



Presenter: Roulz Ariste

Title of Poster: Gender-based Difference in Cost of Acute Care Hospital Stays by Medical Condition in Canada

Abstract: Objectives: The objective of this study is:

- . To estimate the average cost per stay and number of stays for males and females for similar medical conditions
- . To determine whether there is a gender difference in the share of cost that can be allocated to the treatment/presence of complexities.

Methods: The main data sources are the Discharge Abstract Database (DAD), the Canadian MIS Data Base (CMDB), the Ontario Case Costing Initiative (OCCI), the Alberta case-cost database. A bottom-up approach is used: cost is defined as the product of average cost per stay for a given illness times the number of stays relative to this illness. Regression analysis is used to account for gender and complexity, a proxy for co-morbidities or secondary diagnosis. Other control variables are: age, case-mix groups and province. Adjustment is also made to control for price differences across the country.

Results: In 2004-2005, total acute care inpatient cost was estimated at \$8.4 billion for males and \$7.8 billion for females, excluding pregnancy and childbirth related conditions. Average cost per stay was \$7,964 and \$7,261 respectively for males and females. There were 1,052,482 stays for males vs 1,074,077 stays for females. While total acute care inpatient cost was 7.7% higher for males, number of stays was 2.0% lower; this suggests the higher total cost was driven mostly by higher average cost per stay (9.7% higher for males). The total acute care inpatient cost that can be allocated to the treatment or presence of complexities was estimated at 30.3% for males versus 24.4% for females. Results are also presented for the 15 most expensive medical conditions.

Conclusion: Studies on general cost of illness do not usually break down costs into volume and unit cost to understand the impact of each of these components by gender. They do not generally identify co-morbidity costs either. This study contributes to the existing literature by addressing these points.



Presenter: Kate Bak

Title of Poster: Implementation of complex evolving technological innovations: Implementing Intensity Modulated Radiation Therapy in Ontario

Abstract: Objectives: To examine factors that facilitate or impede the implementation of a complex and evolving technology, Intensity Modulated Radiation Therapy (IMRT), across Ontario and to determine the role of different types of evidence in these decisions.

Methods: This research project employs an embedded multiple case study design utilizing multiple methods, including document analysis and key informant interviews. Four regional cancer centre cases in Ontario were selected, with radiation oncology programs and cancer centre administrative leadership groups representing embedded units of analysis. Materials in the document analysis included reports, standards documents, project overviews, proposals and letters obtained from websites and by request from Cancer Care Ontario's Radiation Treatment Program. Key informant interviews were conducted with radiation oncologists, medical physicists, radiation therapists and administrators at each cancer centre.

Results: IMRT is a precise method of delivering high-dose radiation to a tumour while significantly sparing healthy tissues. IMRT reflects a complex and evolving technology for which traditional evidence hierarchies have limited applicability. The four cancer centres selected for inclusion vary in terms of their level of IMRT implementation and academic affiliation, as well as their geographical location, size and population served. Seventeen of the twenty-two invited key informants took part in the study. Three additional participants were added through snowball sampling, increasing the total accrued number of participants to 20. The interviews were audio-recorded using a digital recorder and lasted on average 40 minutes. The collected data are currently being coded and analyzed.

Conclusion: The collected data will help explain the variation and the challenges to the adoption of non-drug innovations and will assist health care professionals, knowledge transfer professionals and policy makers in developing strategies for the diffusion of complex and evolving technologies such as IMRT.



Presenter: Kevin Barclay

Title of Poster: Effective health human resource (HHR) strategies for rural and remote Canada: a scoping review

Abstract: Objectives: Healthcare Leaders in western Canada have identified the adoption of effective HHR strategies for rural and remote areas as an immediate priority. In preparation for a decision support synthesis, a scoping review was undertaken to specify the research questions and relevant evidence that will contribute to solutions for policy and practice.

Methods: The scoping review consisted of four activities. A key word search of published literature from 15 data bases was performed yielding over 600 related abstracts. A review of 'grey' literature was also performed including relevant Canadian websites and policy documents. Throughout the process an iterative dialogue was maintained amongst key informants and partners to identify sources of information and explore the range of possible research questions. Finally a 'roundtable' was hosted to review the results and confirm the final research questions.

Results: The published and grey literature review yielded over 600 abstracts and documents related to effective health human resources strategies for rural and remote Canada. The references were grouped into the main areas of organization/ management, education, setting and practice. Each of these main areas could be further defined by subcategories such as, for example, career pathing (organization/ management), mentoring (education), hospital or community (setting) and team functioning (practice). Through the iterative dialogue this initial framework was modified and draft research questions developed. Through the roundtable, final research questions were defined based upon the scoping activities and the dialogue at the roundtable.

Conclusion: 'Effective health human resource strategies for rural and remote Canada' is a vast area of study. The scoping review has focussed the subsequent research questions on areas that will benefit from a decision support synthesis and will address immediate priorities for policy and planning.



Presenter: Brenna Bath

Title of Poster: Advanced Practice Physiotherapy Triage Assessment of Spinal Conditions: A Collaborative Partnership with Orthopaedic Surgeons

Abstract: Objectives: Health reform recommends a shift in the site of care from hospitals to the community. What are the skills necessary to manage in the community? Health administration alumni were surveyed to determine their views on the skills necessary to be successful leaders within different healthcare sectors.

Methods: A self-administered electronic survey of Health Administration alumni from the University of Toronto's Graduate program (N=276) and Ryerson University's Undergraduate program (N=86) was conducted by email between June and December 2008. The questionnaire included items on employment characteristics (sector and type of work), views on leadership and educational skills and demographic characteristics. Analysis was performed by program, sector, and presence/absence of clinical training.

Results: Healthcare resembles and differs from other management jobs. 39.2% agree, and 39.8% disagree, that the skills required to manage in healthcare are the same as in other industries. Similarly, 36.6% agree and 40.7% disagree that the same skills are required to manage in the community as in hospitals. 74.4% agreed that clinical backgrounds were advantageous, with 34.8% indicating that it was necessary to successfully lead in healthcare. Although 61.3% of graduates had such backgrounds, this did tend to restrict them to managing within that area; only nurses reported managing outside of their clinical area. There was little movement of managers from hospitals to community; those moving tended to go to education/consulting/government. Ongoing analysis is mapping the particular skills identified as critical by job and setting.

Conclusion: There are both similarities and differences in the skills seen as necessary to practice in healthcare and in different sectors. However, for many a clinical background is advantageous to lead successfully regardless of sector. Despite the rhetoric of the shift from hospital to community, few move to the community sector.



Presenter: Brenna Bath

Title of Poster: Management of Hip and Knee Joint Replacement Wait Times: Policy Options for the Saskatchewan Government

Abstract: Objectives: Wait times for hip and knee joint replacement surgery in Saskatchewan are among the longest in Canada. Saskatchewan's current strategy for management of wait times will be presented and three alternative provincial policy options will be compared and evaluated. Implementation considerations for the recommended alternative will also be described.

Methods: A policy analysis comparing Saskatchewan's current strategy to three potential policy options was undertaken. The identified alternative policies were: a) a one time funding transfer to health regions for targeted reduction of wait lists, b) provincial legislation to allow private for-profit provision of hip and knee joint replacements and c) a publicly funded province-wide comprehensive management strategy. The following evaluation criteria was used to compare the policy options: cost effectiveness, sustainability, potential to improve health outcomes, alignment with provincial and national health care values, fairness, time and ease of implementation, and responsiveness / acceptability to stakeholders.

Results: The recommended policy option is a province-wide publicly funded multi-pronged collaborative strategy (option c). This strategy includes the following key features: dedicated surgical facilities within two health regions only, greater use of pre and post-operative interdisciplinary team-based care, and patients put on a single common province-wide list rather than on individual surgeons' lists. Implementation recommendations include the establishment of a provincial joint replacement efficiency committee, modification of the Saskatchewan Surgical Network tracking system to account for total waiting time, exploration of expanded role and scope of practice of certain health care practitioners in order to maximize health care personnel efficiency, and a pilot project to evaluate outcomes and facilitate buy-in of any reluctant stakeholder groups.

Conclusion: Innovative and pro-active strategies are needed to manage excessive waits for hip and knee joint replacements. The recommended policy option will result in a more efficient system with a sustainable reduction in wait times, improved health outcomes and greater patient and health care provider satisfaction.



Presenter: Ivy Bourgeault

Title of Poster: The Role of Immigrant Care Workers in an Aging Society: The Canadian Context and Experience

Abstract: Objectives: The aim of this research was to address the role of immigrant care workers (ICWs) in the home and long term care sectors in Canada in regards to: 1) the factors determining the demand for ICWs; 2) the migration and work experiences of ICWs; and 3) the impact of ICWs on older people's experiences and quality of care.

Methods: The study has several components in two broad categories: 1) Background contextual analysis of immigration policies regulating the entry, employment and integration of ICWs in Canada; the structure and demand for home and long term care in the Canada; and the examination of the roles of domestic and ICWs in the provision of care services. 2) Empirical studies of ICWs, employers and recipients of care in a range of different health care institutions and private households in three provincial contexts: Hamilton Ontario, Vancouver, B.C. and Montreal, Quebec. This includes interviews with 75 workers, 23 employers and 29 care recipients which were analysed thematically.

Results: The majority of ICWs interviewed came to Canada recently in the economic class, although some used the LCP program. Many sought to escape poor economic conditions and in some cases war in exchange for peace, security and job opportunities for themselves and their families in Canada. Regardless of the type of care setting in which they work, ICWs work more than one job due to lack of full time work. Despite generally a good rapport between the workers and their employers, some respondents feel that they are assigned heavier workloads and more difficult clients. Some of the older people we interviewed expressed concern about the quality of education and training of ICWs and felt that it was of utmost importance for care workers to have a minimum of English/French language proficiency.

Conclusion: There is a need for ICWs in Canada but some key issues need to be addressed to better meet their needs and those of the recipients of their care. Some reform requirements are related to language sufficiency and cultural competency - but others are more general concerns with the lack of status of elder care garners in Canada.



Presenter: Judith Belle Brown

Title of Poster: Mentoring: Needs of New Family Physicians

Abstract: Objectives: The purpose of the study was to examine the mentoring needs and experiences of "new" family physicians, those who had been in practice for less than four years.

Methods: This qualitative descriptive study used in-depth interviews to collect data from 16 new family physicians. There were 5 men and 11 women and the majority were between 30-39 years of age. The analysis was both iterative and interpretive.

Results: Many of the participants had established relationships with colleagues in their family practice group who served various mentoring roles. Mentoring was also sought out from specialist colleagues. The key elements in choosing a mentor were openness, approachability, and the mentor's willingness to provide feedback on clinical dilemmas. Upon beginning practice, the participants described feeling ill prepared with regard to financial and practice management issues. Hence, they relied on their mentors to provide direction and expertise. These non-clinical matters were often viewed as the most daunting aspects of starting a practice. Also, participants received guidance from their mentors on how to balance personal and professional responsibilities. This was achieved by observing and learning from their mentor(s) in the context of providing comprehensive family medicine.

Conclusion: Findings of this study strongly endorse the concept of providing mentoring opportunities for new family physicians. Moreover, the support and guidance offered to new practitioners may assist in both recruitment and retention strategies during the on-going health human resource crisis.



Presenter: Ann casebeer

Title of Poster: Enhancing Capacity for Health System Change: The Role and Nature of Organizational Learning

Abstract: Objectives: This session will describe how organizations learn to identify, spread and institutionalize good ideas. Evidence from two cases will be presented. 10 years of research into primary health care innovation suggests that 'learning by doing' is a core approach. Experience from 12 years of SEARCH Canada's practice-based capacity building suggests 'networking' creates opportunity for sustained organizational learning and innovation.

Methods: With regard to primary health care, we have undertaken longitudinal comparative case studies using a combination of in-depth qualitative interviewing, observational data and participatory feedback from site-based practice partners. With Regard to SEARCH, longitudinal internal and external evaluation has provided insights into the role of networks and communities of practice for sustained system level learning.

Results: (Research and Practice Implications) Our primary interest is in extracting a better understanding of the role of organizational learning to share results with practitioners and researchers interested in supporting conditions for organizational learning and subsequent diffusion of innovation.

Conclusion:(Value) These cases provide in-depth empirical data concerning if and how organizational learning occurs within experimental settings. Baseline expectations and subsequent evaluative evidence are captured and compared across time, providing useful information concerning the challenges and opportunities for organizational learning to advance at and across multiple levels.



Presenter: Guanmin Chen

Title of Poster: Adverse Cardiovascular Outcomes Associated With Antecedent Hypertension After Myocardial Infarction: Meta-analysis

Abstract: Objectives: Many studies have examined the role of antecedent hypertension on adverse cardiovascular (CV) outcomes after MI, but this data has not been summarized and evaluated in a systematic manner. We assessed the association of antecedent hypertension with adverse CV outcomes after myocardial infarction (MI) using systematic review and Meta-analyze method in this study.

Methods: A search of MEDLINE (1950 to April 2008) and an EMBASE (1980 to April 2008) database were supplemented by manual searches of bibliographies of key retrieved articles. Studies were included if they reported antecedent hypertension as risk for adverse outcomes (death, stroke, congestive heart failure (CHF), recurrent MI) among MI survivors. Relative risks (RR) were pooled using a random-effects model and robustness of the pooled RR was evaluated in sensitivity analyses. Cumulative meta-analysis, by chronological year of study beginning, was also performed.

Results: The search yielded 17 studies (N=56,748 participants) that reported antecedent hypertension with adverse outcomes for MI survivors: 13 for all-cause mortality; 7 for cardiovascular disease (CVD) mortality; 6 for both recurrent MI and CHF; and 4 for stroke. RCTs (n=8) were pooled separately from cohort studies (n=9). For RCTs, the pooled RR was 1.19 (95% confidence interval [CI] 1.13-1.26) for all-cause mortality and 1.29 (95% CI 1.09-1.53) for CVD mortality. For cohort studies, the pooled RR was 1.46 (95% CI 1.34-1.61) for all-cause mortality and 1.54 (95% CI 1.22-1.93) for CVD mortality. Antecedent hypertension was also consistently associated with an increased risk of stroke, CHF and recurrent MI. The association of antecedent hypertension with all-cause mortality outcomes decreased over time in both cohort and RCT studies.

Conclusion: Antecedent hypertension is associated with adverse outcomes for MI survivors. However, the association of antecedent hypertension with all-cause mortality outcomes decreased over time, and this decreased association reflects improved treatment and management of hypertension in more recent years.



Presenter: Xi-Kuan Chen

Title of Poster: Cost in Ontario's Emergency Departments

Abstract: Objectives:

The objective of this study is to determine the patterns of cost in Ontario's emergency departments (EDs) and explore the factors associated with these costs.

Methods: Analysis based on National Ambulatory Care Report System (NACRS) between 2003 and 2007. Cost of each ED visit were estimated as the product of Resource Intensity Weights (RIWs) and Cost per weighted Case (CPWC). An RIW is an indicator representing the relative resource used by a patient. The RIWs are adjusted for factors known to affect hospital cost. The CPWC provides a measure of the average financial cost a facility incurs to treat a single inpatient. The Ontario population estimates were obtained from Statistics Canada. The per capita ED cost and cost per visit was standardized by age and sex.

Results: Analysis revealed the young and old account for the highest cost per capita ED visits, with infants costing \$161 and seniors \$212 (65+ years). While children and adults form 70% of the population, their visits per capita costs are \$67 and \$85 respectively. Cost per visit was highest for seniors at \$356, followed by adults \$234, infants \$187 and children at \$177. Overall seniors accounted for 28% of ED costs although they make up 13% of Ontario's population. Between 2003 and 2007 the increase in costs per capita and per visit were highest amongst adults, 33% and 24% respectively. ED costs were significantly associated with age, sex, referral source, ambulance admission, and triage level.

Conclusion: Costs have increased over time within Ontario EDs. Seniors are the heaviest users of ED services as determined by per capita ED costs and cost per ED visit, but adults account for the largest cost increase in Ontario EDs.



Presenter: Vijaya Chevendra

Title of Poster: Assessing the Quality of Care of Diabetes Mellitus in Patients of Primary Care Practices using Electronic Medical Records

Abstract: Objectives: Using the DELPHI EMR, to determine the extent of (a) the control of glucose, blood pressure (BP), and lipids according to current guidelines amongst patients with diabetes mellitus (DM), and, (b) whether medication treatment was changed or a referral given to patients following an abnormal A1C, LDL-C or BP results.

Methods: The DELPHI database was created by pooling de-identified health records of 10 primary care practices with over 30,000 patients and their visits between Oct 2005 and Mar 2008. This database was used to identify patients with DM and determine whether their A1C, LDL-C and BP were within recommended targets over the initial 23-month period. For those patients who were not at target, the six month period following the abnormal result was reviewed to determine if there was clinical action undertaken as defined by: a change in medication appropriate for the abnormal value or a referral made to a DM specialist.

Results: 1,151 (5.0%) of the patients in the database were identified as having DM. Of this population, 45.5% of patients were at target for A1C (<7%), 34.5% were at target for LDL-C (< 2.0 mmol/L) and 55.3% were at BP target (<130/80 mmHg). Of the patients not at target, the proportion that received medication treatment (addition, deletion or dosage change) or a referral to a DM specialist within six months was 40.8% for hyperglycemia, 30.8% for hyperlipidemia and 38.5% for hypertension. The proportion of patients receiving treatment did not vary with their A1C or BP severity levels. Of the patients who received a change in treatment regimen, it was primarily in the form of medication changes (87.6% - 96.9%) rather than referral to a DM specialist.

Conclusion: Failure of health care providers to initiate or modify therapy when indicated may account for the absence of a change to the treatment regimen following an abnormal result. Other explanations may include non-adherence on the part of patients, lifestyle counseling, and incomplete data entry into the electronic medical record.



Presenter: Andrea Chircop

Title of Poster: Environmental Health Inequities

Abstract: Objectives:

Environmental health inequities warrant innovative conceptualizations to guide research and practice. Canadian evidence indicates an intra-urban divide in the distribution of health, based on socioeconomic status (CIHI, 2006). Low income-mothers and their children are particularly vulnerable to negative health effects associated with low-income urban neighborhoods.

Methods: The purpose of my research was to explore how low-income mothers experience and negotiate their own and their families' health in an urban low-income neighborhood. Data collection of this urban ethnography included prolonged engagement with low-income mothers over a 15 months period through repeated individual interviews and photovoice. Photovoice places the camera into the hands of participants, enabling them to have a voice with policy makers by drawing attention to areas in the urban environment affecting their health. Atlas/ti software was used to assist with data management and analysis according to common themes.

Results: Data analysis resulted in the identification of common themes including infrastructures of services particularly the lack of childcare services, safe playgrounds, location of residence, public transportation, and affordable nutrition. These findings are supported by the photographs participants took of their neighborhood. Overall, findings illustrate the complexities of urban infrastructures and the intricate balancing act of negotiations for healthy living that low-income mothers have to engage in on a daily basis.

Conclusion: This research is an example of how large scale survey data is contextualized to convey to health professionals and policy makers what it really means to live in a low-income urban neighborhood and how even well intended public policies require change to reduce health inequities.



Presenter: Alexandra Constant

Title of Poster: How Often Are Adverse Events (Aes) Reported In The Canadian Hospitals Database?

Abstract: Objectives: Although medical chart reviews are considered the gold standard methodology to identify AEs, this approach is costly and does not allow for longitudinal comparisons. This paper explores the feasibility of using administrative data to estimate the incidence and types of AEs in Canadian hospitals.

Methods: The Discharge Abstract Database (DAD) contains demographic, administrative and clinical data related to health care services in Canadian hospitals, and was used to track AEs. A team member with medical knowledge selected ICD-10 codes associated with an AE. A dataset of AEs was created by extracting all admissions from 2001 to 2006 that experienced an AE taking into account the first twenty diagnostic codes that contributed to the patient's hospitalization. We calculated the incidence proportion of AEs at the national and provincial level by gender and age.

Results: Our results suggest that the national hospital incidence rate of AEs remained stable from 2003 to 2006, annually representing 10.5% of total admissions. Among the AE cases identified, about 16% each year could be considered preventable. The national hospital incidence rate of preventable AEs also remained stable, annually representing 1.7% of total admissions or about 55,000 cases each year of the study. Nosocomial infections and AEs occurring in medical and surgical care were found to be the most prevalent types of preventable AEs. Nosocomial infections remained stable around 62% over the period studied. Medical and surgical care AEs decreased from 31% to 27% from 2003 to 2006, while, AEs associated with medical devices increased from 1.3% to 3.6% during the same time period.

Conclusion: A key limitation of the DAD is in the potential to underestimate the number of AEs. The next step will be a quantitative analysis comparing the chart review and administrative data approaches to determine if administrative data is an effective way to monitor AEs and support patient safety policy development.



Presenter: Evelyn Cornelissen

Title of Poster: Priority setting in community care: introducing an evidence-informed approach in the Interior Health Authority (IH) of B.C.

Abstract: Objectives: Financing and sustainability are key issues for decision makers. We present findings from a study of how decision makers in a British Columbia community care setting learn and use an explicit, evidence-informed approach to priority-setting and resource allocation. The approach used is known as program budgeting and marginal analysis (PBMA).

Methods: Using action research methodology we investigated the adoption/use of a systematic priority setting approach to inform resource allocations for the 2008/09 budget in a B.C. health authority community care portfolio. Researchers supported decision makers in determining and using both local and research evidence, and locally-generated criteria, to identify priorities for service redesign. Twenty interviews and one focus group were conducted with decision makers pre-implementation (2007). Twelve interviews were conducted post-implementation (2008). Transcripts were analyzed to identify key issues relevant to decision makers regarding priority setting practice. This information was used to:

1. Assess PBMA fit, and
2. Inform PBMA implementation.

Results: The priority setting approach introduced appeared to meet the desired attributes as described by the interviewees prior to trialing the approach. Pre-implementation, respondents wanted a more structured approach to align priority setting with strategic objectives rather than historical drivers such as acute-care decongestion and cost-minimization. An interdisciplinary group assessed proposals for redesign using criteria including accessibility, quality, cost, client choice and innovation. Post-implementation interviews identified challenges including mid-implementation changes in personnel and strategic direction. All participants viewed involvement of a public member at the decision making table as positive. With respect to implementing an explicit and collaborative approach to priority setting, one of the key findings was that this approach involves devolving decision making down hierarchical lines and this can be a barrier to implementation.

