-centred care. The study allowed patients to openly share their experiences with their physician. Patients reported surprise that a physician would refer to a chiropractor. Physician support of chiropractic care was important in helping skeptical patients decide to attend for care. Some questioned the extent of interprofessional collaboration due to lack of acknowledgment by some physicians or awareness of communication. Importance of co-location varied and based on patients' prior experience. Most felt the care received was holistic and patient-centred. Patients were able to differentiate between satisfaction and expectation of care; the former reflected total experience, whilst the latter, treatment based. Conclusion: The results suggest patient involvement in collaborative care varies and dependent on patient-provider relationship, trust, providers' referral support, and the underlying clinical condition. Our findings build on Thompson's framework of decision-making, suggesting participation may be influenced by patient, contextual, and access factors. These factors may change over time, suggesting a dynamic and evolving nature of patient participation in interprofessional collaborative care.

A New Patient e-Tool for Symptom Assessment and Management

Gillian Bartlett, Lisa Dolovich, Martin Dawes, David Chan, Michelle Howard, Brenda Macgibbon, Sara Ahmed, Liisa Jaakkimainen

Background: Symptoms account for approximately 40% of all visits in primary care clinics and over half of all outpatient visits in North America. Although there are many symptom assessment tools, most are related to specific diseases and do not include information on duration, severity or management techniques.

Research Questions: To develop a comprehensive symptom assessment and management tool that patients can use in an electronic personal health record.

Description: Utilizing existing taxonomy (ICPC-2) and a validated assessment tool for symptom severity with an added time scale, we pilot tested a comprehensive symptom assessment questionnaire in 473 family medicine patients. The specific issues with the questionnaire were discussed in a subsequent focus group of primary care patients. The results were used to correct labeling for symptoms and to re-organze into general symptoms, head and neck, heart and upper body and mid – lower body with pain symptoms in a separate questionnaire. In addition to a measure severity and duration, patients also wanted to be able to indicate priority, possible causes (including new medications), current management strategies and an action plan for handling the symptom. These changes have been incorporated into an open source electronic patient health record (MyOscar) and will be evaluated for 6 months in 250 primary care patients in 4 provinces starting the summer of 2011. Results from the pilot will be presented along with the symptom tool.

Advancing PHC Through Better Data and Information

Patricia Sullivan-Taylor

Background: CIHI stakeholders have confirmed a high priority need for more and better primary health care (PHC) information to help clinicians and jurisdictions establish and evaluate programs to monitor and understand the quality, cost, and effectiveness of PHC in Canada.

Research Questions: The Primary Health Care Information program collaborates with stakeholders across Canada to address priority information needs. The goal is to establish new pan-Canadian data sources to better understand PHC across Canada, report on agreed upon indicators and inform health policy and decision-making at multiple levels.

Description: The Canadian Institute for Health Information (CIHI) is leading several initiatives to improve primary healthcare data and information across Canada. We are working with multiple stakeholders to strengthen and improve the PHC data available to clinicians and health system decision-makers. Learn how we are helping our stakeholders in their efforts to measure, manage, and improve primary healthcare by delivering standards, data, insight, and knowledge.

An Evaluation of a Psychotherapy Skills Training Program

Gary Tarrant, Marshall Godwin, Paula Mullins-Richards, George Hurley, Peter Cornish, Elizabeth Ohle, Karen Mitchell, Cheri Bethune

Background: This is a three year study which has evaluated a psychotherapy/counseling program involving first year family medicine residents in behavioural medicine training. This was examined mostly during their academic family medicine rotation in the first year of their family medicine program at the Memorial University of Newfoundland and involved collaboration with the Department of Psychology (at the University Counselling Centre) and the Standardized Patient (SP) program.

Research Questions: To determine the effect of the standardized patient encounter and the twelve-week counseling skills program on residents' knowledge, confidence, competence and attitudes when conducting interviews with patients who present with mental health issues.

Description: This study examined one of the many important aspects of our behavioural medicine and psychiatry training in our family medicine program at MUN. Our psychotherapy skills training program offers a unique experience for our family medicine residents that integrates training with standardized patients (standardized patients or SPs are trained individuals who role-play as patients) and teaching revolving around patient-permitted videotaped encounters with patients in clinics. This is done through inter-professional cooperation with the Department of Family Medicine, the Department of Psychology (at the University Counselling Centre) and the Standardized Patient Program. It was carried out using resident completed surveys at different key points of their behavioural medicine training collected mostly during their core behavioural medicine training (the twelve weeks of their academic family medicine rotation) and at the end of their two-year family medicine program.
This project is a program evaluation and in this presentation participants will learn about the methodology and results of this study. Discussion will revolve around the short-term and long-term benefits of this program including some long-term challenges that were discovered as a result of this study.

An Evaluation of the Vial of Life Program in Rural Newfoundland

Erica Parsons

Background: There are two main goals of the Vial of Life (VOL) program: 1. to promote healthy aging through improved emergency response and health care services; and 2. to enhance a sense of safety and security for older adults living independently. The VOL kit allows emergency responders to quickly locate important medical information regarding an individuals medical history in a time of crisis. This can save time and potentially save lives.

Research Questions: Research objective: To evaluate the effectiveness of the Vial of Life program in the Bonne Bay and Port Saunders area.
A multi phase evaluation was implemented to evaluate the VOL program: there is an evaluation of Kit contents, program education, emergency response impact and emergency room/outpatients impact.

Description: The main objective of this research project is to determine if the VOL program is an effective means of improving emergency response in rural communities; and if there is any benefit to seniors and individuals with medical conditions living in the community. The VOL program is designed for seniors (65 years +) and/or people with special medical conditions living in the community. Emergency responders are trained to look for the VOL magnet on the refrigerator. This will prompt them to obtain the Vial inside the fridge. The Vial is a small plastic container that holds an individuals medical information. The medical information can then be used by paramedics to treat the patient in an emergency. Time is of the essence in an emergency and gathering pertinent personal medical information can be time consuming. The VOL program will save time and potential lives. There may be times when the patient is unable to communicate, so the VOL becomes the primary tool used for paramedics to assist in patient assessment and treatment. Possible positive outcomes include: improved emergency response, improved communication between the client and the paramedics as well as other health care providers, reduced complications during an emergency response, and an improved sense of safety and well-being for clients/seniors and their families living in the community.

Applying the Expanded Chronic Care Model in Western Health

Darla King

Background: This presentation will discuss how the Expanded Chronic Care Model is being used by Western Health to guide the development of strategies to improve health outcomes for residents of the Western Region. This includes the development of a Chronic Disease Prevention and Management Network, which supports identification of priority areas; development of action plans; and interdisciplinary collaboration on these key areas on an organizational level.

Research Questions: 1. To review the expanded chronic care model as best practice in the prevention and management of chronic disease.
2. To identify how Western Health has applied this model through the development of a Chronic Disease Network.

Description: The expanded chronic care model (ECCM) is internationally recognized as a framework for optimal outcomes for clients with chronic health conditions. The model highlights the need for productive interactions and relationships between clients/communities and health care providers/community partners. The ECCM also identifies key strategies which support enhanced prevention and management of chronic disease within the context of the health care system, and the community at large.

This presentation will discuss how the ECCM is being used by Western Health to guide the development of comprehensive strategies to improve outcomes for residents of the Western Region. This includes the development of a Chronic Disease Prevention and Management Network, which supports identification of priority areas; development of action plans; and interdisciplinary collaboration on these key areas on an Organizational Level. The role of Primary Health Care Teams and Community Advisory Committees in supporting CDPM initiatives will also be discussed.

Assessing attitudes and knowledge towards breastfeeding in students at Memorial University, St. John's, NL

Sandra Cooke-Hubley

Background: Studies indicate that the majority of women make their decision to breastfeed prior to conception, and may be made as early as adolescence. Therefore assessing attitudes towards breastfeeding in young adults can be used as a predictor of future behavior. Current, local information on breastfeeding attitudes can be used to complement health promotion campaigns aimed at promoting breastfeeding.

Research Questions: The purpose of this study was to assess attitudes and knowledge towards breastfeeding in male and female students at Memorial University, using an Infant Feeding Questionnaire. Statistical tests were performed to determine if attitudes or behavior towards breastfeeding differed significantly between gender, age, partner status, number of children or Academic Program.

Description: An Infant Feeding Questionnaire was designed for University students to determine attitudes and knowledge towards breastfeeding through a series of questions and scenarios. A total of 215 Memorial University students participated in the study. Based on the responses to the survey, each student was given a composite knowledge score (CKS) and a composite attitude score (CAS). These variables were evaluated according to gender, age, academic program, partner status or presence of children to determine statistical differences. The results demonstrated that only 60% of participants (or their partners) intend to breastfeed. Males scored significantly lower than females on CKS. Males were also less likely than females to agree that breastfeeding is a healthy lifestyle or intend to breastfeed (i.e. that their partner intends to breastfeed). A significant difference in CAS was noted between Academic Programs; arts/education students were significantly more likely have a higher CAS than both science/engineering and business students. Studies have shown that breastfeeding intentions of young adults are good indicators of future behavior. Current, local information on breastfeeding attitudes can be used to complement health promotion campaigns aimed at promoting breastfeeding.

Building Primary Health Care Data and Research Capacity in Canada

Patricia Sullivan-Taylor

Background: Information captured in electronic medical records (EMR) is currently non-standardized with limited structure, and therefore has limited value in comparative analysis. Furthermore, data to identify vulnerable, at risk groups of patients cannot easily be accessed to understand and improve PHC without the implementation of standards.

Research Questions: CIHI will share a multipronged approach to improve the usefulness, availability, and access to primary health care (PHC) information for improved care delivery, as well as clinical and health system management.

Description: In collaboration with clinicians, jurisdictions, and researchers across Canada, CIHI is improving PHC data quality and availability by:
- Supporting jurisdictional implementations of the pan-Canadian EMR Content Standard v2.0.
- implementing the standard as part of the PHC Voluntary Reporting System (PHC VRS).
- Using clinician-validated methodology to transform data centrally.
- Providing national standardized clinician-friendly practice quality improvement reporting tools that use PHC indicators and clinical practice guidelines.
- Partnering on EMR demonstration projects and informing future PHC information needs.

Through CIHI's pan-Canadian PHC VRS, EMR data is used to:
- Help clinicians improve understanding and planning for patient populations.
- identify and test research questions and hypothesis using PHC VRS data.
- Use the data to guide and evaluate quality improvement initiatives.

Development and Evaluation of the Health Professional Collaborative Competency Perception Scale©

<u>*Deborah Kopansky-Giles*</u>

Background: With the development of interprofessional educational (IPE) programs, there is a need to evaluate how well these programs are meeting the needs of students and their competency requirements. While learner-centered, self-administered questionnaires are commonly found in the literature, to date there has been no publication of a scale specifically designed to assess a health professional learner's ability to be a competent collaborator, as defined by the CanMEDS physician competency framework.

Research Questions: This project aimed to undertake the development of an outcome measure designed to evaluate the self-perceived level of collaborative care competency of health professional learners and to and evaluate the instrument's psychometric properties (validity, reliability and responsiveness) through pilot testing of the instrument with two groups of interprofessional (IP) learners

Description: METHODS: The design was a prospective, longitudinal study where the scale was developed, evaluated and then applied through administration to two groups of mixed professional learners. RESULTS: Test-retest of the instrument occurred by 9 chiropractic students who completed the HPCCPS on two occasions, one week apart without any formal IPE. Pre-post testing occurred over a 4 week period by 13 students from 6 different professions who completed 4 1-day modules on the IP approach to MSK condition management. The instrument was used for pre-post testing of 10 mixed learners who completed a ½ day IPE module. Pearson's correlation coefficients for all items exceeded the 0.2 cut-off point suggested by Streiner and Norman (1989). The results of the two sample t test for the pre-post scores suggest the scale was highly responsive in detecting change in IP confidence (p=0.019). Results from the independent two sample t test on the pre post scores from the 4 week IPE module suggest sensitivity to overall group change. The pre post scores showed sensitivity to change (t=-5.66, df = 9, p=0.003). CONCLUSIONS: The HPCCPS had good face and content validity, was highly responsive to detecting change in IP confidence and was sensitive to overall group change. It also had strong stability over time. The HPCCPS appears to be a valid, reliable and responsive instrument for evaluating health professional learners' perception of their collaborative competency and may be used as part of an evaluative strategy in the delivery of IPE.

Diabetes Care Management in Patients with Depression

<u>*Patricia Sullivan-Taylor*</u>

Background: Depression coexists with a number of chronic conditions and is related to poor self-care management in patients who also have diabetes. These patients are more likely to have decreased compliance to medication, diet, exercise, and blood glucose monitoring, which may increase diabetic complications, glucose dysregulation, and health service use.

Research Questions: This study explores the correlation between depression, Primary Health Care (PHC) service utilization and patient outcomes.

Description: A cross sectional study analyzing 8,629 patients 18 years and older with a diagnosis of diabetes was conducted.
Descriptive and regression analyses were performed using electronic medical record (EMR) data from the 2008-2011 period, available through the Canadian Institute for Health Information's (CIHI) PHC Voluntary Reporting System (PHC VRS).
The likelihood of diabetic patients being high service users (above 90th percentile in terms of number of encounters in the year) for those who are also diagnosed with depression is 1.7 times higher adjusting for all other factors.
Controlling for other factors, patients diagnosed with depression are 1.3 times more likely to have A1C > 9% and are 1.7 times more likely to not have A1C test performed in the prior year, compared to those without depression.
Diabetic patients who also have a diagnosis of depression

have complex care needs. Therefore, close monitoring of diabetes care management in patients who also have a diagnosis of depression is necessary from a quality of care and cost-effectiveness perspective.

