## **PROGRAM AND ABSTRACTS**

## THE PRIMARY HEALTHCARE PARTNERSHIP FORUM

Building Research Capacity in Atlantic Canada



**Hosted by** 

SHERATON HOTEL NEWFOUNDLAND, St. JOHN'S, NL

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

As an accredited provider, Professional Development and Conferencing Services, Faculty of Medicine, Memorial University of Newfoundland, designates this continuing medical activity for up to 10 credit hours for Mainpro M-1 of the College of Family Physicians of Canada.







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## **W**ELCOME MESSAGES

#### **DEAN OF MEDICINE**

Welcome to the first Primary HealthCare Partnership Form. There has been an overwhelming interest in this new venture and plans are already underway for an even larger Forum next year.

This Forum is an opportunity for a diverse group of primary health care providers and researchers to find out more about the work going on in this exciting field. It is an exciting time for professionals at the forefront of delivering health care to meet and talk about important topics such as chronic disease management and care of the elderly. Through this Forum, primary health care will move forward strengthening both research and the delivery of primary health care locally, regionally and nationally.

During my time as Dean of Medicine, I've been delighted to support the development of the Primary Healthcare Research Unit, led by Dr. Marshall Godwin. 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.



—Dr. James Rourke

### **DIRECTOR OF THE PRIMARY HEALTHCARE RESEARCH UNIT**

I am delighted to welcome every one of you and thank you for making this first Primary Healthcare Partnership Forum a success. When the staff of the Primary Healthcare Research Unit (PHRU) and the Centre for Rural Health Studies (CRHS) hatched the idea of this conference in September 2008 we had no idea what we were getting ourselves into—of the amount of work involved, the depth of the response, and how exciting it would turn out to be for everyone. We had hoped we could convince a few people to submit abstracts and a few extra people to come long as audience members; instead we have a program of 32 short oral presentations, three workshops, two keynote addresses, 33 posters, and a dinner talk by the Canadian Armed Forces. We have 101 registrants as I write, and we will have to cut off registration at 110 for lack of space.

I would like to thank those who have helped make this event possible: the Canadian Institutes of Health Research for a Meetings, Planning and Dissemination Grant, the Lotte and John Hecht Foundation of Vancouver, BC as well as our industry sponsors and exhibitors for their financial support, the PHRU and CRHS staff who have worked hard to

make the PHPF a success, MUN's Professional Development and Conferencing Services staff who have been very helpful in organizing registration and promoting the conference, and last but not least, everyone who will be joining us for the next day and a half.

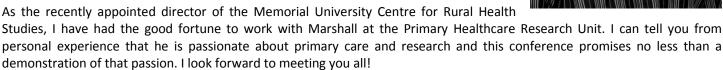
And come back next year...it's already being planned!!!

—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 first 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 Kandahar and elsewhere, 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.



—Dr. Kris Aubrey-Bassler



## **PLENARY SESSIONS**

FRIDAY, NOVEMBER 27<sup>TH</sup> 9:15–10:15 AM

# **Primary Healthcare Reform Initiatives in Canada**Rick Glazier, MD MPH FCFP



Rick Glazier is a Senior Scientist and Leader of the Primary Care and Population Health Program at the Institute for Clinical Evaluative Sciences in Toronto. He is a Scientist at the Centre for Research on Inner City Health at St. Michael's Hospital, where he is also a family physician. At the University of Toronto, he is an Associate Professor and Research Scholar in the Department of Family and Community Medicine, and is cross-appointed in the Dalla Lana School of Public Health, as well as the School of Graduate Studies in Health Policy, Management and Evaluation; Sociology; and the Institute of Medical Science. Dr. Glazier has chaired the Section of Researchers of the College of Family Physicians of Canada (CFPC) and CIHR's Health Services Evaluation and Interventions Research Peer-Review Panel. He was named Family Medicine Researcher of the Year by the CFPC in 2005. Dr. Glazier received his medical degree from the University of Western Ontario, did his family medicine residency at Queen's University, and completed public health and preventive medicine training at Johns Hopkins University and the World Health Organization.

Dr. Glazier's talk entitled "Primary Healthcare Reform Initiatives in Canada" will review the state of primary care in Canada relative to other countries, the main challenges facing primary care in Canada, and the chief responses across the country. It will also go in depth

into assessing access to primary care reform and the impact that primary care reform may have on equity using examples from the province of Ontario.

SATURDAY, NOVEMBER 28<sup>TH</sup> 8:45–9:45 AM

## Interprofessional Education and Practice

Dr. Deborah Kopansky-Giles & Dr. Judith Peranson, St. Michael's Hospital



Dr. Deborah Kopansky-Giles is a chiropractor/clinician scientist on staff in the Department of Family and Community Medicine, St. Michael's Hospital and a professor at the Canadian Memorial Chiropractic College, Department of Graduate Education and Research. Deborah divides her time between developing and managing education and research initiatives in the department at the Hospital, conducting research on models of care delivery and interprofessional education (IPE), consulting and lecturing internationally on the development of integrated models of care and health professional education, publishing, volunteering in professional offices and in private practice.

Long an advocate of giving back to our communities, Dr. Kopansky-Giles, has been involved on numerous local, national and international advisory groups, councils, committees, working groups and networks over the past two decades. She currently represents Canada on the World Federation of Chiropractic and the profession worldwide on the United Nations Bone and Joint Decade. As well, Dr. Kopansky-Giles has extensive experience in policy development and is currently an active member of the WHO-MSK

Topic Advisory Group subcommittee on Rehabilitation involved in the ICD-10 revision process.



Dr. Judith Peranson is a family physician and lecturer in the Department of Family and Community Medicine (DFCM) at St. Michael's Hospital and the University of Toronto. She received her medical degree from the University of Ottawa and completed her residency training at St. Michael's. Following residency, Judith completed an Academic Fellowship though the University of Toronto DFCM with a focus on interprofessional education, policy and research. Judith currently divides her time between clinical practice and developing and evaluating interprofessional education programs for the department. She is also actively involved in the teaching of undergraduate and postgraduate medical trainees in Family Medicine. Judith is currently the principle investigator for qualitative research project on an educational program for senior health science students on an interprofessional approach to managing musculoskeletal problems from a primary care perspective.

Drs. Kopansky-Giles and Peranson's talk will focus on interprofessional education and practice. Dr. Deborah Kopansky-Giles will describe the PHCTF demonstration project, which integrated chiropractors on staff in the Department of Family and Community Medicine (DFCM) at St. Michael's Hospital in 2004, and which evaluated the development of integrative team-based care modeling, examining the facilitators and barriers to integrative programs. Evolving out of this initiative was the development of an interprofessional education (IPE) working group in the DFCM that has been providing IPE programs over the past 3 years and conducting research on IPE, focusing on an IP approach to the management of musculoskeletal conditions in primary care. Dr. Judith Peranson, co-chair of the IPE Working Group, will describe these IPE initiatives, the facilitative approaches used in the teaching and learning sessions and lessons learned from these experiences.

## FRIDAY DINNER AND CANADIAN ARMED FORCES PRESENTATION

Bullet, Blast and Burn — Military Medicine in Kandahar, Afghanistan Commander Peter J. Clifford, CD, MD, CCFP(EM)



Initially inspired by the adventures of Jacques Cousteau, Peter obtained a Bachelors Degree in Marine Biology from Dalhousie University, and a Masters Degree in Oceanography from the University of British Columbia. After working as a marine scientist, he entered medical school at the University of British Columbia. He joined the Canadian Forces under the Medical Officer Training Plan in 1993.

Commander Clifford's experience with the Canadian Forces includes domestic, humanitarian, peacekeeping and war-fighting operations.

Upon completion of his Family Medicine residency, Dr. Clifford's initial posting was at 2 Field Ambulance in Petawawa, ON. In 1998, he deployed to Bosnia as a Unit Medical Officer. Subsequently, he deployed to Turkey in 1999 with the Disaster Assistance Response Team in support of earthquake relief efforts. In 2002, Clifford completed an Emergency Medicine residency at the University of Alberta. Posted to 1 Field Ambulance in Edmonton, he deployed to British Columbia during the 2003 Okanagan forest fires.

In 2004, Dr. Clifford was posted to Victoria BC as the Fleet Support Medical Officer. The highlight of his professional career to date was his deployment to Kandahar, Afghanistan in 2006, where he served with the Role 3 Multinational Medical Unit as the Medical

Director and Officer in Charge of Primary Care. He was awarded a Mention in Dispatches for his team's exemplary support to Task Force Afghanistan. His professional interests include wound ballistics and disaster medicine.

Commander Clifford is currently posted to Halifax, NS as the senior military physician for the Maritime Provinces. He enjoys recreational target shooting to the detriment of his golf handicap, and is learning to convert expensive lumber to sawdust and firewood.

Commander Clifford will present his personal perspective on the challenges of combat medicine, from the standpoint of a family physician with the Canadian Forces. Typical patterns of ballistic injuries from blast and fragment will be discussed, and illustrated with examples from current operations in Afghanistan. The chain of evacuation and casualty handling will be reviewed, from point of wounding through damage control surgery to strategic evacuation. Finally, "lessons learned" from mass casualty events will be provided.

## **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 @ 8:00 am on Friday.
- All breaks and Friday morning breakfast are in the Courtyard area with the posters and exhibitors/sponsors. Friday lunch and Saturday Breakfast are in the Cabot Room.
- Hot breakfast served Saturday morning starting at 7:30 am. Tables will be labelled by topic so people with similar interests can get together over breakfast.

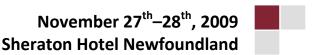
#### Posters

There are three half-day poster sessions. Those people presenting their posters in the morning sessions must have their posters up before the plenary session starts and down by 12:30 pm. Poster presenters are asked to stand by their posters during the designated time for their poster (10:15–11:00 Friday morning session; 2:00–2:45 for Friday afternoon session; 9:45–10:30 for Saturday morning session).

#### Presentations

There are three rooms with presentations/workshops running concurrently. The three rooms are Avalon, Battery, and Plymouth. 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 your presentation is scheduled.

- Two Plenary Sessions (in the Combined Avalon/Battery Rooms)
  - On Friday morning Dr. Richard Glazier, a family physician from Ontario who has studied and published on the primary care reform process will give a presentation on primary healthcare reform initiatives in Canada.
  - On Saturday morning, Dr. Deborah Kopanksi-Giles and Dr. Judith Peranson who work and teach together at the University of Toronto will present jointly on their interdisciplinary approach. Dr. Kopanksi-Giles is a chiropractor and Dr. Peranson is a family doctor.
- Two Concurrent Workshops on Friday afternoon in the Battery Room and Plymouth Room.
- On Friday at the end of the afternoon session, there will be a Cocktail Reception for all registrants. This runs from 4:45–6:00PM.
- ❖ Bullet, Blast and Burn—Military Medicine in Kandahar, Afghanistan. Commander Peter J. Clifford, CD, MD, CCFP(EM), who served in Afghanistan as the Medical Director and Officer in Charge of Primary Care of the Role 3 Multinational Medical Unit, will deliver what promises to be an intriguing account of his experiences during his tour of duty at the military hospital. This is a dinner talk—if you don't have a ticket, see Karen Griffiths at the registration desk.
- Please feel free to approach any of the conference staff if you need help. They will be wearing RED nametags.