Conclusion: This work adds to the growing literature on use of evidence-driven approaches to support decision makers when facing resource scarcity. These approaches facilitate 'knowledge-to-action' regarding the integration of evidence into decision making practice. Collaboration between researchers and managers in practice enhances knowledge sharing and improves understanding of each others' contexts.



Presenter: Ian Cromwell

Title of Poster: The Cost of Waiting: The Economic Benefit of Reduction in Waiting for Early Breast Cancer Radiotherapy

Abstract: Objectives: Breast cancer patients whose radiotherapy treatment is delayed are more likely to experience a local recurrence than patients who do not wait. The purpose of this study is to determine the economic benefit, if any, of reducing waiting from the perspective of the Ontario health care system.

Methods: An investigation in the Canadian scientific and economics literature was conducted to determine the costs of assessment, diagnosis, treatment and follow-up of patients receiving care for a local recurrence. The risks associated with having a local recurrence, metastatic disease and terminal disease were also determined from the literature. The resulting cost of treatment was weighted according to the risk of each health event, and by the associated risk of recurrence due to radiotherapy delay.

Results: The cost of treating a recurrence, weighted according to risk of progression to more severe disease, was approximately (CDN 2008) \$36 000 within the model. The associated incremental cost savings per week of waiting reduction was \$72.49. Sensitivity analysis was conducted around the estimate.

Conclusion: In a health care system like Ontario's, which treats 8500 new breast cancer patients per year, a \$72 per-patient savings may represent a significant reduction in operation cost. These savings should be considered in context of how much resource investment is required to reduce waiting.



Presenter: Yang Cui

Title of Poster: Analysis of the Relationship between Assessment Indicators and Cost in Winnipeg Home Care Services

Abstract: Objectives: 1. To identify the average cost of service for clients within the Winnipeg Health Region and any additional client characteristics (such as age, gender, duration of the home care provision) that predict cost.
2. To determine which resource needs indicator of three was the best predictor of home care cost

Methods: First, fully completed assessment data with a signature date between January 1, 2005 and December 31, 2005 were extracted from the MDS-HC database. Second, clients open to home care services for 90 days or more and clients who had active visits in PROCURA over a six-month period were identified. Third, using administrative databases (MSSP and HSC payroll), the service cost data for nurses and home support workers were obtained. Finally, multiple regression analysis was conducted to estimate which indicator most accurately predicted cost.

Results: The majority of home care clients were elderly, average age was 78. The average weekly cost per client was \$118.55. Younger clients (under 65) were higher cost and resource users. Clients with short and long service episodes had higher weekly costs compared with those who had medium-length service episodes. A full 67% of all clients received service for more than 23 weeks. The indicator RUG-III/HC best predicts cost ($R^2=0.287$), compared with the two indicators of PCH Care Level and MAPLe Score. It is an important indicator of relative resource utilization in the Winnipeg Home Care program.

Conclusion: Given that RUG-III/HC resource indicators are automatically calculated for long term home care clients as part of routine assessment with the RAI-HC, there is merit in exploring how the RAI-HC case mix system can be better utilized in the Home Care program.



Presenter: Colleen Cunningham

Title of Poster: Pharmaceutical policy research needs in Canada: A survey of research users

Abstract: Objectives: To identify key current issues in pharmaceutical policy in Canada, pharmaceutical policy research gaps, and priority areas where targeted research would provide the highest value for policymakers. Using survey results, this poster presentation will provide a timely snapshot of major policy issues for use by decision makers and researchers.

Methods: We are currently conducting telephone interviews with high-level pharmaceutical policymakers across Canada, in tandem with an online survey of Canadian health policy decision makers, patient and consumer representatives, health professional groups, researchers, and pharmaceutical industry respondents. We ask respondents to identify: key issues in pharmaceutical policy over the next year and the next three to five years, areas where new research would have the greatest policy impact, and their primary research sources. Survey and interview data will be coded and analyzed to identify major themes using a grounded theory approach (using NVivo version 8 qualitative software).

Results: Research is underway. Specifically, we are conducting online surveys and telephone interviews in January through mid-February. Data coding and analysis will be done throughout March, and the results will be compiled into a manuscript in April, prior to the CAHSPR conference in May. Our results will provide a timely summary of short- and medium-term policy issues and current unmet research needs from the perspective of those who use research to inform pharmaceutical policy. We anticipate organizing results within the following domains: prescription drug use, cost and outcomes; pricing and regulation issues; resource allocation and coverage; quality use of medicines; and, pharmacare policy.

Conclusion: Our results will provide a summary of the key current issues in Canadian pharmaceutical policy and pharmaceutical policy research. The findings will highlight gaps in knowledge and areas of (currently unmet) policymaker demand for research, which will be useful for researchers in planning upcoming pharmaceutical policy research agendas.



Presenter: Heather Dawson

Title of Poster: Patient Pathways: Transfers from Continuing Care to Acute Care

Abstract: Objectives: Few studies have examined transfers between continuing-care settings (i.e. nursing homes, homes for the aged and other chronic care facilities) and acute care hospitals in Canada. Our study highlights this care pathway among older seniors. We explore reasons for transfers and repeated transfers and wait times associated with hospital discharge.

Methods: Residents of continuing care facilities 75 and older who were transferred into acute care hospitals in Canada (excluding Quebec) were identified in CIHI's Discharge Abstract Database (DAD) for 2007-2008. To better understand characteristics of continuing care patients, reasons for their transfers and their resulting discharge dispositions, we compared them to seniors 75 years and older who were admitted to acute care hospitals directly from home or from a non-continuing care setting.

Results: In 2007-2008, 35% of acute care hospitalizations in Canada (excluding Quebec) were for persons 75 and older, and of those, 10% were the result of transfers from continuing care settings. The majority (83.4%) of these patients arrived by ambulance; most were admitted via emergency department (90.5%). One-quarter had more than one transfer within the year. The main reasons for transfer were respiratory conditions such as COPD; circulatory conditions such as heart failure, and injuries due to falls. Three-quarters of these residents returned to a continuing care setting-the majority (96.0%) of those who returned to the same facility did not wait for their bed. In comparison, 60% of those initially admitted to acute care from a non-continuing care setting waited to access a bed.

Conclusion: Reports indicate that residents of continuing care settings are more medically complex than ever before. With an increased focus on health system accountability, patient safety, wait times and potentially avoidable admissions reasons for patient transfers from continuing care settings is part of the planning puzzle.



Presenter: Johanne Déry

Title of Poster: Conjuguer Performance Et Soins Emprints De Caring : Un Impératif Pour L'administration Des Services Infirmiers

Abstract: Objectives: L'objectif de la présente affiche est de démontrer qu'il est possible de conjuguer la philosophie du caring qui constitue les fondements de la discipline infirmière, l'économie et la performance organisationnelle tout en assurant la qualité des soins dans un contexte de pénurie d'effectifs

Methods: Nous avons effectués une synthèse critique de la littérature ayant pour objectifs de : 1-présenter les principales approches conceptuelles qui orientent l'analyse de la performance organisationnelle; 2-discuter des rapprochements possibles entre les fondements de la discipline infirmière et la notion de performance; 3-traiter des possibilités d'intégration de la performance organisationnelle à l'administration des services infirmiers.

Results: Après avoir retenu trois dimensions à la performance organisationnelle : efficience, efficacité et pertinence, il a été constaté que la définition de ces dimensions était fort différente : perspective quantitative pour l'organisation; perspective qualitative (invisible) de la profession infirmière. L'effort de synthèse de cette présentation permet d'établir les avenues théoriques à considérer dans le développement de l'administration des services infirmiers de façon à ce que les impératifs organisationnels rencontrent les valeurs qui sous-tendent la pratique infirmière.

Conclusion: Coupures budgétaires, augmentation de la complexité des soins, diminution de la durée de séjour et manque d'effectifs infirmiers sont tous des impondérables avec lesquels l'administration des services infirmiers doit composer. Considérant ces facteurs, les organisations doivent assurer des soins et services de qualité tout en démontrant leur performance: un défi actuel à relever.



Presenter: Joanna Dionne

Title of Poster: Patient Preferences of 5-ASA as a maintenance therapy in ulcerative colitis: A qualitative study

Abstract: Objectives: The objectives of the present study are: 1) to identify what features of 5-ASA as a maintenance therapy are important to UC patients 2) to develop a patient preferences questionnaire.

Methods: Two focus groups were conducted with Ulcerative Colitis patients to identify what features of UC maintenance therapy were important to them. Participants were recruited by flyers posted in an outpatient gastroenterology clinic. A semi-structured interview guide was developed based on literature and consultations with experts and was pilot tested. Participants were provided with a medication information sheet listing all 5-ASA trade names and pictures of medications. Demographic information was also collected. The focus groups were audiotaped and lasted 1.5-2 hours. The discussions were transcribed verbatim. Data was analyzed by reviewing the transcripts and identifying key themes.

Results: Fifteen Participants were recruited to participate in the focus group, seven individuals participated in the focus groups, and three of them were male. Participants ranged in age between 24-74 years, and years since diagnosed ranged from 4 - 31 years. All participants, but one, had previous experience with 5-ASA therapy. The participants identified and ranked effectiveness as the most important treatment feature followed by route of administration, prevention of adverse effects, pill burden, and dose frequency. Participants strongly preferred oral medication as a maintenance therapy for its convenience and ease of use, but are more willing to use topical therapy during times of disease exacerbation but not as a long term therapy.

Conclusion: This study helped to identify what aspects of 5-ASA as a maintenance therapy are important to patients. The insights gained from the study may help physicians discuss potential treatment options with patients and incorporate patient preferences into the plan of care.



Presenter: Tyrone Donnon

Title of Poster: Interactive HTA Education Program for Health Care Practitioners in a Local Residency Program

Abstract: Objectives: Since the role of medical expert is well emphasized in residency training, our educational initiative intended to demonstrate how a Health Technology Assessment (HTA) framework: (1) integrates all seven of the Royal College's CanMEDs core competencies, and (2) can assist in priority setting at the local level.

Methods: Through the development of educational manuals and workshops delivered to residents in various medical specializations, we disseminated information regarding HTA and the utility of our two newly developed and inter-related HTA tools. The first step operationalizes how residents can fulfill their CanMEDs roles by using a HTA framework. The Relevancy/Urgency Method is a tool intended to help with setting HTA priorities at the departmental level. In times of greater accountability and resource constraints, this approach is useful in helping departments identify and prioritize their HTA initiatives. Examples from specific divisions were used.

Results: Educational materials on HTA were developed and presented to 25 Directors of a Post Graduate Medical Education Program representing 52 residency specialty and subspecialty programs. Overall, the residency program directors expressed support for the HTA approach as the protocol used to identify residency research projects connected with the CanMEDS roles. The relevancy/urgency method was found to be important in identifying which drugs, devices, equipment and/or medical procedures were of the greatest research priority. Results are discussed in relation to survey responses from residents, program directors, and division members about their needs for HTA priorities and concerns for making health-care decisions and policies connected to components that relate to all seven of the core competency domains.

Conclusion: Utilization of the HTA framework and Relevancy/Urgency Method emphasizes the reality that different departments or divisions may list and differentially rank order technologies and their assessment priorities based on the special needs and visions for their own department or residency in-training program.



Presenter: Tannis Erickson

Title of Poster: Enhancing the Youth Health Survey through Regional Collaboration in Manitoba

Abstract: Objectives: To review and enhance the Interlake Youth Health Survey and methodology and to build capacity in the area of risk factor surveillance in Manitoba to support a coordinated surveillance system.

Methods: An Advisory Committee with membership from all Manitoba RHAs and other partners (Manitoba Health & Healthy Living, CancerCare Manitoba, Canadian Cancer Society -Knowledge Exchange Network, Partners in Planning for Healthy Living) oversaw the project. Environmental scans, literature searches and consultations with users and experts were the primary research methods. Consultations with the users of the data served to ensure that the information needs were being met by the content of the survey.

Results: The Youth Health Survey tool was revised to reflect current best practice in the area of risk factor surveillance in youth and currently accepted risk factor indicators. Accompanying methodology was also developed to help guide the implementation of the YHS in RHAs. Capacity building in the development of survey questions and methodology amongst members of the project and other staff in the RHAs will be achieved through participation in this project. A provincial surveillance workshop was planned to share results and lessons learned as the culmination of this project.

Conclusion: The creation of an enhanced YHS tool and methodology that can be used across the province has moved the process a step closer to a coordinated risk factor surveillance system in Manitoba. The information gathered by surveillance is key to planning healthy living programs at community, regional and provincial levels.



Presenter: Era Mae Ferron

Title of Poster: A Nurse Faculty Model of Retention

Abstract: Objectives: The worldwide shortage of nurses also prevails among the nursing education sector. Empirically-sound retention strategies serve to retain nurses, decreasing the shortage. Unfortunately, little research has been dedicated to understanding faculty retention. Therefore, this doctoral study aims to test a developed model of nurse faculty retention to the academic setting.

Methods: Based on a comprehensive literature review, a Nurse Faculty Model of Retention has been developed. Retention and turnover, considered polar opposite constructs, have been studied extensively in disciplines, such as business, psychology, sociology, and nursing. In effect, the developed model is largely based on Mueller and Price's (1991) multi-disciplinary approach to retention behaviour. Their integrated model "portrays the work conditions, environmental conditions, and employee characteristics as primarily affecting turnover by impacting on the intervening variables of job satisfaction, organizational commitment and intent to stay". The developed model specifies the antecedents of retention and the processes by which the behaviour occurs.

Results: Examination of the literature reveals that organisational commitment is rarely the focus in nurse retention studies. Rather, job satisfaction is the prevailing focus in the nurse retention discussion. In business settings, however, organisational commitment is found to be a stronger predictor of retention than job satisfaction. Moreover, the conceptualization and operationalization of organisational commitment as a uni-dimensional rather than multi-dimensional construct may be a reflection of the minimal role it plays in nurse retention literature. Therefore, the following hypotheses will be tested in this study: (a) organisational commitment is a greater predictor of nurse faculty retention than job satisfaction; (b) organisational commitment is a direct predictor of intent to remain; (c) organisational commitment mediates the association between job satisfaction and intent to remain.

Conclusion: Efforts made towards retaining faculty necessitate action grounded in theory. This study will test a multi-disciplinary retention model, re-examining organisational commitment as a significant factor in retention behaviour. The shortage of approximately 88% of nurse faculty in 2007 makes the retention of faculty pivotal in decreasing the shortage.



Presenter: Ilia L Ferrusi

Title of Poster: Economic Evaluations of Targeted Therapy - do they meet the needs of decision-makers?

Abstract: Objectives: Targeted therapy utilises the gene/protein expression of a patient to inhibit cancer growth with less damage to normal cells than traditional chemotherapy. We sought to evaluate whether published decision-analytic models of trastuzumab, a targeted therapy, have adequately informed decision-makers, by considering diagnostic implications, external generalizability, and representation of decision uncertainty.

Methods: Systematic review of peer-reviewed decision-analytic models considering human epidermal growth factor receptor-2 (HER2) testing or trastuzumab treatment in breast cancer (BC) was conducted. Economic/decision-analytic, HER2/trastuzumab and BC filters were developed to identify publications indexed in select electronic databases (Biosis, Cochrane, CRD, EconLit, EMBASE, HEED, MEDLINE and PubMed) published up to October 2008 in English. Data abstraction focused on use of evidence of effectiveness and local data sources (HER2 test accuracy, trastuzumab effectiveness, costs, utilities), model calibration to the local setting, sensitivity analysis methods (scenario analyses, univariate, multivariate and probabilistic analysis) and representation (i.e. cost-effectiveness acceptability curve[CEAC], value of information analysis).

Results: The search strategy identified 958 citations and 16 were included in this analysis. Only 2 studies considered the joint effects of testing and treatment, while 2 studies modeled testing exclusively. Real world or clinical practice data were used most frequently to estimate costs (16/16), followed by HER2 test accuracy (1/5), utilities (1/9) and trastuzumab efficacy (1/14). All other models of trastuzumab employed pivotal trial results. Model calibration was rarely reported (1/16), possibly due to publication space limitations. Univariate analysis of deterministic parameters was most common (13/16), while probabilistic analysis was used less frequently (7/16), but was more frequent in papers published ≥2006. Approximately half of all studies conducting probabilistic analysis presented CEACs (3/7). Value of information analysis was not conducted.

Conclusion: The evidence suggests that authors rarely include clinical practice, effectiveness or local data beyond costs; studies that utilised other real world parameters were specifically positioned to inform a local decision. The conduct of sensitivity analysis and its representation fell short of meeting decision-maker needs, but likely reflects delayed knowledge diffusion.



Presenter: Andrea Fleiszer

Title of Poster: Innovation in Healthcare - A Concept Analysis

Abstract: Objectives: Despite the increasingly common usage of the buzz-word "innovation," there is a lack of conceptual clarity around what this idea means and how it is characterized, especially within the healthcare domain. To contribute to establishing a foundation for its continuing study, this presentation describes a concept analysis of "innovation".

Methods: Morse and colleagues' (1995, 1996) criteria for concept evaluation was used as a guide for this analysis. Literature search methods included computer searches, manual library searches, citation tracking, and seeking recommendations from local experts in this field. The empirical literature search included English and French language publications for 1970-2008, from nursing, allied health disciplines, medicine, and management. A focus was directed to publications from 1990 onwards. The databases used were CINAHL, Medline, and ProQuest. Abstracts of over 600 articles were examined for their relevance; over 40 of these articles we reviewed. Books and other grey literature sources were also considered.

Results: The relatively small and recent body of healthcare literature about innovation relies on definitions presented in management fields. Innovation's most defining characteristic is that of newness. Other features are: applying an idea, product, or service successfully; involving creators and adopters; relating to an element of action (development and implementation) and including change; resulting in a benefit. Preconditions are contexts, circumstances, or needs necessitating change. The outcome is that innovation achieves something successful, beneficial, useful, valuable, or productive - as in the creation of a new product or a service, or a recognized change in behaviours or beliefs. Three key concepts that have received attention in the literature as either being different from innovation, or as being confused with innovation are invention, creativity, and change.

Conclusion: This topic is unmistakably broad, complex, elusive, and relevant to many disciplines/domains. An evaluation of definitions, characteristics, preconditions, outcomes, and boundaries reveals that the concept has a moderate degree of maturity. While some clarity and consensus exists in the literature across these categories, there is opportunity for further conceptual development.



Presenter: Patrick Fleming

Title of Poster: Retention of Specialist Physicians in Newfoundland and Labrador

Abstract: Objectives:

How long do specialist physicians stay in a Newfoundland and Labrador (NL)? Does retention vary among physicians who are locally trained, trained in other Canadian provinces, or trained in other countries? The objective of this project is to examine specialist retention in NL to identify strategies to recruit and retain physicians.

Methods: This study links 15 years of registration data (1992-2007) from the College of Physicians and Surgeons of NL with the 2007 Scott's Medical Database. It uses survival analysis (cox regression) to examine the proportion of physicians in each group that remain in the NL. Variables for analysis include: specialist type (e.g. medical vs. surgical), gender, age, location of post-graduate training, etc. Logistic regression is used to examine two dependant variables: i) if a specialist works in NL, ii) if a specialist works in Canada. Covariates include sociodemographic and professional variables.

Results: We report data on the average length of stay for specialist physicians trained in NL, other Canadian provinces, and international medical graduates. Sociodemographic and professional variables affecting retention are described. We differentiated retention patterns based on specialist group and type (e.g. medical vs. surgical, cardiology vs. ophthalmology), gender, and age.

Conclusion: A number of factors likely affect the retention of specialist physicians in NL. This paper has identified new considerations for decision-makers when engaged in the retention and recruitment of physicians. It adds to our understanding of physician supply by focusing its analysis on specialists.



Presenter: Dan Friesen

Title of Poster: Targeting System Reform: The One Percent of the Population that Consumes 35% of Alberta's Health Budget

Abstract: Objectives: Determine if a profile of the top 1% health care expenditure provincial residents yields information that can help allocate resources among sectors and encourage health promotion, illness prevention, alternative care planning, and coordination of multidisciplinary care. Explore relationship between morbidity, mortality, and treatment costs.

Methods: The data include multiple years of enrolment, demographic and socioeconomic characteristics, services utilization and expenditures, and health status of over 3 million enrollees for publicly funded health care services. Health status is assigned using physician claims and acute care inpatient and outpatient encounters to group enrollees into general and disease-specific groups. Prepared detailed profiles at various expenditure percentiles and disaggregated by: age/gender and socioeconomic characteristics; geography (provincial, regional, municipal); health sector (including acute inpatient, ambulatory care, physician fee-for-service, long-term care, home care, provincial drug plan); disease category; and time (years).

Results: Findings include: high consistency between years; expected distribution by age, sector, and gender; high correlation between the number of chronic diseases and total cost; higher cost risk associated with certain diseases; in any given year, low percentage of high-cost patients who die; significantly higher expenditure percentages associated with high-cost metropolitan patients but variable results for the non-metropolitan patients.

Conclusion: There are opportunities to address sustainability and improve management by identifying and profiling high-cost beneficiaries. Results can be generalized to other jurisdictions.



Presenter: Brenda Gamble

Title of Poster: Health Administration alumni views on management skills

Abstract: Objectives: Health reform recommends a shift in the site of care from hospitals to the community. What are the skills necessary to manage in the community? Health administration alumni were surveyed to determine their views on the skills necessary to be successful leaders within different healthcare sectors.

Methods: A self-administered electronic survey of Health Administration alumni from the University of Toronto's Graduate program (N=276) and Ryerson University's Undergraduate program (N=86) was conducted by email between June and December 2008. The questionnaire included items on employment characteristics (sector and type of work), views on leadership and educational skills and demographic characteristics. Analysis was performed by program, sector, and presence/absence of clinical training.