Does a Dementia Unit Reduce Polypharmacy in a Veteran's Pavilion?

Roger Butler, *Dr. Rebecca Law ,School of Pharmacy*

Background: This study examined the effect of the addition of a dementia unit to an existing Pavilion by observing the change if any to medication usage comparing the drug utilization at time zero May -June 1999 at 6 month intervals up to 1.5 years after the move.Secondary measures examined include cognitive status as measured by the MMSE, nursing satisfaction as measured by the Chou et al.2002 questionaire, and QOL questionaire measured by Veteran's Canada on a yearly basis.

Research Questions: To determine if there were reductions in meds, which classes of meds,and which patients demonstrated the greatest benefits from the enviromental change. We also wanted to determine what the effect was on patient cognition and QOL as well as nursing satisfaction .

Description: This oral presentation will present our research findings and discuss our results and potential ethical and institutional planning concerns. There is widespread support for the behavioral management of cognitive impairment while at the same time minimizing the role of pharmacological treatment.(Zarit et al 1990). This move theoretically should enable staff to optimize such behavioral approaches in a more" ideal environment". This presentation will review the results of this unique research opportunity which gives much needed data on a captive population who have not been studied this way previously. It will also raise some ethical concerns and may have an impact on current nursing home practice/ design in our province. This study is fully supported by the Newfoundland and Labrador Center for Applied Health Research and has received ethics approval from the Human Investigation Committee of Eastern Health.

Duty to Warn: A Case Report

Kathy Hodgkinson, *Rick Singleton*, *Fiona Curtis*, *Terry Young*, *Daryl Pullman*

Background: Arrhythmogenic Right Ventricular Cardiomyopathy genetic subtype 5 (ARVD5) caused by a p.S358L change in gene TMEM43 is common in Newfoundland. The disease is autosomal dominant and lethal with 50% of affected males deceased by 40 years, and 80% by 50 years in the absence of treatment; compared to 5% and 20% respectively of women. Treatment with the implantable cardioverter defibrillator (ICD) increases survival significantly.

Research Questions: A recently ascertained family via a 56-year-old female proband (subsequently determined to have the common TMEM43 mutation)had lost a brother aged 32 to SCD many years ago. This proband was able to build some of her extended family tree but despite great effort, was unable to find their current whereabouts.

Description: The distress to this proband was obvious, as the death of her brother remained traumatic and she wanted no other families to suffer. She had the names and approximate years of birth of some of her at-risk family members so an ethics consult was convened to determine if hospital records could be broached to find these individuals. This is a 'duty to warn' scenario, where the responsibility for contact is extended from the proband to the care givers. The ethics consultation discussion included health care privacy consultants, bioethicists, informatics experts, hospital lawyers, senior hospital physicians (including public health) and genetic counsellors. It was determined that the privacy consultants would broach the system, and the genetic counsellor would contact the family. This scenario is ongoing. It has lead us to consider the 'circle of care' and to what diameter that extends. From the proband to the immediate family and potentially from the hospital to the extended family? Maintaining this analogy, it might be extended to public education and screening in the communities in which this gene is prevalent. Our cardiomyopathy research team has a significant ethics component, one major feature of which will be the determination of the extent of the potential issue of 'duty to warn' and population screening for this lethal, yet treatable disease caused by the TMEM43 mutation.

Effect of vaginal self-sampling on cervical cancer screening rates: A community-based study in Newfoundland and Labrador

Pauline Duke

Background: Cervical cancer is preventable and treatable if detected early. However, despite intense patient education programs encouraging women to attend Pap screening, parts of NL have very low Pap smear screening rates. Studies have suggested that HPV testing is both effective and acceptable to women and may promote compliance and increased screening rates.

Research Questions: The objective of this study is to determine whether the introduction of a self-collection strategy for HPV screening results in increased primary population cervical cancer screening in a community-based setting.

Description: This study is being conducted in 3 rural communities in Newfoundland and Labrador (NL) with similar demographics. The participants are healthy women aged 30–69 years, with the exclusion of pregnant women. Community A received an intensive educational and promotional program concerning the prevalence and preventability of cervical cancer and the availability of a research project to test for HPV through self-collection. This was in addition to the continued availability of Pap smear screening. Community B received a similar campaign but was focused on the importance of clinician collected Pap smears. Community C received no intervention.
This project is still in progress; The observed cervical cancer screening rates will be compared between the study communities, and compared to the screening rates observed in these communities during the previous year to determine the effect of these new interventions on cervical cancer screening rates. The proportion of HPV positive women who follow up with suggested Pap smear screening will also be determined.

Enabling Primary Health Care Through Telehealth

Joanne Reid, *Rick Dillon*

Background: Newfoundland and Labrador faces numerous challenges in the delivery of heath care services due to the geography,
and widespread population across a large landmass. Telehealth has played a key role in easing the
burden of travel and service delivery for patients.

Research Questions: 1) Does Telehealth support equitable access to services?
2) Does Telehealth increase patient empowerment?

From the Ground Up: Using Asset Mapping to Address Chronic Pain in the Community

Shirley M. Solberg, Sandra LeFort, PhD

Background: In Canada one in five adults experience chronic pain on a daily basis. Chronic pain has huge physical, emotional, economic, and societal costs and affects not only those living with the pain, but family members, friends, health professionals, employers, and others, therefore dealing adequately with the problem is a priority area for many.

Research Questions: The main objective of the study was to engage those affected by chronic pain to identify a variety of strategies that are needed in the community to address the challenge of chronic pain in the community.

Description: We used participatory action research and in particular asset mapping to collect data. Data were collected in three areas of the province. The research was approved by the Human Investigation Committee at Memorial University. Prior to data collection one of the researchers described the data collection process, emphasized that it was for purposes of research, and covered participants' rights as research participants. Participants were divided into 12 groups and assigned to a table containing an asset map. Each group was asked to talk about and record services or approaches under the main areas identified on the map. The researchers and research assistants acted as facilitators for the sessions, answered any questions, and interacted with participants to ensure high quality data. Forty-four individuals participated; 28 women and 15 men with 29 chronic pain sufferers, 6 family members, 7 health professionals, 1 policy maker, and 1 person with an interest in the topic. The groups of participants identified needs from a range of sources, e.g., family and friends, health professionals and health services, workplace and insurance companies, community organizations and recreation, and others including education and media. While they saw a need for specialized services from health professionals other means to help them with chronic pain were very important, including educating the general public about chronic pain. Participants supported a broad approach to deal with the challenges of chronic pain.

Helping Older Workers Remain in Employment Longer: Legislation, Policites and Contracts

Valerie Darmonkow, Other authors: Drs. Lan Gien, Cheryl Haslan, Sandra LeFort, Stephen Bornstein and Scott MacKinnon

Background: Increased life expectancy and improved health inspire many older Canadians to stay employed beyond their retirement age. Prior research shows that

keeping physically, intellectually and socially active through employment has health benefits for the older individual. Society also gains as working late (WL) means not only less pressure on the pension pool and more tax contributions but possibly less health care expenses. Hence, facilitating older worker's (OW) decision to WL may have positive health implications.

Research Questions: Diverse and multi-layered factors affect OW's decision to remain active in the labour force. These factors can be personal, including health, financial and familial status, or employer/government related. This study reviews only pieces of legislation, policies, regulations, contracts and other documents to identify and analyze incentives or disincentives for extending the working life of OW.

Description: This qualitative study is part of a bigger project carried out in collaboration with a UK research team to provide opportunities for comparison. The method includes analyzing government, public and private sector documents as well as interviews with HR managers and OW. To date, legislation, policies, employment contracts, benefits and pension packages from larger provincial public sector employers have been collected and analyzed. Obtaining document data from the private sector presented some challenges; however it is in progress and will be completed shortly. So will be the interviews. Complete results will be available in the fall of 2011. Preliminary findings include facilitators for and barriers to WL. Facilitating factors are the elimination of mandatory retirement age and the amendments of in Canada/Quebec Pension Plan (CPP/QPP) to promote and reward work beyond age 65. However, challenges for OW still exist as labour participation rates of OW have not increased. Barriers to WL are found in employer-sponsored pension plans (mainly defined benefit type) as well as in employment/collective agreements with steep wage profile which encourage early retirement. Although research has demonstrated the benefits of hiring and retaining OW, currently employers lack defined recruitment practices for OW. Conclusions: Providing astute regulatory and real-life options for OW to extend their work life has the potential to extend their overall health and well-being.

History of Cesarean Section associated with childhood onset of T1DM in Newfoundland and Labrador, Canada

Leigh Anne Newhook, *Jennifer Phillips*

Background: Rates of type 1 diabetes mellitus (T1DM) are steadily increasing in many parts of the world, including Newfoundland and Labrador (NL). As NL has the highest reported incidence of childhood diabetes in North America, a population-based case-control study was carried out to investigate mother and infant risk factors for T1DM among children aged 0 to 15 years.

Research Questions: The study examined potential risk factors among children who have diabetes compared to children of the same age and sex who do not have diabetes. Maternal risk factors included mother's age, delivery method, marital status, education, mother's T1DM status and hypertension. Infant risk factors included birth order, prematurity or full-term birth, size-for-gestational-age and birth weight.

Description: This was a case control design involving the linkage of data extracted from the Newfoundland and Labrador Diabetes Database (NLDD) with the Live Birth System (LBS). Two-hundred and sixty-six cases identified from the NLDD were linked to the LBS. Three control subjects, matched on sex, year of birth and place of residence, were selected for each case. Chi square analysis was carried out to assess univariate relationships between perinatal factors and T1DM. Multivariate conditional logistic regression was carried out to further assess the risk factors associated with the development of T1DM.
Cases of T1DM were more likely to be large-for–gestational-age (p=0.024) and delivered by C-section (p=0.009) compared to controls. C-section delivery was associated with increased risk of T1DM (HR 1.41, p=0.015) when birth weight and gestational age were included in the regression model, but not when size-for-gestational-age was included in the model (HR 1.3, p=0.076).
This study presented a unique opportunity to use clinical and administrative data to examine risk factors associated with T1DM.Findings may have an impact on health practice, health care planning and future research related to T1DM among children.

How infant feeding decisions are made: Formula feeding mothers in Newfoundland and Labrador (NL) provide insight

Valerie Ludlow, Laurie Twells. *Co-investigators: Leigh Anne Newhook, Kim Bonia, Janet Murphy-Goodridge, Lorraine Burrage, Phil Murphy*

Background: Even though it is well known that breastfeeding (BF) provides protection from many diseases and reduces health risks for both mother and child, a significant percentage of mothers in Newfoundland and Labrador (NL), Canada choose to formula feed (FF) their infants from birth and the vast majority of mothers are not exclusively BF by age 6 months.

Research Questions: Focus groups were held in three communities (one urban and two rural) in the Eastern Region of the province in the summer of 2010. The data that were elicited from the research question "Why did you choose to formula feed your baby?" were analyzed using qualitative content analysis.

Description: A major theme that arose from the study was how mothers who FF their infants formulate their definition of themselves as 'good mothers' in an environment where FF is considered not the optimal nutritional choice. Mothers in this study felt that FF allowed others to assist with the feeding, was more convenient and less of a financial cost, was less stressful on their relationship with their partner, and placed them in a better social status than those who BF. They also believed that the challenges involved in BF (feeding in public, sexualization and social restriction) reaffirmed their decision as being the best for them. The ambiguity they express about their decision, however, gives them cause to reconsider whether or not FF is ultimately the best decision for their infant.

Improving Breastfeeding Rates in Newfoundland and Labrador. What Challenges do Urban and Rural Family Physicians Face?

Amanda Pendergast

Background: Breastfeeding is associated with numerous health benefits to the mother and child, including protection against infections, cancers and diabetes. Despite the benefits, breastfeeding rates in Newfoundland and Labrador continue to be below the national average. Family physicians were interviewed to discuss breastfeeding in their regions.

Research Questions: Why do family physicians feel that Newfoundland and Labrador has lower breastfeeding rates than most other provinces?
How can physicians and other health care providers improve breastfeeding rates?

Description: Between November 2010 and January 2011, twenty-one family physicians were interviewed in person or by telephone. The interviews examined physicians' knowledge of: normal breastfeeding patterns, current Health Canada recommendations, maternal and infant breastfeeding challenges, involvement of infant formula companies and resources available to physicians and patients. Physicians were also asked why they felt breastfeeding rates were lower in their region, and how breastfeeding rates could be improved.

Physicians were also questioned about what materials would be best suited for a Breastfeeding Tool Kit, a resource which will be developed with the Breastfeeding Coalition of Newfoundland and Labrador, and distributed to all family physicians in the province.