## **PROGRAM SCHEDULE**

## FRIDAY MORNING—NOVEMBER 27<sup>TH</sup>, 2009

8:00-9:00	Registration and Continental Breakfast	Courtyard area
9:00-9:15	Welcome and Opening Remarks:	Avalon/Battery Room
	Dr. James Rourke	
9:15-10:15	Plenary Session:	Avalon/Battery Room
	Primary Healthcare Reform Initiatives in Canada	
	Dr. Richard Glazier	
10:15-11:00	Poster Viewing/Exhibitors/Refreshments (see poster list on page 11)	Courtyard area

## CONCURRENT SESSIONS (11:00 AM-NOON)

Session Theme	Session Theme: Education and Training			
<b>Location: Aval</b>	on Room	Session Facilitator: Dr. Cheri Bethune	Room Mo	nitor: Sara Tully
11:00–11:20 Preparing health professionals to provide collaborative, patient-centred care Anne Kearney			Anne Kearney	
				See abstract on page 21
11:20-11:40	1:20–11:40 Inter-professional Mental Health Training in Rural Primary Health Care Settings		T.S Callanan	
				See abstract on page 18
11:40-12:00	Undergraduate family medi	cine preceptor capacity and retention in New	foundland	Kris Aubrey
	and Labrador			See abstract on page 22

Session Theme: Needs Assessment and Service Provision			
<b>Location: Batt</b>	ery Room Session Fac	cilitator: Dr. Bill Eaton	Room Monitor: Leigh Ann Butler
11:20-11:40	Predicting the Relative Need for GP Servi	ices: A Case Study in NL	Rick Audas & Mike Doyle
			See abstract on page 20
11:40-12:00	Needs Assessment of Palliative Care for I	Newfoundland and Labrador	Fiona O'Shea
			See abstract on page 18

Session Theme: Primary Health Care Initiatives				
Location: Plyn	nouth Room	Session Facilitator: Dr. Pam Snow	Room Mo	nitor: Richard Cullen
11:00-11:20	Primary Health Care Inform	mation program at the Canadian Institu	ute for Health	Greg Webster
	Information (CIHI)			See abstract on page 20
11:20-11:40	Results from the 2008 Canadian Survey of Experiences in Primary Health Care			Greg Webster
				See abstract on page 21
11:40-12:00	Integrating paramedics int	o rural health care delivery systems	– Full Scope–	Ken Jenkins
	Expanded Role			See abstract on page 18

12:00-1:00 Lunch	Cabot Room
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## FRIDAY AFTERNOON—NOVEMBER 27<sup>TH</sup>, 2009

CONCURRENT SESSIONS (1:00-2:00PM)

Session Them	Session Theme: Technology and Healthcare				
Location: Ava	Location: Avalon Room Session Facilitator: Dr. Gerard Farrell Room Monitor: Sara Tully				
1:00-1:20	Assessing administrative databases for surveillance of depressive disorder	ers in <b>Reza Alaghehbandan</b>			
	Newfoundland and Labrador: a multi-linkage approach  See abstract on page 15				
1:20-1:40	Evaluating the Impact of Enhancing Information and Communication Tech	hnology in Kayla Collins			
	a Community Model Primary Health Centre	See abstract on page 17			
1:40-2:00	Can Primary Health Care Benefit from an Electronic Health Record (EHR)?	P Heather Rumsey & Pat Walsh			
		See abstract on page 15			

Session Them	Session Theme: Needs Assessment and Service Provision				
Location: Bat	Location: Battery Room Session Facilitator: Dr. Lisa Bishop Room Monitor: Leigh Ann Butler				
1:00-1:20	The Relationship betwe	een Continuity of Family Physician Care and In-	-patient	Graham Worrall	
	Hospitalization in Elderly People with Diabetes See abstract on page 21			See abstract on page 21	
1:20–1:40 Community Health Needs and Resources Assessment in Newfoundland and Sandra MacDonald		Sandra MacDonald			
	Labrador: Seniors Issue	s		See abstract on page 16	
1:40-2:00	1:40–2:00 Adult Obesity and its Impact on a Provincial Health System in Canada			Laurie Twells	
				See abstract on page 14	

2:00–2:45 Poster Viewing/Exhibitors/Refreshments (see poster list on page 12)	Courtyard area
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## CONCURRENT SESSIONS (2:45-4:45PM)

Session Theme: Perspectives in Primary Healthcare				
Location: Ava	lon Room	Session Facilitator: Dr. Marshall Godwin	Room Monitor: Sara Tully	
2:45-3:05	The Nursing Perspective		Sandra MacDonald	
3:05-3:25	The Pharmacy Perspective		Lisa Bishop	
3:25-3:45	The Family Medicine Persp	ective	Elizabeth Callahan	
3:45-4:05	The Nurse Practitioner Pers	spective	Heather Pitcher	
4:05-4:25	The Policy Perspective		Joy Madigan	
4:25-4:45	Panel Discussion			
Abstracts are	Abstracts are not available for the above sessions.			

Session Theme: Workshop on Determinants of Health				
Location: Bat	ttery Room	Session Facilitator: Andrea Pike	Room Monitor: Leigh Ann Butler	
2:45-4:45	The National Collaborating Centre for the Determinants of Health:		Verlé Harrop	
	Translating determinants theory into practice		See abstract on page 38	

Session Theme: Workshop on Graduate Training					
Location: Plymouth Room Session Facilitator: Dr. Kris Aubrey Room Monitor: Richard Cullen					
2:45-4:45	:45–4:45 Atlantic Regional Training Centre: A graduate training program for excellence in Applied Health Services Research		Cathy Peyton ices Research See abstract on page 38		

4:45-6:00	Cocktail Reception (for all conference registrants)	Courtyard Area
6:00-7:00	Free Time for those attending the dinner	
	Friday's program ends for those not attending dinner.	
7:00-9:00	Dinner and Canadian Armed Forces Presentation	Commander Peter J. Clifford,
	(Advance Purchased Tickets Required)	CD, MD, CCFP(EM)
	Bullet, Blast and Burn – Military Medicine in Kandahar, Afghanistan	

## SATURDAY MORNING—NOVEMBER 28<sup>TH</sup>, 2009

7:30-8:45	Hot Breakfast Interest Groups	Cabot Room
8:45-9:45	Plenary Session:	Avalon/Battery Room
	Inter-professional Education and Practice	
	Dr. Deborah Kopanski-Giles & Dr. Judith Peranson	
9:45-10:30	Poster Viewing/Exhibitors/Refreshments (see poster list on page 13)	Courtyard area

## CONCURRENT SESSIONS (10:30AM-12:30PM)

Session Themes: Occupational Health / Research Methods				
Location: Aval	lon Room Session Facilitator: Dr. Kris Aubrey	Room Monitor: Sara Tully		
10:30-10:50	Occupational Health and Safety Experiences of Youth in Rural Newfoundland			
	Labrador	See abstract on page 19		
10:50-11:10	Patterns of Pain in Work-related Musculoskeletal Disorders in Crab Process	ing: Shirley Solberg		
	Implications for Primary Health Care	See abstract on page 19		
11:10-11:30	Adult Obesity and its Impact on a Provincial Health System in Canada	Laurie Twells		
		See abstract on page 14		
11:30-11:50	Community Profile Tool for Planning, Implementation and Evaluation of At	Risk Joanne Rose		
	Populations	See abstract on page 16		
11:50-12:10	Healthy People, Healthy Communities: Conducting Needs Assessments at E	astern <b>Gillian Janes</b>		
	Health	See abstract on page 17		
12:10-12:30	Post-dated or not? A RCT of delayed antibiotic prescriptions for acute upper	er Graham Worrall		
	respiratory infections in primary care	See abstract on page 20		

Session Theme: Complementary and Alternative Medicine					
Location: Battery Room Session Facilitator: Dr. Laurie Goyeche Room Monitor: Leigh Ann Butler					
10:30-11:00	Report on the results of the study on Use of Natural Health Products in Children in	Marshall Godwin			
	Newfoundland and Labrador	See abstract on page 21			
11:00-12:30	Complementary and Alternative Medicine in Newfoundland and Labrador:	Dr. John Crellin &			
	A Discussion Forum on where we are and where we go from here	Dr. Ethne Munden			
		See abstract on page 17			

12:30	Conference Ends	
12.30	COINCICITE LIIGS	

## **POSTERS**

## FRIDAY MORNING—NOVEMBER 27<sup>TH</sup>, 2009

VIEWING TIME: 10:15-11:00

Poster Board #	Title	Presenter	Abstract on page
1	Vasectomy as a Choice for Family Planning - Is there a Downside?	Gina Higgins	36
2	The Effectiveness of the Edmonton Symptom Assessment System (ESAS) in Monitoring Palliative Care Patients in the Community	Gerard Farrell & Karen Murphy	33
3	Should Every Family Physician Have a Pharmacist?	Lisa Bishop	31
4	The MUN-Med Gateway Project: A Path to Health Care for New Canadians	Pauline Duke	33
5	The Effectiveness of a Self-help Program for Depression in Rural Newfoundland Communities	Elizabeth Church	33
6	Effectiveness of an Intensive Intervention During Pregnancy and for one year Postpartum on Breastfeeding Initiation and Duration Rates in Newfoundland and Labrador	Pam Snow	35
7	What are the Determinants of a Successful and Sustainable Program Delivery as it Applies to Child Nutrition Programs in Newfoundland and Labrador	Barbara Roebothan	37
8	Experiences and Understandings of Deaf Adults Living in Newfoundland and Labrador Regarding Genetic Testing and Genetic Counselling for Hereditary Deafness	Victor Maddalena	27
9	The Doctor Humour Study	William Eaton	32
10	Development of the Canadian Primary Care Sentinel Surveillance Network (CPCSSN): The Newfoundland Perspective	Adam Pike & Tao Chen	25

## FRIDAY AFTERNOON—NOVEMBER 27<sup>TH</sup>, 2009

VIEWING TIME 2:00-2:45

Poster Board #	Title	Presenter	Abstract on page
1	Nephrolithiasis in the Emergency Department: Epidemiology and Development of a Rule to Predict the Need for CT Diagnosis	Richard Cullen	30
2	Residential Proximity and Hospital Level of Service: A Geospatial Epidemiological Study of Obstetrical Outcomes	Kris Aubrey	31
3	Effect of vaginal self sampling for HPV on cervical cancer rates: a community based study	Leigh Ann Butler & Pauline Duke	26
4	Use of Natural Health Products in Children: Parents' Experience	Marshall Godwin	36
5	The Simple Lifestyle Indicator Questionnaire (SLIQ): An Assessment of Normative Data	Sara Tully	35
6	The Simple Lifestyle Indicator Questionnaire (SLIQ): An Assessment of Concurrent Validity	Adam Pike	34
7	The Simple Lifestyle Indicator Questionnaire (SLIQ): An Assessment of Convergent Validity	Leigh Ann Butler	35
8	The Eldercare Project: Recruitment and Baseline Data	Heather Pitcher	27
9	Family doctors and pharmacists working collaboratively as a team	Lisa Bishop	28
10	Changing Lifestyle Using Newman's Theory of Health as Expanding Consciousness and Nurse Coaching	Andrea Pike	24

## **BUILDING RESEARCH CAPACITY IN ATLANTIC CANADA**

## SATURDAY MORNING—NOVEMBER 28<sup>TH</sup>, 2009

VIEWING TIME 9:45-10:30

Poster Board #	Title	Presenter	Abstract on page
1	Childhood Obesity Development and Prevention in Newfoundland and Labrador: Early Growth and Parent Practices	Lynn Frizzell	24
2	Lay Perceptions of Genetic Testing in Primary Care	Holly Etchegary	30
3	Decision-making about inherited breast-ovarian cancer risk: Dimensions of genetic responsibility	Holly Etchegary	25
4	Palliative and End of Life Care in Newfoundland's Deaf Community	Victor Maddalena	31
5	A Qualitative Needs Assessment of Community Dwelling Older Adults with Age-Associated Memory Impairment or Mild Cognitive Impairment in Newfoundland	Karen Parsons	23
6	Are QUIP Rounds useful for Teaching Family Medicine Residents how to Answer Clinical Questions?	Lisa Bishop	23
7	Health, Lifestyle, and Ageing with Multiple Sclerosis: Cognitive Debriefing and Development of a Survey	Michelle Ploughman	28
8	Student Opinions of Prescription Drug Marketing Practices	Wanda Parsons	32
9	Creating Rural Age Welcoming Communities Through a Primary Care Lens	Michael Jones	25
10	Academic Half Days at a Distance: The Introduction of Smart Board and Elluminate Technologies	William Eaton	23

## **ABSTRACTS**

### **ORAL PRESENTATIONS**

## A comparison study of the prevalence of overweight and obese preschool children in NL using different reference standards

<u>Dr. Laurie Twells</u>, Leigh Anne Newhook

**Background:** The number of overweight and obese children is increasing in Canada and many other countries. Most epidemiological surveys include school-age children and there is little data on preschool-age children. Although in North America the Centres for Disease Control in the US developed growth charts that are used to screen children by health professionals, internationally the prevalence of overweight and obesity is being reported using a different standard developed by the International Obesity Task Force.