Results: Healthcare resembles and differs from other management jobs. 39.2% agree, and 39.8% disagree, that the skills required to manage in healthcare are the same as in other industries. Similarly, 36.6% agree and 40.7% disagree that the same skills are required to manage in the community as in hospitals. 74.4% agreed that clinical backgrounds were advantageous, with 34.8% indicating that it was necessary to successfully lead in healthcare. Although 61.3% of graduates had such backgrounds, this did tend to restrict them to managing within that area; only nurses reported managing outside of their clinical area. There was little movement of managers from hospitals to community; those moving tended to go to education/consulting/government. Ongoing analysis is mapping the particular skills identified as critical by job and setting.

Conclusion: There are both similarities and differences in the skills seen as necessary to practice in healthcare and in different sectors. However, for many a clinical background is advantageous to lead successfully regardless of sector. Despite the rhetoric of the shift from hospital to community, few move to the community sector.



Presenter: Loreen Gilmour

Title of Poster: Realism Approach to Theory and Implementation of Knowledge Transfer - A case study of a patient safety intervention

Abstract: Objectives: To understand the impact of local contextual factors on how frontline managers in an acute care setting implemented a new patient safety policy. To contribute to the knowledge translation literature as change is possible but not predictable and models have not been validated.

Methods: Pawson's realist approach was used to investigate "what works for whom, in what circumstances, in what respects and how". A sequential four-phased mixed-method design used theory mapping, case study, survey and theory revision. Theory and implementation were studied side by side.

Results: The Context-Mechanism-Outcome analysis indicated that the educate mechanism appeared to be triggered under all contextual situations. However, the delegate mechanism appeared very sensitive and was only fully activated in day units with limited manager-physician interactions.

Conclusion: Implementation efforts need to address the multi-team decision making process as front line manager decision making autonomy appears far more variable than the official hierarchy would suggest. Separately, the realist approach may contribute to the call for more theory-based and context sensitive implementation research.



Presenter: Richard Glazier

Title of Poster: Convergence of healthcare research and health services planning through Diabetes Strategy program in Ontario.

Abstract: Objectives: Diabetes Strategy is a comprehensive program undertaken by a ministerial body. Program's objectives are to gather information about current diabetes needs and resources and to appropriately plan for new services. Spatial analyses, maps and models developed by external research team provide accurate information required for effective completion of this program.

Methods: We gathered and analyzed individual and ecological data on diabetes and diabetes complications in Ontario. We also analyzed socioeconomic and ethnic factors historically related to diabetes. Furthermore we analyzed diabetes healthcare services (primary and specialized) by looking at small area level patient-service rates and travel times required to reach the nearest diabetes service. We summarized our findings in rural/urban stratified 'composite diabetes needs index'. Results obtained thus far were examined by policy managers at the ministry and in three pilot implementation regions. Further analysis will support expansions of multifunction care provider 'hubs' and supported by them local healthcare services.

Results: The conducted analyses and maps revealed detailed patterns of diabetes needs and services in Ontario. A number of areas of concern were identified within three program pilot implementation regions. These areas show an unfavourable combination of such indicators as high diabetes prevalence, poor access to diabetes services, high percentages of visible minorities or Aboriginal people, high levels of poverty, and high hospitalization rates for avoidable diabetes' complications. In rural Northern Ontario the highest impact on the 'composite diabetes needs index' had long travel times to services, high percent of Aboriginals, and high emergency department admissions for diabetes. In more urbanized Southern Ontario diabetes needs were determined mainly by visible minority status, low income, and greater local mismatch between demand and supply of diabetes programs.

Conclusion: This project shows an example of successful collaboration between healthcare researchers and health services planners. The outcome of this work provides healthcare decision makers with a set of scientific evidence-based criteria for better understanding of diabetes needs in Ontario and for improved planning of future services to meet these needs.



Presenter: Bing Guo

Title of Poster: Risk assessment instruments for predicting recidivism of spousal violence

Abstract: Objectives: Male-to-female spousal violence is a significant public health problem worldwide. This health technology assessment (HTA) was to examine the research evidence on the inter-rater reliability and predictive validity of risk assessment instruments used for predicting spousal violence recidivism and lethality in males who have had contact with the justice system.

Methods: All original, published systematic reviews or primary cohort studies were identified by systematically searching PubMed, the Centre for Reviews and Dissemination databases (National Health Service Economic Evaluation Database, HTA, Database of Abstracts of Review of Effects), EMBASE, Family & Society Studies Worldwide, Sociological Abstracts, Social Services Abstracts, Social Sciences Abstracts, Academic Search Premier, Web of Science, PsycINFO, and ABI/Inform from January 1995 to May 2007. Relevant library collections and the websites of HTA-related agency resources were also searched. Study selection was conducted according to predetermined criteria. Some major methodological issues were identified but no formal quality assessment tool was used.

Results: Eight primary studies were found that evaluated the predictive validity of several currently used instruments: the Ontario Domestic Assault Risk Assessment (ODARA), the Spousal Assault Risk Assessment (SARA), the Violence Risk Appraisal Guide (VRAG), the Danger Assessment, the Domestic Violence Screening Instrument, and the Level of Service Inventory-Revised. Inter-rater reliability was reported only for the SARA, the ODARA, and the VRAG. Limited research indicated good inter-rater reliability for all three instruments. In terms of predictive validity, none of the studies reported any lethal assault during the follow-up period. The area under the receiver operating characteristic curve (a measure of predictive validity) was less than 0.80 (range 0.59 to 0.77) for all instruments evaluated, suggesting only marginal to moderate improvement over chance in predicting non-lethal recidivism.

Conclusion: All of the instruments were better than chance in predicting non-lethal spousal violence recidivism, but the superiority of one tool over another or their ability to predict lethal assault remains unanswerable. It is inappropriate to base any decision about an individual's risk of recidivism solely on the scores of these instruments.



Presenter: Gillian Hanley

Title of Poster: Examining regional variation in primary cesarean section rates in British Columbia

Abstract: Objectives: To estimate the contribution of differences in maternal characteristics (age, parity, pre-pregnancy weight, weight gain during pregnancy and smoking), maternal conditions (hypertension, diabetes, multiple birth), and obstetric interventions during delivery (labour induction and epidural anesthesia) to regional variation in primary cesarean section rates in B.C.

Methods: Using data from the British Columbia Perinatal Database Registry, we studied all deliveries in British Columbia between 2004 and 2007 (n=116,839). We calculated crude primary cesarean section rates, and examined unadjusted odds ratio of the association between each Health Service Delivery Area (HSDA) and likelihood of delivery by primary c-section. Multivariate logistic regressions were used to determine whether regional variation in primary cesarean section rates could be explained by differences in maternal characteristics, maternal conditions and obstetric interventions during delivery. Observed over expected ratios were calculated using a province-wide regression to generate expected primary cesarean section rates in each HSDA.

Results: Rates of delivery by primary cesarean section varied from 16.1% of births to 27.5% of births across HSDAs. While differences in maternal characteristics and conditions could explain this variation in some HSDAs, there was significant variation that could not be explained even after controlling for covariates representing maternal characteristics, maternal conditions and obstetric interventions. Observed over expected ratios also indicated that primary cesarean sections rates varied from 26% below to 22% above the rates that would be expected given the provincial mean. Our results suggest that while some variation may be explained by regional characteristics-such as the higher than would be expected rates in some Northern regions-this cannot explain the significant variation in rates across B.C.

Conclusion: Regional differences in primary cesarean section rates are only partially explained by maternal characteristics, maternal conditions and obstetric interventions during delivery. These results suggest that areas with higher usage rates may be performing the intervention in less medically appropriate populations-a hypothesis that should be further investigated.



Presenter: George Heckman

Title of Poster: Transitional Care Team Program: Evaluation Study

Abstract: Objectives: The primary goal for this program is to improve the overall health and productivity of hospitalized patients with COPD and CHF by transitioning them into the community earlier through access of proactive chronic disease management strategies. The project will also be evaluating; patient and caregivers satisfaction, clinical improvement, cost reduction and patient functionality.

Methods: A Transitional Care Team has addressed supporting efforts to improve quality of life for patients with chronic diseases (targeting patients with COPD and CHF) by promoting and encouraging patients to take responsibility for self management. The core of this program is a partnership with a highly qualified team consisting of: Clinicians and (Gerontologist/Cardiologist, Advanced Practice Nurses, Master's of Education and Director of Patient Care in a Community Access Center) and administrators who have experience and expertise in both the patient population, education and the management of chronic diseases.

Results: Preliminary results demonstrate the identification and correction of medication discrepancies, increased client knowledge regarding the indications of worsening condition and appropriate responses, increased adherence to treatment recommendations, as well as improvement from baseline in Self Care Assessment (Hobic), and Quality of Life (SF-12) measurements.

Conclusion: APN led interventions to enhance self-management improve the health and quality of life of people with Heart Failure or Chronic Obstructive Pulmonary Disease. Clients and Caregivers with improved understanding of their medical conditions are increasingly motivated to develop effective self-management strategies and adhere to treatment recommendations.



Presenter: Deirdre Hennessy

Title of Poster: Effect of Socioeconomic Status on Mortality and Care Provision Among Critically Ill Patients

Abstract: Objectives: The objective of this study was to investigate differences in hospital mortality among intensive care unit (ICU) patients of differing socioeconomic status (SES). In addition, we examined the impact of SES on provision of care, during ICU and in the year after discharge.

Methods: This was a population based historical cohort study of critically ill patients in the Calgary Health Region between Jan 2002 and Dec 2006. The primary outcome measure was all cause hospital mortality. SES was measured using a variable that specified whether or not patients received welfare or subsidy for their health care premiums. Provision of care was measured using ICU and hospital length of stay and the Therapeutic Intervention Scoring System (TISS), a system developed to record nursing workload in ICU.

Results: There were 9631 patients admitted to ICU during the study period, 7523 who were residents of the Calgary Health Region (CHR). When patients were stratified by SES, 2978 never received welfare or subsidy (W/S); 2164 received W/S for 1-2 years and 2381 received W/S for >3 years. In terms of outcomes, hospital mortality was highest in the group that received W/S for 1-2 years at 39.9% compared to 22.9% for those who never received W/S and 27.2% for those who received W/S for >3 years. ICU and hospital stays were longest for those received W/S for >3 years and shortest for those who never received W/S. TISS scores did not vary between groups, neither did the proportion of patients that underwent surgical intervention.

Conclusion: SES is an important determinant of both health and health care provision. This preliminary descriptive analysis demonstrates some differences between socioeconomic groups in terms of outcome from critical illness and provision of care. Further analysis will involve the construction of regression models to adjust for age and other important covariates.



Presenter: William Hogg

Title of Poster: Enabling e-health through outreach facilitation in an eastern Ontario health region

Abstract: Objectives: This project merges elements of the Ontario Diabetes Strategy with an outreach facilitation intervention to 1) implement a diabetes registry with outreach facilitation support in primary care practices in the region; and 2) improve the quality of care of diabetes patients through improved adherence to evidence-based diabetes guidelines.

Methods: The diabetes registry project is an exciting pan-Ontario project occurring over 5 years in partnership with the MOHLTC and the regional health authorities (LHIN). The registry is being piloted in two 'early adopter' health districts in eastern Ontario. In our LHIN it is very primary care focused and will be offered to 1200 physicians. Implementation of the registry will be supported by nurse outreach facilitators who assist practices in making system level changes to incorporate the registry into routine care. The project is being rolled-out using the "stepped wedge" design. All providers and diabetes patients in the practices can participate.

Results: Within our region we will begin with a pilot study in three practices. These participants will provide feedback on the functionality, use, and impact on work, and suggest improvements required for the planned mass roll-out across the entire region. Evaluation will examine: (1) process of implementation, (2) utilization, (3) efficacy of implementation, (4) economic analysis, and (5) improvements in provider compliance with the evidence-based guidelines.

Conclusion: The Diabetes Registry Project has enormous potential to create positive impacts in health of diabetic patients. The results from the 'early adopter' sites will directly feed into the larger provincial diabetes prevention and management initiative, where the diabetes registry will function as a significant aspect of Ontario's Diabetes Strategy.



Presenter: Gladys Honein

Title of Poster: Improving Uptake of Colorectal Cancer Screening among Marginalized Populations: A Systematic Review and Meta-Analysis

Abstract: Objectives: Colorectal cancer (CRC) screening is underutilized in Canada especially among marginalized populations such as women, ethnic groups, immigrants, aboriginal and low socioeconomic status individuals. The primary objective of this systematic review is to identify interventions that increased the uptake of CRC screening tests among marginalized populations. We adopted a socio-ecological model as a conceptual framework for this review.

Methods: Method: Systematic review and meta analysis Data sources: Medline and Embase.

Study selection: Randomized controlled trials without language restriction were assessed for eligibility and quality. The quality of the trials was assessed using the Canadian Effective Public Health Project which considers the concealment, blinding, attrition and analysis. Main outcome measure: The uptake of any colorectal cancer screening test taken from the health record

Results: 27 studies were included: 3 policy studies, 7 organizational studies and 17 individual studies.

The policy studies included removing dietary restrictions (increased the uptake by 50%; RR= 1.57, CI : 1.30-1.9) and physician recommendation (RR= 3.4, CI : 3.13-3.7). Organizational studies included an intervention to convert from sigmoidoscopy to colonoscopy on the same visit, incorporating FOBT with health check, and 3 studies assessed the impact of a personal navigator (meta-analysis result: RR:1.13 CI: 0.05-23.60) with I2 94%. The individual level studies were categorized into purely educational to motivational and cultural competency interventions. Results ranged from poor impact (purely educational) to moderate effect (motivational) to high effect (two of the cultural competent studies).

Conclusion: This systematic review shows that effective interventions to improve the uptake of colorectal cancer screening among marginalized populations is possible. This synthesis is meant to help decision makers adopt the best approach to improve uptake of CRC screening among marginalized populations



Presenter: Michelle Howard

Title of Poster: Organizational attributes of primary care associated with team functioning in Family Health Teams

Abstract: Objectives: Team functioning in interprofessional health care can improve care. Family Health Teams (FHTs) represent one model of interprofessional primary care. FHTs are highly variable in terms of size, organization, composition and governance. The objective of this study is to understand organizational predictors of team functioning in FHTs.

Methods: A cross-sectional survey of all staff of 21 FHTs in Ontario was conducted in the fall of 2008. The survey was designed according to a conceptual framework for team-based practice. The outcome instrument was the shortened 14-item team climate inventory. Independent variables included an organizational culture measure, questions on the practice leadership, and use of information technology in practice. At the practice level, information was obtained on the configuration of the practice and staffing, and the funding model. Hierarchical regression will be used to predict team functioning, taking account of the nesting in the data.

Results: Data collection will be completed in early 2009 and results will be presented. The response rate, with a follow-up mailing underway, is currently 57% (n=370). This presentation will provide results of the association between organizational variables and level of team functioning.

Conclusion: This study will provide information on the relative contributions of different organizational aspects of primary care that contribute to team functioning, in order to direct efforts at optimizing interprofessional primary care teams and quality of care.



Presenter: Amy T.M. Hsu

Title of Poster: Estimating Efficiency in Ontario's Long-Term Care Facilities

Abstract: Objectives: With uncertainty surrounding the impact of an ageing population, financing the future of long-term care (LTC) depends on cost control and more efficient use of resources. Using an economic approach, this study examines the relationships between labour inputs, quality of care and operational efficiency in Ontario's LTC sector.

Methods: Using the stochastic frontier analysis (SFA) of panel data, this study assesses the determinants of operational efficiency in LTC facilities in Ontario, while controlling for quality of care using a wide array of indicators. The analysis accounts for unobserved heterogeneity and the potential endogeneity of quality. Output was measured in terms of patient days, and labour inputs were measured in terms of accumulated FTE paid hours per resident-day in each LTC facility. Data was obtained from The Residential Care Facilities Survey, and quality indicators were derived from compliance reports conducted by the Ministry of Health and Long-Term Care in Ontario.

Results: Preliminary analysis revealed important differences in performance by profit status, despite the fact that facilities are compensated at the same per diem rates, with larger long-term care facilities operating more efficiently than smaller facilities.

Conclusion: Overall, we expect that differences in operational efficiency between for-profit, not-for-profit, and public facilities will not be significant after controlling for differences in service quality. The results will serve to underline the importance of considering an array of quality indicators and controlling for endogeneity of quality.



Presenter: Amina Jabbar

Title of Poster: Innovative Methods to Develop Evaluation Frameworks: "Concept Mapping" Effective Community Engagement in Ontario's LHINs

Abstract: Objectives: Evaluation of community engagement (CE) in health system organizations is fraught with methodological problems, including the absence of commonly-accepted evaluation frameworks and validated measurement tools. To address these challenges, we developed a valid and reliable framework to assess CE effectiveness in Ontario's 14 Local Health Integration Networks (LHINs).

Methods: Concept mapping is a participatory, mixed method that produces a conceptual framework of a selected phenomenon based on relationships between ideas generated by participants. LHIN organizational staff with CE responsibilities participated in three discrete stages. Through "brainstorming," participants generate statements that describe effective CE. In "sorting and rating," participants sort the statements into mutually exclusive and exhaustive groups, then rate their relative importance. The sort data provide the basis for generating a "cluster map," a visual representation of the framework and the conceptualized relationships between the statements. Finally, in "mapping," participants review the cluster map and finalize the framework.

Results: The CE effectiveness framework generated through the concept mapping process will be presented, including the reliability of the cluster map with calculations of split-half and inter-rater reliability. Participants' reviews of the cluster map and final framework generated through this process will also be discussed.

Conclusion: The implications of the CE effectiveness framework generated through this study for CE planning and evaluation will be discussed. In addition, the utility of concept mapping as an innovative, participatory method for developing frameworks in collaboration with health system managers and policy makers will be reviewed.



Presenter: Egon Jonsson

Title of Poster: IHE Consensus Development Conference on Depression in Adults: how to improve prevention, diagnosis and treatment

Abstract: Objectives: A proven, effective means of knowledge transfer is through scientific hearings called consensus development conferences. The objectives of the conference on depression was 1) to educate and inform attendees on how to improve prevention, diagnosis and treatment of depression in adults; and 2) to develop a consensus statement to inform health policy and practice.

Methods: During two days of scientific hearings, experts presented evidence on a series of pre-determined questions to an independent jury of mental health professionals and public representatives. The jury then convened overnight to write a consensus statement based on:

1. Presentations by experts working in areas relevant to the conference questions
2. Presentations by patients and caregivers
3. Questions and comments from conference attendees during open discussion periods
4. Closed deliberations by the jury

The jury's role was to synthesize the information presented into clear and accurate answers - in the form of recommendations - to a set of predetermined questions.

Results: The jury's consensus statement recommended wide-ranging and immediate changes in the way depression is viewed, prevented, diagnosed and treated in Canada. As a direct result of the recommendations the Canadian Psychological Association and the Canadian Psychiatric Association are in discussions to identify depression assessment tools.

Thirty thousand statements were sent to health care professionals and policy makers across Canada

A consumer supplement on the consensus statement appeared in a bilingual health magazine in 40,000 medical offices across Canada. The complete consensus statement appeared as a supplement (6,000 copies) to the Canadian Journal of Psychiatry and distributed to all Canadian Psychiatric Association members. Health Quality Council of Saskatchewan will launch a new Chronic Disease Management Collaborative that will address the jury's key recommendations

Conclusion: The rigorous consensus development conference format ensures the production of a well-considered, practical, and informative knowledge transfer tool that can be immediately used by policy and decision makers, and other stakeholders to effect change in the area of specific concern. The impact of the conference and resulting consensus statement are currently being formally assessed.



Presenter: Janusz Kaczorowski

Title of Poster: Extending Primary Care to Patients with High Blood Pressure through Community Pharmacies Connected by E-health to Family Phys

Abstract: Objectives: The Cardiovascular Health Awareness Program plus Action Plan (CHAP+AP) is an ongoing, community-based cardiovascular disease (CVD) and stroke disease prevention program targeting high risk populations. This study describes program activities and outcomes based on ongoing delivery of the program in 20 communities across Ontario.

Methods: Regular assessment sessions are promoted using community-wide advertising, referrals and/or personalized letters from family physicians to high risk patients. Sessions are delivered with support from pharmacists, community nurses, and local organizations. At the sessions, volunteer peer health educators assist participants in using a BpTRUT automated device to record blood pressure and other risk factors on a standardized form. With permission from the participant, summary risk profile forms are sent to the participant's family physician and pharmacist. Each participant receives a copy of the assessment, along with risk factor-specific cardiovascular health education materials and a list of local resources.

Results: In 20 Ontario communities there were 4579 assessments completed in 2008. CHAP+AP is run by a local coordinator and a total of 137 peer health volunteers in 20 communities assist with the program delivery. CHAP+AP sessions took place in 107 pharmacies or other community settings during 2008. Attendees average age was 68.9 (SD=12.9) years and 61.8 percent were female. 26 percent (99 of 383) of family physicians are currently participating in CHAP in these communities. A community nurse was alerted to a participant with high blood pressure 159 times and 28 participants were recommended to see the pharmacist during the CHAP+AP sessions.

Conclusion: Hypertension represents a significant primary health care problem, and its under-detection and under-treatment leads to an economic burden in health care expenditures and potential years of life lost. Using e-health CHAP+AP offers a viable, sustainable, community-based, low-cost program by which to potentially reduce the population risk for CVD and stroke.



Presenter: Arminee Kazanjian

Title of Poster: Compassion Satisfaction and Compassion Fatigue among Hospice Palliative Care Providers: The impact of caring

Abstract: Objectives: Little is known about experiences of compassion satisfaction (CS) and compassion fatigue (CF) among the Hospice Palliative Care (HPC) workforce, given their constant exposure to loss, grief and bereavement. CS and CF are useful constructs to understand workforce conditions specific to HPC but, until this study, have seldom been applied to HPC.