Injury Epidemiology and Consumer Product-related Risk in Rural Newfoundland and Labrador

Kayla Collins, *Tracy Parsons, Veronica Kippenhuck, Gail Downing, Doug Hopkins*

Background: Injuries are among the leading causes of death and disability in Canada, particularly among children and youth. Individuals living in rural areas have been found to be at a disproportionate risk of injury and a considerable number of injuries are due to consumer products such as sporting equipment and children's toys. As many injuries are preventable, understanding injury epidemiology is an important first step in developing injury prevention programs and reducing premature death and disability.

Research Questions: 1. To characterize injury events and identify risk factors for injury in a rural setting, and
2. To examine consumer products as risk factors for sports related injury, agricultural machinery related injury, all terrain vehicle (ATV) and snowmobile related injury and falls among older adults.

Description: Methods
The setting for the study is the Carbonear General Hospital (CGH). Individuals (all ages) presenting with an injury to the emergency department (ED) are invited to participate in the study by completing a questionnaire related to their injury event. For those with injuries in four specific areas of interest (agricultural machinery-related injury, ATV and snowmobile-related injury, sports-related injury or falls among older adults), an injury specific questionnaire is also administered. In addition, a chart review is being carried out to obtain clinical information for all injuries presenting to the ER during the two-year study period.

Results
Preliminary results indicate an average of forty-two individuals per week, or approximately 2,200 per year, aged twenty years and older presenting to the ER with an injury; preliminary survey response rate is 50%.

Detailed results will be available Fall 2011.

Learning the Ropes of Well-Baby Care with the Rourke Baby Record eLearning Module

Leslie Rourke, Sarah Hann, MUN Med 2013
Anne Drover, MD, FRCPC

Background: eLearning modules are an innovative method for learners acquiring knowledge and skills. The Rourke Baby Record (RBR) provides an evidence-based, structured approach to preventative pediatric care (well-baby/well-child visits) for children from birth to 5 years of age. RBR e-modules enable learners to access health information and resources as they learn exemplary well-baby care.

Research Questions: The objective was to develop an eLearning module for a 6 month well-baby visit which would 1)demonstrate how to do an optimal well-baby visit; 2) Familiarize learners with the 2011 RBR (www.rourkebabyrecord.ca) as a portal to access health information and resources for well-baby visits; and 3) service as a pilot for future teaching tools for preventative pediatric care at other ages.

Description: Exemplary well-baby care includes not only physical examination and immunization parameters, but also nutrition and growth monitoring, developmental surveillance, and anticipatory guidance. With funding from SURA (Summer Undergraduate Research Award) and support from HSIMS (Health Sciences Information & Media Service), an eLearning module was developed for teaching a 6 month well-baby visit.

The module highlights the key domains of a 6 month well -baby visit, walking the students through dialogues with the parents of key questions and discussion points, while also demonstrating proper techniques for monitoring growth, physical examination, and immunization. It keeps learners engaged with question and answer sections, interactive medical charts, graphics and videos.

This oral presentation will demonstrate the module and discuss aspects of its development and future plans. It will appeal to teachers, students/residents, teachers, curriculum planners and evaluators, primary healthcare providers including family physicians, paediatricians, public health nurses, NPs, and of course to parents of young children!

Medical Care Utilization and Barriers of Elderly Chinese Immigrants Living in Canada

Jing Wang, Peter Wang, Victor Maddalena, Yaping Jin, Yanqing Yi

Background: New elderly Chinese immigrants in Canada are a large, homogenous, and disadvantaged population. However, research in immigrant health, medical care utilization, and access barriers is not proportional to the size of this population.

Research Questions: This study aims to describe medical care utilization and the barriers of accessing the medical care systems among elderly new Chinese immigrants, examine the influences of social, economic, and personal factors on medical care utilization and access barriers, and provide a support to improve medical care services and other immigrant research.

Description: Methods: A mix method of qualitative and quantitative research is used. Chinese immigrants who are over 65 years old and have lived in the Greater Toronto Area no more than 10 years are invited to participate in Focus group study or questionnaire survey. Five elderly Chinese new immigrants living in the Greater Toronto Area participated in the Focus group interview, and there are 133 eligible questionnaires among 151 participants in the questionnaire survey.
Results: The elderly new Chinese immigrants in the survey are highly educated, but with poor English level. Over half of senior Chinese new immigrants are living with their children and rely on their financial support. Most of them reported the self-perceived health as good and fair. Medical care utilization is relatively low. Access barriers for elderly new Chinese immigrants are evaluated from access difficulties, including English communication, transportation, relying on children to access the hospital, and satisfaction of medical care, including satisfaction on the latest medical services, efficiency, prescriptions, and contact with doctors in time.
Conclusion: Medical care utilization among elderly new Chinese immigrants is low and is associated with English level, overweight or obese, and residence time in Canada. "Healthy Immigrant Effect", Chinese traditional opinions of accessing medical care, medical insurance, and knowing medicine-related knowledge could account for part of under-use of medical care service.

Patient to Population: Engagement of Community Family Physicians in Population Health

Brenda Hefford

Background: In British Columbia, through the support of the General Practice Services Committee, voluntary GP networks called Divisions of Family Practice have formed throughout the province. These non-profit societies of physicians have been working in partnership with their local Health Authorities, the Ministry of Health, and community groups to identify and address health care gaps in their communities.

Research Questions: Will supporting GPs to voluntarily become involved in a new collaborative way of working with Health Authorities and the Ministry of Health lead to greater engagement of GPs in the broader HC system, and improved contributions to population health issues?

Description: In late 2008 three prototype communities entered into discussions with the Ministry of Health and their local health authorities regarding designing and developing the first Divisions of Family Practice in BC. Since then several communities have formed Divisions of Family Practice which are in varying stages of development. The more developed divisions are actively involved in partnerships with their health authorities and community groups in better streamlining and integrating primary health care services in their communities. Several innovative patient care models have been developed under this umbrella. These GP Divisions and related services have been developed with the Institute for Health Care Improvement (IHI) "Triple Aim" goals in mind (Improved patient and provider experience, improved population health outcomes, improved sustainability of the Health Care System)

This presentation will discuss the development of Divisions of Family Practice in British Columbia, with a focus on the GP division in White Rock/South Surrey. Early outcomes, two and a half years into this process, will be presented.

Refining Clinical Assessment, Treatment and Research through Intensive Interactive Case Study: Learning from Children in Foster Care

Dennis Kimberley

Background: Traditional methods of direct observation and interviewing to obtain information on normative development, developmental damage, harm, resilience and parental capacity, all too often put children who need foster care at a disadvantage, at best, and at increased harm, at worst. Dr. Kimberley will present his refinement of case study methods in an Intensive Interactive Model to increase reliability of assessments and progress evaluation; to meet both research goals and child protection goals.

Research Questions: Objective: To improve case study methods for clinical practice and research in a child protection context, including foster care.
Question: May intensive and interactive case study methods better increase understanding of child youth risk, need and progress; parental capacity; foster home risks and needs?

Description: In this presentation, Dr. Kimberley will describe and analyze intensive and interactive case study methods and procedures, using multi-method case study designs, which meets both research goals and protection goals., within the context of high risk children and youth needing foster care protection. Of particular interest may be the clinical and research benefits of expanding observational venues with high concentrations of in-vivo observations. These multiple-method direct observations, supplemented by multiple-method interviewing, documents analysis, and specialist consultations, may help reduce risk and harm to children in need of foster care, as well as increase foster care success. The intense, interactive case study methods may increase the specificity of child centered personal and social changes desired by, or required from, natural parents, in the interest of family preservation; or desired from foster families in the interest of increased placement success. This clinical-practitioner as clinical-researcher model will be discussed within the context of real cases involving high risk children who have been abused, who present multiple challenges for foster families and for those within the child-youth's support network. The implications for reducing child-youth risk and harm and increasing strengths and genuine resilience, will also be discussed.

Teaching an Interprofessional Approach to the Management of Musculoskeletal Problems in Primary Care - A Pilot Study: Part 1-Students

Deborah Kopansky-Giles

Background: In Canada, there is growing impetus to improve the collaborative abilities of our health professional work force in order to more effectively manage an increasing burden of chronic illness, including musculoskeletal disease. Educational programs are needed that will address the deficiencies in the way these disorders are currently addressed in health professional education curricula as well as prepare students for future work in mixed -professional health care settings.

Research Questions: 1) To determine if a 4-day modular program will enable a mixed-professional group of learners to develop and/or improve their competencies in collaborative musculoskeletal health care as relevant to the practice of primary care; 2) To determine if participation in this 4-day module increased the student's confidence in being a collaborative health practitioner

Description: Methods: This project undertook a mixed-methods design. Pre-and-post program semi-structured focus groups with students were conducted to explore satisfaction with the program content and delivery, as well as perceptions of program impact on the acquisition of collaborative competencies in musculoskeletal care. Results: 13 students from 6 different health professions and 5 academic institutions participated in the 4-day modular program. There was variation amongst the students regarding their year of study and also variability in their levels of musculoskeletal training and experience with IPE. They had different reasons for participating in the study but overall a strong 'readiness' for IPE learning. The students were generally very satisfied with the program and particularly enjoyed opportunities to discuss their own experiences and ideas as well as to learn from other students. They also described learning more about their own professional identities as well as learning about the roles and approaches of others, the importance of collegial relationship building and the use of language in interprofessional collaboration. The findings from the pre and post-administration of the HPCCS indicated that students' level of confidence in being collaborators in future practice significantly improved as a result of the program. Conclusion: Future research should focus on optimizing the mix of learners involved, the ratio of learners to facilitators so as to enable balanced contributions from all participants.

Teaching an Interprofessional Approach to the Management of Musculoskeletal Problems in Primary Care - A Pilot Study: Part 2-Educators

Deborah Kopansky-Giles, Judith Peranson
Scott Reeves

Background: In Canada, there is growing impetus to improve the collaborative abilities of our health professional work force in order to more effectively manage an increasing burden of chronic illness, including musculoskeletal disease. Educational programs are needed that will prepare students for future work in mixed-professional health care settings. Furthermore, there is a need to identify the teaching and learning processes used in successful mixed-professional activities in order to prepare educators to teach in these IP settings.

Research Questions: 1) To determine effective facilitation strategies used by a mixed-professional group of educators for enabling the acquisition of collaborative competencies by a mixed group of health science learners.

Description: Methods: Clinician-teachers participating in a 4-day modular IP program completed a needs assessment to determine program content and the different educational approaches to be used during the weekly modules. The results of the needs assessment informed the development of the module as well as a semi-structured interview guide to be used during key informant interviews of the facilitators conducted pre-and-post program, focused on exploring the facilitator's satisfaction with program content and delivery, as well as perceptions of program impact on student acquisition of collaborative competencies in MSK care. Results: 22 facilitators participated in the module delivery from 10 different professions and 7 different academic institutions as well as one patient. Key themes identified included the following: 1)The facilitator group possessed a depth of experience in IP practice and IPE teaching with good understanding of IPE concepts; 2) They identified the importance of a champion role for IPE programs; 3) The facilitators described personal learning benefits from working on and in teaching modules with respect to their own teaching and IP clinical skills; 4) There was a range of learning and teaching styles identified but a consensus that IP concepts are best taught
IP role modeling; 5)There was a very high level of satisfaction with program delivery, a general perception that students increased their collaborative skills, however variable perceptions regarding whether students' knowledge of MSK disorders was enhanced.

The use of acute health care services by mentally-ill seniors of NL: A quantitative investigation (My doctoral dissertation topic)

Lisa Adams

Background: This study will use aggregate level quantitative data to assess the extent to which seniors with and without a mental illness use acute hospital in-patient services. Seniors with a mental illness have often been referred to as bed-blockers and as a huge infringement on the clinical efficiency of acute care hospitals in NL, but there is much uncertainty as to if they are properly being assessed, diagnosed and treated as they should to meet their mental health needs or that other organizational bureaucracies are influencing their use.

Research Questions: How do seniors with and without mental illness compare in their use of acute in-patient hospital services? And what are some factors that contribute to this usage?

Description: Much research suggests that seniors with mental illnesses are high users of acute hospital services, however, all research in Canada and abroad that have investigated this topic have many methodological limitations that challenges the generalizability of findings. Using aggregate level quantitative data for the whole province of NL this research study will seek to discover exactly how seniors with and without a mental illness compare in their total length of stay, acute length of stay, rate of admission and resource intensity weight (relative cost). Other factors being considered for their influence on seniors' use of acute health care services are age, gender, geography, mental illnesses, other co-morbid illnesses, the institution to which they are being discharged and to which they are transferred, and their discharge disposition. Various univariate and bivariate statistics will be conducted to assess this relationship inclusive of multiple linear regressions, use of the Charleson Index and various other parametric and non-parametric statistical tests. My doctoral thesis is due for completion by September, 2011, so my results for now will be pending the outcome of my data analysis. I am hypothesizing that mentally-ill seniors' use of acute hospital services is significantly greater than that of seniors without mental illnesses and this difference in use is reflective of inadequate policies, discharge processes, poor assessment and other organizational bureaucracies that prolong the stay of mentally-ill seniors in acute hospitals.

The Association of Continuity of Family Physician Care with Health Care Services Utilization and Costs in Newfoundland and Labrador

John C. Knight, Dowden, Jeff and Gadag, Veeresh

Background: Having a regular primary care provider has been associated with improvements in adherence to treatment, problem recognition, preventive care, and patient satisfaction as well as with lower health services use and costs. Although elderly people value continuity of care more than younger people, more research is needed to investigate whether higher continuity for seniors is associated with better health outcomes. Few studies have examined the association of continuity of care with outcomes for different age groups.