**Research Questions:** The objectives of the study were to define the prevalence of normal, overweight and obesity in a pre school population living in the Eastern region of NL and to compare it with previously reported data using both the CDC and IOTF reference standards and to assess the agreement between the two reference standards.

**Description:** The cross-sectional study involved 1026 children (537 male, 489 female) with an average age of 4.5 years, born in the Eastern region of Newfoundland and Labrador (NL) in 2001. Wights and heights were directly measured for each child and BMI was calculated according to the formula weight (kg)/height (m2). Children were classified as normal, overweight or obese using both the cut-points recommended by the Centres of Disease Control (CDC) in the United States and those recommended by the International Obesity Task Force (IOTF). Statistical comparisons were conducted.

Both the CDC and the IOTF criteria gave similar, but not identical estimates of the prevalence of overweight, 19.1% versus 18.2% respectively. However using the CDC criteria, fewer children were classified as normal weight, 64% versus 74% and more than twice as many children were classified as obese, 17% versus 8% respectively. In this study of preschool children, the use of the CDC growth curves compared to the IOTF criteria led to a significantly higher reported prevalence of preschool obesity. The accurate measurement of a health problem is the crucial first step in defining its associated burden. Although CDC growth charts are used for clinical purposes in Canada, the IOTF criteria are used for international comparisons providing some confusion as to what is the most valid and reliable method to assess childhood obesity.

### Adult Obesity and its Impact on a Provincial Health System in Canada

Laurie Twells, J. Knight, R. Alaghebandan, NL Centre for Health Information

**Background:** In Newfoundland and Labrador, between 25-35% of adults are obese. Due to the increased prevalence of obesity and its associated adverse health effects, it is assumed obesity has negative clinical and economic consequences.

**Research Questions:** The objectives of the study were to examine the association of BMI level with self reported chronic disease, actual measures of physician and hospital health services utilization and the associated direct costs in the province of Newfoundland and Labrador.

**Description:** In a secondary analysis of the provincial component of the Canadian Community Health Survey (2000/01), survey records for respondents aged 20-64 (n=2345) were linked to 5 years of administrative physician and hospitalization data in order to obtain objective longitudinal HSU. Regression models were used to examine whether BMI level was an independent predictor of physician visits, hospitalization and costs.

Of the sample, 37%, 39%, 17% and 6% were classified as normal, overweight, obese, and morbidly obese (BMI = 35kg/m2), respectively. The obese (including morbidly obese) were more likely to report serious chronic conditions (e.g. hypertension, Type II diabetes). Analyses identified the morbidly obese group as having a significantly higher number of GP visits over a 5-year period compared with the normal weight group (BMI 18.5-24.9kg/m2), [median 22.0 vs. 17.0, p<.05], and as having significantly higher



### **BUILDING RESEARCH CAPACITY IN ATLANTIC CANADA**

average costs of GP (p<.001) and specialist services (p<.05). Morbidly obese was a significant independent predictor of GP visits (p < .001) and total physician costs (p < .01), after adjusting for chronic conditions and other covariates. Being obese is associated with increased presence of chronic diseases, namely those related to lifestyle. Morbid obesity is independently associated with increased family physician utilization and total physician costs. A percentage of future health promotion and education efforts and weight loss interventions should be targeted at this high risk group.

# Assessing administrative databases for surveillance of depressive disorders in Newfoundland and Labrador: a multi-linkage approach

<u>Reza Alaghehbandan</u>, Don MacDonald, MSc, PhD, Sarah Wickham, MSc (c), Neil Gladney, MSc (c), Jeff Dowden, MSA, Kayla Collins, MSc, PhD (c)

**Background:** Mental illness is an important public health problem worldwide. In Canada, approximately 16% of health care expenditures can be attributed to psychiatric disorders while one-quarter of hospital days are for its treatment. However, there is still a lack of comprehensive surveillance system for mental disorders in this country.

**Research Questions:** The objectives of this study are 1) to identify a valid case definition for surveillance of depressive disorders using administrative data, and 2) to examine predictive factors associated with true positives, false negatives and false positives, based on selected case definitions.

**Description:** This study is auditing electronic patient charts at three university-based family practice clinics with EMR systems in St. John's, whereby we classify a sample of patients from each clinic into one of two cohorts; those diagnosed with a depressive disorder (experimental) and those not diagnosed with a depressive disorder (control). The classification of patients through the EMRs in the three clinics serves as a "gold standard" in the study, which is then compared to these same patients investigated through the use of various case definitions applied against the provincial hospital and physician administrative databases.

The expected outcomes of this study are measures of sensitivity, specificity, positive predictive value, and negative predictive value in order to assess the reliability and usefulness of administrative data in surveillance of mental illnesses.

The findings of this study will be used as a foundation for an ongoing surveillance of depressive disorders and other mental illnesses, such as anxiety disorders, psychotic disorders etc, in general as well as to support public health decision-making for mental illnesses prevention and management.

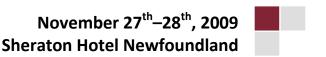
## Can primary Health Care benefit from an Electronic Health Record (EHR)?

Heather Rumsey, Patricia Walsh

**Background:** Nurse Peer Leaders representing the Newfoundland and Labrador Centre for Health Information's EHR Peer Network will highlight how primary care practitioners and the client can realize benefits of improved health information.

**Research Questions:** Does improved health information management decrease wait times, increase in rural communities, improve chronic disease management and help reduce drug reactions.

**Description:** This presentation will focus on the current information network in primary healthcare, look at the proposed vision of an electronic health record and then suggest ways a cradle to grave informatics system will improve healthcare in the future by making the connections (realizing benefits for clinicians and clients). We will give practical examples whereby having the right information at the right time on the right patient will help clinicians make the right decisions in real time. This presentation will also demonstrate that capturing information efficiently and systematically will allow clinicians to identify trends in population health. We will also discuss accountability and privacy issues associated with an Electronic Health Record.



# Community Health Needs and Resources Assessment in Newfoundland and Labrador, Canada: Seniors Issues

Sandra MacDonald, Judith Blakeley, Lorna Bennett, Donna Best, Creina Twomey

**Background:** Community health needs and resources assessment studies are critical when planning healthy public policy and population health initiatives, especially when considering initiatives for healthy seniors in the community. This study is based on the Population Health Framework and supports the belief that partnerships between community representatives and health care professionals provide valuable information upon which to base decisions regarding policy and program formation.

**Research Questions:** The purpose of this study was to assess the community health needs and resources of five regions within the province of NL.

Description: The study used a descriptive, exploratory design to gather qualitative and quantitative data regarding health needs and resources. The research objectives included assessing health beliefs and practices, determining satisfaction with existing community health and related services and determining utilization of selected health and community services. A triangulation of methods (general public household survey, key informant telephone interviews and focus groups sessions) was built into the study in an attempt to provide both a convergent validity and a broad understanding of the data collected. A random sample of households were surveyed using the international tool "Community Health needs and Resources Assessment Guide" (CHNRG) developed by the Association of Registered Nurses of Newfoundland and the Danish Nurses Organization and modified for use in this study. The findings indicate that seniors wanted a primary health approach to community care. Issues arising included the need for improved home care, elder abuse and social isolation. This presentation will focus on recommendations for addressing senior's issues and concerns and will discuss implications for healthy public policy and population health initiatives for healthy seniors in the community.

## **Community Profile Tool for Planning, Implementation and Evaluation of At Risk Populations** *Joanne Rose*

**Background:** The Community Profile Tool integrates a community assessment process into a site specific planning approach that is inclusive of communities and partners. Health promotion and prevention strategies at a community level require systematic changes to the way health services are planned, implemented and evaluated. The success of this method has demonstrated broader application.

**Research Questions:** The objective of the strategy was to target under screened communities/populations to enhance capacity to promote, educate and provide screening services in the places where women live. Targeting an 'at risk' population requires new approaches that are both evidence based and encompass the concepts of community capacity building and cost effectiveness within the population health framework.

**Description:** The Community Profile Tool (CPT) can assess the capacity for community involvement, identify linkages with health care providers and educators, and provide a framework to evaluate the success of interventions that increase participation in screening. The Cervical Screening Initiatives Program has built this community-based tool to profile communities, identify opportunities and barriers to screening and capture screening participation rates. The Community Profile Tool is a simple questionnaire to guide the gathering of information and assist with site specific planning. The outcome measure, screening rates by community, is summarized in a GIS mapping tool which can identify under screened communities and inform and enhance planning for the delivery of health services. This community-based information – the profile, partners and screening rates - is used to identify opportunities for collaboration among health providers, health educators and key community contacts to improve screening rates.

Evaluation is both process and impact driven. Critical indicators are the pre and post intervention screening rates, level of involvement of the community partners, enhanced provision of services and individual feedback from service providers. The Community Profile Tool has proven to be instrumental in increasing uptake in under screened communities; improved screening rates have been seen in many of the communities evaluated to date.

# Complementary and Alternative Medicine in Newfoundland and Labrador: A Discussion Forum on where we are and where we go from here

Dr. John Crellin, Dr. Ethne Munden

Abstract not available.

# Evaluating The Impact Of Enhancing Information And Communication Technology In A Community-Model Primary Health Care Setting In NL

Kayla Collins, Dr. Doreen Neville

**Background:** The Connaigre Peninsula primary health care (PHC) setting was chosen by the Newfoundland and Labrador government to explore the value of sharing client information in an interdisciplinary environment, by building on existing technologies to fill gaps in information and communication capabilities. A series of technical enhancements were implemented in this setting over an approximately two year period. The purpose of this study was to evaluate the impact of these technical enhancements.

**Research Questions:** 1. What are the benefits of the information and communication technology enhancements and how to they compare to anticipated benefits?

2. What are the lessons learned that can be used by other primary health care sites engaging in similar initiatives?

**Description:** This presentation will: a) describe the development of the evaluation study, which was guided by "Towards an Evaluation Framework for Electronic Health Records Initiatives" by Neville, Gates, MacDonald et al (2004) and included key stakeholder engagement; b) summarize the information and communication technology enhancements in the Connaigre Peninsula primary health care setting; and c) provide an overview of study methods and key findings.

## Healthy People, Healthy Communities: Conducting Needs Assessments at Eastern Health

Gillian Janes , Lisa Browne, BA, MBA

**Background:** One of the responsibilities of a health authority in our province is to assess health and community services based on the determinants of health. To date, Eastern Health has completed needs assessments on the Burin Peninsula (2006), Bell Island (2007), and the Southern Avalon (2007); during 2009, we are assessing Northeast Avalon. A Community Advisory Committee guides the process in each area.

**Research Questions:** The objective of the primary research is to find out the needs of the population based on the determinants of health. The needs assessments involve telephone surveys, key informant interviews and focus groups.

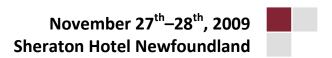
# Implications of Medical Genetics Research for Clinical Care: Knowledge Translation Sessions in Rural Newfoundland and Labrador

<u>Dr. Jane Gree</u>n

**Background:** Dr. Green is a Professor of Medical Genetics, MUN, and has worked in medical genetics research in NL for 30 years, particularly on hereditary eye diseases and hereditary cancers, including the development of clinical screening and management plans. She has a strong interest in translating the new genetic information for medical students, physicians, patients and their families, and the general public. This has involved many trips to rural NL. In 2008 she received a Regional CIHR Knowledge Translation Award for her work in rural Newfoundland and Labrador.

Research Questions: - to maximize new genetic knowledge, both clinical and molecular, regarding hereditary diseases in NL

- to provide relevant genetic information to family members and health care providers
- to work together to develop clinical screening and management  $\boldsymbol{p}$



**Description:** Because of the explosion of genetics information recently, it is difficult for physicians and other health care practitioners to recognize what is most relevant to their patients. Because of the population structure of Newfoundland and Labrador with genetic isolates and clusters of genetic disease, there have been many valuable studies on hereditary diseases here contributing to a better understanding of the clinical characteristics and natural history of these conditions as well as identification of new genes and mutations. The objective of a series of Knowledge Translation (KT) presentations being given at rural hospitals in 2009-2010, is to describe when genetic testing is available and when it is not, using examples from hereditary colon or breast cancer and other genetic conditions relevant to each area. The value of clinical screening for early diagnosis and treatment of hereditary cancers or cardiomyopathies, even when genetic testing is not available, and the importance of recognizing hereditary eye diseases and hereditary deafness to improve education and career planning, is also discussed at these sessions.