Methods: The research is based on results of a cross-sectional survey of HPC personnel in Canada in which experiences of compassion satisfaction and compassion fatigue were measured. The questionnaire also inquired about personnel background, education, employment experience, personal and organizational cultures, and other workforce-related concepts and issues. Included in the questionnaire was a psychometric scale that was refined and validated specifically for these constructs. The findings were analyzed in relation to other survey variables such as health care discipline, level of education of provider, individual attributes, and organizational factors.

Results: The results of this research will provide important information about the prevalence of CS and CF among HPC care providers and volunteers nationally, individual and organizational factors that influence them, the extent to which they are evident in different cultural contexts and information about their cross-cultural dimensions. This information can be used by managers, policy-makers, educators, front-line clinicians and volunteers to understand the adverse outcomes of compassion fatigue and to develop strategies to mitigate them and to foster compassion satisfaction. Ultimately, these findings can inform the development of education programs and effective workplace practices and policies that will promote positive growth for HPC providers.

Conclusion: This is the first time empirical data has been collected about the prevalence of CS and CF among HPC personnel in various settings in Canada. The findings identify socio-demographic and cultural determinants of CS and CF and will be used to produce and test statistical models that explore in more detail their relationship to experiences of CS and CF.



Presenter: Anne Kearney

Title of Poster: Outcomes of a comprehensive interprofessional health education strategy to improve patient care

Abstract: Objectives: To conduct a systematic evaluation of an interprofessional health education (IPHE) curriculum strategy to improve patient care at Memorial University including attitudes of students related to IPHE and IP teamwork and their satisfaction with pre- and post-licensure IPHE education activities.

Methods: Evaluation of all education activities was based on a modified Kirkpatrick (1967) program evaluation model with a focus on the first three stages: reaction, attitude modification and acquisition of knowledge and skills. Baseline data on attitudes related to IPHE and IP teams were gathered prior to the start of the strategy and again at the outset of the following two academic years from all undergraduate students in six health professional programs. A specifically developed post-survey tool was administered after each IPHE curriculum component to assess student satisfaction and their perception and understanding of IP teamwork.

Results: Student reaction to the IPHE curriculum was very positive and contributed to their understanding of IPHE and teamwork involving other health professionals. 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. Students were less enthusiastic about web-based online components. Challenges encountered included overcoming logistics such as a common time for participating students to have face-to-face learning activities and the space in which to hold many concurrent small group student discussions. It is essential that students be exposed to well-planned IPHE at various phases of their undergraduate and graduate education, that a variety of learning activities be explored, and that IPHE components be integrated into the curriculum of participating academic units.

Conclusion: IPHE has the capacity to address many stressors in the Canadian health care system including increasing patient acuity, unacceptable wait times, and escalating costs. However, it is a complex endeavour that requires meticulous planning undertaken in the spirit of true interprofessional collaboration between participating health professional academic programs.



Presenter: Charlotte King

Title of Poster: Using Administrative Data to Distinguish Key Pre-Diagnosis Events Leading to a Colorectal Cancer Diagnosis

Abstract: Objectives: As part of a larger study focused on identifying the care trajectory for colorectal cancer patients from pre-diagnosis to death, our objective was to identify key colorectal events prior to cancer diagnosis. Here we present methodology developed to identify endoscopies, cancer surgeries and other colorectal events in order to create trajectories.

Methods: Physician billing, outpatient and inpatient data from Alberta Health and Wellness for Alberta residents diagnosed with colorectal cancer between 2000 and 2005 were obtained. Diagnosis and procedure codes were categorized as endoscopies, surgery, other-colorectal, or non-colorectal based on consensus from a gastroenterologist, surgeon, and general practitioner. A literature review to identify codes for endoscopies was completed and compared to codes that were categorized by the physicians. Records in the billing were merged with outpatient and inpatient datasets by personal health number, date of visit and code category to ensure proper enumeration of key events.

Results: We received 1,827,697 billing records, 255,411 outpatient records and 34,779 inpatient records. Approximately 20% of the records were categorized as endoscopies, surgery and/or other-colorectal events. 90% of surgeries coded in the Alberta Cancer Registry matched exactly to the inpatient database. Two main data issues existed that had to be addressed in order to identify key colorectal events. First, physician billing practices were diverse and complex, requiring significant input from physicians to properly categorize codes. Second, many visits were captured in multiple datasets requiring extensive data exploration to develop an algorithm that properly enumerated visits. Issues related to code classification, code comparison, and identification of unique observations will be presented. The distribution of number of endoscopies and cancer surgeries identified per patient will also be presented.

Conclusion: This research presents methodology developed to identify key events prior to cancer diagnosis using administrative datasets. Integrating procedural and diagnostic codes from multiple coding schemas is challenging and code conversion creates certain limitations. The methodology described here could be used to identify and enumerate pre-diagnostic events in other settings.



Presenter: Michele Kohli

Title of Poster: Transparency and Priority Setting Within Community Care Access Centres

Abstract: Objectives: Although theoretical arguments for and against explicit priority setting have been described, few studies have explored health care professionals experiences with transparency. The objective of this research study was to examine the role that home care case managers believe transparency should play in patient-level resource allocation decisions.

Methods: In Ontario, access to publicly funded home care services is managed by Community Care Access Centres (CCACs) who employ case managers to assess potential clients and develop service plans. Case studies examining resource allocation were conducted with one urban CCAC and one rural CCAC. Data were collected through 39 semi-structured interviews with CCAC administrators and case managers and a review of CCAC policies and other relevant documents. Analytic techniques from grounded theory were used to identify themes related to the factors and values important in priority setting.

Results: Case managers emphasized the importance of being clear about the goals of service provision, describing how the intensity of services provided may change over time, and discussing discharge from services at the time that the service plan is developed. They believed that clients should be told why they were not provided with certain services through the CCACs. The CCACs promoted transparency and emphasized its use in conflict resolution, but did not make written versions of their policies publicly available. It is not clear if doing this would have increased or decreased frustration of both clients and case managers over priority setting. Although it was felt that transparency increased the consistency and fairness of decisions, it did not eliminate conflicts between case managers and clients.

Conclusion: Case managers believed that the use of some degree of transparency and discussion of service plans with clients can improve the process of allocating resources. Additional research is required to concretely determine how organizations can achieve the optimal level of transparency.



Presenter: Christine Kurtz Landy

Title of Poster: Getting the Research Off the Shelf: Making Research Relevant to Policy Makers

Abstract: Objectives: Research uptake for evidence informed policy development is complex. The Ontario Ministry of Health (MOH) is striving to make health services research they fund relevant. Their investment provides a vital evidence base about health services within the Ontario context to MOH policy makers and to Local Health Integration Networks for strategic development of health services.

Methods: This presentation describes the processes a CHSRF postdoctoral fellow and MOHLTC staff developed and implemented to synthesize the multiple research studies funded by the MOH into user friendly summaries.

Results: The issues encountered in the development of these summaries will be discussed including: 1) policy makers' need for brief expositions of multiple study findings and implications for policy development; 2) differences between policy and research drivers such as timing cycles; 3) consideration of research quality; 4) evaluation of the utility of the summaries; and 5) examination of paradigmatic divides between the researchers' perspective on high quality knowledge translation and the pragmatic needs of policy makers in making decisions. The structural components of the user friendly research summaries will be described.

Conclusion: Implications for future development of these research summaries, and how researchers and policy makers can help in this process will be discussed.



Presenter: Claudia Lagacé

Title of Poster: Towards a primary care-based sentinel surveillance system for chronic disease in Canada: benefits and implications for public

Abstract: Objectives: In Canada, most people with chronic disease receive their medical care from primary care physicians. The establishment of a primary care-based chronic disease surveillance network would provide key information to an overall public health surveillance system and fill gaps that currently exist in the disease surveillance spectrum.

Methods: Through its grant and contribution program, the Public Health Agency of Canada (PHAC) funds the College of Family Physicians of Canada (CFPC) for a Canadian Primary Care Sentinel Surveillance Network (CPCSSN), a pilot initiative aimed at testing the feasibility of establishing a national primary care sentinel surveillance system using regional practice-based research networks with primary care practices which use electronic medical records (EMRs). The CPCSSN was established with the primary aim of monitoring the occurrence of chronic diseases such as depression, hypertension, diabetes, COPD or osteoarthritis as well as their risk factors.

Results: This innovative surveillance project seeks to fill in current surveillance gaps, provide clinically verified data on chronic diseases and their management, make available timely information, and inform public health interventions/programs. The establishment of a Canadian sentinel surveillance network for chronic diseases may provide additional benefits to other key public stakeholders such as the public health units, family physicians (FPs) and the communities they serve. Potential benefits may include the development of working relationships between public health professionals and FPs, an increased awareness of the public to different health issues, improved primary care practice, and the possibility of involving the networks in other general practice-based public health activities. Implications for public health and policy will be presented.

Conclusion: This project presents an excellent opportunity to tap into a rich source of information that has not been effectively utilized before which ultimately, has the potential to enhance the capacity for public health chronic disease surveillance in the settings in which much of the chronic disease care is delivered in Canada.



Presenter: Lise Lamothe

Title of Poster: Merging Mental Health and Addiction Services to Treat People with a Co-occurring Disorder : Challenges and Processes

Abstract: Objectives: The need for integrated services to treat co-occurring disorders is now recognized. This situation led to the creation of a specialised clinic. This study aims to analyse the integration process that occurred in this particular clinic in order to identify the strategies and means used and their overall influence.

Methods: We conducted a qualitative case study. Data collection was based on three sources: semi-structured interviews (n=16), analysis of documents and observation. Our data collection extended from 2003 to 2006, all of which covers the change process from the year 2000 to 2006. We analysed the data from a process perspective. Data generated from the various sources and types of actors were compared in order to insure validity and comprehensiveness of the analysis. The analysis was also validated with informants; all members of personnel (clinical and administrative) were invited to a presentation of results and engaged in a discussion with researchers.

Results: Our analysis shows that the pursuit of integration is associated with important challenges at various levels: the clientele and professional practices, the adapted structural framework and the inter-organizational relationships. These challenges were met from the creation of the clinic. Strategies and means were used to reduce the tensions raised by those challenges and had effective influence on the integration process. However, our analysis reveals that integration is an ongoing process never completely achieved. In fact, challenges never completely disappear but they are rather being transformed, raising new tensions to which members of the organization need to respond with new strategies and means in order for the integration process to continue.

Conclusion: These results force us to reconsider the integration of services, not as a fixed result but rather as an object of change emerging from a complex process of which the outcome remains unknown. This new perspective ties itself to the notion of sensemaking, offering new avenues for future research.



Presenter: Lacey Langlois

Title of Poster: From Home to Facility-based Continuing Care: A New Tool to Flag Clients and Populations at Risk

Abstract: Objectives: There is increasing interest in preventing unnecessary institutionalization of older adults. The objective of this analysis is to showcase a new research-based tool that identifies home care clients who may be at risk for admission to facility-based continuing care. The analysis will highlight key risk factors across three Canadian jurisdictions.

Methods: The CIHI Home Care Reporting System (HCRS) allows for comparative reporting of home care quality and outcomes. Eight jurisdictions are adopting the HCRS standard. Yukon, Ontario and Nova Scotia currently submit data. In 2008, CIHI released new Clinical Assessment Protocols (CAPs), supporting real-time evidence-based feedback for clinicians. CAPs also inform system-level quality monitoring and planning. In this analysis, HCRS data are used to highlight the Institutional Risk CAP, which flags home care clients at risk of admission to facility-based continuing care (e.g. long-term care). The analysis will explore the characteristics and risk factors of those flagged by the CAP.

Results: This analysis illustrates the similarities and differences in home care populations across three jurisdictions using the RAI-HC[®] assessment, developed by interRAI, an international research consortium, and submitted to HCRS. The HCRS data are used to compare relative rates of clients who are flagged by the Institutional Risk CAP, which indicates a risk of being admitted to facility-based continuing care within the subsequent 90 days. The analysis sheds light on the prevalence of the most important risk factors that may result in admission, many of which are modifiable. The results provide clinicians and policy-makers with a comparable profile of admission risk among home care clients across three Canadian jurisdictions.

Conclusion: As demand for continuing care grows with the aging population, it will be increasingly important to ensure that services are provided in the most appropriate setting. This analysis provides a starting point for identification and targeting of home care clients who may be at risk of potentially avoidable institutionalization.



Presenter: Eric Latimer

Title of Poster: Towards quality indicators for prescribing of antipsychotics in schizophrenia

Abstract: Objectives: Several antipsychotic medications are available for the treatment of psychotic symptoms in schizophrenia. Our aim was to explore the distribution of three possible quality indicators in antipsychotic prescribing among physicians and hospitals in Québec, as well as their correlates.

Methods: Provincial administrative data for 2003 and 2004 on prescriptions filled, physician services and hospitalizations were obtained for all publicly insured adult residents of Québec who had a schizophrenia diagnosis and who consumed at least one antipsychotic during this period (N=29,155). Based in part on the literature and in part on qualitative interviews of psychiatrists in Québec, we considered three possible quality indicators: (1) systematic prescribing of higher doses; (2) variability in dosing across a psychiatrist's patients; and (3) use of clozaril, a drug recommended for use in treatment refractory patients but requiring more monitoring of patients.

Results: We find that: (a) there appears to be considerable variation in the propensity to prescribe high doses not only across physicians but also across hospitals, suggesting that differences are not due only to case mix differences; however, hospitals that prescribe higher doses do not have more hospital days per patient; (b) variability in dosing, measured by the average coefficient of variation of antipsychotic dosing across a physician's caseload, varies across physicians and hospitals, but again this is not associated with greater hospital days; (c) overall prescribing rates for clozapine in Québec are low in comparison with rates reported elsewhere and rates considered likely to be optimal, and highly variable across hospitals. Consistent with findings reported elsewhere, patients on clozaril have fewer hospital days on average.

Conclusion: The clearest policy implication to emerge from these findings to date is the need to increase access to clozaril in hospitals that do not currently prescribe it.



Presenter: Chad Leaver

Title of Poster: Understanding contributions of organizational change culture and capacities when implementing a flow improvement intervention

Abstract: Objectives: Hospital-wide patient flow improvement processes to decrease ED waiting times are complex and require crucial staff engagement and management leadership to ensure sustainability of the change goal. Our aim was to identify and test the contribution of organizational factors that may serve as barriers or facilitators to implementation success.

Methods: Potential factors and candidate measures were identified by literature review. Hypotheses were generated specific to the hospital change intervention under study guiding the definition of eight change capacity constructs. The self-complete survey was pilot tested among nursing, physician and administrative staff at a large community hospital participating in a Ministry of Health ED process improvement pilot program. Quantitative survey data were analyzed and a weighted average composed each construct score. We conducted a combined analysis of qualitative focus-group data to inform and validate change capacity constructs under consideration.

Results: Candidate measures (86) were identified from the literature and research team consult. The pilot survey contained 49 items on a scale of 1-5 (low/high); grouped across 8 constructs: Openness of professional communication across the hospital (3.3); Perceived Quality of intra-(3.0) and inter-professional communication (2.9); Psychological Safety (3.5); Goal Importance (1.9); Goal Congruence (3.0); Senior Management Support/ Prioritization of the Goal (2.8); and Participatory / Informed Leadership (2.9). ED (15), General Medicine (22) and Senior Administrative (8) staff completed the survey; and participated in focus groups (23) and in-person interviews (3). Qualitative data suggest coordinated communication and senior management support is essential to achieve implementation success; and an overall increased capacity to engage in change efforts was highlighted as result of the pilot.

Conclusion: We developed a survey to understand organizational factors that may influence implementation success of a hospital process improvement intervention to improve ED-waiting times. Qualitative data provide an increased understanding of the organizational context of communication nodes and gaps; and increased insight to the overall impact and sustainability of improvement efforts.



Presenter: Tina LeMay

Title of Poster: The Costs of Hospital Stays: Why Costs Vary

Abstract: Objectives: Using CIHI's latest case mix grouping methodology, CMG+, the objective is to demonstrate how the five factors embedded in this methodology may contribute to variations in acute care hospitalization costs in Canada.

Methods: CMG+ provides a greater level of specificity in hospital resource consumption and is used to show the effect of the five factors on the variation in hospitalization costs. These factors are: Age Category (age of the patient), Comorbidity Level (co-existing illnesses beyond the main reason for hospitalization), Flagged Intervention (specific flagged procedures associated with higher resource consumption), Intervention Event (the number of specified intervention events performed in a single hospital visit) and Out-of-Hospital (OOH) Intervention (selective interventions performed outside the admitting facility).

Results: Results show the extent to which average hospitalization costs vary according to the five factors. For example, it may depend on the type of disease or condition being treated, how many interventions are used during a patient's hospital stay, how and where a patient is treated, type of patient and the length of hospital stay. For example, in the case of treating typical inpatients who had an angioplasty after a heart attack, the overall average cost per hospitalization was \$10,553. However, the average costs of hospital stays per case ranged from \$4,693 to \$78,013 after adjusting for the various factors.

Conclusion: Highlighting the tools/data used to demonstrate variations in resource consumption and how they affect costs may influence financial and resource allocation decisions. Costs will vary from place to place and region to region based on characteristics of their respective populations and differences in the delivery of care.



Presenter: Kathy Li

Title of Poster: Determining the Minimal Clinically Important Difference for Important Outcomes of Statin Therapy

Abstract: Objectives: To examine the magnitude and the method of selection for the delta that statin trials were designed to detect. Also, to establish an MCID with prescribing physicians. MCID was defined as the smallest benefit of statin therapy that would result in physicians recommending it to their patients after considering potential harm and cost.

Methods: A systematic review of randomized controlled trials of statin therapy was conducted. Methods of selecting the delta were critically appraised. A self-administered questionnaire was faxed or mailed (if no fax number) to 736 Hamilton physicians. Using specific scenarios, they provided a MCID for statins and vascular outcomes using absolute risk reduction. The Dillman's Tailored Design Method was used to increase response rates. Three days prior to the distribution of study questionnaires, potential respondents were faxed a brief pre-notice letter about the forthcoming survey. Two additional reminders were sent subsequent to the first questionnaire fax-out.

Results: Most studies (15/28) did not provide a justification for the size of the delta, nor indicate whether it represents the MCID. Results of the physician survey (n = 176) showed that physicians would recommend statin therapy if it would at least reduce the relative risk of coronary death, non-fatal MI, stroke, coronary revascularization, and any major vascular event (composite of the four outcomes listed previously) by 31.6% (SD:19.6), 33.5% (SD:18.6), 31.7% (SD:20.5), 34.3% (SD:19.4) and 31.2% (SD:19.4) respectively. For the scenarios where baseline risk of developing a vascular event in 5 years was 30%, 13%, and 5%, physicians would recommend treatment if it reduced that baseline risk by 31.4% (SD: 19.8), 34.6% (SD:18.0), and 46.2% (SD: 24.6).

Conclusion: Most statin trials seemed to be designed to produce a statistically significant result without taking into account its clinical importance. Better reporting guidelines may be required. We also have shown that it is possible to elicit a relatively similar MCID across vascular outcomes, but with variability.



Presenter: Clare Liddy

Title of Poster: The use of disease registries in primary care: a systematic review

Abstract: Objectives: To present the findings of a systematic review that examined the use of chronic disease registries in primary health care.

Methods: Standard systematic review methods were used. Studies were identified from EMBASE, Medline (Inprocess), HealthStar, CINHAL, PsycInfo, Ageline, PubMed, AMED, and citation snowballing, in November 2007. Included studies must have contained a chronic disease specific registry in a primary care setting for one of the following chronic illnesses: diabetes, COPD, asthma, depression, epilepsy, congestive heart failure, hypertension, CAD, stroke, dyslipidemia, or long-term use of medication. Only English studies were included.

Results: Eighteen studies were identified. The majority of articles were disease-specific registries, with diabetes being the most common. Methods for populating registries included chart audit, electronic medical records, information extraction from databases, lab feeds, pharmacy data, and point of care. Major implementation barriers include lack of time or knowledge, a dearth of remuneration, or lack of computer software/hardware.

Conclusion: Despite the promise of disease registries, there are still a limited number of high quality studies to draw conclusions on its effectiveness. There are many barriers in implementation. Implementation can be complicated by level of comfort with technology, willingness to take the time to learn and implement the registry, and having to change patterns of care to include the registry.



Presenter: Mingfu Liu

Title of Poster: An Analysis of Burden and Trend for Hypertension: A Canadian Population-Based Study, 1996 To 2003

Abstract: Objectives: Hypertension is a cardiac condition that can lead to coronary artery disease, cognitive heart failure and stroke, and therefore be considered a burden on health service utilization. The objective of this study was to investigate the burden and trend of hypertension in a large Canadian population from 1996 to 2003.

Methods: Study population included Calgary Health Region residents 35+ years old during the period of fiscal years 1996/97 to 2002/03. Patients with hypertension in Physician Claims and Inpatient Discharge Abstract databases were identified using ICD-9-CM codes (401.x, 402.x, 403.x, 404.x, 405.x) and ICD-10-CA codes (I10.x, I11.x, I12.x, I13.x, I15.x). Case was defined as at least 2 physician claims or 1 hospitalization in 3 years. Stratified analyses were conducted for hypertension burden and trend based on crude and age and gender standardized population prevalence.

Results: Hypertension prevalence increased each year by 2.10%. The prevalence in 1996/99 was 18.86% for crude prevalence and 18.90% for age and gender standardized prevalence. The prevalence increased to 27.25% and 27.31%, respectively, by 2000/03. 65+ years old were more prevalent compared with 35-64 years old. The prevalence estimates for 35-64 years old were 12.52% for females and 11.98% for males in 1996/98. The estimates were 51.13% for females and 45.06% for males for 65+ years old in 1996/98. By 2000/03, the prevalence for 35-64 years old was 18.65% for both females and males, and the prevalence for 65+ years old was 68.09% for females and 62.91% for males. The increasing trend was also steeper in the 65+ years old than in the 35-64 years old.