Research Questions: 1) To investigate the relationship of continuity of family physician care with hospitalizations, specialist visits and associated health care costs; 2) To examine the effects of patient age on the relationship of continuity of family physician care with health care services utilization and costs, with particular interest in the elderly.

Description: Samples from the Canadian Community Health Survey and Medical Care Plan provincial health insurance registry were linked to fee-for-service physician claims and inpatient hospital abstracts. Continuity of family physician (FP) care was estimated using a visit-based index and survey respondents/patients were classified as either low, medium, or high continuity depending on index value. Multivariate regression, controlling for enabling, predisposing and need factors as described in Andersen's behavioral Model, revealed that higher continuity of care was associated with small to moderate reductions in hospitalization for ambulatory-care-sensitive conditions and hospital costs in both cross-sectional and longitudinal analyses. Analysis by age group provided evidence that reductions increased with age. The study provides strong evidence that continuity of FP care results in reduced hospitalization for ambulatory-care-sensitive chronic illness and hospital costs, probably through improvements in prevention and/or management of chronic illness, which may take on "increased importance" in older individuals. The study results suggest that traditional continuity of FP care should continue to be incorporated into primary health care reforms, especially for vulnerable populations such as the elderly. These findings are especially important in a time when FPs in solo- and small-group-practice are increasingly being replaced by teams of primary health care providers. A modified version of Andersen's model is presented based on study results.

The epidemiology of cardiomyopathy and sudden cardiac death in Newfoundland

Kathy Hodgkinson, Fiona Curtis, Anne Williams, Jim Houston, Terry Young, Sean Connors

Background: Newfoundland is a genetic isolate, known for its founder population. Research into cardiomyopathies and sudden cardiac death (SCD) began in 1996 with a team of academics and clinicians.

Research Questions: To ascertain all families with SCD and cardiomyopathy in Newfoundland, and determine their genetic etiology. All families consenting to the research were originally referred for clinical work-up, firstly to the Provincial Medical Genetics Program, then to a genetics/cardiac clinic formed in 2004.

Description: Since 1996, 369 families (the largest family comprising 1200 subjects over 10 generations) were ascertained. There were 17 different referral diagnoses, 50% of which were cardiomyopathies (dilated CM (DCM), hypertrophic CM (HCM) and CM not specified), 28% with a family history of SCD, 8% for arrhythmogenic right ventricular CM (ARVC), and 2% for Long QT syndrome (LQTS). The remaining 12% comprised 11 other referral diagnoses. To date 15 genes associated with inherited heart conditions with varying mutations have been found in74 families (from 135 families with DNA available (57%)). Of these 74, 30% (22 families) have the TMEM43 mutation discovered by our team in 2008 and 32% (23 families) have either a MYBH3 or MYH7 mutation. Twelve families have mutations in other ARVC genes, and 4 families have LMNA mutations. At least three families have more than one mutation segregating, and ongoing genotype phenotype studies are taking place. Since the start of the clinic, referral numbers continue to increase with 47% of the referrals falling into the last three years. Discussion. We have determined the genetic etiology of over 50% of families with available DNA to date. Families with large histories and negative for known mutations will be clinically ascertained and genetic research will continue. Our team of clinicians, epidemiologists, geneticists, bioethicists, genetic counsellors, nurses and molecular geneticists have an unparalleled opportunity to determine the genetic and clinical epidemiology of all Newfoundlanders.

The Golden Years: The Potential Impacts of an Aging Population on Ambulance Services in Western Newfoundland

Madison Muggridge

Background: As a course requirement for the GIS post diploma program at the College of the North Atlantic, research was conducted in partnership with David Buckle, Regional Director of the Paramedicine and Medical Transport (PMT) division of Western Health. The purpose of this project was to help the PMT division prepare for the increased stress on Western Health services due to the aging of the baby boomer population (those born in Canada between the years of 1947 and 1966).

Research Questions: The focus of my research was the analysis of the relationship between reasons for ambulance dispatch in western Newfoundland and the demography of communities within Western Health's region. Specifically, can the current ambulance dispatch data be used to assist in prioritizing future ambulance dispatching in western Newfoundland?

Description: Geographic Information Systems (GIS) has enabled health care practitioners to pinpoint sources of infection, understand the interaction of sicknesses based on their proximity to contributing criteria, and to track the spread of disease over space and time. GIS has also found a niche in the health care field through predictive analysis, i.e., how can we understand and apply data collected today to help prioritize our actions in the future? Western Newfoundland is being faced with a baby boomer population that is progressing toward retirement and the need for long-term health care, as well as the impending strain and challenge that this increase in the elderly population will cause for Western Health. Ambulance deployment data from Western Health was examined, isolating the reasons that the emergency transport was needed and the ages and genders of those that require the service. Concurrent analysis examined the change in demography for a number of communities in Western Newfoundland from 1991 to 2006, using Canada Stats census data. The results show that there is a measurable shift in population from smaller communities to larger centers, particularly in the age groups studied in this project. Preliminary analysis has helped highlight that particular groups, within subsets of age and gender, are using ambulance services for particular reasons. This data coupled with the population shift data may be useful in helping predict where to prioritize ambulance services in the next five to ten years.

The Interactive Atlas on chronic diseases and mental health

Alain Vanasse

Background: Produced by the PRIMUS Research Group, the Interactive Atlas on chronic diseases and mental health is an online, easy-to-use information system that allows users, and particularly decision makers, to interact with administrative heath data at different levels and produce results displayed as tables, graphs or maps almost instantly.

Research Questions: The aim of the Interactive Atlas is to provide a rapid transfer of knowledge on health geographical disparities and social inequalities observed in patients with chronic diseases and/or mental disorders in the province of Quebec.

Description: With some diseases such as myocardial infarction, diabetes, osteoporosis, schizophrenia and mood disorder, we will demonstrate the power and the significance of the Interactive Atlas for researchers to develop new research hypotheses as well as for decision-makers to monitor diseases. For example, the user can query the system and get the prevalence and/or the incidence of a disease, its health care utilization (consultation with a general practitioner and consultation with a specialist) and related outcomes (death, hospitalization). In addition, by allowing the identification of specific regions or subpopulations (gender, rural/urban, deprivation level) that necessitate specific intervention, it is a powerful tool for the under-exploited field of population health, helping us to better understand disparities and inequalities in health and to optimize distribution of resources in primary care.

The New Hope Clinic: A Primary Health Care / Mental Health Collaborative

Dawn Gallant, Geri Dalton Nurse Practitioner Mental Health & Addictions Outreach Program Eastern Health

Background: A comprehensive Eastern Health downtown needs assessment and stakeholder consultations identified that many vulnerable & marginalized groups in the downtown core who faced challenges such as poverty, substance abuse, homelessness, mental illness & chronic disease, did not have their primary health care or mental health needs met. A Nurse Practitioner clinic was officially opened at the New Hope Community Center in downtown St. John's in March 2011 to begin to meet those identified needs.

Research Questions: The purpose of this presentation is to share information about the New Hope Clinic in downtown St. John's & the reason it was established. A brief overview of the history & process that led to this collaborative initiative will be given along with highlights of the successes & challenges the partners faced in establishing the clinic.

Description: A comprehensive Eastern Health downtown needs assessment and stakeholder consultations identified that many vulnerable & marginalized groups in the downtown core who faced challenges such as poverty, substance abuse, homelessness, mental illness & chronic disease, did not have their primary health care or mental health needs met. A Nurse Practitioner clinic was officially opened at the New Hope Community Center in downtown St. John's in March 2011 to begin to meet those identified needs. It is well documented in the literature that individuals with serious mental illness (SMI) have higher rates of premature death & that individuals with SMI suffer with higher rates of chronic illnesses such as diabetes, hypertension,obesity & dislipidemia & are more likely to smoke, eat poor diets & remain sedentary. The Eastern Health Primary Health Care program, Mental Health & Addictions Outreach program & The Salvation Army established Nurse Practitioner, Community Health Nursing & physician services out of the New Hope Community center to begin to meet the health care & mental health needs of the vulnerable & marginalized populations in the downtown area of St. John's. This presentation will share information about the New Hope clinic with regard to why it was established, the history & process that led to this collaborative initiative & the highlights of the successes & challenges the partners faced in establishing the clinic.

The Newfoundland and Labrador Diabetic Ketoacidosis Project - Part One: Focus Group Sessions

Leigh Anne Newhook, Dr. Roger Chafe, PhD
Daniel Albrechtsons

Background: Newfoundland and Labrador has a very high and increasing incidence of Type I DIabetes Mellitus. A major complication of T1Dm is Diabetic Ketoacidosis (DKA). DKA is an emergency condition which can cause significant morbidity and mortality. Our project aims to improve the management and prevention of DKA in NL, hopefully resulting in lower rates of hospital admissions provincially for this condition.

Research Questions: Our goal is to improve the education of families with children/teens with T1DM to prevent DKA by identifying barriers to the prevention of DKA in Newfoundland, particularly in rural areas. We also aim to identify tools and educational supports to promote the

prevention of DKA by Newfoundland families, particularly in rural areas.

Description: Focus group sessions will be held for pediatric patients and families living with T1DM in a number of different locations across the province, including Goose Bay, Labrador City, Carbonear and Marystown. Focus group sessions will be one hour in length and will ask patients and their families questions designed to identify barriers that prevent proper DKA management. We will also ask patients about resources that they would like to see developed for their use. The focus group sessions will be transcribed, coded and analyzed for content. The data obtained from these focus group sessions will be used to develop resources for patients and their families. This project is part of a larger initiative, the Newfoundland and Labrador Diabetic Ketoacidosis Project, which aims to decrease the annual number of hospital admissions for DKA throughout the province. Preliminary results will be included in the presentation.

Posters

Achieving a Balance: Strategies to Improve Heart Health for Multi-tasking Women

Jill Bruneau

Background: Achieving a Balance: Strategies to Improve Heart Health for Multi-tasking Women

Research Questions: What strategies to reduce stress will assist multi-tasking women to achieve a balance in everyday living and lead to improved heart health?

Description: This presentation will discuss the results of a review of the literature on the multiple roles of women, factors that influence the level of stress such as the socio-economic determinants of health, and the various strategies that may be used to reduce risk for coronary artery disease and hypertension. Communicating these findings to other disciplines may increase awareness of this important research so that health professionals can employ strategies to improve the heart health of women and ultimately affect the health of many families within our communities.

Cervical Screening Initiatives: Utilizing Primary Health Care- A Win:Win Approach

Vera Lynn Alteen, Possibly stakeholder involved in this initiative

Background: Chronic Disease Prevention and Management Committee of Western Health selected cervical cancer as a priority issue for 2010-2011. One of the major objectives of the plan was to develop, implement and evaluate site specific cervical screening plans for communities with Pap screening rates < 30% 2008 and 2009 rates. Utilizing a primary health care approach, teams were successful in increasing Pap rates in all census divisions of the Western region.

Research Questions: Would cervical screening teams increase Pap participation rates in all areas of the Western region utilizing this primary health care approach?

Description: The regional coordinator facilitated cervical screening workplans with existing teams and brought together key stakeholders to develop teams where they did not exist.
The regional coordinating office supported the teams by providing tools and resources: GIS mapping and statistics, health promotion materials for education and recruitment and expertise with health promotion approaches. There was also support from the Provincial Cervical Screening Initiatives (CSI) Office through access to service grants.
Primary Health Care Principles were followed to create supportive environments, collaborate and reorientate health care services.
The results:
- 7 CSI workplans were developed
-Creative approaches were utilized to recruit women
-Networking with key stakeholders was key to development of comprehensive plans
-Pap Participation rates increased 5% for all women as compared with 2009
-There were Pap participation increases in every division of Western Health

Clinical utility of CT and derivation of a score for the diagnosis of suspected urinary tract stone

Richard Cullen

Background: Patients presenting to emergency rooms with symptoms suggesting kidney stones often undergo a diagnostic CT scan. Research suggests that the same amount of radiation generated by 2 to 3 abdominal CT scans is associated with cancer in atomic bomb survivors and nuclear industry workers. Moreover, 47% to 68% of patients pass their kidney stones without any medical intervention or long term sequelae.

Research Questions: Among patients presenting with suspected renal colic (1) Derive a score that predicts the risk of a kidney stone (2) Derive a separate score that predicts the risk of an urgent or emergent CT result that might be better investigated with a contrast enhanced CT scan.

Description: Bivariate analysis of the retrospective data identified several variables that are significantly related to outcomes of interest. Methods similar to those used to derive the Framingham risk score were used to derive risk scores and test the score index against a portion of the data. The index fit the data well, providing support for the development of a clinical decision tool for the management of renal colic. A prospective study involving the recruitment and monitoring of apparent renal colic patients from two emergency departments is now underway to further develop and validate the score index

Creating community dialogues: Exploring public opinions about genetics research in Newfoundland

Holly Etchegary, Dr. Elizabeth Dicks, Dr. Jane Green, Dr. Daryl Pullman, Ms. Catherine Street, and Dr. Patrick Parfrey

Background: Continued advances in genetics have prompted calls for greater public debate and involvement in decision-making about genetics research. Newfoundland is well known as a site of genetics research; however, relatively little work has explored public opinion and knowledge about genetics. We undertook community consultations to better understand how the Newfoundland public perceives various aspects of genetic research.