This presentation will review the clinical and molecular aspects of recent medical genetics research in the province, and the Knowledge Translation program in rural Newfoundland and Labrador.

# Integrating paramedics into rural health care delivery systems – Full Scope–Expanded Role Ken Jenkins

Abstract not available.

### **Interprofessional Mental Health Training in Rural Primary Health Care Settings**

T. S. Callanan, O.J. Heath, P.A. Cornish, E. Church, V. Curran, C. Bethune

**Background:** Access to mental health service and resources is limited in rural and remote setting and , health care practitioners in rural primary health care settings often have little training in mental health. An innovative training model was established to deliver instruction regarding interprofessional collaboration and mental health interventions.

**Research Questions:** to present an example of an interprofessional continuing education in mental health in rural primary health care settings. To review the impact of such a training program delivered via video conferencing.

**Description:** This training program was developed in response to requests from rural communities for mental health training. Two pilot projects were conducted, the results of which formed the basis for the design of the program. subsequently, the program was delivered to six rural communities, each of which had identified and funded primary health care teams. The intent of the program was to promote collaborative interprofessional practice skills and provide training in range of mental health interventions. There were seven modules in the program presented in one initial on-site visit and eight follow-up interactive video conferences. Each module included both skill and content components and focussed on interprofessional team building. The role of a local facilitator was identified as essential for the conduct of the program. The program had a positive impact on health care practitioners' attitudes to interprofessional team work and their confidence in providing the mental health services in a variety of areas.

### Needs Assessment of Palliative Care for Newfoundland and Labrador

Fiona O'Shea

**Background:** Newfoundland and Labrador has a small, multicultural population spread across a massive geographic area. The population is aging, demographics are changing and, there is an increasing number of people living longer with multiple complex medical diseases. Providing comprehensive palliative care services to people living with life limiting and terminal diseases from diagnosis to death within acute care, long term care and the community is a challenge in urban, rural and remote communities alike.

**Research Questions:** What are the existing palliative care services in Newfoundland and Labrador? What are the gaps in the current palliative care services? What are the solutions to these gaps?

**Description:** This is a provincial research project. The quantitative section consists of surveying all members of nine professional groups. The qualitative section consists of visits to sites of care as outlined in the document "Guide to Health and Community"



Services Newfoundland and Labrador." 149 people participated in 100 interviews in 53 sites throughout Newfoundland and Labrador. 82 interviews were taped and transcribed in their entirety. The interviews were analyzed. There are 80 subthemes identified. These are collapsed down to 10 main themes. A literature review of five years of five palliative care journals and key regional, provincial, national and international papers, supports the identified themes and the recommendations made by participants in the surveys and interviews, for an independent Provincial Palliative Care Service for Newfoundland and Labrador.

### Occupational health and safety experiences of youth in rural Newfoundland and Labrador

Dr. Nicole Power, Dr. Kathryne Dupre, Dr. Arla Day, Dr. Barbara Neis

**Background:** The occupational health and safety (OHS) experiences of youth in rural environments have received little research attention. Because education, work experience, and skills are inversely related to age, the employment options of youth tend to be more limited than those of adults. As a result of these limitations to youth work, the OHS experiences of youth are unique from those of adult employees. Moreover, youth's options may be even more constrained in rural environments, reflecting their distinctive demographic, economic, and social contexts.

**Research Questions:** What is the relationship between paid work in rural environments and the health and safety of employed youth in Newfoundland and Labrador?

**Description:** This presentation reports on the preliminary results of a SafetyNet pilot project entitled, "An examination of the occupational health and safety of employed youth in rural Newfoundland and Labrador," funded by a CIHR Centre for Research Development grant to the Atlantic Rural Centre at Dalhousie University. We conducted in-depth, qualitative interviews in person or by telephone with ten youth. Each participant also completed a demographic survey. Qualitative analysis has identified links between paid employment and related OHS experiences, and features of the rural society in terms of the social and economic organization of community, demographics, and distance from larger centres. In this presentation, we will focus on the case of student summer employment. The interviews suggest that rural communities rely heavily on government-funded programs to create summer jobs for youth. Young people identified a number of technical risks associated with these jobs, such as a lack of safety equipment. However, interviews also suggest that these jobs take place in communities where 'everyone knows everyone,' which both mitigates as well as enhances risk on the job.

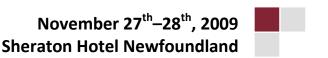
## Patterns of pain in work-related musculoskeletal disorders in crab processing: implications for Primary Health Care

Dr. Shirley Solberg

**Background:** Work-related musculoskeletal disorders (WMSDs) are a major health and safety problems in many occupations and industries. One of the main symptoms of this problem is pain and as with other types of chronic pain, it is usually not dealt with well at the primary healthcare level.

**Research Questions:** The objective of this research, which was part of a larger project, is to examine the prevalence of WMSDs among crab processors at a single plant and look at the type of health care services, the injured workers used for these problems.

**Description:** Using a body char, the DASH and SF-12v2 instruments and a survey questionnaire we interviewed 107 workers (73 women and 34 men) working in different jobs within a single plant. Almost 50% of the women and 42% of the men reported symptoms of WMSDs and for 46% of the participants these problems were chronic. Although most of those with symptoms sought episodic care from a local physician and received some medication, the majority of those affected self-medicated in order to continue work. The research findings have a number of implications for primary health care but more broadly for the role that primary health care workers can play, they can contribute greatly to improving occupational health and safety in small rural communities where workers may not have access to other types of health care.



## Primary Health Care Information program at the Canadian Institute for Health Information (CIHI)

Greg Webster, Patricia Sullivan-Taylor

**Background:** The Primary Health Care Information program at the Canadian Institute for Health Information (CIHI) collaborates with key stakeholders across Canada to address priority primary health care (PHC) information needs. PHC is the most common health care experienced by Canadians. Our goal is to establish new pan-Canadian data sources which can be used by a range of stakeholders to better understand PHC across Canada and inform health policy and decision-making at various levels.

**Description:** Projects under way to improve the understanding of PHC across Canada include:

- PHC Indicators Electronic Medical Record (EMR) Content Standards—to support the collection of standardized data on quality of care in EMRs;
- Voluntary PHC Reporting System Prototype pilot—to work with interested PHC providers to test methods for collecting quality of care and chronic disease data from EMRs;
- Feasibility study for a new practice-based survey of patients and providers to collect data from a rolling, random sample across multiple PHC models;
- Pilot work to explore options to expand the use of existing PHC data sources, such as patient-level fee-for-service physician billing data for use in new analyses and enhancements to the quality and completeness of PHC data for alternative payment (non-fee-for-service) activities; and
- Analysis and Reports—to use existing surveys to report on topics such as: Experiences with PHC in Canada using new data from the Canadian Survey of Experiences with PHC, 2008, and Diabetes Care Gaps and Disparities in Canada using data from the Canadian Community Health Survey diabetes care module.

CIHI is working in collaboration with stakeholders to address PHC data gaps in Canada. These activities are intended to address and support the PHC information needs of jurisdictions and others.

# Post-dated or not? A RCT of delayed antibiotic prescriptions for acute upper respiratory infections in primary care

<u>Dr. Graham Worrall</u>, Dr Wendy Graham

**Background:** Most upper respiratory tract infections are caused by viruses, yet primary care clinicians frequently treat them with antibiotics. Using a delayed prescription - which the patient is asked to use only if the illness does not improve within a few days - has been shown in previous studies to result in a considerable reduction of unnecessary antibiotic use.

**Research Questions:** If the delayed antibiotic prescription is post-dated, rather than dated the day the patient visits the clinician, will this further reduce the rate of antibiotic use?

## Predicting the relative need for general practitioner services: A case study in Newfoundland and Labrador Dr. Rick Audas & Dr. Mike Doyle, Toby Dunne

**Background:** Resources to provide general practitioner physician services in Canada are collected primarily though general taxation by both the provincial and federal governments. The Canada Health Act suggests that health care resources be allocated on the basis of medical need. Vertical equity considerations suggest that those in greater medical need of health care resources to satisfy those needs. Horizontal equity considerations suggest that those who have comparable medical needs receive the same allocation of resources.

**Research Questions:** In this paper, we build on the age-gender capitation model for general practitioner services by incorporating a number of other measures including socioeconomic status (SES), the presence of chronic conditions and a variety of lifestyle choices to determine the impact each has on the relative need for general practitioner services.



### **BUILDING RESEARCH CAPACITY IN ATLANTIC CANADA**

**Description:** One way to improve the equity in primary health care funding for general practitioner services is to allocate resources directly to geographical areas and communities. This is referred to as a 'capitation' model. a simple capitation model would allocate a dollar figure for each citizen in a particular community. However, this would fail to capture the well-documented differences in relative need across the age distribution and across genders.

To compare and validate the results we use MCP claims data, linked Canadian Community Health Survey (CCHS) data and linked data from the Newfoundland Adult Health Survey (NAHS). We found that the needs based models add significant predictive power when they incorporate the number of chronic conditions to age and gender. However, lifestyle and SES variables, while often significant and consistent with the determinants of health approach, add little marginal predictive power. The implications of inequitable health care funding across populations is that specific areas are over-funded and over-services relative to other areas. Since the marginal benefit of health care declines as service levels increase, a more equitable reallocation can improve the total health output from a fixed budget.

### Preparing health professionals to provide collaborative, patient-centred care

Anne Kearney, Curran, V., Heath, O.& Sharpe, D.

**Background:** Health Canada has funded 20 projects to increase inter-professional education (IPE) to health professional students with the ultimate goal of improving patient care. Memorial University received funding to develop and deliver a comprehensive curriculum for both undergraduate students in medicine, nursing, pharmacy and social work and practicing clinicians.

**Research Questions:** This presentation will provide an overview of a systematic evaluation of the IPE curriculum at Memorial University including participant satisfaction with IPE and attitudes related to IP teamwork.

**Description:** Participant reaction to the IPE curriculum was very positive and contributed to their understanding of IPE and teamwork involving other health professionals. At the undergraduate level, highest satisfaction ratings were given to experiential delivery components such as face-to-face small group case-based discussion, work with standardized patients, and panel discussions. IPE has the capacity to address many stressors in the Canadian health care system including increasing patient acuity, unacceptable wait times, and escalating costs and it is essential that students be exposed to well-planned IPE at various phases of their undergraduate and graduate education. IPE is a complex endeavour that requires meticulous planning undertaken in the spirit of true inter-professional collaboration between participating health professional academic programs.

## Report on the results of the study on Use of Natural Health Products in Children in Newfoundland and Labrador

Marshall Godwin

**Description:** The study on the use of Natural Health Products(NHP) in Children in Newfoundland and Labrador involved several parts. We surveyed all of the family physicians in the province regarding their experience and opinion with their young patients being on NHP. We surveyed parents in the waiting rooms of family doctors offices about their use of NHP in their children. We reviewed the children's charts to assess whether the physicians knew if their patients were on NHP and also so that we could test for drug-NHP interactions. We also did interviews of parents who use NHP in their children. The preliminary analysis of the results will be presented. As well, a poster at this conference presents some of the results.

### Results from the 2008 Canadian Survey of Experiences in Primary Health Care

**Greq Webster**, Patricia Sullivan-Taylor

Background: Primary health care (PHC) is the most common health care experienced by Canadians. This presentation will provide new information about Canadians' experiences with PHC. The results are based on CIHI's analysis of the 2008 Canadian Survey of Experiences with Primary Health Care (CSE-PHC), a survey co-funded by CIHI and the Health Council of Canada. The cross-sectional telephone survey was fielded by Statistics Canada and included a stratified random sample of adults 18 years and older in 10



provinces and three territories in private households (sample size ~ 11,500). It provides pan-Canadian and provincial-level data for the general population and people with select chronic conditions.

**Description:** Results: Highlights include new analysis on PHC access, continuity, coordination, chronic disease prevention and management, self-care, interdisciplinary teams and satisfaction. For example, 86% of adults have a regular doctor and 91% report a regular place of care. More than two-thirds of adults have been with their doctor or place of care for more than 5 years. Results also highlight chronic disease care practices, comprehensiveness of care and quality of patient-provider interactions. For example, 81% would recommend their regular doctor or place of care to a friend, yet 38% of adults with one or more of seven chronic conditions never received help making a treatment plan in the past 12 months.