Conclusion: The increasing trend of hypertension in the population was significant. As more and more baby boomers are heading to the senior population, it is expected that this trend will continue to increase. Future planning of health services should take account of the requirements of the increasing number of hypertension patients



Presenter: Catherine Makris

Title of Poster: Putting Prevention into Practice: the Canadian Task Force on Preventive Health Care

Abstract: Objectives: To increase awareness and knowledge about the renewed Canadian Task Force on Preventive Health Care among Canadian health services, health policymakers, practitioners and policy researchers. As well as to provide insights into the new model connecting primary care and public health.

Methods: The health care system is increasingly burdened by an aging population with increasing numbers of individuals being diagnosed with multiple chronic conditions. The Public Health Agency of Canada (PHAC) has established a renewed Canadian Task Force on Preventive Health Care (CTFPHC). The purpose of the Task Force is to lead the development and dissemination of evidence-based clinical practice guidelines and recommendations to support preventive primary care. Guidelines will be developed by an impartial and unbiased panel, providing credible third party advice. The renewed Task Force will build on the previous Task Force's international recognition with its 25-year pioneering history.

Results: The Task Force Scientific Panel is comprised of 10-12 independent experts and leaders representing fields of clinical primary care and public health, evidence syntheses, evidence-informed decision-making processes and knowledge transfer and exchange research. The Task Force operations are supported by a team of professionals in PHAC as well as a university-based evidence synthesis centre responsible for developing 8-10 systematic evidence reviews per year to inform guideline and recommendation development. The poster provides an overview of the Task Force's purpose, operating structure, priority setting and guideline development processes as well as key partnerships to support coordination, dissemination, implementation support and evaluation. The Task Force is a collaborative knowledge development and exchange initiative that can support connections between primary care and public health programs as important resources for prevention.

Conclusion: The Task Force will address the need for streamlined access to credible, up-to-date and relevant evidence to support primary care practice and will support the development of prevention tools and activities to aid implementation of practice guidelines.



Presenter: Candice Manahan

Title of Poster: Who is best suited to work in northern B.C.?

Abstract: Objectives: The primary objective of this project was to identify personal characteristics and experiences shared by health care professionals who have worked in northern B.C. long-term to potentially create a northern suitability component for health education program selection criteria.

Methods: Six speech-language pathologists, 4 psychologists, 4 occupational therapists, 8 social workers, and 4 physiotherapists living in northern B.C. long-term participated in semi-structured interviews. A qualitative descriptive design was used to identify influences in choosing rural or northern training, initiating practice, and remaining in northern B.C.

Results: Two major themes emerged in relation to choosing rural or northern training: (1) Professionals choose their profession based on education programs available in their region and (2) rural or northern training generally did not influence participants' decision to practice rurally. Four major themes emerged from the interviews regarding initiating practice and remaining in northern B.C., including influences of personal background, professional, individual, and community factors. Differences between recruitment and retention influences depended on participants' stage of life, past experiences in rural settings, and the location of their family. Although the findings highlight a number of shared personal characteristics and experiences, it is not one particular factor over another that appears to dictate long-term practice. Rather, health professionals stay long-term in northern B.C. when particular combinations of factors create the most personal value.

Conclusion: The findings suggest personal characteristics and experiences, along with age and stage of life, rural background, and location of family influence personal values about family, career, personal preferences, and community. Personal values, in turn, determine the decision to come and/or stay in northern B.C. Findings inform education selection, recruitment and retention.



Presenter: Elisabeth Martin

Title of Poster: Evaluating deliberative forums - The case of the Consultation Forum of Quebec's Health and Welfare Commissioner

Abstract: Objectives: In 2008, Quebec's Health and Welfare Commissioner created a Consultation Forum - 18 citizens and 9 experts deliberating on health and welfare issues. In this presentation we will report on the development and application of a framework to assess the implementation, functioning, and impacts of this deliberative forum.

Methods: Deliberative forums are increasingly used to engage citizens and experts about challenging issues for the purposes of informing decision-making. Yet, there is a paucity of research evidence about deliberative forums and their effects. Thus, we developed an evaluative framework based on criteria identified through a review of literature. We adopted an overarching qualitative study design with four data collection strategies: 1) a document review; 2) non-participant observation of Forum's deliberations; 3) self-administered questionnaires, and 4) semi-structured interviews with members of the Forum, members of the Commissioner's office, and other stakeholders. This 3-year evaluation will be completed in 2011.

Results: After one year of this evaluation project, our analysis has so far revealed the ability and enthusiasm of citizen and expert members to deliberate on complex issues with technical, social, and ethical implications (e.g. prenatal screening program for Down syndrome). Our findings also demonstrate the importance of having a host organization willing to dedicate extensive resources (both financial and human) and expertise to support high-quality deliberations. Another key finding that will be discussed is the significant challenge faced in adequately synthesizing the content of hours of deliberations into a final, digestible product that is relevant, useful and acceptable to all stakeholders.

Conclusion: Study findings will inform future activities of Quebec's Health and Welfare Commissioner, explore the appropriateness of this type of deliberative forum for engaging citizens and experts in challenging health system debates and identify key areas for design attention to improve the quality of future deliberative forums of this kind.



Presenter: Lisa Masucci

Title of Poster: Costs of Service Provision over the Palliative Care Trajectory

Abstract: Objectives: There has been a dramatic shift in the provision of palliative care from hospitals to in-home care. This study measured direct costs associated with home-based palliative care, and specifically, visits by physicians, nurses, and personal support workers as well as ambulatory resource costs.

Methods: Study participants were recruited from the Temmy Latner Center for Palliative Care (TLCPC), a regional palliative care program based in Toronto, Canada. One hundred and thirty-six palliative patients and their family caregivers participated in the study. Information regarding service use was obtained through structured telephone interviews with family caregivers.

Results: The mean total direct cost of care per patient for ambulatory and home-based services was \$ 5,055 per month (2006 CDN). The largest component of these costs (74%) was comprised of services provided by personal support workers (mean monthly cost = \$2,941 (2006 CDN)). The mean monthly cost of nursing visits was \$605 (2006 CDN). Ambulatory services, which consisted of lab and diagnostic tests, hospital admissions, emergency room visits, and physician services comprised 6% of total direct monthly costs (\$243 (2006, CDN)). Physician home visits made up the smallest cost component (3%) with \$125 month (2006 CDN). Variation in the proportion of each direct cost component over the palliative care trajectory was also assessed.

Conclusion: The findings may provide insight into resource allocation planning within home-based health care organizations. Specifically, fiscal restraint warrants consideration of program costs (and outcomes) in order to inform resource allocation decisions that advance the efficient, effective and equitable distribution of health care resources.



Presenter: Jane McCusker

Title of Poster: Development of a classification of emergency departments

Abstract: Objectives: To develop a classification of emergency departments (EDs) that may be used to compare ED performance and patient outcomes. Data were derived from a Quebec study of the safety of discharge of older patients from ED to the community, using data derived from administrative databases and interviews with key informants.

Methods: Variables were classified a priori as pertaining to: 1) SL -size and location of the ED; 2) ST- structure (staffing, computerization) ; 3) HCP - health care processes, tools and protocols; 4) CS - community services availability; and 5) VS - vision of role of ED. We used Multiple Factor Analysis (MFA) to analyze variables by group as well as globally, so as to highlight not only the interrelationships of variables within each group, but also the interrelationship of the groups. We then proceeded to obtain classifications, using Ward ascending hierarchical clustering technique applied to the lower dimensional representations.

Results: The sample comprised 103 EDs. Survey participation rates were 71% for ED chief physicians and 90% for head nurses. Preliminary analyses were based on 68 EDs (66%) with complete data. At the group level, we found 2 factors and 3 or 4 classes for SL; 5 factors and 4 or 6 classes for ST; 3 factors and 4 classes for HCP; 2 factors and 3 classes for SC; and 2 factors and 3 classes for VS. At the global level, we found 6 factors and 4 or 7 classes. Detailed results will be presented. Moreover, we found that ST is strongly associated with SL, and more weakly with HCP and CS.

Conclusion: The methodology presented here produces reasonable data reduction and classifications of Quebec EDs based on groups of variables and on the whole set of variables. The validity of the classification should be studied in relation to selected outcome indicators.



Presenter: Megan McKeown

Title of Poster: Episodes of Care for Back Pain using Electronic Medical Records: What Determines Episode Length and Management of Care?

Abstract: Objectives: 1) To characterize episodes of care for back pain in a Canadian context, including length of episode and management of back pain care. 2) To identify differences in episode of care characteristics based on patient sex, age, comorbidities, history of physician visits for back pain, and back pain severity.

Methods: A longitudinal, observational study using quantitative data from the Deliver Primary Health Care Information (DELPHI) Project. The DELPHI database contains 36 months of de-identified EMR data from 10 family practices across south-western Ontario. A random subset of 10% of these patients has been coded using the International Classification of Primary Care (ICPC), a classification that describes important features of primary care physician visits, including diagnosis. ICPC diagnostic codes were utilized to define back pain cases. 464 back pain patients and 456 episodes of care for back pain were identified.

Results: The mean episode length in days was 15.03; 20.80 for males and 10.10 for females ($p=0.002$); 19.54 for patients with prior back pain visits and 11.21 for patients without ($p=0.014$); 18.94 for patients with severe pain and 9.65 for patients with moderate pain ($p=0.007$). Age and chronic, musculoskeletal, and psychosocial conditions were not significantly associated with length. On average, there were 1.53 physician visits per episode; 1.79 for males and 1.30 for females ($p=0.001$); 1.67 for patients with severe pain and 1.32 for patients with moderate pain ($p=0.022$); 1.40 for patients with chronic condition(s) and 1.70 for patients without ($p=0.047$). Age, history of back pain visits, and musculoskeletal and psychosocial conditions were not significantly associated with the number of visits.

Conclusion: Back pain episode of care length and number of visits are associated with patient characteristics. Further analysis will investigate referrals, investigations, and prescriptions within the back pain episode of care. Knowledge of back pain episodes of care can aid policy makers and practitioners in planning the use of scarce resources.



Presenter: Colleen McMillan

Title of Poster: Silent Knowledge and Disordered Eating; What the Voices of Adolescent Girls Tell Us

Abstract: Objectives: To determine which lifecycle factors(s) make at risk adolescent girls who are currently experiencing disordered eating more vulnerable to developing an eating disorder within a two year timeframe. Once these factors are identified, to transfer this experiential knowledge to family physicians toward establishing a more effective practice template.

Methods: A qualitative framework supported by interdisciplinary involvement allowed for multiple avenues of recruitment, inter rater reliability, theoretical sampling and knowledge dissemination. Sixteen at risk adolescent girls displaying disordered eating behaviours committed to prolonged focus group engagement over a 4 month period. To capture the range of lived experiences, discussion was enriched by the methods of photo voice, artwork, painting and visual mapping. Member check was continuous through out the research period to attain integrity and trustworthiness. Analysis through a constructivist grounded theory approach identified themes that were later explored and collaborated on by health practitioners and research participants alike

Results: Traditional diagnostic methods of identifying at risk adolescents were incongruent to the participant's lived experiences. These experiences revealed that stresses associated with growing up, such as independency, resulted in a desire to delay the developmental stage of adolescence. However, a space to express such fears was not accommodated in the standard clinical talk that accompanied assessment for disordered eating. As well, 81% of the research participants stated they were influenced to diet by parental figures while conversely, feeling forced to overeat to please familial members. Assessment questions do not capture these conflictual messages by reducing the phenomenon to an individual level. The absence of mutuality between adolescent girls and significant others, including physicians, contributed toward feeling disconnected and alone.

Conclusion: Capturing the lived experiences of adolescent girls who are at risk for eating disorders opened up possibilities of rethinking how knowledge is defined and synthesized into practice methods of family physicians. The merging of consumer voices with system providers represented a new synergy toward decreasing the prevalence of eating disorders



Presenter: Lisa Merrill

Title of Poster: Characteristics and Pregnancy Outcomes of Canadian Women who Used Illicit Drugs Prior to Pregnancy

Abstract: Objectives: Substance use among pregnant women is a growing public health concern. The purpose of this study was to identify characteristics of Canadian women who used illicit substances prior to pregnancy compared to women who did not, and to identify differences in the pregnancy outcomes between the two groups of women.

Methods: A secondary analysis of data collected through the national Maternity Experiences Survey (MES) of the Canadian Perinatal Surveillance System was conducted. The MES used a randomly selected sample of recent mothers drawn from the 2006 Canadian Census; participants completed a computer assisted telephone interview conducted by Statistics Canada. A univariate analysis was completed to identify statistically significant differences between women who reported using substances prior to pregnancy (n=474) and those who did not (n=5,929). Backward stepwise multivariate logistic regression models were then constructed, entering correlates and outcomes for which there was evidence of a significant association from the univariate analyses.

Results: Women who used substances prior to pregnancy were significantly more likely to be younger, less educated, and of a lower income level than those who did not use substances prior to pregnancy. Significant correlates of substance use prior to pregnancy included abuse, Aboriginal race/ethnicity, smoking, alcohol use, a low pre-pregnancy body mass index and a history of depression. Women who used substances prior to pregnancy were more likely to have an unwanted pregnancy, be unhappy about their pregnancy, be abused during their pregnancy, and report higher rates of post partum depression than women who did not use substances prior to pregnancy. As well, women who used substances prior to pregnancy were more likely to delay the initiation of prenatal care.

Conclusion: The results of this study identify characteristics of women who use substances prior to pregnancy and may be helpful in identifying women at risk of continued use during pregnancy. An in-depth understanding of this target population is required to guide policymakers in their decisions regarding service provision for these women.



Presenter: Akm Moniruzzaman

Title of Poster: Risk Factors Of Recurrent Tuberculosis In British Columbia, Canada From 1990 To 2006

Abstract: Objectives: Globally Recurrent Tuberculosis (RTB) remains a significant challenge to TB control programs and is not well characterized in a population-based setting. The primary objective of this study was to investigate the risk factors of RTB in a population-based TB cohort in British Columbia (BC), Canada over a period of 17 years.

Methods: We reviewed all TB cases that were registered with provincial (BC) tuberculosis services from 1990 to 2006. A tuberculosis case with documented evidence of prior active TB that became inactive is defined as recurrent disease. Logistic regression analyses were used to identify risk factors for recurrent TB cases.

Results: Among 5403 eligible TB cases, 490 patients had recurrence (9.1%, 95% CI:8.3%, 9.9%). The median age of this study cohort was 44 (Range: 1-104) years, of whom 45% were female, 67% were foreign-born and 13% were aboriginals. The logistic regression demonstrated that young age (UOR:0.96, 95% CI: 0.96, 0.97), male (UOR: 1.44, 95% CI:1.19, 1.75), foreign-born (UOR:1.48, 95% CI: 1.11, 1.97) and Canadian-born Aboriginal people (UOR: 1.95, 95% CI: 1.38, 2.76) were more likely to have recurrence compared to Canadian-born non-Aboriginal people. Other significant risk factors for recurrence were incomplete TB treatment (UOR:11.74, 95% CI: 8.80, 15.68), poor compliance with treatment (UOR:3.14, 95% CI: 2.11, 4.68), history of alcoholism (UOR:1.55, 95% CI:1.11, 2.16), history of malignancy (UOR:2.00, 95% CI:1.32, 3.05), and extra-pulmonary TB (UOR:2.25, 95% CI:1.73, 2.92).

Conclusion: This study identifies several important risk factors of TB recurrence in a large population-based cohort. Development and implementation of effective interventions enhancing completion rate and compliance to TB treatment are urgently required in order to prevent recurrence.



Presenter: Dawn Mooney

Title of Poster: On the Road to Renewal: Mapping Primary Health Care in BC

Abstract: Objectives: This project informs policymakers in their quest to develop innovative ways to deliver primary health care (PHC) to British Columbians. It draws on a variety of sources to provide maps and graphs that increase understanding of geographic disparities in health status, PHC resources, and patterns of use of PHC services.

Methods: We draw information from sources including the Canadian Community Health Survey, the BC Ministry of Health Services, and the BC Linked Health Database, and also present important new analytic work in collaboration with partners from the BC Ministry of Health Services. Each of fifty profiles employs specialized maps and graphs to enhance knowledge translation and advance understanding of regional variation.

Results: Building on earlier work mapping disparities in health status and PHC service utilization, this project provides important insights into the state of the PHC system in BC. Profiles examine regional variation in the prevalence of chronic conditions, comorbidities, risk factors, frailty, access to and satisfaction with care, utilization of services, including preventive and home care, and supply, distribution, and organization of PHC providers. Data is presented for all adults, for seniors, and for frail elderly across BC's 16 health regions. Profiles are available for download from a convenient web portal and selected profiles will be published as an atlas.

Conclusion: Our work enables effective comparison of the population's varying experience of risk factors, chronic conditions, and primary health care services across BC. The graphical format of our work should enable easy translation of data into programs, policies and practice methods designed to increase health status and reduce health disparities.



Presenter: Sanober Motiwala

Title of Poster: Examining remuneration and clinical productivity in paediatric medicine

Abstract: Objectives: The purpose of this study is to synthesize the existing body of literature on clinical productivity of paediatric physicians. We examine inherent differences between paediatric and adult patient populations that may impact productivity and the effects of different remuneration schemes on the clinical productivity of paediatric physicians.

Methods: A structured literature review for the period since 1985 was conducted using several databases, including Ovid, MEDLINE and CINAHL. The following Medical Subject Headings (MeSH) (and their affiliated truncations) were searched: either "p(a)ediatrics" or "child health" or "infant care" or "adolescent care"; AND "performance" or "productivity" or "accountability" or "practice plan". Articles were excluded if their titles/abstracts indicated that "clinical productivity" or "clinical performance" or "p(a)ediatric practice" were not the primary focus of the article. To reduce the potential for publication bias, author and hand searches of the retained articles and their bibliographies were used to identify additional articles and reports.

Results: Resource-based activity measures are the most prevalent measures of clinical productivity. While such measures are broadly considered useful in accounting for volume and complexity of cases, there are limitations associated with their application to paediatrics. There are differences between adult and paediatric care as a result of the unique characteristics of the paediatric population such as size, age and presence of complex congenital disease. Comparisons of clinical effort required to care for children and adults suggest that the care of children may require greater work effort, which may not always be captured in resource weightings and procedure codes. Pay-for-performance for paediatric physicians can be effective in academic medical settings if coupled with a strong foundational remuneration model that accounts for a breadth of responsibilities.

Conclusion: There is recognition of differences between medical specialists but there is a paucity of work that delineates productivity measures for different specialties. This study has highlighted the linkages between remuneration and clinical productivity in paediatric medicine. Our findings are relevant for decisions pertaining to physician remuneration and performance measurement.



Presenter: Sarah Munce

Title of Poster: Health System Factors Associated with Rehospitalisations after Traumatic Spinal Cord Injury: A Population-based Study

Abstract: Objectives: To examine one year rehospitalisation rates following spinal cord injury (SCI) onset and health system factors affecting rehospitalisation in Ontario, Canada.

Methods: All persons who had an acute care hospitalization for traumatic SCI in Ontario between April 1, 2003 and March 31, 2006 were identified according to ICD-10 codes and followed for one year following acute care discharge through record linkage of administrative databases. Index cases with an SCI admission the year prior to 2003 were excluded from the analysis as well as persons who died within 1 year after the index hospitalization. Factors associated with 1-year rehospitalisation were assessed using multivariate logistic regression analyses and included age, sex, rurality, length of stay, comorbidity, level of injury, discharge disposition, in-hospital complication, physician visits and specialist visits measure and etiology of injury.

Results: A total of 559 individuals met the inclusion criteria and 27.5% (n = 154) were rehospitalised 1-year after initial acute care discharge. Factors significantly associated with 1-year rehospitalisation were length of stay, rural residence, 50+ outpatient physician visits and 50+ specialists visits following the index admission. The main causes of rehospitalization were musculoskeletal, respiratory, gastrointestinal, and urologic disorders.

Conclusion: This study presents recent data on rehospitalization and yet rehospitalization rates continue to remain high. Our findings have significant implications for healthcare policy and planning in Ontario, Canada with respect to the management of SCI to achieve optimal health outcomes, in particular in rural areas.



Presenter: Elena Neiterman

Title of Poster: Overcoming Barriers: Internationally Trained Midwives Talk About Their Experiences in Canada

Abstract: Objectives: This presentation analyzes the experiences of international trained midwives who came to Canada in the past decade in order to identify (1) the major difficulties they face on their way to professional integration; (2) usefulness of bridging programs and policy initiatives established to facilitate the process of integration.

Methods: The paper is based on qualitative analysis of 24 semi-structured interviews with internationally trained midwives who came to Canada in the past decade. Majority of our interviewees have been practicing in Canada while some were still in the process of getting into practice. Each interview was conducted in person or over the phone and lasted between 1-1.5 hours. We asked our respondents to share with us their experiences in Canada and to talk about barriers and facilitators on their way to professional integration. The interviews were recorded, transcribed verbatim, and analyzed in NUDIST*6 for emerging themes.

Results: Our respondents listed lack of financial means, different models of practice, cultural differences and proficiency in English/French as major barriers for professional integration. They also suggested that they were not sufficiently informed about Canadian midwifery. Particularly, they noted that they were often unfamiliar with practicing midwifery in geographically remote areas in their home country. For the most part, they also lacked experience working as primary care provider. High costs of midwifery bridging training were named as one of the biggest barriers by majority of our respondents. Overall, our respondents found it beneficial to attend existing bridging programs for midwives. On-site training and placements into midwifery practice were found to be most helpful for midwives in training.

Conclusion: We summarize our findings with a list of barriers that internationally trained midwives face on their way to professional integration. We also provide policy makers with number of solutions to address those barriers.



Presenter: Emmanuel Ngwakongnwi

Title of Poster: Providing Health Care Services to Homeless Populations: Lessons from the field

Abstract: Objectives: To identify the issues, challenges, or barriers that hinder service delivery to homeless people in Calgary metropolitan area. To recommend suggested action steps to tackling homelessness and improving health status of homeless populations. Such knowledge is vital for planning service delivery models for this vulnerable population.