Research Questions: To explore public knowledge and values in order to foster greater public involvement in decision-making about genetics research and genetics health services
To better understand how the public perceives genetics research so that practitioners can improve existing genetics services

Description: Community groups were identified in St. John's and Grand Falls-Windsor and invited to participate in a two-hour community consultation about genetics research in the province. Six sessions were completed between October 2010 and April 2011, with at least two others planned. Community groups included Rotary Clubs, church groups and women's groups, representing a broad cross-section of the general public (N=90). During the sessions, participants heard a presentation highlighting some of the research of the Interdisciplinary Research Team in Human Genetics at Memorial University. The presentation was followed by a facilitated discussion designed to explore some complex issues raised by genetics research (e.g., the privacy of genetic information, funding for genetics research). Participating groups thus far expressed great satisfaction with the sessions and suggested such presentations should be held regularly. Participants engaged with many of the complex issues raised by genetics research, noting the importance of such research for improving health, but also raising concerns about privacy, access and lack of knowledge about what research is happening in the province. Results to date suggest that the richness and diversity of public opinion could be a valuable resource for critical discussion and more accountable policy-making about genetics research in Newfoundland.

Current growth patterns and prevalence of overweight and obesity in NL preschool children by the new WHO standards, and changes over 20 years.

Lynn Frizzell, Patricia Canning, PhD

Background: In our previous research we reported high and rising rates of overweight and obesity in preschool children in Newfoundland and Labrador from 1988/89 to 2001/02. Other research has shown that obesity risk can be set in the earliest years of life and that the rates of prenatal and postnatal growth may be particularly significant risk factors. Thus, surveillance of early growth and obesity prevalence in very young children is important.

Research Questions: We aimed to determine the current prevalence of overweight and obesity among preschoolers using the WHO growth standards and to compare that to the 1988/89 and 2001/02 rates. We also examined the relationship between birth weight status, rate of early growth and body weight status at preschool in order to better understand the development of obesity.

Description: In NL, 98% of children start school fully immunized - the majority through Well Child Clinics held at ages 2, 4, 6, 12, 18 months and at school entry. At these clinics children are also routinely weighed and measured and thus clinic records provide nurse-measured heights and weights for almost all young children in the Province. For this study, growth data were gathered from a random sample of 30% of clinic records for children born in 2005 and measured in 2009/10, before entering school in September 2010, throughout the Province. Data gathered included date of birth, sex; birth weight and length; and weight, length/height and date at each of the Well Child Clinic visits. Results will be presented to show the current prevalence of overweight and obesity by the WHO standards as well as an analysis of the trend from the two earlier cohorts. Rates of births classified as small or large for gestational age will be presented along with postnatal growth rates and the relationships between these indicators of early growth and later preschool body weight status. These data are important for the continued surveillance of the problem of child obesity and to the development, implementation and evaluation of prevention and intervention measures.

Development of a local breastfeeding DVD resource for young Inuit families Upper Lake Melville, Labrador

Dee Dee Voisey, Judy Voisey, Healthy Baby Club Resource Mother
Aboriginal Family Centre, Happy Valley-Goose Bay, NL

Background: With so much focus on the negatives in aboriginal life the project coordinators felt it was important to celebrate the successes of the Inuit families who chose to breastfeed, sometimes despite incredible obstacles including homelessness, single parenting, and lack of partner support. This project highlights the lives and strengths of several families who have overcome obstacles to provide mother's milk in order to provide their children with the far-reaching benefits available from breastfeeding.

Research Questions: To celebrate the strong traditional breastfeeding culture in Inuit families while promoting breastfeeding as the foundation for a lifetime of healthy eating. To build women's confidence in their ability to successfully breastfeed and nurture their infants and young children by presenting real-life stories of local women and their families.

Description: For the 2008-2009 fiscal year there was a 100% breastfeeding initiation rate and continuation rate to 6 weeks within the Happy Valley-Goose Bay Aboriginal Family Center's Healthy Baby Club. Labrador had the highest rate of breastfeeding initiation in the province and this was celebrated and recognized on a provincial level.

A local filmmaker/producer was hired for this project, which was overseen by a multi-faceted committee of mothers including a local Lactation Consultant, the Provincial Breastfeeding Consultant, a Nurse Representative from the Nunatsiavut Government, a local Inuit Elder, and the Healthy Baby Club Resource Mother who along with the families in her group identified the need for a locally produced, culturally appropriate resource for families seeking assistance with decisions around infant feeding.

Funding for the project was secured from several sources, including the Labrador Regional Wellness Coalition, the Ikajuttiget Board (supporting projects for the benefit of Nunatsiavut Government beneficiaries in the Upper Lake Melville area), and LG Health.

Diagnostic Imaging: Wait Times, Urgency Classification and Attendance Status by Modality

Charlene Reccord, Katie Little, M.Sc., Mike Doyle, PhD., Rick Audas, Ph.D.

Background: Physician reliance on technology, unrealistic public expectations and lack of education regarding the use and cost of diagnostic imaging procedures all contribute to service demand in this area. Patients who cancel or do not show up for scheduled appointments also place burden on the system. These patients may need to be rescheduled and consequently, they remain on wait lists. Further, these cases represent a missed opportunity to schedule other patients awaiting service delivery.

Research Questions: The objective of this research was to determine median wait times for select diagnostic imaging modalities, and to assess the impact of wait time and urgency classification on appointment attendance status using administrative data sources.

Description: Overall, there were a total of 39,881 select outpatient diagnostic imaging procedures scheduled during 2009 and 2010. Of these, 25,333 were for Computed Tomography (CT), 7,880 for Magnetic Resonance Imaging (MRI) and 6,668 for Ultrasound (US). Median wait time varied by modality with the longest wait time observed for US appointments (51 days). The percentage of cancelled appointments ranged between 10.4% for US and CT respectively, to 11.9% for MRI. The proportion of no-show appointments was lowest for MRI (6.3%), followed by CT (12.2%) and US (13.5%). Multinomial logistic regression revealed that, compared to attended appointments, the odds of canceling or not showing up for appointments increased as wait time increased. Further, with the exception of no shows for US and CT appointments, where no significant impact of urgency classification was noted, cancelling or not showing up was less likely for urgent appointments. Limitations and possible non-attendance interventions or policy options are discussed.

Dyslipidemia and lipid profile in Newfoundland: A comparison of laboratory data and electronic medical records (EMR)

Justin Oake, Dr. Shabnam Asghari, Dr. Marshall Godwin, Dr. Kris Aubrey, Dr. Kayla Collins

Background: Newfoundland and Labrador (NL), has a higher level of cardiovascular disease (CVD) mortality than any other province in Canada. There are several factors that may explain these trends; one is the lipid profile pattern and high prevalence of dyslipidemia in this province. To our knowledge there is no study in our province or Canada to use these databases to assess the prevalence of dyslipidemia and lipid profile.

Research Questions: Describe and compare lipid profiles and the prevalence of dyslipidemia in Newfoundland using two electronic health databases: laboratory data from Eastern Health and Canadian Primary Care Sentinel Surveillance Network (CPCSSN) EMR data.

Description: This is a secondary, cross-sectional, analysis of existing data in our province. We will compare laboratory data from Eastern Health to EMR data from family physicians who are part of the CPCSSN. The study population includes patients aged 20 years or older who live in Newfoundland. The most recent lipid profile (Triglyceride, Total Cholesterol, High Density Lipoprotein (HDL), Low Density Lipoprotein (LDL)) available on patients between January 1, 2009 and December 31, 2010 will be identified in these two databases. The independent variables from both databases are sex and age, and the independent variables from the EMR include medication use (lipid lowering) and presence of comorbid conditions such as vascular disease. First the lipid profile from EMR will be correlated with the laboratory records to find discrepancies which may exist between these databases. In the next step, adjusted and unadjusted rates will be calculated from both databases and will be compared using univariate, multivariate and regression analyses (linear and logistic). Findings of this project can help policymakers and healthcare providers to better understand the magnitude of dyslipidemia as an important risk factor for cardiovascular disease and other chronic disease in Newfoundland. Furthermore, it provides information to develop policies to decrease the high prevalence of cardiovascular disease risk factors.

Evaluating Cardiovascular Comorbidities in Psoriasis Patients in Eight Newfoundland and Labrador Dermatology Practices

Boluwaji Ogunyemi, na

Background: Psoriasis is an inflammatory disease that has consistently been documented to affect 1-2% of people worldwide and predisposes to developing psoriatic arthritis. Recent research has proposed an inflammatory mechanism for atherosclerosis, which itself predisposes to significant cardiovascular outcomes, which contribute significantly to early mortality. Medication used to treat cardiovascular and other comorbidities of psoriasis impact choice of anti-psoriatic management that dermatologists choose.

Research Questions: To describe cardiovascular comorbidites in both psoriasis and psoriatic arthritis patients.
To correlate these with disease severity and compare the prevalence of these comorbidities to the general population of Newfoundland and Labrador.

Description: Eight dermatologists from Newfoundland and Labrador have agreed to each collect information for 50 consecutive consenting adult patients with a confirmed diagnosis of psoriasis, resulting in 400 patients in total from St. John's, and Grand Falls-Windsor. From the patients will be collected questions about the severity of psoriasis and information about symptoms suggestive of psoriatic arthritis. The Psoriatic Arthritis Screening Questionnaire (PASQ) will be administered to ascertain this in addition to a supplemental questionnaire, which captures cardiovascular comorbidities. Cardiovascular burden among psoriasis and psoriatic arthritis patients assessed will include medication for hypertension, presence of hypertension, history of angina, myocardial infarction, cerebrovascular event, cardiac surgery, transient ischemic attack, and hyperlipidemia. The burden of cardiovascular comorbidities among these psoriasis patients will be compared to the general population of Newfoundland and Labrador as a control. Preliminary results based on the data that has been collected so far will be presented.

Expectations and Realities: Supports and Challenges for Stroke Survivors Living at Home

Jared Clarke

Background: Living at home after a stroke can be challenging. Stroke survivors often depend on a variety of supports to help them live independently, and they face a variety of challenges. In this research we will interview stroke survivors who will be living in their own home to discuss the supports and challenges that are important in their lives. The goal of this study is to understand the supports and challenges that people experience while living at home after a stroke, and to find solutions that might help them live better.

Research Questions: What are the most significant supports and challenges experienced by stroke survivors as they readjust to life at home? Are the expectations of supports and challenges for stroke survivors at discharge different than the realities faced after returning home? What service gaps exist in our communities when it comes to supporting stroke survivors to live independently and at home?

Description: This ongoing study uses mixed methods to explore the supports and challenges experienced by older adults who have suffered a stroke and are preparing to return home or are currently living at home following hospital care. Patients with persisting motor/mobility impairments are interviewed at two distinct time points - just prior to discharge from an inpatient setting and again 6-9 months after returning home. The semi-structured interviews examine the patients' thoughts and feelings about their discharge, the challenges to living independently at home, the supports and services available (or not) to ease that transition and facilitate daily life, and potential solutions to the challenges and issues identified. These qualitative results are examined using a variety of lenses - e.g. expectations vs experience; rural vs urban communities; the role of formal vs informal supports and services. The study also collects some basic health and demographic information and assesses activities of daily living at the follow-up interview.
The findings of this study will be used to help identify service gaps in communities across the province and recommend solutions that might help support people to live well at home following stroke. A focus is placed on community-based services.

Fibre consumption in the adult population of Newfoundland and Labrador: How much is being consumed and which food groups are contributing to the intake?

Natasha Baker, J. Colbourne, P. Wang, L. Liu, B. Roebothan

Background: In 2004, The Canadian Community Health Survey Cycle 2.2 identified that adults residing in Newfoundland and Labrador (NL) were not consuming the recommended adequate intake (AI) for fibre. However, in recent years public education about the importance of fibre has increased. In response, the food industry has been adding fibre to a variety of food products. Has public education and the food industry's response had a positive influence on fibre consumption?

Research Questions: The purpose of this research is to monitor daily dietary intakes of NL adults for: (1) total fibre, (2) food groups contributing the most fibre and (3) the number of servings of fruits/vegetables, grains and other foods.

Description: This project is a secondary analysis of data collected through multiple 24-hour recalls, which was part of a larger study, "Assessing the validity of a self-administered FFQ in the adult population of Newfoundland". Trained interviewers completed 24-hour recalls using 400 randomly selected NL telephone numbers. Recalls were to be completed on a weekday and a weekend; residents aged 35 to 70 who completed both recalls were included in the analysis. To estimate dietary intake, recalls were entered into ESHA nutrition analysis software. The total amount of fibre consumed is being monitored, as well as the amount of fibre obtained from fruits/vegetables, grains, and other foods. The types and quantities of food consumed are being recorded and will allow the number of Canada's Food Guide servings to be calculated. Data analysis is ongoing.

Food consumption patterns in Newfoundland and Labrador, Canada: A cross-sectional telephone survey

Lin Liu

Background: Complicated reasons of geographical, cultural, social, and economic factors made Newfoundland and Labrador diet to be different from the diets of other North American populations. Much of the current evidence on diet and disease has been gathered from prospective cohort studies in which large numbers of individuals report their dietary habits and are monitored for subsequent development of specific diseases. Thus, it is important to monitor the dietary intakes of the population.