Conclusions: This survey can be used to provide insights about PHC that point to areas of actionable improvement. These results begin to address PHC data gaps and can be used to inform system-level research and decision-making focused on improving the quality of PHC for Canadians.

# The relationship between continuity of family physician care and in-patient hospitalization, in elderly people with diabetes

Dr. Graham Worrall

**Background:** Family physicians are sure that continuity benefits their patients, especially elderly patients with chronic diseases. To date, however, there is little objective evidence for this belief.

**Research Questions:** In elderly people with diabetes, is a higher level of family physician care positively correlated with lover levels of in-patient hospitalization?

**Description:** Using existing healthcare electronic databases, we calculated three different indexes of family physician continuity of care (COC) for elderly people with diabetes. We assembled a retrospective cohort of elderly diabetic people and examined various healthcare outcome, including acute admission to hospital and death rate. We then used correlation statistics to examine whether higher COC was associated with health outcomes.

## Undergraduate family medicine preceptor capacity and retention in Newfoundland and Labrador Kris Aubrey-Bassler, Scott Moffatt MD FCFP, Norah Duggan MD CCFP

**Background:** The Memorial University of Newfoundland Medical School class size will be expanding gradually over the next few years and the length of the family medicine clerkship rotation will likely be increasing from 4 to 8 weeks. This will necessitate an increase in the precepting capacity of current preceptors and/or the recruitment of additional preceptors to fill this need. Additionally, no one has documented the factors that affect precepting capacity in the province.

**Research Questions:** We sought to document the current precepting capacity in the province, outline the potential capacity and determine factors that affect the recruitment, retention and precepting capacity of these preceptors.

**Description:** We have circulated a two page self administered questionnaire to all family physicians in Newfoundland and Labrador known to have been involved in precepting undergraduate medical students in the previous 2-3 years. A similar questionnaire was circulated to all other family physicians in the province identified from the College of Physicians and Surgeons of Newfoundland and Labrador web-based physician directory. The questionnaire consists of demographic and practice related questions, a self-report measure of recent undergraduate precepting activity and estimates of maximum precepting capacity for the different undergraduate family medicine clinical rotations. Additionally, we included Likert scale questions to determine the relative importance of various factors hypothesized to be related to precepting capacity. At the time of this submission, surveys are currently being returned and have not yet been analyzed. We will compare current and future precepting capacity using t-tests, and factors related to capacity using the chi-squared test. Results will be used to develop strategies to expand preceptor capacity.



## **POSTERS**

# A Qualitative Needs Assessment of Community Dwelling Older Adults with Age-Associated Memory Impairment or Mild Cognitive Impairment

Karen Parsons, Aimee Surprenant, Anne-Marie Tracey, Dr. Marshall Godwin

**Background:** By learning the specific needs of older adults with mild memory impairment here in our province and disseminating the results to healthcare professionals working in this area improved healthcare can be facilitated by building upon this evidence-based knowledge.

**Research Questions:** To identify priority health-related needs of community dwelling older adults with mild memory loss. To identify the services and potential intervention strategies that could assist this group of individuals to meet these needs.

**Description:** This is a qualitative needs assessment of older adults with mild/early memory loss. Twenty-four individuals and primary support person/family member participated in one face-to-face audio-taped interview using a semi-structured interview questionnaire. Focus groups were also conducted. Analysis followed a five-step method of qualitative contextual analysis. Themes were identified that not only answered the above research questions but also revealed a great deal about the lived experience of losing one's memory.

## Academic Half Days at a Distance: The Introduction of Smart Board and Elluminate Technologies <u>Dr. William Eaton</u>

**Background:** At any given time, over half the residents in Memorial's Family Medicine Residency program, are working in rotations away from the academic center in St. John's. All residents are expected to attend academic half days every Tuesday afternoon. Until July 2009, residents viewed the half days via the internet, using audio and video broadcast (E-Presence) which does not have interactive functions.

Research Questions: This poster will describe the advantages and drawbacks of introducing these newer technologies.

**Description:** Using the Smart Board and Elluminate technologies and speakerphones, residents are now able to interact freely. Learners at faraway sites can run the system remotely, and present the seminar from a distance.

These academic half days are broadcast to our residents all over the province and to sites in New Brunswick. The newer technologies allow for active participation regardless of the learner location, using verbal and keyboard interaction between the central academic site and the distant sites.

## Are QUIP rounds useful for teaching family medicine residents how to answer clinical questions?

Lisa Bishop, Dr. Norah Duggan

Dr. Heather Flynn

**Background:** "Questions in Practice" (QUIP) rounds are an opportunity for residents to identify a clinical question, research the answer, present the information they retrieved, and discuss how they would apply it to their practice. QUIP rounds have been ongoing for several years at two of the family medicine academic sites at MUN, but the value of QUIP rounds in teaching family medicine residents how to answer clinical questions has not been evaluated.

**Research Questions:** The objectives of the study were to determine the opinions of family medicine residents toward their experiences with answering clinical questions, the sources of information used to answer clinical questions, the value of QUIP rounds and the value of an interdisciplinary approach to QUIP rounds.



**Description:** All residents enrolled in the family medicine program at MUN as of June 2008 were surveyed to obtain their experience with answering clinical questions. Those residents who participated in QUIP rounds were asked additional information on the value of QUIPs as a teaching tool. The questionnaire gathered information about the residents' current experiences with answering clinical questions including what sources they used to answer clinical questions, the residents' experience during QUIP rounds including their searching, interpretation and application skills, and the value of interdisciplinary QUIP rounds.

A total of 46 residents were surveyed, and 42 residents responded (91%). Eighty-eight percent of residents felt comfortable with answering clinical questions. Three quarters felt that QUIPs improved their confidence in patient care and 97% felt their clinical knowledge improved. Twenty-four percent of respondents participated in interdisciplinary QUIP rounds, with the pharmacist being the most commonly present other health professional. All respondents felt that the interdisciplinary approach to QUIPs helped introduce different resources and 90% felt that it provided useful additional information. Overall, QUIPs were considered a useful learning experience by 80%.

## Changing Lifestyle Using Newman's Theory of Health as Expanding Consciousness and Nurse Coaching Andrea Pike, Dr. Marshall Godwin

**Background:** Cardiovascular disease is the leading cause of death in Canada. Many factors contribute to its development including lifestyle, clinical factors, biochemical factors, demographics, genetics, and the broader determinants of health. This study is concerned with what we believe are the most modifiable risk factors – those related to lifestyle.

**Research Questions:** To determine if an intervention integrating Newman's HEC theory with a nurse coach strategy in individuals with pre-hypertension and pre-diabetes but without existing CVD can prevent the development of frank hypertension and diabetes thereby decreasing the likelihood of developing CVD.

**Description:** Design: Sequentially balanced cohort study. Setting: Primary care. Participants: Pre-diabetic and/or pre-hypertensive patients aged 40-60 years. Intervention: The nurse coaching strategy is based on a client-centered, facilitative approach meant to enhance individuals' intrinsic motivation to change. It will run over the course of one year including 4 group and 3 individual face to face meetings. In addition, nurse coaching by telephone will be made available through scheduled appointments based on one hour per participant per month. Outcome measures: Change in thinking (as measured by Schwarzer and Renner's health related self-efficacy scale) that precedes or is concurrent with lifestyle behavior change (as measured by the Simple Lifestyle Indicator Questionnaire) are the primary outcomes. Secondary outcomes (cardiovascular risk, blood pressure, fasting blood glucose, quality of life) will be assessed by the Framingham Global Risk Assessment, the BpTRU, Accu-Chek Plus, and SF-36 respectively. Results: This research is in progress. This poster will highlight study methods. Conclusion: It is anticipated that the intervention will lead to sustainable, positive changes in thinking, improved lifestyle behavior, decrease in global cardiovascular risk, and improvement in fasting blood glucose, and blood pressure. Further, it is anticipated that these changes will persist up to one year following the completion of the intervention.

## Childhood obesity development and prevention in Newfoundland and Labrador: Early growth and parent practices

Lynn M. Frizzell, Patricia Canning, PhD

**Background:** Research shows obesity risk can be set in the earliest years of life and that the rate of early postnatal growth is a particularly significant contributing factor. Insofar as the rate of postnatal growth is dependent on parent practices, it represents a modifiable risk factor that may be targeted by obesity preventions.

**Research Questions:** To examine rates of growth from birth to age five years and the relationship between early growth and body weight status. To document the current prevalence of overweight and obesity among young children. To measure parents' knowledge, attitudes, beliefs, practices and readiness to change in order to guide the development of obesity prevention initiatives and to provide a baseline for future evaluation.



**Description:** This research project is designed as two studies. Since, 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 - data for Study 1 will be gathered from child clinic records and parents will be recruited at clinics, for Study 2. Study 1: Date of birth, sex; birth weight and length; weight, length/height and date at each immunization visit will be collected from the records of the 2001 birth cohort of children entering school September 2009. Study 2: Parents recruited at clinics throughout the Province will complete questionnaires to determine their knowledge, attitudes, beliefs and practices regarding healthy child growth promotion and child obesity prevention. Findings will provide up-to-date prevalence estimates. Examination of the relationships between birthweight, early rates of growth and body weight status will increase understanding of the development of child obesity. Parental and family factors contributing to the development of child obesity will be identified. Findings will be used to inform the development of obesity prevention strategies, ensuring they are designed to meet the identified needs of the parents of this Province, and will also provide the baseline against which prevention initiatives may be evaluated.

## **Creating Rural Age Welcoming Communities Through a Primary Health Care Lens** *Michael Jones*

**Background:** The Kittiwake Coast Primary Health Care Region was formally recognized in 2007 as one of Central Health's six PHC sites. The region has a rapidly aging population with approximately 20% of community populations consisting of people aged 65 years and older. With this in mind, considerable efforts have been expended in researching senior's issues in this region. This evidence-based research has been used to develop and implement new seniors programming within the region to ensure local seniors remain strong, vibrant and healthy later in life.

**Research Questions:** What specific health issues are prevalent in the region and what possible activities/programs can be designed to address them? What do seniors see as the relevant issues facing them in their daily living? What do they see local health care professionals play in those? To work with other community partners to design, develop and implement interprofessional solutions to current and future needs of our aging population.

**Description:** This presentation will outline research efforts undertaken by the Primary Health Care Leadership Team at Brookfield Bonnews Health Centre to identify issues pertinent to this age group and the diseases/health issues facing them (i.e. Type II Diabetes, mental health, physical inactivity).

The P.H.C.L.T. has developed (in one case jointly developed) various primary research tools/methodologies to investigate these issues, including:

- -Seniors Surveys
- -Focus Group Sessions (a. Healthy Aging Celebration; b. Vision Kittiwake Coast)
- -Community Advisory Committee (C.A.C.)

The Primary Health Care Lens and the Principles of PHC:We consider the five pillars of primary healthcare to be (i) interprofessional collaboration; (ii) health promotion; (iii) appropriate technology; (iv) accessibility and (v) public participation. These principles are always nearby when the P.H.C.L.T. and C.A.C. meet to discuss issues regarding seniors and program design, development and implementation.

### Decision-making about inherited breast-ovarian cancer risk: Dimensions of genetic responsibility

Holly Etchegary, Fiona Miller, Sonya DeLatt, Brenda Wilson June Carroll, Mario Cappelli

**Description:** Since genetic information has implications for family members, some choices about genetic risk may be influenced by perceptions of responsibility to relatives. Drawing upon 20 semi-structured interviews with test recipients in Canada, this study explored decisions about inherited breast-ovarian cancer. Qualitative data analysis revealed the pervasive significance of genetic responsibility in test decisions. We highlight three dimensions of genetic responsibility: 1) to know about the self for self; 2) to know about the self for others; 3) to know about the self to oblige others to know. It is argued that these dimensions of genetic responsibility have implications for test decisions, family relationships and other family members' desire to know (or not know) and to act (or not act) with respect to their own genetic risk. In particular, genetic responsibility may play out as a framing of a relative's



moral obligation to know their risk that could obviate any interest they might have in not knowing. We conclude that perceptions of responsibility to – and of - other family members be thoroughly explored in genetic counseling sessions.