Methods: This was a cross sectional survey of eligible participants to a 2007 conference in Calgary on 'Diversity and Wellbeing: Taking Action on Homelessness and Health'. A standardized questionnaire consisting of close- and open-ended questions, as well as open-content, closed-questions was developed and used for primary data collection. Questions assessed participants' gender, role, level of contact, length of time serving homeless people, barriers to service delivery, and ways to improve services. Our data was supplemented by information gathered from facilitated group discussions in an afternoon session. Statistics and qualitative content analysis were used to analyse quantitative and qualitative data respectively.

Results: Of the 133 eligible participants, 87 (65.5 %) returned their questionnaires. Respondents included females (90.8 %) and males (9.2 %). Five occupational characteristics of study participants were identified as follows: health care provider (41.0%), homeless services provider (13.8%), social worker (3.8%), administrator (8.9%), and others (23.0%). We classify services to homeless population as: Structural services - to improve the health of those currently homeless and reduce homelessness. They include primary care or walk in-clinics, provision of shelters, housing, and assertive outreach. People services - to improve health through the provision of dental care, counselling, mental health, case management, emergency response, and food banks. Suggested action steps for tackling homelessness emphasize 1) continuum of care, 2) access to services, 3) supportive housing, 4) addressing poverty, 5) collaboration and coordination.

Conclusion: Improving health services to homeless people requires a multi-faceted and well coordinated approach. We found a common acknowledgement of gaps in the medical health services for homeless persons especially related to early discharge from hospital with no-follow-up. Replicating this study in other milieu may enhance knowledge on serving homeless populations.



Presenter: Elizabeth Oddone Paolucci

Title of Poster: Interactive HTA Education Program for Medical Students in a Local Undergraduate Medical Education Program

Abstract: Objectives: Few medical schools teach about HTA and its utility. Our goal was to develop an interactive HTA education program at the local medical school level to educate the next generation of healthcare practitioners and broaden their understanding and capacity for implementing sound HTA practices in support of research and decision/policy-making.

Methods: Our approach entailed developing an interactive education program which could be delivered within the existing UME curriculum of a first year Healthy Populations and second year Applied Evidence Based Medicine course. We developed and delivered a written module introducing the fundamentals of HTA and presented a model incorporating a holistic approach to evaluating patient presenting problems while simultaneously meeting the objectives of the medical school. We also created a general template guiding students through step-by-step on how to complete a HTA. Four small-group activities on topics of medical relevance were developed to demonstrate the utility of the HTA template.

Results: A 3 hour HTA workshop was delivered to 100 medical students utilizing 5 different preceptors. Following a one hour presentation, students worked in small groups with a preceptor and were assigned one of four HTA topics (obesity, smoking cessation, autism, and SARS and West Nile Virus). Using the HTA template and on-site computer internet access, students were given one hour to search for information specific to their medical topic. Small groups then returned to the larger forum and presented their findings. Participants reported a better understanding of how to use a HTA approach to achieve research project requirements and fulfill the 7 CanMED roles. Evaluation results suggested a good 'fit' between HTA and the existing UME curriculum expectations and requirements for graduating medical students.

Conclusion: The interactive educational program brought recognition and acknowledgement in the utility of the HTA approach. By introducing HTA to students at the medical school level, we seized the opportunity to bring a broader understanding and capacity for implementing sound HTA practices to the next generation of healthcare practitioners.



Presenter: Bradley Osmond

Title of Poster: Collaborative Community Health Planning in Annapolis Valley Health

Abstract: Objectives: To develop a collaborative and systematic approach for community health planning

Methods: In Nova Scotia, Community Health Boards (CHBs) are legislated by the Health Authorities Act to engage in community consultations and develop community health plans. In the past in Annapolis Valley Health (AVH), the five CHBs independently developed their plans. The CHBs have since recognized the importance of adopting a collaborative approach to community health planning. The CHBs and AVH engaged in a research project to explore the tools and supports needed to work together.

Results: They have created a model for working together through all phases of a community health planning cycle. It includes the population health approach and explores and implements collaborative opportunities, including the community consultation process. The CHBs, with support from AVH and in partnership with various stakeholders, have adapted a national survey to gather valid information on the determinants of health at a local level for planning and priority setting. The presentation will chronologically map the process used by the CHB Collaborative Health Planning Team and will identify the challenges as well as the key tools, supports, and resources that are required by CHBs in order to be effective in collaborative community health planning.

Conclusion: The survey selection process, methodology and preliminary data and plan for its use in CHB decision making to improve health in local communities will be highlighted as well.



Presenter: Reka Pataky

Title of Poster: Cost-effectiveness of MRI for breast cancer screening among BRCA1/2 mutation carriers and other women at high hereditary risk

Abstract: Objectives: We modeled the cost-effectiveness of MRI screening for women at high hereditary risk of breast cancer at the BC Cancer Agency (BCCA). This evaluation is part of an evidence-based marginal analysis (EBMA) study, a project designed to explicitly incorporate local empirical evidence into the program budgeting and marginal analysis framework.

Methods: An advisory panel of clinicians and decision-makers was established to support the evaluation of MRI for breast cancer screening. Currently, only BRCA1/2 mutation carriers are offered MRI screening, in addition to the annual mammography offered to all women at high risk. We constructed a Markov model to determine the cost per quality-adjusted life year of current screening practices, and the incremental cost-effectiveness of expanding the MRI screening program. We calculated transition probabilities between states using data from BCCA administrative databases. Costs were considered from the perspective of the BCCA, and utilities were derived from the literature.

Results: Work on this project is in progress. We have developed a model and compiled relevant local data with the support of the advisory panel. Stakeholder involvement in the process so far has been good. Analysis is ongoing and final cost-effectiveness results are pending. The use of MRI for breast cancer screening is one of five program areas identified by the EBMA steering committee for cost-effectiveness evaluation. Three of these programs have already been evaluated and the results of those evaluations are being incorporated into priority-setting decisions. We are optimistic that the results of this model will also be used to inform decision-making in the future.

Conclusion: Understanding the cost-effectiveness of MRI screening for breast cancer is an important component of making informed resource allocation decisions. Our experience with the EBMA project and model construction so far suggests that decision-makers are keen to use local data to generate cost-effectiveness evidence to facilitate priority-setting.



Presenter: Kaye Phillips

Title of Poster: Training, Trends & Trajectory: A national applied health services research postdoctoral program at a glance

Abstract: Objectives: The CHSRF/CIHR Postdoctoral Award (PDA) offers qualified researchers the training and experience necessary to establish an independent research career in applied health services, nursing, and knowledge exchange. This presentation reviews national program data trends amongst completed postdoctoral fellows, discusses its relevance within complementary international funding programs, and identifies future postgraduate training directions.

Methods: Traditional paradigms of education and training in health services and nursing research emphasize a narrow scope of scholarly outputs, including the generation of peer-reviewed publications and grant writing. In an effort to shift this paradigm, the Foundation adopted a linkage and exchange approach (Lomas, 2000), which was integrated into the CADRE PDA. Based on an internal formative evaluation of the PDA program, an analysis of the Foundation's award recipient database was conducted between July and August 2008. Descriptive data of completed postdoctoral fellows was captured to identify trends in research areas, decision-making collaboration levels, and career outcomes of recipients.

Results: Currently, the CADRE program is affiliated with 25 per cent of the 93 universities in Canada, and there are plans for further expansion. Since 2001, the Foundation has awarded 74 postdoctoral fellowships; of these, 41 have been successfully completed. The majority of fellows study within the realm of health sciences, approximately one-third of focus their research on nursing-related issues, and a select few are interested in social science research questions. Additional analysis will be presented that builds upon the above, addressing the issues of capacity built, the impact of the award, and the career trajectory of fellows. The PDA program will be discussed in light of the postgraduate funding landscape, with emphasis on how a linkage and exchange approach sets this postdoctoral experience apart.

Conclusion: With the CADRE PDA in its ninth and final year of competition, the Foundation is using the PDA dataset as a tool to inform future training initiative decisions. A key element of this strategy will include exploring new partnership opportunities with health system decision makers, organizations, and health services funders.



Presenter: Sylvie Provost

Title of Poster: Organisation des services de première ligne et pratiques cliniques préventives

Abstract: Objectives: L'organisation des services médicaux de première ligne fait l'objet d'importantes transformations au Québec. L'influence des différents modèles d'organisation sur la prestation des pratiques cliniques préventives (PCP) est peu documentée. Dans une étude sur les modèles d'organisation des services médicaux de première ligne et l'expérience de soins des patients, nous avons mesuré l'association entre ces modèles et la prestation des PCP.

Methods: L'étude, réalisée en 2005 dans deux régions du Québec, comportait: une enquête populationnelle sur l'expérience de soins et une enquête auprès des organisations de première ligne, avec une liaison nominale entre les résultats des deux enquêtes en identifiant la source habituelle de soins de première ligne des patients. L'analyse des données sur les PCP liées aux maladies chroniques concerne 3172 personnes jumelées à 315 organisations.

Quatre types d'organisations de première ligne ont été identifiés selon le financement de leurs infrastructure et fonctionnement: «Public» (cliniques médicales des CLSC et Unités de médecine familiale); «Mixte» (GMF en clinique privée); «Privé/Autres groupes»; «Privé/Solos».

Des modèles de régression logistique ont été utilisés pour mesurer l'association entre les types d'organisations et la prestation des PCP.

Results: Le score global moyen de couverture PCP (proportion moyenne de PCP réalisées auprès des individus parmi les PCP auxquelles ils étaient éligibles selon leurs âge, sexe et habitudes de vie) était de 63% pour la population à l'étude. Le score global moyen était plus élevé pour les patients dont la source habituelle de soins de première ligne était de type «Public» (68% vs 64% pour les organisations de type «Mixte», 61% pour «Privé/Autres groupes» et 65% pour «Privé/Solos»).

Dans les analyses de régression (contrôlant pour âge, sexe, éducation, revenu, présence de facteurs de risque et problèmes de santé, durée de fréquentation de la source habituelle), les facteurs associés à un score PCP de 80% ou plus étaient: avoir un médecin de famille (OR 2,98), une source habituelle de soins de première ligne de type «Public» (OR 1,49) et un nombre élevé de visites à cette source (OR 1,39).

Conclusion: Quelle que soit leur source habituelle de soins de première ligne, la couverture des patients pour les PCP concernant les maladies chroniques n'est pas optimale. Toutefois, les organisations de type «Public» (cliniques des CLSC et Unités de médecine familiale) apparaissent plus performantes. Certaines caractéristiques de ces organisations, telles que mission et mode de rémunération des médecins, pourraient expliquer ces différences.



Presenter: Laura Quigley

Title of Poster: Utilizing Registered Nurse Capacity for Flexible Sigmoidoscopy Procedures in Ontario: A Cost-Effectiveness Study

Abstract: Objectives: 1) To evaluate the cost-effectiveness of registered nurses performing flexible sigmoidoscopies compared to physicians, as a primary screening tool for CRC. 2) To assess whether flexible sigmoidoscopy performed by Nurse Sigmoidoscopists represents a potential means of increasing the availability of CRC screening.

Methods: Physician billing data for sigmoidoscopy procedures are drawn from the Ontario Health Insurance Plan Schedule of Benefits. Physician procedural billing reports on volume of procedures and procedures that result in multiple polyps being biopsied was made available through Cancer Care Ontario's Division of Provincial Planning. Data for nurses are derived from the Nurse Flexible Sigmoidoscopy Training Program which took place from April to June 2006 in Ontario, Canada. The data include information on volumes of procedures performed and polyps detected from the nurses taking part in the Program. Sensitivity analyses are performed to check the robustness of study findings.

Results: For screening procedures in which polyps are detected or not detected in average risk people, nurses are less costly with an on-call fee of up to \$28.85 for physicians. Nurses are not less costly if an 'on-call' physician billing fee is billed at the 75% or 100% the OHIP rate, as well as if the physician bills for an additional flexible sigmoidoscopy procedure when removing the polyps. The results of this study echo the literature in showing that polyp detection rates are not statistically significant between nurse and physician procedures. The considerations regarding remuneration of the 'on-call' physician must be taken into account when a final agreement is developed for the implementation of nurse screening procedures.

Conclusion: Preliminary results suggest that the use of registered nurses to perform flexible sigmoidoscopies may be a cost-effective alternative to physician performed procedures. We discuss the factors which may influence the degree to which this conclusion may hold across other jurisdictions.



Presenter: Vivian R Ramsden

Title of Poster: Primary Health Care: Engaging Communities in the Development of Programs & Policies at West Winds Primary Health Centre

Abstract: Objectives: 1. To engage the communities being served by West Winds Primary Health Centre in the development of programs & policies to enhance health and well-being. 2. To better understand the strengths and opportunities for change in the communities being served by West Winds Primary Health Centre.

Methods: Community-based participatory research methods integrated with transformative action research in which individuals from the communities being served facilitated face-to-face interviews with heads of households, 18 years of age and older residing at randomly selected addresses in the six communities. The instrument used was a Community-Based Survey developed and facilitated with the Community Participation Working Group. The quantitative data was entered into SPSS and analyzed; however, the qualitative data was analyzed using inductive and participatory analysis.

Results: The participation rate was 61% (444/725). The ages of the participants ranged from 18-100 years with a mean age of 46.26 years with 64% being women and 36% being men. The self-reported risk factors related to metabolic syndrome included: tobacco mis-use, 33%; high blood pressure, 24%; high blood cholesterol, 18%; poor circulation, 16%; alcohol abuse, 12%; and, diabetes, 9%. Of those who currently mis-use tobacco, 78% indicated that they smoked less than 1ppd; 69% stated they were interested in becoming smoke-free. Contrary to a previously held perception that individuals living in these communities would not have a physician, 89% of participants indicated that they did. Most participants preferred to access services during daytime hours; however, 19% preferred to access services during daytime and evening hours.

Conclusion: Through their involvement in the research process, program development and committees, residents of the communities and the health care practitioners working with them have gained a greater appreciation for each other's roles and responsibilities. Members of the communities sitting on various committees, programs and research teams reflect the policy changes.



Presenter: Annie Robitaille

Title of Poster: Comparison of methods used for evaluating prevention and health promotion in primary care: A systematic review

Abstract: Objectives: Our goal was to perform a systematic review to evaluate the accuracy of the different methods used to measure preventive care and health promotion in primary care. We also aimed to summarize some of the other advantages and disadvantages to using each of these methods.

Methods: Articles included in the systematic review took place in a primary care setting, used medical record abstraction, patient self-report, provider self-report, administrative data, clinical vignettes, or standardized patients, and examined the validity, or discussed the strengths and weaknesses of the method in measuring the rate at which preventive care and health promotion were delivered. The following databases were searched: PsycINFO, CINAHL, Embase, and Medline. The reference lists of the selected articles and key journals were hand searched and key experts in the field were contacted. Articles were reviewed, their quality rated, and data was extracted by two independent reviewers.

Results: We included 56 studies in the review. We found that standardized patients were a valid measure. However, the time involved in training the standardized patients and lack of access to closed practices can make this method unfeasible in some cases. Administrative data appears to be accurate for billable information. Patient-self report, although not perfectly accurate, would appear to be best for measuring health counseling activities. Medical records underestimate the rate of preventive care and health promotion provided. This is especially true for health habit counseling. Medical records appear to be most accurate for physical examinations, immunization, and lab procedures. Providers over report the rate of preventive care and health promotion provided. Advantages and disadvantages to using each of the methods were identified.

Conclusion: This systematic review identified the methods that are most accurate and feasible to use depending on the type of care being measured while taking into account challenges related to each method. Areas that are still unclear and that further need to be researched were identified.



Presenter: Paul Ronksley

Title of Poster: Data Enhancement for Co-morbidity Measurement Among Patients Referred for Sleep Diagnostic Testing

Abstract: Objectives: Observational outcome studies of patients with obstructive sleep apnea (OSA) require adjustment for co-morbidity to produce valid results. The aim of this study was to evaluate the use of administrative data to enhance self-reported co-morbidity among patients referred for sleep diagnostic testing.

Methods: A retrospective observational study was conducted on 2149 patients referred for sleep diagnostic testing in Calgary, Canada from July 2005 to August 2007. A questionnaire administered prior to sleep testing captured details of the patient's self-reported co-morbidity. Administrative data and validated algorithms (when available) were also used to define the presence of these co-morbid conditions within a two-year period prior to sleep testing. To assess the agreement between the two sources, the proportion of subjects with each co-morbid condition was calculated based on: self-report only, administrative data sources only, and self-reported and administrative data combined.

Results: Patient self-report of co-morbid conditions had varying levels of agreement with those derived from administrative data, ranging from substantial agreement for diabetes ($\kappa = 0.79$) to poor agreement for cardiac arrhythmia ($\kappa = 0.14$). An enhanced measure of co-morbidity, using either self-report or administrative data, showed the prevalence of hypertension, diabetes, and myocardial infarction increased with increasing OSA severity ($p < 0.001$). These clinically meaningful trends in the prevalence of co-morbidity among this population have been documented in previous observational studies and provide support for the face validity of these enhanced measures of co-morbidity.

Conclusion: Administrative data in combination with survey data has the potential to create a more complete measure of co-morbidity among patients referred for sleep diagnostic testing. Given the resources required to obtain clinical data, use of data enhancement with administrative data may be valuable to other researchers.



Presenter: Shelley Ross

Title of Poster: Informing retention initiatives in the Canadian Health Care context: The factors related to educational experiences that impact career decisions of female physicians

Abstract: Objectives: This study systematically examines the existing literature related to female physicians in practice and in training. Specifically, we wanted to determine the personal and educational factors that contribute to female physicians' success in the practice of medicine, and those factors that contribute to female physicians' decisions to leave the medical profession.

Methods: This study is exploratory in nature, and was intended to "map" the existing research and look for recurring themes within the literature. This approach was best served by a scoping review, an innovative methodology in which 5 stages are followed in the examination of existing literature. Scoping reviews are ideally suited to address broad research questions such as the one examined in this study. Most importantly, the scoping review model includes a consultation process, a valuable step in determining the needs of the stakeholders who will use the results of the analysis.

Results: This scoping review was initiated in September 2008, and will be completed by April 1, 2009. Preliminary findings have begun to emerge, and will guide the further analysis of the papers included in the scoping review as we continue to seek recurring themes for the underlying reasons behind our findings. We have identified that female physicians: provided significantly fewer services than their male counterparts; are more likely to retire earlier than their male counterparts, and; are more likely to experience burn-out and commit suicide than are their male counterparts. As well, female post-M.D.'s are more likely to choose family medicine than their male counterparts, and less likely to choose surgical specialties; those who do choose surgical specialties are most likely to choose obstetrics/gynecology.

Conclusion: This scoping review will provide data for evidence-based decision-making at the level of medical education to support female students' unique needs. Identifying the factors that influence female physicians' career choices will allow for policy and practice decisions that will give women the experiences and guidance to help them practice medicine to the fullest extent possible.



Presenter: Anne Sales

Title of Poster: Prioritizing Quality Improvement Indicators Used in the Resident Assessment Instruments

Abstract: Objectives: Many Canadian jurisdictions mandate the Resident Assessment Instrument (RAI) modules to collect standardized data in continuing care. Over 25 quality indicators can be generated, which leads to issues of prioritization within resource-limited health care settings. The purpose of this project was to obtain stakeholder prioritization of the RAI quality indicators.

Methods: A purposive sample of interdisciplinary participants (n=30) with expertise in home care and long-term care were sent two questionnaires: one for the RAI-MDS indicators/measures (used in long-term care) and one for the RAI-HC indicators/measures (used in home care). Participants rated each item's importance for quality improvement purposes and average scores for each item were used to generate 10 priority indicators. Three meetings were held to discuss rating criteria, to decide whether to add other important indicators to the top ten, and to vote for their top three indicators from the final prioritized list.

Results: Participants found it useful to group conceptually similar indicators together. The RAI-MDS indicators were grouped into 15 categories; votes for each category ranged from 1 to 16. The 5 priority RAI-MDS items that received the most votes were pressure ulcers, pain, incontinence, falls, and little or no activity. The indicators for the RAI-HC were grouped into 17 categories; votes for each category ranged from 1 to 12. The 5 priority RAI-HC items that received the most votes were pain, falls, high risk for residential facility placement, brittle informal support system, and decreased social activity. Underlying criteria for selecting the priority indicators included impact, prevalence of issue within the setting of interest, consideration of available resources, and desirable indicator traits such as stability over time.

Conclusion: This work is a step towards development of a prioritized list of RAI quality indicators for use within continuing care settings. Further work will include factor analysis to determine whether groups of conceptually similar indicators represent a single factor and multivariate analysis to analyze hypothesized relationships between indicators.



Presenter: Sophie Sapergia

Title of Poster: Uncovering what works in dementia caregiver support services: The contribution of a narrative approach

Abstract: Objectives: Research examining the effectiveness of dementia caregiver support services has generally found minimal effects on emotional and physical outcomes, leading to calls for qualitative investigations of caregiver experiences with such services. Therefore, this study examined the experiences of dementia caregivers interacting with their family members' community geriatric mental health service.

Methods: A thematic narrative approach to qualitative data analysis was chosen mainly because it allows for emphasis on the "story" as a whole. This approach was also expected to be useful for understanding how caregivers perceived their experience with the community geriatric mental health services (CGMHS) within the context of their broader caregiving experiences. Six caregivers of clients of a CGMHS with Alzheimer's, vascular, or mixed dementia were interviewed. A two-step narrative analysis process was utilized: first, themes were coded within the individual narratives; second, common and disparate themes were identified across narratives. A "metastory" synthesizing common themes was developed.

Results: Each participant's narrative took on a clear temporal structure, with present experiences often being compared and contrasted with past experiences; for example, past experiences with service providers and with family members were described by caregivers as influencing their experience of the current situation. The CGMHS therapist was emphatically described by most caregivers as playing a central role in caring for their family member. Most of the caregivers described themselves relying on "holistic" support of the therapist. Further, several caregivers related their personal experiences to demographic and policy trends "outside" of their own narratives. The overarching "metastory" appeared to be analogous to a journey to an unfamiliar territory, in which the CGMHS therapist acted as a "guide".

Conclusion: This narrative analysis of caregiver experiences with their family members' CGMHS provides rich and detailed descriptions of the benefits they described receiving from the service, contributing to an improved understanding of how such services may provide benefits for caregivers.