Research Questions: The objectives of the study were to evaluate the patterns of food consumption in the general adult population of Newfoundland and Labrador, and to describe demographic factors that relate to the consumption of specific food items

Description: This study is part of a broader Food-Frequency Questionnaire validation program addressing food consumption patterns, nutrition conditions, the association between colorectal cancer and dietary intake in Newfoundland population. A random sample of 400 participants from the general public in NL was recruited by telephone using a list provided by Canada Select. And this cross-sectional telephone survey was conducted between February and April 2011. Food intake was assessed using a 24-hour dietary recall method.
As the results suggested,there were many food items which were consumed daily by Newfoundland population, and a lot of items were unique in this area for its special geographic location. However, the relatively high percentage of people consuming less than the recommended amount of fruits and vegetables observed in this study suggest that the adult Newfoundland population is at increased risk of many diseases. Meanwhile differences in food consumption patterns were influenced by gender and age, although other important socio-demographic variables may also explain differences in dietary intakes.

Geographic variations of lipid profiles in Newfoundlanders

Scott Lee, Dr. Shabnam Asghari
Dr. Kris Aubrey
Dr. Marshal Godwin

Background: Studies examining the lipid profile of Newfoundlanders have shown that their profiles differ from the rest of Canada. Anecdotal evidence suggests that Newfoundlanders tend to have lower levels of high-density lipoproteins (HDL) and higher levels of low-density lipoproteins (LDL) than other Canadians. The limited gene pool in Newfoundland is believed to be one of the main contributors to the low HDL and high LDL levels. It is unclear whether or not there is a geographic variation in lipid profiles within NL.

Research Questions: To assess geographic variation in lipid profiles between and within rural and urban locations within Newfoundland.

Description: This is a secondary analysis of electronic medical record (EMR) data from 3 clinics in Newfoundland. The study population includes all patients aged 20-79 with a complete lipid profile from the period January 2, 2009 to December 31, 2010. Patients for whom data related to place of residence are missing as well as pregnant women were excluded from the dataset. This research is still in progress. Preliminary results using data from three clinics (n=2034) in St. John's show that rural patients (33%) were more likely to have low HDL (<1mmol/L) as compared to their urban counterparts (26%), .2 (1) =6.552, p=0.010. There were no significant differences in LDL or cholesterol levels. TG was also found to be significantly different between the regions 33.9% of rural residents had high TG (>1.7mmol/L) compared to 24.6% of urban residents, .2 (1) =12.055, p=0.001. Preliminary analysis of the incomplete dataset suggests that patterns of dyslipidemia differ between rural and urban areas of Newfoundland. Complete results, including an analysis to determine factors associated with these differences, will be available at the conference.

Health Care Use at the End of Life in Atlantic Canada Report

Terri Brophy

Background: This report provides an overview of the 2007-2008 end-of-life population hospital usage during the last year of life. The intent of this report is to provide health program managers, ministerial staff, policy-makers and other related service delivery groups with additional information to help with the assessment and delivery of the most appropriate end-of-life care for their residents. Vital statistics and hospital administrative data from each province were used to perform the analyses in this report.

Research Questions: The report focuses on the decedent population profile, location of death and use of acute hospital services in all four Atlantic provinces. It compares the patterns of hospital utilization among the four Atlantic provinces, with particular focus on those 65 and older.

Home visits Optimizing Medical care in the Elderly (HOME Study): A pilot study on the effects of an interprofessional primary care program on emergency room visits and hospital admissions in the frail elderly

Katherine Stringer/Carla Dillon, Denise Cahill (Nurse Practioner), Sarah Way (MUCEP student)

Background: The challenges of providing care to the ever increasing aging population are well known. Seniors with a high number of comobidities have the highest rate of healthcare visits. Despite a recent focus on healthy aging and prevention and early management of chronic conditions, the benefits of preventative community based care for our current frail elderly patients are still not clear.

Research Questions: To evaluate the effect of our interprofessional, community-based, primary care program for homebound frail elderly patients. We will measure their rate of emergency room visits and hospital admissions before and after our program (phase1) and compare this to other older adults with multiple chronic conditions (phase 2).

Description: Our homevisit program at the Ross Family Medicine Clinic utilizes an interprofessional approach (Nurse Practioner, Pharmacist and Family Physician) to provide comprehensive primary care to our homebound frail elderly patients in St. John's. Care includes primary preventative as well as acute care.
We are conducting a pilot study to evaluate the effect of this program. Primary outcomes to be measured are annual rates of emergency room visits and hospital admissions for a two year period before and after development of the program. Phase 1 of this study will focus on homebound seniors in our clinic who are 80 years or older and have 3 or more comorbid conditions. They will be studied prior to and after intervention of our program. Data will be collected using electronic and paper health records of these patients. In phase 2 of our study, this data will be compared to 2 groups; those who are 80 years or older and have 3 or more comorbid conditions and are; (1) patients within the Ross Clinic who are not part of the home visit program and (2) patients of all other clinics in St. John's, using the primary outcomes. This poster will show results from Phase I of our study. If there is a suggestion from the results of this trial that this intervention is beneficial, they will be used to plan a larger prospective trial.

Innovative Mixed Methods Approach to Age Friendliness in the Community of St. John's

Devonne Ryan, Member of the Age Friendly Communities Team

Background: Age friendly communities (AFC) are communities with "policies services, and structures related to the physical and social environment [that] are designed to support and enable older people to live in security, enjoy good health and continue to participate fully in society." The WHO considers AFC to be "one of the most effective policy approaches for responding to demographic aging."

Research Questions: CIHR considers the gathering of policy-relevant evidence surrounding AFC a research priority; this is echoed by the St. John's Mayor's Advisory Committee on Seniors (MACS). Our objective is to produce research data concerning AFC - our findings will serve as the basis of a roadmap to be developed by the MACS and City Council.

Description: Methods in partnership with the MACS, have modified an AFC survey developed in Ireland to measure the age-friendliness of a community from the perspective of its residents. Extensive pilot testing with volunteers of all ages was carried out. With trained volunteers (students, faculty members, members of the MACS), the AFC survey with be administered through telephone interviews during August 2011 to a random sample of residents of St. John's, 19 years and older. The survey takes approximately 15 minutes to administer. Volunteers will record responses to formatted computer cards which will be scanned. An SPSS dataset will be created from the scanned responses.
Results/Findings based on the descriptive analysis of the survey results will be presented.
Conclusions and Implications of our innovative AFC university-community partnership have led to the systematic development and implementation of the robust survey. Ideally this could have important implications from a policy and academic perspective. The findings may help City Council in identifying improvements that could lead to better quality of life for residents.

Interventions Performed By Community Pharmacists in Newfoundland and Labrador

Lisa Bishop, Stephanie Young
Amy Conway

Background: At any step in the filling process, the community pharmacist may identify problems with prescriptions such as incomplete information, incompatibility with the patient's current medications, or an adverse effect. Interventions made to resolve these issues ensure the quality, safety, and efficacy of medications. This function is often not recognized by patients or funders and may be a time consuming task. Pharmacists are considered medication experts, and want to ensure their knowledge and skills are fully utilized.

Research Questions: What are the number and type of interventions made on a daily basis by community pharmacists in NL that are related to medications or products ordered by prescription from an authorized health care provider?

Description: A prospective cross sectional study of community pharmacist interventions was completed. Participants included third-year pharmacy students and their pharmacist preceptor as a data collection team. During a seven day consecutive period, all interventions made by the pharmacist that occurred during the student's shift were identified. Details about each intervention was recorded, including the exact problem, the action taken by the pharmacist to resolve the problem, and the final outcome.

Nine student-pharmacist pairs submitted data from nine pharmacies in rural (n=3) and urban (n=6) centres. A total of 125 interventions were documented for 106 patients. The top four categories of problems identified were: clarification required (25 %), drug not available (16 %), dose too low (16%), and medication insurance issues (12%). The prescriber was contacted for 69% of the interventions. Seventy-five percent of prescriptions were changed. By then end of the study, 89% of the problems were resolved.

Overall, it was noted that many of the issues identified in this study were related to correcting administrative issues, recognizing that there are many other potential interventions that would help utilize the pharmacist to the full scope of their abilities.

Is it normal for my baby to...? Parent Resources for Well-Baby Visits

Laura Butler/Leslie Rourke, Laura Butler, MUN Meds 2014

Background: Parents have many questions about their children's health. Primary health care professionals are challenged to not only provide anticipatory guidance, but to answer parents' questions and provide reliable children's health information resources.

Research Questions: 1. To highlight parent resources for health information regarding infants and children to age 5 years.
2. To become familiar with the 2011 Rourke Baby Record and its web site (www.rourkebabyrecord.ca) as a portal to access health information and resources suitable for parents of young children.

Description: As evidence mounts regarding sensitive periods in the first 5 years of life for all aspects of future health including learning, personality and mental health, so does the importance of preventive health care for infants and young children.

Exemplary well-baby/well-child care includes not only physical examination parameters, but also nutrition and growth monitoring, developmental surveillance, and anticipatory guidance. Since first published in 1985, the Rourke Baby Record (RBR) has provided an evidence-based, structured approach to preventive paediatric care for children from birth to 5 years of age.

This poster presents a new initiative on parent resources available on the RBR web site (www.rourkebabyrecord.ca). This poster will appeal to FPs, paediatricians, primary health care providers, teachers, students/residents, - and of course to parents of young children!

Nurse Practitioner Faculty Led Student Well Women Screening Clinic

Wanda Emberley Burke, Kelly Power-Kean MHS; NP Marcy Greene MSc; NP

Background: Newfoundland and Labrador (NL) has one of the lowest cervical screening rates in Canada with a mortality rate for cervical cancer at twice the national average (Canadian Cancer Society, 2008). Of 150 women who currently have been diagnosed with cervical cancer in NL, approximately 80% have not adhered to the national cervical screening guidelines (NL Cervical Cancer Registry, 2009).

Research Questions: (1) Raise the awareness of cervical cancer and the importance of cervical screening to the students attending the CNS; (2) Increase the opportunities for accessible and comprehensive Well Woman services for the students attending the CNS; and (3) Facilitate NP faculty practice as scholarship and continuing competence in Well Woman healthcare.

Description: Professional leadership for the nurse practitioner (NP) within the continuing competency program of the ARNNL (2009) embodies leadership that serves to develop client care, health care, population health and the profession. Nursing education, in particular NP programs, have placed increasing emphasis on faculty clinical practice to facilitate competency in the dual roles of practitioner and teacher. Nursing as a practice discipline therefore can coexist in academic and practice environments (Little & Milliken, 2007:Riely & Omery, 1996; Williams and Taylor, 2008). The NP faculty at the Centre for Nursing Studies (CNS) has established a faculty-led Student Well Woman Clinic to provide client care that facilitates linkages between practice, education and population health.

Newfoundland and Labrador (NL) has one of the lowest cervical screening rates in Canada with a mortality rate for cervical cancer at twice the national average (Canadian Cancer Society, 2008). Approximately 98% of the student populations at the CNS are female, many of whom have to relocate from small rural communities and no longer have access to their primary health care provider.

Oral health status in institutionalized schizophrenic patient in Shahrekord, Iran: A cross-sectional study

Naziheh Assarzadegan, Neda Parvin,Masoud Nikfarjam,Iraj goudarzi

Background: Schizophrenia is a chronic psychiatric disease. Schizophrenic patients are incapable of doing their personal duties and self health care and side effects of the psychotherapeutic drugs contributes to oral diseases in this group.

Research Questions: This study was carried out on institutionalized schizophrenic patients in Chaharmaha-Bakhtiary province of Iran with the purpose of determining oral and dental health status in these patients.

Description: Method: This cross-sectional study was performed on 123 institutionalized schizophrenic patients in three psychiatric care centers in Chahrmahal-Bakhtiari during 2008. Data was gathered using questionnaire for demographic information, patients' medical sheets, psychological interview and completing Standard Anderson Positive and Negative Scale questionnaires (SAPS, SANS), and complete dental examination determining Decayed, Missing, Filled Teeth (DMFT) and gingival indices. Mann-Whitney, chi-square and Spearman correlation tests were used for statistical analyses.
Results: Mean DMFT score was 19.43±7.71 in the study population. There was a significant relation between this score and age, smoking history, number of cigarettes per day, hospitalization period and mean negative symptoms score (p=0.05). Pyorrhea was significantly more severe in men than women and factors including smoking history, number of cigarettes per day, hospitalization history and mean score of both negative and positive symptoms were found to be significantly related with severity of pyorrhea (p=0.05)Conclusion: Oral health status is very poor among institutionalized schizophrenic patients. Therefore more attention must be paid to primary oral health care services with the aim of prevention along with supplying proper routine care and treatments.

Perceived Influence of Electronic Medical Records on Family Medicine Resident Learning – A Primer for Clinical Teachers

Alison Sinnott Drover, Dr. Shabnam Asghari, Dr. Stephen Shorlin, Mr. Mike Foley, Mr. Justin Oake

Background: The Electronic Medical Record (EMR) is a paperless, digital patient record system which replaces traditional medical charts. While the influence of EMR on patient outcomes is well documented, little data exists regarding EMR impact on resident learning and development of core competencies required for independent practice. Therefore, research is needed to inform clinic-based teaching methods for enhancement of resident learning in the EMR setting.