# Development of the Canadian Primary Care Sentinel Surveillance Network (CPCSSN): The Newfoundland Perspective

Adam Pike & Tao Chen, Dr. Marshall Godwin

**Background:** Most health system work relating to chronic disease takes place in the primary care setting. The quality of data deriving from these settings, however, is relatively poor. The growing use of electronic medical records (EMRs) in family medicine in Canada provides an important opportunity to collect more accurate, complete, and timely data than traditional billing-based surveillance systems without significantly increasing physician workload.

**Research Questions:** To recruit primary care practitioners with EMRs from the practice based research network in NL for the purposes of extracting anonymous health data about patients with chronic disease and transferring it to a central surveillance database.

**Description:** A pan-Canadian primary care surveillance network based on data extraction from multiple EMR systems can provide an important and unique source of information for chronic disease surveillance. This presentation will report on the experience of Newfoundland's practice based research network as the CPCSSN attempts to assess the feasibility of this approach. Design: Feasibility Study. Setting: Primary care practices using EMRs. Participants: 20 family physicians and their patients who have at least one of the following chronic diseases: Hypertension, COPD, Depression, Arthritis, Diabetes. Outcome Measures: Ability and ease with which data can be extracted from EMRs in NL and transferred to the central surveillance database. Results: This research is a work in progress; results will be available at the conference. Early findings from the first EMR system used (Wolf) are promising. To date, data have been extracted from the Wolf EMR system and transferred to the surveillance database. Newfoundland's surveillance database currently houses information such as the number of cases of our identified chronic diseases for 9 healthcare providers and 3599 patients. Conclusion: It is anticipated that collecting and amalgamating EMR data from multiple EMR systems is a feasible approach for a chronic disease surveillance system.

## Effect of vaginal self-sampling on cervical cancer screening rates: a community-based study Leigh Ann Butler, Pauline Duke

**Background:** Although cervical cancer is highly preventable and treatable if detected early, Newfoundland and Labrador has one of the highest incidence rates in all of Canada. The primary underlying cause of invasive cervical cancer is persistent infection with oncogenic Human Papilloma Virus (HPV). Recently, there has been much interest in using HPV testing as an effective way of screening for cervical cancer. This test could be used in addition to the Pap smear and it would be beneficial to cervical cancer screening initiatives throughout Canada and around the world.

**Research Questions:** 1. Does a self-collection Dacron swab-based method of specimen collection lead to improved screening coverage for cervical cancer in under screened and unscreened women compared to clinician collected Pap smear based strategies?

2. What proportion of women in a community based population would use a self-collected Dacron swab-based method to screen for HPV?

**Description:** This study will investigate whether the availability of an option to self-collect vaginal specimens for HPV - based cervical cancer screening will increase the proportion of women who are screened for cervical cancer. The investigators will study three rural communities in Newfoundland and Labrador with similar demographics. Potential participants living in study community 1 will have the option of being screened for HPV infection through a vaginal self-collection method in addition to the continued availability of PAP smear screening done by physicians and nurse practitioners. This community will also see the introduction of an intensive community - based educational and promotional campaign demonstrating the importance of cervical cancer screening. Study community 2 will receive the same intensive community - based educational campaign as study community 1; however, the only screening method available to potential participants will be the usual Pap smear screening done by local practitioners. Finally, study community 3 will serve as the control community. It will not receive an educational and promotional campaign nor have the



availability of a vaginal self collection method for HPV screening. This community will continue receiving the same cervical screening services as all other communities in the province with Pap smears being offered by local practitioners. The observed cervical cancer screening rates will be compared between 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 in Newfoundland and Labrador.

## Effectiveness of an intensive intervention during pregnancy and for one year postpartum on breast feeding initiation and duration rates in NL

Dr. Pamela Snow, Dr. Wanda Parsons, Dr. Pauline Duke

**Background:** There is compelling evidence that breastfeeding improves health outcomes for both mother and child. Newfoundland and Labrador has the lowest breast feeding initiation rate in Canada.

**Research Questions:** Does and intensive intervention during pregnancy and for one year postpartum improve breastfeeding initiation and duration rats in this province?

### ElderCare Study: Evaluation of a nurse-based management program- Preliminary Analysis

Heather Pitcher, Dr. Marshall Godwin

**Background:** Care of the elderly poses a central challenge to health care systems and 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:** To assess the need for a nurse-based management program in order to improve the quality of life of community living elderly people.

**Description:** Design: Cluster randomized trial. Setting: Primary care practices and patient homes. 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 as evidenced by scores on the CASP-19 and SF-36. Other outcomes under investigations included level of patient satisfaction and health services utilization. Results: This research is still in progress. However, preliminary results based on approximately 100 participants 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, and have significantly fewer past year hospitalizations, family doctor visits and ER visits as compared to baseline and control group scores. Conclusions: Based on anticipated results we might conclude that participants who received the intervention will exhibit a higher quality of life and decreased use of the healthcare system.

## Experiences and Understandings of Deaf Adults Living in NL Regarding Genetic Testing and Genetic Counseling for Hereditary Deafness

Dr. Victor Maddalena, Myles Murphy, Sandra M. Cooke

**Background:** In the biomedical paradigm, deafness is considered a disability that can be treated or prevented. However, people who identify with deaf culture do not consider deafness as a disability, but rather it is an integral part of their cultural identity. Therefore, there may be a conflicting view about the utility of gentic testing for deafness in the deaf community.

**Research Questions:** To determine the attitudes of members of the deaf community and their hearing family members towards genetic testing for deafness. To determine the experiences genetic health professionals have with genetic testing of deaf individuals and families and their personal perspectives on genetic testing for deafness. To make recommendations to shape policy and guidelines around genetic testing for deafness.



**Description:** A Powerpoint presentation translated into American Sign Language (ASL) on DVD will be shown to focus groups comprised of individuals from the deaf community and their hearing family members. The Powerpoint will explain the elements of genetics and inheritance as well as the central issues around genetic testing for deafness. After the presentation, open-ended questions will be posed to participants to assess their attitudes towards genetic testing for deafness. In addition, genetic health care professionals will be interviewed using open-ended questions to determine their attitudes and experiences with genetic testing with deaf individuals and families. It is anticipated that the results of this study can help shape policy and guidelines around genetic testing for deafness as well as other genetic non-preventable disabilities.

### Family Doctors and Pharmacists Working Collaboratively as a Team

Lisa Bishop,Dr. Heather Flynn,Dr. Norah Duggan

**Background:** The Shea Heights Community Health Centre has an interprofessional team consisting of a pharmacist and family physicians. This interprofessional collaboration has enhanced the quality of care provided to the patients. With chronic disease management becoming more complex with our aging population, collaboration with pharmacists can help provide optimal patient care.

**Research Questions:** 1) To illustrate the collaboration of a pharmacist and family physician in providing coordinated patient care in primary health care.

2) To highlight the benefits of collaboration in patients with complicated medication regimens.

**Description:** Several cases will be presented to illustrate the benefits of this interprofessional practice model. Family physicians at the clinic identify patients who are likely to benefit from medication assessment and are consulted to the pharmacist. The pharmacist meets with the patient to complete a comprehensive medication review, and a consult note with drug therapy recommendations is placed in the patient's chart. Several cases that illustrate this interprofessional model will highlight managing chronic disease states, such as diabetes and hypertension, as well as managing adverse drug reactions and assisting with adherence. The addition of the pharmacist to the primary health care team has fostered positive attitudes about interprofessional practice and has allowed for more optimal pharmacotherapeutic decisions for the patients.

## Health, Lifestyle and Ageing with Multiple Sclerosis: Cognitive Debriefing and Development of a Survey Michelle Ploughman, Mark Austin

**Background:** MS symptoms and progression are highly variable. One of the most important questions MS patients ask is 'what should I expect in the future and how will the disease progress?'. We know very little about what people with MS can do stay health as they get older.

**Research Questions:** The specific aim of this project was to identify health and lifestyle factors that may influence ageing well with MS. A secondary aim was to perform cognitive debriefing and refinement of specific survey tools intended for postal survey in older people with MS.

**Description:** Eighteen individuals over the age of 60 with MS for more than 20 years participated in in-depth semi-structured interviews exploring healthy aging and lifestyle. As part of a pilot survey, they also completed five questionnaires examining health, abilities and lifestyle (EQ-5D, Barthel Index, Personal Resources Questionnaire, Simple Lifestyle Indicator Questionnaire and Frenchay Activities Index). Responses as well as difficulties with clarity of the survey questions were recorded. Subjects' (14 F/4 M) mean age was 66.5 ± 6.7 yrs with mean Barthel score 68.4 ± 28.82. Time from first symptoms was 33.5 ± 8.22 yrs. Four subjects required question clarification to complete the Barthel Index (BI) and the PRQ2000. Six subjects required additional clarification to complete the Simple Lifestyle Questionnaire (SLIQ) and seven subjects found parts of the Frenchay Activities Index (FAI) unclear. Half of subjects were not able to answer EQ-5D independently. Subjects, despite reading the instructions, were not able to decipher the EQ-5D rating scale. Subjects had difficulty interpreting the difference between mild, moderate and vigorous exercise in the SLIQ and as well, had difficulty interpreting language within the FAI. This pilot survey indicates that 20 to 50% of older people with MS had difficulty interpreting survey questions intended for postal distribution. Based on the findings, the authors adapted the tools for this

## **BUILDING RESEARCH CAPACITY IN ATLANTIC CANADA**

participant group. Clearly, cognitive debriefing is required in order to determine effectiveness of these survey tools in this population. The individual's social network was more related to quality of life than other variables, including level of disability.

### Lay perceptions of genetic testing in primary care

<u>Holly Etchegary</u>, Julia Frei, Isabelle Boland, Beth Potter, Natasha O'Reilly, Mario Cappelli, Ian Graham, Mark Walker, Doug Coyle, & Brenda J. Wilson

**Background:** The new genetics raise complex social and ethical questions for primary care. The complexity of issues has prompted calls for greater public debate and involvement in decision making about the new genetics.

**Research Questions:** To explore public knowledge and values about genetic testing in order to foster greater public involvement in decision making about the new genetics in primary care.

**Description:** The new genetics raise complex social and ethical questions for primary care. The complexity of issues has prompted calls for greater public debate and involvement in decision-making about the new genetics. However, despite the sophistication of scientific knowledge implied in understanding genetics, it is too simplistic to resort to a "deficit model" of public understanding in which experts consider the public ignorant, and even uninterested in science. Drawing upon interviews with women offered prenatal testing, this study explored lay understanding of 'genetics' and genetic testing and how these fit in our current healthcare system. Qualitative data analysis revealed that women critically engaged with difficult issues raised by genetic testing, including acceptable uses of testing, the value of testing at the expense of prevention or cure, access to testing, abortion and quality of life. Moving beyond their personal experiences of testing, women recognized the wider social context within which testing was offered, noting the potential for stigma and discrimination. Results provide support for greater lay involvement in policy discussions and decision-making about the new genetics in primary care.

# Nephrolithiasis in the emergency department: Epidemiology and development of a rule to predict the need for CT diagnosis.

Richard Cullen, Richard Barter, Melanie Belisle, Gena Bugden, Kris Aubrey-Bassler

**Background:** Kidney stones affect approximately 12% of men and 5% of women throughout their lifetimes. For patients presenting with symptoms suggesting kidney stones, a doctor will in most cases order a diagnostic CT scan. Research has shown, however, that the same amount of radiation generated by 2 to 3 CT scans is associated with cancer in atomic bomb survivors and nuclear industry workers. Moreover, 47% to 68% of patients secrete their kidney stones without any medical intervention or long term consequences.

**Research Questions:** (1) Identify characteristics of subsets of patients whose outcome would not be adversely affected by (a) delaying the diagnostic CT scan for up to several days and (b) cancelling the CT scan; (2) develop a score representing the urgency of a CT scan for a given patient based on symptoms at the time of emergency room presentation.

**Description:** Design: Secondary data analysis of emergency room charts, i.e., logistic regression on patients' demographic information, medical laboratory results, medical and family history, CT scan results, and referrals to and procedures by specialists and their outcomes.

Setting: Canadian hospital emergency rooms.

Patients/participants: Data will be gathered from the charts of patients who had a provisional diagnosis of kidney stones (before confirmatory CT scan). Outcome measures: The urgency of a diagnostic CT scan during the initial emergency room visit. Results: Preliminary data have yielded a score to predict an urgent (important to diagnose during the initial visit) CT scan result. Patients scoring 0 were 0% likely to have an urgent result, whereas those scoring 4-7 were 24% likely.