Presenter: Joykrishna Sarkar

Title of Poster: Prevalence of Chronic Diseases and Risk Factors in Northern and Southern Canadian Aboriginal and non-Aboriginal Populations

Abstract: Objectives: There is growing concern about the impact of chronic disease in Aboriginal populations, particularly those living in northern Canada. This research compares the prevalence of major chronic diseases and risk factors in northern and southern Canadian Aboriginal and non-Aboriginal populations.

Methods: Data were from the Canadian Community Health Survey (CCHS) cycles 1.1 (2000/01) and 3.1 (2005). Respondents (20+ years) from Yukon, Northwest Territories, and Nunavut formed the northern Canadian (NC) and from the rest of the Canada formed the southern Canadian (SC) populations. Aboriginal and non-Aboriginal were identified based on self-reported ethnicity. Adjusted odds ratios (OR), and 95% confidence intervals (CIs) were calculated for chronic diseases and risk factors.

Results: Compared to SC Aboriginal, NC Aboriginal had significantly lower odds of any chronic condition, and arthritis in both cycles and of asthma, diabetes, and hypertension in cycle 1.1. The odds of any chronic condition and hypertension were significantly lower for NC non-Aboriginal than SC counterpart in cycle 1.1. The risk factors which were significantly higher in NC Aboriginal than SC Aboriginal include daily smoker and infrequent physical activity in both cycles and regular drinker and inactive during leisure time in cycle 3.1. This indicates an increase of risk factors in NC Aboriginal over time.

Conclusion: Chronic diseases and risk factors vary by region. The identification of high-risk populations is important for the development of population-based health promotion interventions.



Presenter: Maureen Seguin

Title of Poster: Physician mobility and work location choice: exploring generational differences

Abstract: Objectives: How often do physicians change work locations? What influences physicians' choice of work location and do these reasons change over a physician's career? Using qualitative interviews, we examined physician mobility, highlighting differences in the factors affecting work location choice in different generations of physicians.

Methods: We interviewed 48 randomly selected physicians who had graduated from either the University of Saskatchewan or Memorial University of Newfoundland in the 1960s, 70s, 80s, and 90s. We asked participants about the number of locations where they worked over their career and their reasons for choosing each location. Interviews were recorded, transcribed and coded thematically. We used Barer et al.'s framework to code six groups of factors related to practice location decisions: 1) personal background factors, 2) professional education factors, 3) professional practice factors, 4) personal/family factors, 5) community factors, and 6) economic factors.

Results: Most physicians had worked in two or fewer locations over the course of their career, regardless of when they graduated. Personal/family factors (i.e. being close to family, lifestyle) and professional education factors (i.e. completed residency there) were the most commonly cited reasons for selecting a specific location, regardless of year of graduation. For older generation physicians, wanting to work abroad or political crises were important in their choice of work location whereas younger generation physicians cited lifestyle as an important consideration. With the exception of return for service agreements and some specialists, economic factors were not generally cited as primary reasons for choosing a work location.

Conclusion: Factors influencing physicians choice work locations are largely stable over different physician generations among graduates from two Canadian medical schools. While economic factors have largely been the focus of recruitment and retention initiatives, our study highlights the importance of personal background and professional education factors in provincial physician resource strategies.



Presenter: Bosu Seo

Title of Poster: Colorectal cancer screening: can administrative data distinguish between diagnostic FOBT/Colonoscopy and screening tests?

Abstract: Objectives: The purpose of this study is to address whether we can distinguish between diagnostic FOBT and Colonoscopy and screening FOBT and Colonoscopy tests using administrative claims data. The project also identifies the characteristics of people who are more likely to be screened and those who are less likely.

Methods: Data derived from linking the CancerCare Manitoba cancer registry to the Manitoba Population Health Research Data Repository to determine the true prevalence of screening tests for colorectal cancer (CRC). FOBTs performed in public labs and rural hospitals were also obtained from Diagnostic Services Manitoba. CRC test records between 2004 and 2007 for people between the age 50-69 were utilized. Data included patient/physician characteristics, diagnoses, tests/services ordered or performed as well as demographic information. The patient charts in rural and urban clinics and cancer registry will be reviewed to validate the screening algorithm of FOBT and Colonoscopy.

Results: About 78.7% of all FOBT tests currently available in the repository seemed to be screening based on the algorithm created. While only 17.6% of colonoscopy tests were used for a screening purpose. Variations exist in the rates of screening tests of FOBT and Colonoscopy in terms of age, gender, residence of patients, geographical location of practice, year, physician blocs (general practitioners and family physicians, internists, surgeons, oncologists, and other specialists). The results of validation using the cancer registry review and the clinic chart review will be presented at the CAHSPR meeting.

Conclusion: It is possible to identify screening tests for both FOBT and Colonoscopy using administrative data, which may provide a rapid and inexpensive means to analyze patterns of screening and estimate economic burden of disease and preventive care. These efforts will improve overall quality of preventive care and life.



Presenter: Hope Shamonda

Title of Poster: The Right to Health applied to HIV/AIDS

Abstract: Objectives: Provide a rights based argument to establish the normative foundations for deeming health a right. Apply this to HIV/AIDS to quantify rights and duties and detail the policy implications. Investigate the relationship between GDP and HIV/AIDS to provide data that reflects that HIV/AIDS is a marker of inequality.

Methods: Literature review of journals concerning health, global justice in health and health as a human right. Analysis of data from governments, health services providers, NGOs, and policy makers to identify key aspects of securing health globally. Literature synthesis of distributive justice and justice in healthcare materials. Thematic analysis to identify key aspects of the right to health and methods of assessment for reaching this goal. Utilized the Philosophers index and Scholars portal for distributive justice and comparative justice materials to identify key aspects of the normative foundations of global health. Utilized Rawls's "reflective equilibrium," relied upon a relational (feminist) framework.

Results: A right to health implies securing the means for accessing health globally. If health is a right then there are consequent duties. The duty to contribute redistributive measures to health is ground in the interest of others. It is a conditional duty, a duty to perform this action if others cannot provide for themselves. A right to health is the foundation of other duties, such as the duty to provide clean drinking water, education, etc.,. A right of one person is a ground of a duty, ground which, if not counteracted by conflicting considerations, justifies holding that other person to have the duty; thus states and citizens do not incur duties to others when this would be an unfairly burden

Conclusion: If health is a right there are consequent duties. HIV/AIDS disproportionately affects the marginalized, justice requires acknowledging the duties a right to health imposes on an international level. The proper distribution of healthcare, guided by principles of distributive and comparative justice, can achieve lasting ends towards justice in healthcare.



Presenter: Shamila Shanmugasegaram

Title of Poster: Comorbidities as Barriers to Cardiac Rehabilitation

Abstract: Objectives: Cardiac rehabilitation (CR), a multidisciplinary approach to secondary prevention, is greatly under-utilized. The presence of certain comorbidities is associated with even lower utilization. The objective of this study was to assess the relationships between common cardiac comorbidities, namely diabetes, obesity, and arthritis and self-reported barriers to CR participation.

Methods: 2671 cardiac inpatients (30.2% female; age 66.0 ± 11.8 ; 55.1% response rate) from 11 hospitals across Ontario completed a survey, of which 719 to date have completed a second mailed survey 12 months later. Participants were asked to rate the degree to which 21 items represented barriers to CR on a 5-point Likert scale. Risk factors and comorbidities were assessed via chart review and patient report. Obesity was confirmed through patient chart indication, body mass index greater than 27, and/or measure of waist circumference. Multiple comparisons were corrected using the Bonferroni method.

Results: 218 (33.4%) patients had comorbid diabetes, 256 (42.7%) were obese, and 300 (43.8%) had arthritis. In addition, 107 (16.6%) had diabetes and obesity, 99 (14.6%) had diabetes and arthritis, 113 (17.4%) had obesity and arthritis, and 48 (7.1%) had diabetes, obesity, and arthritis. Total CR barriers (2.01 ± 0.76) were significantly greater among arthritic ($2.15 \pm .79$ vs $1.93 \pm .73$; $p < 0.01$), but not diabetic or obese patients ($p > 0.05$). Arthritic patients rated the following CR barriers significantly higher than non-arthritic patients: "I find exercise tiring or painful" ($p < .001$), "I don't have the energy" ($p < .001$), "other health problems prevent me from going" ($p < .001$), and "I am too old" ($p < .001$).

Conclusion: Results suggest that persons living with both heart disease and arthritis perceive greater barriers to CR participation. Exercise has beneficial effects for both heart disease and arthritis, and the use of individualized exercise prescriptions could mitigate musculoskeletal pain associated with increased activity.



Presenter: Kristin Shields

Title of Poster: Share your Story, Shape Your Care: Engaging Communities in the North West Local Health Integration Network (LHIN)

Abstract: Objectives: 1. To increase the number of community members and health providers engaged in priority setting and planning in Northwestern Ontario. 2. Collect stories and ideas from residents of our region. 3. To collect information required to inform the second Integrated Health Services Plan (3-year planning document).

Methods: Online 'choicebook' that provides participants information, allows them to weigh in on solutions for the issues identified in the first Integrated Health Services Plan and share their stories and ideas for integration and many other topics. Paper copies available for those without internet access and face-to-face discussions to supplement data collection and focus on specific topics. A discussion guide will be developed to support health professionals, informal caregivers, Aboriginal leaders, etc. to lead discussions with those who are 'marginalized', supporting culturally appropriate engagement.

Results: Results to be completed late March, 2009. Results will include priorities for health system transformation in Northwestern Ontario; opinions on options presented and ideas and stories of residents across a vast geography. Results to-date include a great example of communities taking 'ownership' for engaging their communities (e.g. municipalities, school boards, churches, health organizations) and how local priority setting and decision-making can be supported in an area 47% of the geography of Ontario using innovative methods.

Conclusion: With the support of local health service providers and community partners across Northwestern Ontario, it is possible to engage a broad range of stakeholders using innovative methods in the development and assessment of priority-setting and planning of health services.



Presenter: Shannon Sibbald

Title of Poster: An Evaluation Tool for Priority Setting

Abstract: Objectives: The purpose of the evaluation tool was to provide a simple, practical way for an organization to evaluate what it means to achieve success in its priority setting activities and identify areas for improvement.

Methods: There are two phases in this study: (1) the creation of the evaluation tool, and (2) assessing the validity, usefulness, and applicability of the evaluation tool. The evaluation tool flowed from the ten elements of the conceptual framework and consisted of three components: a survey, an interview guide, and a document analysis guide. Validity was tested in two steps: (1) face and content validity of the tool were tested by circulating the entire tool to an interdisciplinary group of researchers and (2) real-world applicability and usability of the tool by administering it in a mid-size urban hospital (a pilot test).

Results: This research fills a gap in knowledge by developing an evaluation tool that can be used by health system leaders to evaluate and improve priority setting. The strength of this tool is that it provides an understandable, concrete tool to help identify good practices as well as opportunities for improvement. In total 114 hospital employees participated in this study. The evaluation findings confirmed senior management's assessment of areas where their budgeting process could be improved. Senior Management's willingness to adopt the recommendations for improvement is further evidence of the usefulness of the tool. As of this writing, the report has resulted in three major changes within the organization including: (1) a change to timing (2) increased information management and (3) increased stakeholder involvement and training.

Conclusion: The findings from our pilot are promising, but there is still work to do. Through the use of this tool, an organization can identify areas of good practice, areas needing improvement as well as help facilitate good priority-setting practices and possibly set a standard for priority-setting practices in healthcare organizations



Presenter: Lyn M. Sibley

Title of Poster: Evaluation of the contribution of survey-derived morbidity measures to administrative data-based explanatory models of physic

Abstract: Objectives: The objective of this study was to evaluate administrative data-based methods of predicting physician utilization and the contribution of survey-derived indicators of health status to the explanatory power of these models. These methods can be used to assess equity of physician utilization or calculation of capitation rates.

Methods: This study uses data collected from residents of Ontario in the 2000/01 Canadian Community Health Survey (CCHS), linked with corresponding administrative physician claims data from 2002/03 and 2003/04. Explanatory models of family physician (FP) and specialist physician (SP) utilization were run using administrative data and measures derived from The Johns Hopkins Adjusted Clinical Groups (ACG) Case-mix System; then survey-based measures of health status were added to the models. Logistic regression was used to model access (having had at least one visit) and Poisson regression to model intensity (the number of FP and SP visits). The coefficient of determination, R^2 , indicates the models' explanatory power.

Results: The study sample consisted of 25,558 individuals aged 20-79 years representing approximately 7.8 million Ontarians. Over the two years of the study period, 82.5% of the study population had a FP visit with a median of six visits and 53.2% had a SP visit with a median of one visit. The explanatory power of models based on administrative data alone was 32% for the number of FP visits, 21% for the number of SP visits, 17% for access to FPs, and 34% for access to SPs. The addition of the survey-based measures to the administrative data-based models brought about less than a two percent increase in explanatory power for all four of the outcomes.

Conclusion: The results of this study show that administrative data-based measures of morbidity burden are valid and useful indicators of future physician utilization and that survey-derived measures do not contribute significantly to these models. These findings support the future use of this method for both research and reimbursement applications.



Presenter: Serena Siow

Title of Poster: Healthcare Workers in British Columbia: Exploring the contributions of age and tenure on work-related injury

Abstract: Objectives: We examine the independent contributions of age and job tenure to the incidence of occupational injury, accounting for their potential interaction, for healthcare workers in British Columbia, Canada. Understanding age and job tenure as risk factors in the healthcare sector would enable improved targeting of health education and prevention programs.

Methods: The study cohort includes employees of three health regions in BC over a two-year period, 1 January 2005 to 31 December 2006. The Workplace Health Indicator Tracking and Evaluation (WHITE) Database collects regional (surveillance and administrative) data on healthcare workers in BC. Workers were divided into mutually exclusive groups based on age and job tenure for each calendar year.

To calculate injury rates, the number of compensation-approved claims, incidents requiring medical care, and concerns/near-misses were used as the numerator. The denominator was the total number of productive hours. Crude and adjusted relative risks were calculated for each injury type.

Results: Our data in healthcare workers do not support an across-the-board increased risk of injury for young and new workers. Specifically, our adjusted relative risk estimates suggest that this is only applicable to certain types of injuries such as cut/puncture; but does not apply to MSI, the most common type of injury in healthcare. New hires, independent of their age, reported the lowest risk of injury overall and showed a decreased risk for MSI [RR (95% CI) = 0.66 (0.57-0.75)], still significant in the adjusted model [RR (95% CI) = 0.80 (0.70-0.92)]. Cut/puncture injuries did behave as expected based on previous studies, with both younger age and shorter tenure in the job independently increasing the risk of injury in crude and adjusted models.

Conclusion: Neither age nor tenure influenced overall rates of injuries for all healthcare workers; they did, however, influence specific types of injuries. Health education and prevention programs targeted to new and young workers should consider specific situations with increased risk, such as percutaneous procedures.



Presenter: Neale Smith

Title of Poster: Moral distress in managers involved in health care priority setting

Abstract: Objectives: Moral distress, a concept employed in clinical practice, refers to situations where care-providers feel prevented from carrying out choices they feel are morally correct. Our objective was to determine if the concept is applicable to activities like organizational priority setting; if so, how might it manifest among health system managers?

Methods: Managers from one regional and one provincial health authority in British Columbia were invited to participate in either a focus group or interview (n=18 total). Subjects were selected in order to include senior- and middle-level managers, and to include both individuals who had previously worked with a formal approach to priority setting and those who had not. Interviews and focus groups were audiotaped with consent and transcribed, with key themes identified inductively through qualitative analysis.

Results: Interview and focus group data indicate that the concept of moral distress is applicable to resource allocation decisions. Participants understood the concept and could relate stories or examples from their own careers in which they personally experienced moral distress in relation to priority setting. This presentation reports on circumstances which appear to induce moral distress, how moral distress manifests among this sample of decision makers and describes some of the coping mechanisms employed by study participants. We also examine whether or not there are differences in the experience of moral distress between senior- and mid-level management groups, and between those who have experience with formal priority setting and resource allocation tools and those who do not.

Conclusion: Based upon the views of research participants and derived directly from their own experiences, a set of potential strategies will be proposed which health care organizations might adopt in order to limit or mitigate moral distress and its effects among mid- and senior-level managers.



Presenter: Pearl Soltys

Title of Poster: A decision post mortem investigation: how evidence is used in health authority decision making

Abstract: Objectives: An in-depth look at the process of decision-making in regional health authorities was conducted in an attempt to learn whether common features exist that could be represented in a graphic model and used to draw attention to the role of evidence in decision-making for a particular organization.

Methods: Group interviews were conducted with a total of 25 decision makers from 7 provincial regional health authorities who preselected a decision to analyze. Interview participants were guided through a retrospective examination of the processes and people involved and the routes taken to lead up to the decision. Participants recalled how and when the problem or source of the decision arose and the subsequent chain of events including the source and type of evidence that was requested or available at each stage.

Results: Even though there were differences in the structures within the organizations, common features were found in the sources of inspiration for the decisions as well as in the internal and external factors that provided the momentum for change. These factors included: the role of champions, the impact of innovative or non-typical groupings of decision makers, the presence of "tipping points" and the identification of unexpected consequences for the organization that extended beyond the decision itself. Two main roles for the use of evidence in health authority decision making emerged: a facilitative role that enhances the organizational capacity to recognize and capitalize on opportunity and a targeted role for evaluating fit in terms of timing, costs and benefits.

Conclusion: The findings of this study suggest that more than one course of action may need to be considered to ensure that all necessary evidence is available for regional health authority decision-making. Organizations may consider this model as a blueprint in examining how they collect and use evidence.



Presenter: Daniel Sperber

Title of Poster: The Cost Effectiveness of a Law Banning the use of Cellular Phones by Drivers

Abstract: Objectives: To assess the cost effectiveness of a hypothetical law banning the use of cellular phones by drivers in the Canadian province of Alberta in the year 2004.

Methods: Cost effectiveness analysis using a probabilistic decision-analytic model populated with publically available data. We adopted a societal perspective. Health gains were measured in terms of quality-adjusted life years. Net costs include costs associated with awareness raising, enforcement (policing and courts) and the welfare loss associated with the reduction in cell phone use, less expected savings in health care and other costs associated with automobile accidents.

Results: The baseline estimate suggests that a ban promotes health and releases resources worth more than the costs, with a mean estimated societal savings of Can \$24,000/QALY (2004 prices). In sensitivity analysis, there is an 80% chance that a ban will be 'cost saving', and a 94% chance that a ban will cost less than Can\$50,000/QALY. The results are sensitive to the additional risk posed by cellular phone use whilst driving, the compliance rate exhibited by drivers in response to a ban, and the pattern by which consumers may comply with a ban.

Conclusion: Under the strongest set of model and parameter assumptions a cell-phone ban is likely to be cost saving from a societal perspective. However, the results are sensitive to parameters for which there is very little information or for which the available information is contradictory.



Presenter: Moira Stewart

Title of Poster: Characterizing Primary Care Physician Visits Using the International Classification of Primary Care: Results from the DELPHI

Abstract: Objectives: To describe the frequency of symptoms occurring either singly or in association as well as the co-morbidity of diagnoses in family practice at the first visit of an episode.

Methods: This is a quantitative study using the DELPHI database. This database contains the de-identified records of over 30,000 patients, extracted from 10 primary health care practices in Southwestern Ontario. Family physicians coded diagnoses, reasons for encounter, and episodes of care using the International Classification of Primary Care (ICPC-2-R) within their electronic medical record.

Results: The three most common symptoms were cough, back symptom/complaint, knee symptom/complaint. These symptoms resulted in episodes that contained multiple visits approximately 30% of the time. The most common second symptom for each occurred approximately 20% of the time. The three most common diagnosis codes among ICPC-2-R patients were hypertension uncomplicated, health maintenance/preventive medicine, non-insulin dependent diabetes followed by lipid disorder. Co-morbidity was present 94% of the time for hypertension, 95% for diabetes and 93% for lipid disorder at the first visit of the episode.

Conclusion: The profile of co-occurring symptoms and diagnoses indicates that the majority of symptoms occur singly. On the other hand, the vast majority of common diagnoses co-occur with at least one other diagnosis.



Presenter: Tamara Sussman

Title of Poster: An integrated knowledge translation approach to developing solutions for improving the management of late-life depression

Abstract: Objectives: The aims of this integrated knowledge translation project are to: identify barriers/facilitators to implementing chronic care models for late-life depression in Canadian primary care settings; develop a prioritized list of implementation solutions; and develop a partnership of researchers and knowledge users to submit a joint grant proposal evaluating selected solutions.

Methods: Eight researchers and twelve knowledge users participated in a one-day conference. Participants met both as a large group and in smaller sub-groups throughout the day. A nominal group technique was used to enable a process of generating and consolidating solutions. All conference proceedings were audio recorded and three note takers were present. Two weeks following the conference, participants were asked to rank solutions according to their feasibility and importance. Results of this voting, and a qualitative analysis of the conference themes, are being used to inform a joint grant proposal. Interested knowledge users have been invited to become co-investigators.

Results: The conference proceedings generated twelve solutions that participants felt were necessary to improve the identification, management and treatment of late-life depression in primary care. While there was relative consensus on the feasibility of implementing the proposed solutions in the current context, much more variance was evident regarding the relative importance of the solutions. A preliminary qualitative analysis of conference proceedings suggests that professional affiliation may account for some of these differences. Informal feedback from conference participants on the partnerships process has been positive. All have expressed preliminary interest in collaborating on a future grant submission. Next steps involve determining how to prioritize a research agenda based on the results of the conference and post-conference deliberations, and drafting a collaborative research agreement.

Conclusion: Partnerships between knowledge users and researchers are critical to increasing the likelihood that research findings will be translated into action for improving health care delivery. This paper offers a model for engaging knowledge users and researchers in a collaborative process of shared, practice-based knowledge generation around late-life depression management.



Presenter: Ali Tawfik-Shukor

Title of Poster: Decentralization of governance: a comparative study of England, The Netherlands and Ontario, Canada.