Research Questions: The purpose of this study is to first obtain data on how MUN Family Medicine academic faculty and residents feel EMR influences resident learning of core competencies in family medicine, and second, to compile this new data with a review of existing literature in the form of a primer presented at interactive workshops to inform clinical teaching in family medicine at MUN.

Description: This is a mixed method study. Data is collected from MUN Family Medicine faculty and residents using questionnaires and focus group discussions. Questionnaires are designed with both quantitative and qualitative questions, allowing respondents to rate how they perceive the impact of EMR on resident learning. Focus groups are assembled after the return and review of questionnaire responses, using semi-structured open discussion format. Case-based examples will be solicited and recorded. Data from questionnaires and focus groups will be compiled with a complete review of relevant literature, and will be presented in the form of a primer for clinical faculty. The primer will be presented with case-based teaching strategies to illustrate the potential applications of this information in EMR based clinical teaching.
On completion of this project, clinical teachers will be able to reflect on their own case-based experiences of teaching within the EMR setting, demonstrate awareness of the ways in which EMR can influence resident learning, and apply this knowledge to enhance resident learning in the clinic setting and formative evaluation of residents.

Physician Referral Patterns: A Focus on Computed Tomography in Eastern Health

Katie Little, Charlene Reccord (PhD), Mike Doyle (PhD), Rick Audas (PhD)

Background: In recent years, significant advancements have been made to improve access to diagnostic imaging (DI) services in Canada; however, the demand for these services continues to increase and wait times remain a concern for some provinces. Like other health authorities, patient wait times are a priority for Eastern Health, where the DI program serves a regional population of approximately 290,000 and service requests continue to increase.

Research Questions: The study objectives are 1) to examine variations in physician referral patterns for diagnostic outpatient computed tomography (CT) exams, and 2) to determine whether physician demographic and practice characteristics are associated with diagnostic outpatient CT referral patterns.

Description: Two administrative databases were merged; one containing data on the frequency of physician referrals for diagnostic outpatient CT exams within Eastern Health in 2010, and a second database containing referring-physicians' demographic and practice information including gender, years of experience, specialty, practice location, and number of services or patients seen in 2010. Descriptive analyses of referring physicians' demographic characteristics and total/mean/median number of referrals were reported, and regression analysis was conducted to determine if physician demographic and practice characteristics predicted referral patterns for diagnostic outpatient CT appointments in 2010.

Preconception Health Social Marketing Campaign

Lorraine Burrage, Natalie Moody, Maria Driscoll, Colleen Kearley, Margaret Coombes, Anne Wareham, Tracey Bridger, Janet Doyle

Background: Improving the health of women before pregnancy is a primary prevention strategy in reducing adverse maternal/infant outcomes. Women must be encouraged & enabled to actively plan for and enter pregnancy in good health, with as few risk factors as possible. The risk factor of obesity is increasing in reproductive aged women & is associated with diabetes, hypertensive disorders, higher rates of cesarean births & post-operative complications. Public awareness of risk of a high BMI prior & during pregnancy is limited.

Research Questions: To achieve a healthier body weight for women of childbearing age in the Eastern Health Region of Newfoundland and Labrador.

Description: The CEPSM* model of social marketing was used to develop the campaign framework. The Action Group obtained background information on the risk of obesity in pregnancy and the statistical evidence demonstrating obesity prevalence within Eastern Health and the province. An environmental scan was conducted to provide a synopsis on external factors that could affect this campaign, such as other related programs within Eastern Health, existing provincial and Eastern Health policies, and societal norms affecting and influencing behaviours, beliefs and values. Focus groups were conducted with women between 23-30 years of age who see a baby sometime in the future, to determine what they know and want to know, and how they want to receive information or support to be healthy/healthier prior to becoming pregnant to increase healthy pregnancy outcomes. The findings of the focus groups indicated that before the objective of achieving a healthier body weight can be reached, women must have the knowledge that their health and body weight before pregnancy affects their fertility, pregnancy and their baby's health. To enable this, Phase Iof the campaign will focus on working with health care providers to reach the target population using such resources as a preconception health website, information brochures, preparation for pregnancy checklist and a tool to help discuss the sensitive topic of body weight.

Predicting parental compliance with an early intervention program

Dana Noseworthy

Background: Early intervention programs for children at risk for developmental delay are often parent-mediated. Parents acquire strategies to stimulate their child's development at recurrent training sessions. Difficulties with parental compliance impede program implementation and decrease cost-effectiveness. The current study investigates the value of two measures as predictors of parental compliance with an early intervention program.

Research Questions: 1. To what extent can parental compliance with an early intervention program be predicted by a) a measure of parental readiness for change and b) a measure of parental perceptions of barriers to treatment?

Description: This project explores internal and external factors which may impact a parent's ability to engage in and comply with an early intervention program. The Direct Home Services Program (DHSP) is a family-centred home-based early intervention program delivered in the province of Newfoundland and Labrador. This program offers parents weekly home visits with a practitioner to teach them activities to strengthen their child's developmental skills. Based on research in related areas, parental readiness to change (internal factor), and their perceptions of barriers to treatment (external factor), are expected to predict parental compliance during the first 6-months of the program. Data concerning these factors is obtained from questionnaires completed by consenting parents and their practitioners prior to the start of intervention and across the first six months of intervention. The results will contribute to program development around issues that interfere with effective program delivery.

Recruitment and Retention of Doctors of Chiropractic in Rural Newfoundland and Labrador (NL), Canada 1991- 2010

<u>Laurie Goyeche</u>

Background: There is a documented difficulty attracting and retaining medical doctors (MDs) in rural NL. Rural MDs who stay are often burdened with chronic disorder case-loads. DCs are licensed to diagnose, treat and manage acute and chronic neuro-muscoskeletal conditions. There has been a steady growth of chiropractors, especially in rural communities in NL since legislation in 1991. Understanding the regional distribution of such growth is important for human health resources and interprofessional collaboration practice planning.

Research Questions: The objective of this study was to determine the recruitment and retention rates of DCs in rural NL communities between 1991 and 2010. Secondarily, these rates were compared to rates for medical doctors (MD) Dentists (DDS) and Optometrists (OP).

Description: Methods: Descriptive study. Secondary analysis of data from NL professional associations, Statistics Canada, HHR and CIHI were used to compare rates of DCs and MDs, Dentists (DDS) and Optometrists (OP) in rural NL. Results: Since DC legislation in 1991, DCs have increased at an average rate of 32% per year in rural areas and 20% per year in urban areas. The overall retention of DCs from 1991 and 2010 in NL is 65%, with a mean of 13.5 years in practice. Between 1995 and 2005, rural DCs were recruited at a rate of 75% with a mean of 6.9 yrs in practice, compared to provisionally licensed international graduates (PLIMGs) at 20% and 5 years. In 2010, 16% of MDs, 36% of DDSs, 24% of OPs and 18% of DCs were in rural areas. Conclusion: There has been a steady growth and retention of DCs in rural NL. One of the main challenges to rural health care in NL will be the aging population with increasing numbers facing both acute and chronic neuro- musculoskeletal problems, chronic pain and lifestyle issues. Such patients already constitute a high percentage of patient visits to rural MD's. Since DC's are commonly sought and are qualified to manage these complaints and DCs already provide health promotion (lifestyle) and prevention services to patients focused around their scope of practice (drugless and non-surgical approaches); it is important that future studies and health care policy should focus on improving community health care access and services by evaluating integrative health models which incorporate DC's into rural health clinics.

Residential proximity and hospital level of service for Canadian obstetrics patients

<u>Kris Aubrey-Bassler</u>

Background: Evidence is equivocal about the effect of hospital delivery volume on obstetrical outcomes in low risk women. Some studies suggest that outcomes are equal, while other studies suggest that outcomes are better at higher volume, more specialized hospitals. However, the effect of access to care for rural women has not been considered in these analyses. Studies on rural women have shown that outcomes are best when obstetrical care is available close to home (even though volumes are usually small).

Research Questions: This study was designed to reconcile this apparently contradictory evidence. Our objective is to quantify the factors that are associated with improved obstetrical outcomes, with a focus on those of interest to rural and remote hospitals.

Description: This study is a retrospective analysis of Canadian obstetrical and neonatal administrative data from April 1, 2006 to March 31, 2008 using a multi-level logistic regression model. We are particularly interested in factors applicable to rural hospitals and are therefore examining the effect of hospital volume, provider volume, specialty of care provider and availability of caesarean section. Hospital remoteness variables calculated using a geospatial digital road network and socioeconomic information obtained from the 2006 Canadian census are also included in our model. This poster presents descriptive data on travel distance between a patient's home and the service level at the delivering hospital. Inferential statistical modelling will be carried out in the near future.

The Canadian Survey of Health, Lifestyle and Aging with Multiple Sclerosis; A Preliminary Report

Michelle Ploughman, JD. Fisk, M. Godwin, M. Stefanelli, C. Harris, S. Beaulieu, R. Marrie, K. Knox

Background: In Multiple Sclerosis clinics, one of the most important questions patients ask is, 'What should I expect in the future and how will the disease progress?'. Early predictors of disease progression, such as severity, do not predict how a person with MS will function in the long term. Can lifestyle modification or social/emotional engagement affect aging with MS? Our older clients with MS are a wealth of knowledge about aging with a chronic disease.

Research Questions: 1. Collect survey data in older people with MS regarding health, lifestyle behaviours, disability and perceived health-related quality of life (HRQoL). 2. Identify factors predictive of disability and HRQoL in this population.

Description: Methods: We are surveying a purposeful sample of 3000 older people with MS in Canada who are 55 years of age and older with MS symptoms for more than 20 years. Participants are recruited by telephone from a list generated from the MS databases in all Canadian provinces. The survey is comprised of multiple patient-reported outcomes that were chosen based on initial qualitative studies and a minimal set of previously validated instruments that measure the specific domains; exercise, diet, alcohol use, smoking, social support, financial security, activities, mental and cognitive health, functional ability, co-morbidity, HRQoL and disease characteristics.

Results: Preliminary results represent the first 100 respondents in 5 provinces. The 78 females and 22 males reported living with MS symptoms for an average of 33 yrs. Over 90% live in their own home with the remainder residing in assisted living and long term care facilities. Two thirds of respondents report independence in activities of daily living (ADL; measured by Barthel Index) but severe limitations in instrumental ADL (measured by Frenchay Activities Index). Higher perceived HRQol (measured using a Visual Analogue Scale) is associated with higher scores of resilience (measured by Resilience Scale) and social support (measured by Personal Resource Questionnaire) but not related to level of disability. Data gathering and analysis is ongoing.

The Effectiveness of Low Glycemic Index Diets in the Management of Blood Lipids: A Systematic Review and Meta-Analysis

Patrick Fleming, Marshall Godwin

Background: The glycemic index (GI) is a measure of post -prandial glycemic response to carbohydrates. Foods with a higher GI rating produce “spikes” in blood-glucose levels. These spikes may increase vascular oxidant stress, induce inflammatory cytokines, and cause endothelial dysfunction. The literature indicates there may be a correlation between low-GI diets and improved lipid profiles. Therefore, low-GI diets may represent an inexpensive and simple tool for health care providers in the management of blood lipids.

Research Questions: This project will determine if low-glycemic index diets are effective in the management of total cholesterol, LDL, HDL, and triglycerides in the general population.

Description: A literature search will conducted using Pubmed, EMBASE, and the Cochrane library for randomized controlled trials comparing low-GI diets to high-GI diets in the management of blood-lipids. Articles will be independently appraised by two reviewers using predetermined criteria based on the U.S. Preventative Task Force Quality Rating Criteria. We will use the PRISMA statement as our study protocol. Data on treatment effect regarding lipid profiles will be entered into the meta-analysis software Revman for statistical analysis. Outcome data will be extracted from relevant studies and entered into summary tables. [Results will be available before the time of presentation]

The effects of Lavandula Angustifolia mill infusion on depression in patients using Citalopram: a randomized control trial study

Naziheh Assarzadegan, Neda Parvin,Masoud Nikfarjam,Iraj goudarzi

Background: Many herbs have been used to treat psychiatric disorders including anxiety and depression in traditional medicine. Herbal medicines have less complication and might be administered alone or as a complementary therapy in these patients.

Research Questions: This study was carried out to determine the effect of using Lavandula angustifilia infusion on depression in patients taking Citalopram.

Description: Methods: Among all the patients referred to the Hajar Hospital psychiatric clinic, Shahrekord ,Iran, 80 patients who met the criteria of major depression according to the structured interviews and the Hamilton questionnaire for depression were included in the study.Using stratified randomization ,they were randomly assigned into two groups of intervention and control at this clinical trial study. In control group, the patients were given Citalopram 20 mg along with 2 cups of sweet hot water as placebo twice a day. In intervention group, the patients took 2 cups of the infusion of 5 mg dried Lavandula Angustifilia added to boiling sweet water in addition to tablet Citalopram 20 mg twice a day. The patients were followed up for four and eight weeks of the study onset using Hamilton Scale questionnaire and treatment side effects form. Data were analyzed using student t-test, pair t-test and chi square.
Results: After four weeks of the trial onset, the mean depression score according to the Hamilton Scale for depression was 17.5 ± 3.5 in the control group and 15.2± 3.6 in the intervention group ($p<0.05$). After eight weeks, it was 16.8±4.6 and 14.8±4 respectively ($p<0.01$). In addition, the most commonly observed adverse effects in both groups were dry mouth and confusion. In terms of side effects, there were no significant differences between two groups. Conclusion: Lavandula Angustifilia infusion has some positive therapeutic effects on depressed patients and might be used alone or as an adjunct to other anti depressant drugs.