Conclusions: By employing a clinical decision rule based on patient characteristics, ER doctors may be able to safely treat kidney stone patients without a CT scan, thus avoiding the patients' exposure to potentially harmful radiation.

## Palliative and End of Life Care in Newfoundland's Deaf Community

Dr. Victor Maddalena, Myles Murphy, Dr. Fiona O'Shea

**Background:** There is a dearth of research that examines the experiences of deaf people at end of life (EOL) and the challenges they face in accessing culturally competent palliative care. This qualitative research will explore the EOL and palliative care experiences of deaf people living in St. John's and surrounding communities.

**Research Questions:** The purpose of this research is to answer the following research question: what are the experiences of deaf people living in Newfoundland and Labrador regarding end of life and palliative care services?

**Description:** Terminal illness, dying, death and bereavement are often experienced within a cultural context and this process is an important dimension of healthy aging. The deaf community is a distinct linguistic and cultural group. There is a limited body of research that examines the experiences of deaf people and their interactions with the health system. There is a dearth of research examining their experiences at end of life.

When compared to the general population, the deaf community, as a social group, experiences poorer health status, lower levels of employment and lower English literacy levels. Moreover, deaf people tend to have fewer interactions with the health system, they seek care less frequently than the general population and their encounters with the health system are often characterized by communication difficulties, fear, mistrust and frustration.

## Residential proximity and hospital level of service: A geospatial epidemiological study of obstetrical outcomes.

Kris Aubrey-Bassler, Alvin Simms, Peter Wang, Joan Crane, Marshall Godwin, Bruce Weaver, Richard Cullen

**Background:** Despite the limited services available in rural areas, previous research suggests that neonatal mortality, hospital charges, and the risk of an abnormal neonate are all greater for women with poor access to obstetrical care at their home hospital, even though those women are usually travelling to deliver at high volume, specialized centres. Thus, in determining the obstetrical outcomes for rural women, it appears as though proximity to care is more important than the level of service offered. Despite this, obstetrical programs in small rural hospitals are closing.

**Research Questions:** Determine the factors contributing to obstetrical outcomes in Canadian communities, ranging from those with no services to those with the most highly specialized hospitals.

**Description:** Design: 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 will therefore analyze the effect of hospital volume, provider volume, specialty of care provider and availability of caesarean section. Hospital remoteness variables will be calculated using a geospatial digital road network and included in the model. Setting: All regions of Canada except the province of Quebec, where a different institution collects discharge data. Patients/Participants: Canadian women and their babies. Outcome measures: The rate of maternal death and all major adverse maternal outcomes (e.g. infection, surgery, heart attack), as well as the rate of perinatal mortality. Results: It is anticipated that the best obstetrical outcomes will occur in areas where a high level of service is offered, and in rural areas where care is offered locally. Conclusions: Offering obstetrical services in rural locations is important, despite the availability of these services in distant urban centres. Policymakers should consider the possibility of increased health risks when deciding to remove obstetrical programs from rural hospitals.

### Should every family physician have a pharmacist?

Lisa Bishop, Dr. Cheri Bethune

**Background:** Shea Heights Community Health Centre has been a demonstration project site for collaborative interprofessional work in primary care involving pharmacists and family physicians. As a sample of collaborative care involving a complex patient, this poster will describe the advantage of this collaboration for patient, patient's family, physician, pharmacist and the health care system.



**Research Questions:** 1. How does the involvement of a pharmacist assist in the provision of care to a complex patient in primary health care?

- 2. What is the perceived benefit to the patient?
- 2. What is the impact of this collaboration on the family physician?

**Description:** The case study involves a 76 year old woman with CAD, COPD, anxiety and several admissions to hospital for cardiac and respiratory complications. There were challenges in the diagnosis of her episodes of decompensation between the hospital physician and the family physician. This included frequent changes in medication, multiple diagnostic tests and resulted in confusion for the patient, family and primary care givers. We will describe how collaboration between the family doctor and clinical pharmacist was effective in sorting through a complicated medication regimen and differences in diagnostic opinions.

### **Student Opinions of Prescription Drug Marketing Practices**

Wanda Parsons, Katherine Gallagher, Julie Sheppard

**Background:** The pharmaceutical market in Canada is large and profitable. In 2007, its value grew by 7%, to \$CDN23.9 billion. In the next five years, it is expected to increase by another 34.5%1. In the United States, drug companies spend nearly twice as much on promoting their products as they do on research and development2, and there is no reason to believe that these figures are any better in Canada. Much of this spending is directed towards doctors.

**Research Questions:** To determine whether medical students are sensitive to some of the ethical dimensions of marketing by drug companies and whether they are different from other students at a similar education level.

**Description:** This exploratory study investigates whether medical students are sensitive to some of the ethical dimensions of marketing by drug companies. Specifically we examine whether they are different from other students at a similar educational level. We are surveying medical students, graduate business students (whose views might be sympathetic to the drug companies), and graduate students from all other disciplines (whose views might reflect the views of patients) at Memorial University to determine whether they have similar or different opinions about the appropriateness of commonly-used drug company marketing practices. The results of this study are expected to provide preliminary evidence whether the concerns about the ethics of drug company interactions with the medical community are valid.

### The Doctor Humour Study

Dr. William Eaton

**Background:** This poster shows the background, methods, results and conclusions of an office-based study of family doctors and the use of humour during office consultations.

Research Questions: 1) How often does humour occur between doctors and patients during the office consultation?

- 2) Is this humour initiated by the doctor or the patient?
- 3) Is this humour focused on the patient's problem or on an unrelated matter?

#### **Description:** Methods:

Family doctors were asked to use a humour log to record responses to the above questions after the interactions with each of 40 patients. Descriptive statistics and McNemer's Test were used to quantify the data.

### Results:

Humour occurred in 60% of office-based interactions between family doctors and their patients. Patients and doctors initiate humour about equally. The focus of this humour, about the patient's problem or unrelated, was about equal.

#### Conclusions:

Humour occurs often between family doctors and their patients, is initiated equally by the doctors and the patients, and is equally focused between the patient's problem and unrelated topics.



## The Effectiveness of a Self-Help Program for Depression in Rural Newfoundland Communities

Elizabeth Church, Dr. Cheri Bethune, Dr. Terrence Callanan, Dr. Peter Cornish, Dr. Lynda Younghusband

**Background:** Self-help programs have been shown to have a positive impact on mental health issues, such as depression and anxiety. Although little is known about their effectiveness in actual practice conditions or in rural communities, it is hypothesized that a self-help program for depression could be a valuable support to rural health professionals where mental health services are often sparse.

**Research Questions:** To assess the effectiveness of a self-help approach for depression in rural Newfoundland communities. To examine how a self-help program works in actual practice conditions.

**Description:** Forty-six health professionals, from eight rural communities, who currently treat adults with depression each recruited four patients with mild-to-moderate depression and the ability to comprehend text written at a grade six level (for a total of 184 patients). Participants were randomized by the health professionals' discipline (family medicine, nursing, nurse practitioners, social work) with half of the participants in each discipline group being randomly assigned to the control group and half to the treatment group. Patients in the treatment condition were give a well-established self-help book for depression and the other half received treatment as usual from their health professional. Before and after the intervention, patients completed a self-report depression inventory and a questionnaire assessing their readiness and motivation to change. Data collection in currently underway, and we will report preliminary results.

# The Effectiveness of the Edmonton Symptom Assessment System (ESAS) in Monitoring Palliative Care Patients in the Community

G. Farrell

**Background:** As the population ages and rates of cancer increase, growing attention is placed on the development and expansion of palliative care programs. Typically, palliative care assessments are scheduled based on provider availability and in settings such as hospital wards, palliative care units, outpatient clinics or during home hospice care evaluations.

**Research Questions:** The objective of this study will be to assess the effectiveness of using an online version of the Edmonton Symptom Assessment System (ESAS) as a means of monitoring and assessing symptoms of palliative care patients in the community.

**Description:** This study will assess one approach to expanding these traditional approaches to symptom evaluation by providing access to an online format of a symptom assessment tool, the ESAS, to palliative patients and their home care givers. This will allow palliative care providers to remotely monitor patient symptoms and effectively schedule interventions and deliver patients' care based on patient need.

In the proposed study patients seen in a palliative care outpatient clinic will be offered the opportunity to participate. To be eligible, patients will need to have access to a computer with an internet connection and give informed consent. Participants will visit the study website as frequently as daily but at least twice a week, logging on to the secure site with an individual user identification and password. After login, participants will complete the nine items of the ESAS measuring symptom severity and submit responses. Patient responses will be accessible to the palliative care team. Data will be presented to the health care providers over time so that trends can be recognized. As well, the health care providers can identify and view patient responses for any single day chosen. This data will be reviewed by providers every 2 weeks and contact with the participant will be made by telephone. This call will be used to discuss the patient responses and allow caregivers to remotely monitor patients and modify or change caregiver follow-up. As this is intended as a pilot project the goal is to recruit 60 participants for a 3 to 6 month evaluation period.

### The MUN-Med Gateway Project: A Path to Health Care for New Canadians

Dr. Pauline Duke, Dr. Fern Brunger, Anna Sanderson, Karen Downton

**Background:** Access to a continuum of care from a family physician is an essential component of health and wellbeing. Accessing care is especially challenging for new immigrants/refugees because of language barriers, translation requirements, complex histories and unfamiliarity with the Canadian Healthcare system. The Gateway Project is a medical student initiative whereby students and family physicians help new Canadians overcome barriers and access appropriate medical care as an integral part of their integration into a new community.

**Research Questions:** The purpose of this research was to determine the effectiveness of the Gateway Project based on statistics of client usage an interviews with student volunteer participants to determine successes and challenges with: (1) service provision; (2) student education; and (3) administration and management.

**Description:** This poster reports results of the evaluation of the effectiveness of the MUN-Med Gateway Project. Success with client uptake, student volunteer participation rates, and student learning satisfaction indicated the need to expand to accommodate increasing interest in the project. Strategies to develop and maintain the initiative were identified. Specific challenges were identified and strategies developed in terms of: student skill sets, health information database system and management, and administration and coordination of the program.

The overwhelming success of this program makes it a model for the use of community action as an education strategy. Our results point to theimmediate potential of expanding the initiative to other faculties (specifically Education, Nursing and Social Work) and to other areas of health care provision to newcomers to Canada. The benefits are not only in enabling newcomers to access family physician care, but also, importantly, exposing students to cross-cultural medicine early in their careers providing impetus for them to take active roles in providing health services for immigrants and refugees in their future practice.

## The Simple Lifestyle Indicator Questionnaire (SLIQ): An Assessment of Concurrent Validity

Adam Pike, Godwin M., Tully S., McCrate F., Kirby A., Bethune C., Matthews J.

**Background:** Cardiovascular disease is the leading cause of death in Canada. A major risk factor for cardiovascular disease is lifestyle (smoking status, diet, exercise, alcohol use, stress). Currently, however, an instrument to measure cardiovascular lifestyle as a single construct does not exist. The SLIQ was developed to address the need for such an instrument.

Research Questions: To measure concurrent validity of the SLIQ.

**Description:** Design: General population survey. Setting: General community. Patients: 300 adults aged 18 and over from the general population. Instrument: The SLIQ is a 12 question instrument composed of five lifestyle components including diet, physical activity, alcohol consumption, smoking and stress. The Diet History Questionnaire (DHQ) is a validated measure of diet; only the vegetables, fruits, grains and alcohol components of the DHQ will be used. The Social Readjustment Rating Scale (SRRS) is a validated measure of stress. The Spencer Eight Question Lifestyle Scale measures four of the five components of the SLIQ and predicts cardiovascular morbidity and mortality. A pedometer will be worn for three days to measure the average number of steps per day. Outcome Measures: Strength and direction of the association between scores on respective components of the SLIQ and scores on the DHQ, SRRS, and Spencer Eight Question Lifestyle Scale, and the average number of steps per day. Results: This research is still in progress. Results will be available at the conference. A strong correlation is anticipated between the scores on the respective components of the SLIQ and the above selected instruments. Conclusion: When fully developed, the SLIQ will have a variety of potential uses, such as assessing results of interventions aimed at lifestyle change, assessing lifestyles of populations in epidemiological studies, and following patients clinically.