Abstract: Objectives: The aim of this study is to examine the impact of decentralization as a systems reform policy on the organization, management and delivery of Type 2 Diabetes Community-Based Integrated Care services in England, The Netherlands and Ontario.

Methods: The exploratory study uses a cross-national comparative case study design, involves documentary desk research and semi-structured interviews. The scope of the project focuses on three levels of decision-making in England, The Netherlands and Ontario: the primary process of patient care, the organizational context, and the financing and policy context. Documentary research will help solicit contextual information surrounding the funding, planning, organization, regulation, management and delivery of healthcare in each constituency. Phone, email and personal interviews will be used to triangulate desk research results and add insight from the specific viewpoints of key opinion leaders in the field. Informed consent, confidentiality, anonymity and ethical approval will be sought.

Results: Each constituency has recently implemented decentralization in various guises as systems reform policies, within diverse regulatory platforms. England has reorganized and reconfigured Strategic Health Authorities (SHAs) and Primary Care Trusts (PCTs), and has implemented a variety of reforms (eg. Payment-by-Results, Practise-based Commissioning, Choice) affecting governance structures in the NHS. Ontario has implemented regionalization reforms, with the creation of 14 Local Health Integrated Networks (LHINs) that are heavily performance-managed by the Ministry of Health and Long-Term Care. The Netherlands has implemented its long-awaited Health Insurance Act, creating a demand-driven regulated market, affording insurers new responsibilities within a complex governance structure involving a multitude of actors. Ultimately, all three constituencies have implemented similar service delivery models, albeit within different regulatory environments.

Conclusion: Each constituency uses a variety of reforms and strategies within differing regulatory regimes to achieve their objectives. If policymakers are able to agree on a set of common values and shared goals, and take into account their differing local contextual policy factors, they can examine and learn from the actual processes of decentralization in each constituency.



Presenter: Eric Tchouaket

Title of Poster: Les meilleures financements des systèmes de soins

Abstract: Objectives: Deux objectifs sont visés : Cerner les différents modèles et systèmes de modèles de financement présents dans les pays à l'aide de l'interrelation entre les fonctions du financement (taxonomie) -Apprécier la performance de chacun d'eux. Le niveau de performance sera définie non pas uniquement par l'atteinte des objectifs mais aussi par la production du système et son adaptation à l'environnement

Methods: -Devis de recherche mixte: Étude de cas multiples (objectif 1) et Étude transversale (objectif 2) -Les 30 pays de l'OCDE constituent l'échantillon de l'étude à cause de leur comparabilité et leur représentativité des pays développés. Les résultats concernent uniquement ces pays et ceux qui leur sont similaires -La source principale des données est la banque Eco-Santé-2007 de l'OCDE. Elle est complétée par les données de l'OMS et 26 rapports de santé des pays publiés par le Bureau Européen de l'OMS de 1999-2007 -Analyse des données :Taxonomie opérationnalisée par une analyse multi variée ACM et Classification hiérarchique (objectif1); Construction des indices composites (SQUID) des différentes dimensions de la performance et utilisation des statistiques non paramétriques pour les comparaisons

Results: -Le financement est assez complexe et ne se limite pas à la disponibilité des ressources dans le système. Il intègre aussi une dimension d'organisation de soins qui est interreliée à l'ensemble des ressources dans le système. D'où le concept de modèles. -Pas de modèle unique par pays mais présence de plusieurs modèles constituant un système de modèles de financement -Six modèles de financement découlant de l'interdépendance entre les fonctions de financement -Huit systèmes de modèles de financement regroupant les deux modèles dominants dans les pays -Aucun modèle (et système de modèles) n'est performant sur toutes les dimensions de la performance -Aucun modèle (et système de modèles) n'est pire -le modèle i (système de modèles i) est performant sur telle dimension de la performance -le modèle j (système de modèles j) est le moins performant sur telle dimension -Les résultats complets de l'analyse de la performance seront finalisés sous peu

Conclusion: -Le processus de financement prend en compte l'interdépendance entre la disponibilité des ressources et l'organisation des soins. -Apprécier les effets du financement nécessite cette conceptualisation en modèles et systèmes de modèles de financement -Pas de meilleur modèle ou système à tous les niveaux de performance -Prendre en compte les contextes des pays est indispensable pour la mieux comprendre ses effets



Presenter: Paulos Teckle

Title of Poster: Health-Related Quality Of Life In Cancer: A Comparison Three Utility Instruments And Two Cancer Profiles

Abstract: Objectives: To (1) compare three methods of utility assessment (HUI-2&3, EQ-5D and SF-6D) across different cancer patients; (2) investigate the equivalence of the European Organization for Research and Treatment of Cancer (EORTC) QLQ-C30 and the Functional Assessment of Cancer Therapy-General (FACT-G) cancer profiles; and (3) analyze the construct validity of each instrument.

Methods: Cancer patients from Vancouver, Canada, diagnosed with breast, lung or colorectal cancer completed the FACT-G, EORTC-QLQ-C30, EQ-5D, HUI 2&3, and the SF-6D. Patients were aged 18 years and older, able to speak and read English, had no cognitive impairments, and had expected survival of 6 months. The mean, standard deviation (s.d.), range, floor effect, and ceiling effect of scores and utilities were calculated. Internal consistency was evaluated using Cronbach's alpha, convergent validity using Spearman's rank correlation coefficient, and discriminant validity in terms of the correlation between scores and relevant patient characteristics using an analysis of variance (ANOVA).

Results: A total of 161 cancer patients, breast 66(41%), lung 47(29%), and colorectal 48(30%), participated in the study. High response rate was achieved (96%). Seven(4%) patients chose not to participate. Mean(s.d.) age was 57.7(11.6), 100(66%) were female, and most patients required no assistance. Mean utility scores (n = 161) for EQ-5D UK-tariff(0.83) and SF-6D US-tariff(0.72), HUI2 (0.84) and HUI3(0.77) were significantly different. Individuals with colorectal cancer have higher mean values for all scores than breast and lung cancer patients. Agreement among utility scores was strong while agreement between utility scores and global score of the health profiles was between moderate to strong. The FACT-G and QLQ-C30 scales meet the minimum standard for reliability ($\alpha = 0.70$).

Conclusion: These results support the FACT-G and the EORTC-QLQ-C30 as reliable and valid measures of the quality of life of cancer patients. Utilities obtained from different preference-based measures are significantly different. This is work-in-progress. We will increase our sample size to examine ability of utilities to discriminate between clinically distinctive groups.



Presenter: Kednapa Thavorn

Title of Poster: Factors associated with Health Services Utilization among Canadian Immigrants

Abstract: Objectives: To investigate factors associated with the longitudinal (and cross-sectional) use of health service among cohorts of Canadian immigrants.

Methods: Data were drawn from the National Population Health Survey (NPHS), a longitudinal survey administered by Statistics Canada. The outcome variables were the propensity and intensity of health services utilization, in particular visits to general practitioners, hospitalization, and use of alternative health care services over 12 months preceding the survey interview. The explanatory variables were predisposing, enabling, and need factors follow the framework proposed by the Andersen behavioural model. Multiple logistic and multiple linear regression analyses were used to examine factors associated with the propensity and intensity of health service use.

Results: From the first NPHS cycle (1994/95), 1305 immigrants aged 20 and over were identified and followed every two years through each subsequent wave of the survey. Age, education level, annual income, country of origin, length of stay in Canada, spoken language, perceived health status and presence of diseases were found to be significantly associated with the use of health services among immigrants. Recent immigrants, holding needs constant, reported a significantly lower propensity to use health care services, but this difference diminished overtime.

Conclusion: Health service use by immigrants was associated with predisposing, enabling and need factors. This study informs policy decision making concerning the impact of immigrants on the Canadian health system. Further studies are needed to assess the effects of these factors among different subgroups. Moreover, the association between the use of health services and immigrants' health status also requires exploration.



Presenter: Lana Trey

Title of Poster: Supporting Healthy Aging through Information Technologies

Abstract: Objectives: This project addresses the issues of low health literacy among seniors in Canada and the potential of information technologies to contribute to health literacy. With the expectation for seniors to be informed about their health conditions and to be able to participate in decisions about health options, learning how to use web and mobile resources can be critical.

Methods: Premises underlying the Health Literacy framework (IOM, 2004) indicate that health literacy is an active mediator between individuals and their health context. In this study, a workshop is offered to a group of seniors (ages 65-80). The study is conducted in several steps. Participants have (1) participated in a pre-interview to determine their initial state of computerized and health literacies; (2) participated in 12 one-hour weekly workshops; (3) been interviewed immediately after the final workshop; (4) will be post-interviewed after 4 months to investigate the value of long-term learning outcomes and perseverance of acquired health and information technology skills.

Results: The findings of this study provide a comprehensive understanding of (1) the nature of relationships between information technologies and health literacies, and (2) the effectiveness of various online strategies for delivering health services. This will inform and guide policy makers in developing lifelong learning curricula and community programs to address seniors' health and information needs.

Conclusion: Information technologies are among key resources for improving health literacy and health among senior populations. Computer technologies are essential in facilitating access to health information especially for those population groups who are isolated due to health or remote living conditions.



Presenter: Ellen Olive Wahoush

Title of Poster: Primary Health Care: Experiences of preschoolers in refugee and asylum seeking families

Abstract: Objectives: This study was in partial completion of my PhD. Study objectives were to explore and describe refugee and refugee claimant mothers' experiences when their preschool child had an acute, minor episodic illness and to explore primary care provider perspectives to include the full range of primary care provider agencies.

Methods: This qualitative study used a mixed methods approach. Refugee and Asylum seeking mothers were recruited through community agencies and using a network recruitment approach to include mothers who did not use the health care system. Mothers were given a choice to participate in a semi structured interview or to participate in one of three focus groups. Focus groups were conducted one each in English language, French and Somali. Staff representing the full range of primary care provider agencies were interviewed. Quantitative data were analyzed using SPSS to produce descriptive statistics; qualitative data were content analysed and themes identified.

Results: Mothers reported their preschoolers encountered common illnesses. Very low income was common among families and food insecurity affected one third of these families. Mothers accessed health information from a wide range of sources and used electronic sources more than reported for Canadians. Delays in accessing health care services related to fear about child services, possible negative effects on migration status and costs. Almost all mothers identified a nurse by name most often a public health nurse or a nurse practitioner at a community health centre and stated that the nurse was a key contact for them. Primary care providers rarely know who among their clients is a refugee or asylum seeker and have very little if any preparation for working with ethno-racially diverse populations.

Conclusion: Although mothers managed their child's illnesses quite well they faced unnecessary challenges. Primary health care staff need better preparation at a minimum for working with ethno-racially diverse populations and they need to use new information channels to reach out to all families.



Presenter: Greg Webster

Title of Poster: Results from the 2008 Canadian Survey of Experiences in Primary Health Care

Abstract: Objectives: This presentation will show the results from the 2008 Canadian Survey of Experiences with Primary Health Care. The data presented will provide new information about Canadians' experiences with many aspects of primary health care. This information will be of interest to a broad range of researchers, health-policy and decision makers.

Methods: CIHI and the Health Council of Canada co-funded the 2008 Canadian Survey of Experiences with Primary Health Care. This survey provides new PHC data which can be used to report on 27 PHC indicators for a range of analyses. The survey provides pan-Canadian provincial-level data for both the general population and for people with select chronic illnesses. Beginning in April 2008 a cross-sectional telephone survey was fielded by Statistics Canada. The survey was completed by a stratified random sample of adults 18 years and older in 10 provinces and three territories who live in private households (sample size ~ 11,500).

Results: The survey results will provide highlights on PHC access, continuity, coordination, chronic disease prevention and management, self-care and satisfaction. For example, 88% of Canadians have regular doctor, approximately 50% of these people have been with their doctor for more than 7 years and 22% report difficulty accessing health information/advice. The analysis and results will also highlight chronic disease services, comprehensiveness of care and quality of patient-provider interactions. For example, 75% were always/usually involved in clinical decisions with 28% almost always/most of time helping to make a treatment plan. The full range of data is currently being analyzed, so the presentation will include a rich source of new provincial-level information on PHC in Canada.

Conclusion: This survey provides important new insights about Canadians' experiences toward primary health care. As such, these results begin to address important PHC data gaps in Canada. The survey data can be used to inform system-level research and decision-making and improve the quality of care for Canadians.



Presenter: Marcy Winget

Title of Poster: Development of a framework for evaluating the cancer control system with respect to timely access to quality care

Abstract: Objectives: We are developing a framework to evaluate the cancer control system by identifying cancer patient care trajectories from pre-diagnosis to death. The trajectories are being used to evaluate timeliness and appropriateness of care, identify access issues, and create a platform for evidence-based decision making for health care system improvement.

Methods: All patients diagnosed in Alberta with a primary invasive colorectal cancer in 2000-2005 were identified from the Alberta Cancer Registry and linked to population-based databases from the Alberta Cancer Board (physical and electronic cancer medical records), provincial and regional health ministries, and the 2001 census. Variables that identify key cancer care events of colorectal cancer patients were identified for each of four periods encompassing the patient care trajectory: pre-diagnosis (physician visits and tests prior to and related to diagnosis), treatment (initial treatment and physician visits), post-treatment/cure (colorectal-related events and services), end-of-life (in-home, hospice, palliative, and supportive living care services).

Results: To date we have completed the initial steps of identifying and evaluating the pre-diagnosis and treatment phases of the patient trajectories and describing the cohort with respect to demographics, clinical characteristics and initial treatment patterns. There are 8264 patients included in the cohort, 88% of whom had not had a previous cancer. The median age is 72, 49% had stage I or II disease, 28% have other serious co-morbidities, 14% are in the lowest SES category, and about 65% live in a major city. Most (89%) patients had surgery, 39% of whom also received systemic and/or radiotherapy. Older, rural, lower SES patients with colon (vs. rectal) cancer were less likely than others to receive treatment other than surgery (adjusted for stage and co-morbidities).

Conclusion: Development of an evaluative framework of the cancer control system by identifying patient care trajectories via linkage of multiple data sources is important and possible in order to identify system roadblocks and gaps in care. Results are directly relevant to broad stakeholders to improve timely access to quality cancer care.



Presenter: Walter Wodchis

Title of Poster: Factors Associated with Turnover Among Registered Nursing Staff in Ontario Long-Term Care Homes

Abstract: Objectives: To determine the level of turnover among full and part-time registered nursing staff in Ontario Long Term Care (LTC) Homes and to examine whether LTC home characteristics and human resource practices (e.g. retention, training) are associated with turnover.

Methods: Surveys were sent to Administrators and Directors of Care (DoC) in 620 LTC Homes. This data was linked to staffing data provided by the Ontario Ministry of Health and Long Term Care (for homes providing consent). Turnover was defined as percent of Registered Nurses and Registered Practical Nurses who left voluntarily or involuntarily over the past 12 months, calculated separately for full and part-time staff and dichotomized as highest 25% of facilities for analyses. Regression models included the following predictor variables: facility, Administrator and DoC characteristics, retention strategies, training, staffing levels, and other staff turnover (e.g. personal support worker).

Results: A total of 125 homes provided complete data for all measures and were included in this analysis. Average turnover was 12% for full-time and 21% for part-time registered nurse staff with the top quartile defined as above 18% and 31% respectively. Forty-four percent of registered care hours were provided by part-time staff. Being in the highest quartile of full-time staff turnover was negatively associated with Administrator specialized LTC training and positively associated with "other" staff turnover ($p < 0.05$). For part-time staff, DoC turnover, percent of full-time registered staff, and "other" staff turnover were positively associated with the highest quartile of part-time staff turnover ($p < 0.05$). Retention strategies, training, and workload were not significant in multiple linear regression models for either staff category.

Conclusion: The role of part-time registered staff is substantial in Ontario LTC Homes. While this study identified a general trend for higher turnover among homes that had retention strategies in place, leadership, measured by Administrator specialized training and DoC turnover rates, were the primary predictors of staff turnover in our multiple regression models.



Presenter: Sabrina Wong

Title of Poster: Collaboration between primary care and public health: What do we know?

Abstract: Objectives: The objective of this study is: To estimate the average cost per stay and number of stays for males and females for similar medical conditions. To determine whether there is a gender difference in the share of cost that can be allocated to the treatment/presence of complexities.

Methods: The main data sources are the Discharge Abstract Database (DAD), the Canadian MIS Data Base (CMDB), the Ontario Case Costing Initiative (OCCI), the Alberta case-cost database. A bottom-up approach is used: cost is defined as the product of average cost per stay for a given illness times the number of stays relative to this illness. Regression analysis is used to account for gender and complexity, a proxy for co-morbidities or secondary diagnosis. Other control variables are: age, case-mix groups and province. Adjustment is also made to control for price differences across the country.

Results: In 2004-2005, total acute care inpatient cost was estimated at \$8.4 billion for males and \$7.8 billion for females, excluding pregnancy and childbirth related conditions. Average cost per stay was \$7,964 and \$7,261 respectively for males and females. There were 1,052,482 stays for males vs 1,074,077 stays for females. While total acute care inpatient cost was 7.7% higher for males, number of stays was 2.0% lower; this suggests the higher total cost was driven mostly by higher average cost per stay (9.7% higher for males). The total acute care inpatient cost that can be allocated to the treatment or presence of complexities was estimated at 30.3% for males versus 24.4% for females. Results are also presented for the 15 most expensive medical conditions.

Conclusion: Studies on general cost of illness do not usually break down costs into volume and unit cost to understand the impact of each of these components by gender. They do not generally identify co-morbidity costs either. This study contributes to the existing literature by addressing these points.



Presenter: Jonathan Yee

Title of Poster: Evaluating the flow and content of web-based cardiac rehabilitation discharge summaries to family physicians: A pilot study

Abstract: Objectives: The objectives of this pilot study were to investigate the flow of an electronic cardiac rehabilitation discharge summary to family physicians and to evaluate physician perceptions of the summary's content in order to prepare for a more definitive evaluation of cardiac rehabilitation discharge electronic summaries.

Methods: In this cross-sectional study, we solicited consent from 55 consecutive cardiac rehabilitation patients from the London Health Sciences Centre, and secured consent from 13 of their family physicians (24% response rate). A link to the anonymized electronic discharge summary was emailed to 10 (77%) eligible family physicians with access to the internet within their practice. Of these 10 physicians, the summary perceptions of 2 physicians were examined through both online questionnaire and a semi-structured telephone interview.

Results: Of the 10 electronic summaries sent to the physician, 8 were successfully received. Results from the questionnaire revealed that physicians were highly satisfied with the summary content, with an overall mean satisfaction score of 4.5 on a 5 point Likert scale. Physicians rated all information provided in the summary as useful (4 on a 5 point scale or greater), with patient-specific information (CCS and NYHA class, medications, risk factor change from intake, exercise test results and overall risk algorithm score) rated as the most useful (mean=5) and risk factor targets from guidelines rated as least useful (mean=4±0). Major themes from qualitative interviews included satisfaction with summary format, desire for earlier communication from cardiac rehabilitation (via intake summaries) and desire for information about future medication recommendations.

Conclusion: Pilot results suggest that electronic transmission of cardiac rehabilitation summaries shows promise as a potential medium for information exchange between health professionals. As well, the content of the electronic cardiac rehabilitation discharge summary meets the needs of family physicians. A larger multi-site study has been funded to compare electronic intake and discharge summaries to usual care.



Presenter: Jean Hai Ein Yong

Title of Poster: Economic Evaluation Studies Submitted To Inform Cancer Drug Funding Decisions: A Closer Look At The Quality And Limitations

Abstract: Objectives: The objective of this study was to understand the limitations of economic evaluation studies submitted to the interim Joint Oncology Drug Review (JODR) to inform oncology drug reimbursement decisions in Canada.

Methods: We reviewed the pharmacoeconomic reviewers' comments on all submissions to Canada's JODR from March 2007 to March 2008. We extracted comments related to limitations of the analysis into data abstraction templates and analyzed them.

Results: Reviewers' comments on 15 JODR submissions were examined. The most commonly mentioned limitation was insufficient sensitivity analysis to inform decisions (85%). This includes missing sensitivity analysis around key parameters or the range used in the sensitivity analysis not being justified. Seventy-percent of the submissions had errors related to calculation, disease representation or data incorporation in the model. Other important limitations included issues around inappropriate comparator or outcome, costing methodology and assumptions, quality of clinical evidence and health state utility estimates.

Conclusion: This study allows us to better understand limitations in economic evaluation studies submitted to inform oncology drug reimbursement decisions in Canada. Our results suggest ways to improve the quality and relevance of economic evaluations to better inform drug reimbursement decisions.



Presenter: Caroline Yung

Title of Poster: Are there significant differences in health care utilization by rural and urban communities in Canada?

Abstract: Objectives: Some studies suggest people in rural and remote communities face access barriers to health care services relative to their urban counterparts. This study examines whether differences in utilization exist when accounting for supply side factors such as physician density, as well as controlling for other relevant socio-economic and health characteristics.

Methods: This study uses data from the longitudinal National Population Health Survey 1994/95-2004/05 and external data from the following two sources: Three cycles of the Census are used to determine urban rural locale by Metropolitan Influence Zones that considers individuals who commute from rural to urban areas for work. Scott's Medical Database is also used to calculate the density of family physicians per 10,000 population. Utilization of healthcare services is measured using self-reported overnight hospital stays, and the number of general practitioner and specialist visits. A count model accounting for over-dispersion in the data is used to estimate health care utilization.

Results: Preliminary results indicate that when controlling for socioeconomic status and other health characteristics, modest differences in GP and hospital stays are found by urban/rural residence, but more significant differences in specialist care exist were found. Additional analysis will include supply side measures of access as determined by the density of physicians where an individual resides. Accounting for physician density is expected to be an important factor when considering utilization of health care services, and will provide a more accurate picture of differences in utilization as they related to urban rural residence.

Conclusion: Preliminary results indicate that differences in GP visits and hospital stays by rural and urban residents were modest, but differences for special visits were more significant. We expect that including physician density to illustrate the effect of supply side measures on utilization will provide additional insight to the issue of urban rural differences in utilization.