The Eldercare Study: Evaluation of a Nurse-based Program of Care

Marshall Godwin

Background: Care of the elderly poses a central challenge to health care systems. Administering care for patients who are very old can take much time and effort by the family physician. Moreover, a physician is not always necessary or the most appropriate healthcare provider to address the many concerns of the elderly.

Research Questions: Objective: To assess the need for a nurse-based management program in order to improve the quality of life of community living elderly people. Design: Cluster randomized trial. Setting: Primary care practices/patient homes.

Description: Participants: The old elderly aged 80+ living at home or in a level one or two personal care home. Intervention: A one year, nurse-based program of home delivered care. Patients were assessed by the eldercare nurse for their ability to carry out activities of daily living, medication usage, safety issues, and need for community services. Individual patient goals aimed at improving patient quality of life were set in collaboration with the patient. Main Outcomes: The main outcome measure is whether or not the intervention improves quality of life. Other outcomes include patient satisfaction, health services utilization, and use of community services. Results: This research is still in progress; final results will be available at the conference. We anticipate that members of the intervention group will exhibit higher scores on quality of life measures, a patient satisfaction questionnaire, have significantly fewer past year hospitalizations, family doctor and ER visits, and improved use of community resources as compared to baseline and control group scores. Conclusions: This research will allow us to better understand the care needs of the old elderly and how this group uses available resources. It will determine whether a nurse-based program of care can meet the needs of both old elderly patients and the healthcare system.

The importance of monitoring folic acid fortification: How much are we really consuming?

Jennifer Colbourne, *Other authors: N. Baker, P. Wang, L. Liu, B. Roebothan*

Background: In November, 1998, the fortification of enriched white wheat flour,pasta, and cornmeal became mandatory in Canada. This public health strategy was established primarily to lower the prevalence of neural tube defects (NTD). Evidence has shown that this approach has been effective in preventing NTD but there is now controversy over the potential risks of excessive folic acid consumption. The possible negative effects may be greater in seniors who suffer from a vitamin B12 deficiency.

Research Questions: The purpose of this research is to determine the amount of folic acid being consumed by the adult population of Newfoundland and Labrador (NL) through foods, such as ready-to-eat cereals (RTECs), where the folic acid is added at the discretion of the manufacturer. An additional goal is to determine the total intake of other B vitamins that are being consumed by this population.

Description: Folic acid and other B vitamins are now being added to more foods, such as RTECs, than those which are mandated. Unlike the mandatory fortification of bread, the fortification of RTEC is at the discretion of the manufacturer. The level of folic acid being consumed, especially through RTEC, is becoming a concern since recent evidence has shown that the amount of folic acid present is significantly higher than the labeled value. Excessive consumption of folic acid has the ability to mask a vitamin B12 deficiency; this is especially likely in seniors where vitamin B12 absorption is impaired. Furthermore, current research suggests that high folate consumption in certain individuals, through a combination of fortified foods and supplements, may increase the risk of some cancers and cardiovascular disease. Secondary analysis is being performed on the raw data collected through mul-

tiple 24-hour food recalls as part of a larger project (the validation of a food frequency questionnaire). Trained interviewers surveyed 400 randomly selected NL residents, aged 35-70 years, by telephone. The food recalls were entered into ESHA nutrition analysis software. The quantity of RTEC and bread consumed by the participants were recorded, along with the amount of folic acid present in these foods. The total amounts of folic acid, vitamin B12, and vitamin B3 were also monitored. Data analysis is ongoing.

The NL Alcohol and Other Drug Monitoring Pilot Project: A Focus on Cocaine Usage

Charlene Reccord, Krista Butt, Research Analyst, Department of Research, Eastern Health

Background: Rehm and associates (2006a) estimated the total social cost of alcohol and other drug abuse in Canada to be 39 billion dollars in 2002, with health care costs comprising a majority of this total (22%). In addition to being a costly problem, individuals who abuse alcohol and other drugs present a unique challenge for medical professionals as they often present with multiple and complex health needs.

Research Questions: The broader aim of the NL Alcohol and Other Drug Monitoring Pilot Project was to examine emerging drug trends, to identify the most commonly used substances and the legal, social and health implications of this usage among high risk groups. However, the following research will focus primarily on cocaine usage among adult drug users and how this has affected participant's lives.

Description: A convenience sample of 60 adults participated by completing the Canadian Adult Sentinel Survey of Injection Drug Use (CASSIDU, 2010); 19 (32.2%) female, 40 (67.8%) male. The average age of respondents was 30.0 years. Volunteer participants were recruited from various settings, including shelters, needle-exchange services, and outreach and drop-in centres. When asked about previous drug use, all participants (n=60, 100.0%) reported using drugs of some kind. Most had tried tobacco (n=58, 96.7%) or had consumed alcohol (n=59, 98.3%) at some point in their lives. When considering drugs other than alcohol and tobacco, cocaine (n=56, 93.3%) was also reported to be used by most participants. Of these, forty-three (76.8%) reported using it in the past 12 months.
Details of participant's drug use and the health, legal and social implications of this are discussed. Furthermore, participant's engagement in treatment programs are also reported.

The researcher development program: Strategies to enhance research capacity in rural family medicine

Cheri Bethune, Shabnam Asghari PhD, Patti McCarthy MA , Kris Aubrey MD, MSc, Vernon Curran PhD, Marshall Godwin MD,MSc

Background: Capacity building in research is particularly important within rural family medicine where time, resources, and research skills are often limited. There is growing supportive literature on addressing the ability to use and apply research; however, the process has not been fully explained in the literature.

Research Questions: What competencies in research are most relevant to the teaching and practice of geographic full time (GFT) faculty in family medicine? How might these skills be developed most effectively in a broadly dispersed faculty in a rural family medicine program?

Description: This study outlines the planning, developing, implementing and preliminary assessment of a research capacity building initiative within a predominantly rural family medicine program. It includes characteristics and key activities designed to enhance research capacity within the department of family medicine. An initial assessment of academic family physicians, using a self-administered tool and discussions with key stakeholders and policy makers revealed a need for enhanced communication of research results and education in research methods. Faculties noted barriers to be involved in research such as lack of time, skills and resources, and fear of a negative response from journals. This baseline assessment and feedback from stakeholders and policy makers, in conjunction with a literature search, was utilized to develop a faculty development program that includes a funded mentorship opportunity, individual consultations with research experts and a developmental writing series.

The State Of Primary Care Research In Grand Falls-Windsor

John Campbell, Dr. Samual Ralph, Dr Elizabeth Bautista

Background: The purpose of the presentation is to outline the types of research being done by FP in GFW for the purpose of informing other researchers and expanding potential colloboration.

Workshops

Chronic Disease Self Management Program (CDSMP) in NL

Darlene Ricketts, Darla King - Western RHA, Jessica Byrne - Central RHA, Dawn Gallant - Eastern RHA, Elaine Lyall - Labrador/Grenfell RHA

Background: Chronic Disease Self Management Program (CDSMP) in NL

Research Questions: 1) To provide an overview of the Chronic Disease Self Management Program and its implementation in NL.
2) To discuss the Regional Health Authorities' (RHA's) roles & responsibilities in relation to training & program delivery.
3)To present updates regarding chronic disease self-management programs in each region.

Description: This will be a panel presentation providing an overview of the CDSMP in NL. The CDSMP promotes self-efficacy, the confidence one has that he or she can master a new skill or affect one's own health. Sessions are offered via workshop, over a 6 wk period (2 1/2 hrs/wk) in community settings. The program is offered free of charge, is very participatory, targets people with one or more chronic health conditions (and/or caregivers) and is facilitated by 2 trained peer leaders. Subjects covered in the program include techniques to deal with symptoms & problems associated with chronic illness, physical activity, nutrition, use of medications, communicating effectively with friends, family & health care professionals, & evaluating new treatment options. The program helps keep participants active, recognizes similarities of challenges, helps people put knowledge into action & is designed to enhance (not replace) regular treatment & disease specific education. Initial plans to implement the CDSMP in NL began with a Master Training session in February 2011 with planned implementation throughout the province. RHA's have received provincial support to implement the CDSMP and plans are ongoing in each region. The CDSMP has been well evaluated and results show significant measurable improvements in patient outcomes and quality of life. A 5yr research project (>1000 participants) found that people who participated in the CDSMP, when compared to those who did not, improved their health status, healthful behaviors, & spent less days in the hospital.

From Research to Policy and Practice: Reconsidering the Role of Testing in Type 2 Diabetes

Stephanie Young, Sheila Tucker, B.A.(Conj), B.A. (Hons.), B.ED., M.L.I.S.,CPAD, Liaison Officer for NL, Canadian Agency for Drugs & Technologies in Health (CADTH)

Background: Self-monitoring of blood glucose (SMBG) through testing is common practice. However, there is controversy about its benefits for patients with type 2 diabetes not using insulin. The frequency of testing is also unclear. In 2010, the Canadian Agency for Drugs & Technologies in Health (CADTH) published the findings of a review of the evidence underlying the guidelines on self-testing. This session will focus on a presentation of the CADTH research and discussion of the implications of this work for health care practice.

Research Questions: Objectives: At the completion of this workshop, the participant will be able to: (1) discuss the recent CADTH report regarding self monitoring of blood glucose (SMBG); (2) apply the results of the CADTH report to assess the need and make recommendations for SMBG for patients with diabetes depending on their situation; and (3) utilize CADTH's SMBG tools in their practice.

Description: The workshop will be comprised of the following components:
1) Presentation on the CADTH review (50 minutes):
- Overview of CADTH;
- SMBG project and significance of the issue of self-monitoring for patients, health professionals and drug plan managers;
- Presentation of the findings of the systematic review;
- Implementation of the CADTH findings across Canada, with an emphasis on implementation in Newfoundland & Labrador.
2) Small group discussion (20 minutes). CADTH's SMBG toolkits will be distributed as a resource for review and discussion. Small group facilitators will be asked to address the following questions:
- What is your assessment of the CADTH review and findings? What are the implications for your health care practice? What is your assessment of CADTH's SMBG toolkit? What are your perceptions regarding the utility of these tools in your practice?
3) Small Groups Report Back & Session Wrap Up (20 minutes) - Suggestions re. next steps in CADTH's outreach around SMBG. - what activities should be conducted to move this research into policy and practice?

The Vision, Promise of an Electronic Medical Record Program, and Opportunities for Primary Health Care Research

Ian Hodder, Dr. Pam Elliott, Dr. Kayla Collins

Background: The Centre's mandate to develop the Provincial Electronic Health Record (EHR) is essential to realizing enhanced patient safety and care. In addition, significant patient benefits will be gained by enabling primary care physicians office access to the EHR via the Electronic Medical Record (EMR). Access to clinical information from various EHR components; Provincial med profiles, DI reports, and lab values, all essential to EHR vision, EMR promise, and to improve population health through Primary Health Care Research

Research Questions: Participants will have the opportunity to review and discuss pre and post provincial EHR landscape and impact on health information and patient outcomes. In addition, participants will review and discuss in small groups, impact, anticipated benefits, indicators of interest for evaluation, and other research priorities/ challenges with a provincial EMR.

Description: Our workshop will examine the current provincial health information landscape and potential challenges of quality health information affecting patient outcomes. Through both a presentation and small group format, we will provide an update on the Electronic Health Record, from rationale to current status, health system benefits of the Pharmacy Network, iEHR Labs Project, EMR, as well as national EMR benefits indicator development . Breakout group discussions will follow with participants having the opportunity to discuss in groups current opportunities, impact, and challenges for Primary Health Care Research to address population health needs. Lastly, feedback from the workshop will help to inform the evaluation for the EMR.

Getting Public, Providers and Stakeholder Perspectives: How and Why to Conduct Deliberative Consultations for a Participatory Approach in Primary Care Research

Gillian Bartlett, Ann Macaulay, Jonathan Salsberg, Claudio Corradetti

Background: Getting Public, Providers and Stakeholder Perspectives: How and Why to Conduct Deliberative Consultations for a Participatory Approach in Primary Care Research

Research Questions: How can primary care researchers use deliberative consultations to acquire a more realistic view of issues surrounding research topics of interest, and to determine what parties may be most affected before forming the participatory research partnership?

Description: Deliberative consultations are small group discussions where the moderator plays a minimal role and are specifically designed to show what the public, health care providers and stakeholders think about an issue or topic once given an opportunity for debate and consideration. Deliberative consultation provides a framework for decision-making that allows for the establishment of mechanisms of cooperation, building trust and an increase in transparency. Data collected from deliberative consultations provides the researcher with in-depth perspectives and guidance for proposed research and can serve as a foundation for embarking on a participatory research project. This workshop will provide an introduction to deliberative methods and arguments for when and why this method would be appropriate in primary care research using a current example. Participants working in small groups will construct a protocol for a deliberative consultation including methods for data analysis and how to leverage the results for participatory research.

Notes

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