## The Simple Lifestyle Indicator Questionnaire (SLIQ): An Assessment of Convergent Validity

Leigh Ann Butler, Godwin M., Tully S., McCrate F., Kirby A., Bethune C.

**Background:** Cardiovascular disease is the leading cause of death in Canada. A major risk factor for cardiovascular disease is lifestyle (smoking status, diet, exercise, alcohol use, stress). Currently, however, an instrument to measure cardiovascular lifestyle as a single construct does not exist. The SLIQ was developed to address the need for such an instrument.

Research Questions: To measure convergent validity of the SLIQ.

**Description:** . Design: General population survey. Setting: General community.

Patients: 300 adults aged 18 and over from the general population. Instrument: The SLIQ is a 12 question instrument composed of five lifestyle components including diet, physical activity, alcohol consumption, smoking and stress. The SF-36 is a generic indicator of health-related quality of life. It covers both physical and mental concepts including behavioral functioning, perceived well-being, social and role disability, and personal evaluations of health in general. Outcome Measures: Strength and direction of the association between scores on the SLIQ and the SF-36. Results: This research is still in progress. Results will be available at the conference. We anticipate a moderately high correlation between the SLIQ and the SF-36. Lifestyle should be moderately associated with health status but may not be highly correlated because of life, environmental, and genetic factors – thus demonstrating convergent validity by implying a moderate amount conceptual overlap. Conclusion: When fully developed the SLIQ will have a variety of potential uses, such as: assessing results of interventions aimed at lifestyle change, assessing lifestyles of populations in epidemiological studies, and following patients clinically.

## The Simple Lifestyle Indicator Questionnaire (SLIQ): An Assessment of Preliminary Normative Data

Sara Tully, Dr. Marshall Godwin

**Background:** Cardiovascular disease is the leading cause of death in Canada. A major risk factor for cardiovascular disease is lifestyle (smoking status, diet, exercise, alcohol use, stress). Currently, however, an instrument to measure cardiovascular lifestyle as a single construct does not exist. The SLIQ was developed to address the need for such an instrument.

Research Questions: To develop population norms for the SLIQ.

**Description:** Design: General population survey. Setting: General community. Instrument: The SLIQ is a 12 question instrument composed of five lifestyle components including diet, physical activity, alcohol consumption, smoking and stress. Participants: 300 adults aged 18 and over from the general population; 100 adults aged 18 and over from the fitness population. Participants will be asked to provide their age, sex, marital status, education level, household income, height, and weight and will be approached by a research assistant in public places to complete the questionnaire. Results: This research is a work in progress, results have yet to be calculated and data continues to be collected. Results will be available at the time of presentation. The data generated will provide norms for a wide variety of people and make it possible to assess sub-group norms by age, sex, education level, income, and BMI. Conclusion: When fully developed, the SLIQ will have a variety of potential uses, including; assessing results of interventions aimed at lifestyle change, assessing lifestyles of populations in epidemiological studies, and following patients clinically.

# The use of natural health products in children: Parents' experience and physicians' awareness: A qualitative analysis

Allison Kirby, Dr. Marshall Godwin

**Background:** Comparatively little research has been conducted in the use of Natural Health Products (NHPs) in children. There is also a lack of communication between family physicians and parents with regard to the use of such products. A more robust understanding of NHP use will be obtained if in-depth individual perspectives are solicited from parents and physicians.

**Research Questions:** To gain a more thorough understanding of why parents choose to have their children use NHPs, the extent of their knowledge about the products, and their sources of information. Also to shed light on the physician/parent interactions that occur when NHPs are considered and utilized.



**Description:** Design: Semi-structured interviews will be carried out with parents to obtain a better understanding of the reasoning behind the use of NHPs, and focus groups will be held with family physicians to elucidate the attitudes and concerns of physicians regarding NHPs.

Setting: Newfoundland and Labrador, Canada.

Participants: Parents who have been identified as using NHPs in their children ( $n^225$ ) and physicians randomly selected from those who completed a qualitative survey and indicated they would be interested in participating in a focus group ( $n^325$ ).

Main and Secondary Outcomes: Key themes emerging from the qualitative data will be identified according to a number of criteria, including relevance to the research objectives, frequency with which a theme was mentioned, relative importance of the themes based on the amount of text taken up to address an issue, and emphasis (e.g., emphatic or emotional speech).

Results: Data has not yet been analyzed, but results will be available at the time of presentation. A grounded theory approach will be used to identify recurring themes and important issues.

Conclusion: A deeper understanding of the issues surrounding NHP use in children for both physicians and parents will be garnered through this qualitative methodology.

## Use of Natural Health Products in Children: Parents' Experience

Dr. Marshall Godwin

**Background:** Natural health products (NHP) are being used increasingly in our society; this includes use in children. Physicians need to be aware of what products are being used and for what reason (s). These products have potential side effects as well as potential interactions with prescribed medications.

**Research Questions:** To assess the degree to which parents attending a family practice clinics use NHPs in their children and for what reasons.

**Description:** Design: A survey of parents with children age 0 to 12 years of age, followed by a review of the children's charts. Setting: Family physicians offices in urban and rural areas of Newfoundland and Labrador.

Participants: Adults attending family physician waiting rooms who cared for children age 0-12 years of age. The children also needed to be patients of the family practice so that their charts could be accessed.

Outcomes: Use of any NHP in the children; which NHPs were used; why they were used; whether or not the parents felt the NHPs were useful or had side effects; how they heard about the NHP and its alleged benefits; where they purchased the products.

Results: Data has been collected on 334 children (average age 5 years; SD 3.3 years, 51% female; 49% male). 40.7% of the children were given NHPs by their parents; 30% of the children were also on prescribed medications from their doctors; and 20% of the children were reported to have a chronic medical condition. Details of the results will be presented in the poster.

Conclusions: NHPs are used frequently by patients in their children. There is the potential for concurrent use and hence potential interactions between medications and NHPs.

### Vasectomy as a Choice for Family Planning - Is There a Downside?

Gina Higgins, Dr. Carl Robbins

**Background:** In the calendar year of 2007, over 200 vasectomies were performed in a University Medical Family Practice Clinic in St. John's using local anesthetic and no pre-operative sedation. The incidence of immediate surgical complications were low. However, given the discussions in the professional literature and popular press, there is a need to determine the local overall satisfaction of patients with the procedure two years after, and specifically to determine whether post-vasectomy pain is a significant late complication of the procedure in this setting.

**Research Questions:** Among those patients with vasectomies done in the University Medical Clinic, what is the general satisfaction level with the procedure two years later? Does post-vasectomy pain persist among some patients? If so, what is the prevalence of this problem?



### **BUILDING RESEARCH CAPACITY IN ATLANTIC CANADA**

**Description:** This project will have two phases. The first will include a literature search, questionnaire development and testing, completion of consent process and ethical approval. The second phase will include administration of the questionnaire, collation of survey data and results interpretation. The study is intended to satisfy the research project requirements of the Family Medicine training program for the participation resident. The poster at the Primary Healthcare Forum will deal with the first phase only, emphasizing the literature information and possibly present modified questions arising from this. Final results presentation will be at Memorial University Research Day in the Spring of 2010.

# What are the Determinants of a Successful and Sustainable Program Delivery as it Applies to Child Nutrition Programs in NL?

Barbara V. Roebothan, Ann Ryan, Montgomery Keough, Veeresh Gadag, Daphne LeDrew.

**Background:** Researchers representing MUN (various academic disciplines and the Health Research Unit, Medicine) and representatives of the Kids Eat Smart Foundation (KESF) are working together to improve the quality of service delivery and sustainability of child nutrition programs. Such programs have great potential to promote healthy behaviors in the youth of a province with high rates of chronic disease. A somewhat unique additive, multi-method staged Participant Action Research design with both qualitative and quantitative components is being followed.

**Research Questions:** What are the best practices to be followed by community-based child nutrition programs, such as the KESF of NL breakfast program, to ensure optimum program delivery and sustainability?

**Description:** Primary care encompasses general medical practice, community health services, and a variety of private health and community-based services. One such community-based service in Newfoundland and Labrador (NL) is the breakfast program hosted by the Kids Eat Smart Foundation (KESF). It has regular contact with a broad spectrum of children and thus is in an influential position to promote healthy lifestyles in our youth. At present the program is overseen, coordinated and funded by KESF but run almost entirely by volunteers at each site. Is the current process the most appropriate method of service delivery to ensure the overall success and sustainability of this much needed program? The project is a group effort by Memorial University researchers and administrators of KESF of NL to investigate this issue with the intent of identifying factors to characterize the most successful offerings of this program in the province. Preliminary input from researchers and a province-wid advisory board was used to develop a guide for 13 focus groups held throughout NL, participants representing volunteers and non-volunteers with some knowledge of KESF breakfast programs. These data were used to develop a questionnaire specifically for this project which was administered by telephone to a geographically stratified random sample of the general public. key informant interviews will help to clarify issues raised though data collection. Findings will be used to improve the delivery and sustainability of KESF nutrition programs and shared with other community-based health services. (This project was funded by NLCAHR and the Janeway Foundation).

### **WORKSHOPS**

## Atlantic Regional Training Centre: A graduate training program for excellence in Applied Health Services Research

Cathy Peyton, Dr. Anne Kearney

**Background:** The ARTC is one four regional training Centres in Canada. The Centre is a collaborative venture among four Atlantic Canada universities. , MUN, Dal, UNB, UPEI. Through sharing of resources, and building upon complementary strengths our goal is to produced highly trained applied health services researchers.

**Research Questions:** The objectives of the session are to: provide an overview of the ARTC program, discuss the strengths and challenges of delivering a graduate program across four provinces, provide student perspective of a collaborative, interdisciplinary and interprovincial program in health services research, provide two examples of student research and engage workshop participants in discussion of delivery of such a program.

**Description:** Following a description of the key components of the program - nine courses, five workshop with health system decision makers, student residency placement and thesis work, will be a review of the delivery model of the program ( synchronous and asynchronous web-based teaching using D2L as the delivery platform and Elluminate Live as one of the synchronous tools). There will be a facilitated discussion with a graduate of the program and a current student in the program. Discussion will be centred around the strengths and challenges of delivery of the program as well as the benefits of the interdisciplinary /interprovincial focus of the program and their research. This workshop will also provide an opportunity for the session participants to gain awareness of the ARTC program and what such a program has to offer for health care researchers.

# The National Collaborating Centre for the Determinants of Health (NCCDH): Translating determinants theory into practice

Verlé Harrop, Hope Beanlands, Andrea Pike

**Background:** Presently, there is a growing movement in Canada, through organizations like the NCCDH, Canadian Alliance for Risk Factor Surveillance (CARRFS), and Canadian Network of Public Health Observatories (CanPHO), to revisit health data through a Determinants of Health lens. The determinants lens affords a layer of analysis and interpretation that in turn enables communities, researchers, practitioners and educators to better understand and act on the factors impacting local as well as population-based health and wellness.

**Research Questions:** The intent of this workshop is to provide participants with strategies for addressing WHO's KT challenge. Objectives: To learn about: 1) Determinants of Health; 2) WHO health inequalities stratifiers; 3) Translating theory into practice using NCCDH KT Health Inequalities Worksheets.

#### **Description:** Workshop Process:

- 1. Introduction: a) Determinants of Health; b) WHO's health inequality stratifiers (drilling down by sex, income, education, place of residence, occupation, ethnicity/race).
- 2. Review examples of how the Determinants of Health have informed primary health care: a) Needs Assessment; b) Regional Health Status Reports; c) Community Health Centre Models; d) Inter-city comparisons; e) Evaluation frameworks.
- 3. Determinants worksheets: a) Introduction; b) Completion; c) Sharing; d) Podcasts.

Participants will complete an NCCDH KT Health Inequalities Worksheet and share insights around applying a Determinants lens and WHO's health inequalities stratifiers to qualitative and quantitative data analyses.

Participants will come away with: 1) an NCCDH Health Inequalities KT template; 2) Library of completed determinants work sheets; 3) Pod casts of participants reflecting on how the determinants of health/health inequalities impact their practice.



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## Additional funding for the Primary Healthcare Partnership Forum was provided by:



