

Department of Community Health Sciences Faculty of Medicine, University of Manitoba

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MCHP Mission and Values

The Manitoba Centre for Health Policy (MCHP) is a research unit within the Department of Community Health Sciences, Faculty of Medicine, University of Manitoba

Vision

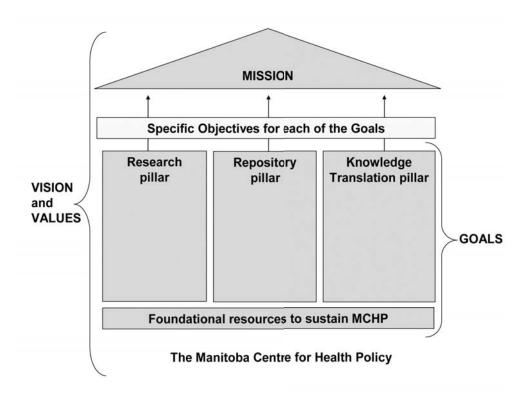
The Manitoba Centre for Health Policy sets the international standard for using population-based secondary data to create new knowledge that informs health policy, social policy and service delivery

Values

Innovation and Excellence
Collaboration and Teamwork
Social Relevance and Stewardship

Mission

The Manitoba Centre for Health Policy (MCHP) is a research centre of excellence that conducts world class population-based research on health services, population and public health, and the social determinants of health. MCHP develops and maintains the comprehensive Population Health Research Data Repository on behalf of the Province of Manitoba for use by the local, national and international research community. MCHP promotes a collaborative environment to create, disseminate and apply its research. The work of MCHP supports the development of policy, programs and services that maintain and improve the health of Manitobans.



Message from the Director



This year has been tremendous in terms of growth at MCHP. While recalling our achievements of the last 12 months I've become especially excited about the year ahead. In March 2010 MCHP will celebrate its 20th Anniversary by hosting an international conference and celebratory dinner. Like this Annual Report, the conference will look at the accomplishments of the past and highlight the research and research scientists that make MCHP a remarkable

place to work. The conference will also allow us to focus on the future of health services research using the knowledge gained from previous projects. We also hope to fill gaps in analysis that may have been left open in past research by asking new questions and digging deeper into what makes Manitobans healthy – and what makes MCHP and Centres like this across Canada valuable for population health research.

We're pleased to say that we are working towards expanding our data sets at MCHP. Last year, we successfully negotiated to add information from across a number of platforms which will broaden our scope of research, giving us greater insight and allow us to link possible determinants of health across traditional and perhaps nontraditional health fields. For example, we have recently acquired Public Housing data, which represents a huge opportunity in looking at links with both health and social outcomes and how they relate to each other. As we continue to grow and expand our reach, we hope to increase the number of datasets in a variety of areas. We have put in an application to the Canadian Foundation for Innovation which would help fund both new database acquisitions and a new model for operating remote access sites to the Repository.

Through the publication of deliverables and dissemination of the messages within them; workshops for stakeholders, policy planners and decision makers, regional health authority representatives, and researchers; web-based resources; and the ongoing activity of the CIHR-funded *The Need to Know* Team, knowledge translation continues to account for a significant portion of our activity at MCHP. All of these activities are outlined in this report.

In March we were honoured to host three "conversation" sessions with Sir Michael Marmot, Professor of Epidemiology and Public Health at University College London while he was at the University of Manitoba to give a public lecture for the Faculty of Medicine. The first session was on child health; the second on primary and

public health; and the third on Aboriginal health. We also hosted guests from the University of New Brunswick and from Dalhousie University, to discuss population health research centre models.

I would like to say a special thank you this year to all of the research scientists who participate in research projects at MCHP. Particularly I'd like to thank the Faculty of Medicine and the Department of Community Health Sciences for their valuable input and participation in our endeavors. There are also numerous people whom I wish to thank for their continued commitment and support. Please accept my apologies for anyone that may have been overlooked.

- Dean of Medicine Dr. Dean Sandham
- Department Head for Community Health Sciences Sharon Macdonald
- Members of our Advisory Board, especially our Chair, Dr. Brian Postl
- Health Minister Theresa Oswald; Healthy Living Minister Kerri Irvin-Ross; and Deputy Health and Health Living Minister Arlene Wilgosh, who all maintain a strong interest in the policy implications of our work
- Minister and Deputy Minister of Education, Citizenship and Youth – Peter Bjornson and Gerald Farthing
- Minister and Deputy Minister of Family Services and Housing – Gordon Mackintosh and Martin Billinkoff
- Minister and Deputy Minister of Science, Technology, Energy and Mines – Jim Rondeau and John Clarkson
- Deborah Malazdrewicz Director of Health Information Management, Manitoba Health and Healthy Living, our liaison with the Ministry
- Healthy Child Manitoba Jan Sanderson and Rob Santos
- Healthy Child Committee of Cabinet
- Numerous individuals who have provided input and feedback for our deliverables, especially those who have served tirelessly on our Working Groups or as part of deliverable research teams
- All MCHP research scientists and support staff who ensure the success of MCHP activities
- Manitoba Health & Healthy Living, supports the stability and success of MCHP with the research funding provided

See you in March 2010, for our 20th Anniversary Conference!

Patricia J. Martens, PhD Director and Associate Professor

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1.0 RESEARCH

1.1 Deliverables

The Manitoba Centre for Health Policy (MCHP) works under a five-year grant with Manitoba Health and Healthy Living (MHHL) to produce six major research projects annually. These studies deal with health and social issues that can best be answered using data from the Population Health Research Data Repository (Repository). Topics are jointly decided upon by MCHP's director and the Deputy Minister of Health and Healthy Living.

All released deliverables (full reports, four-page summaries, and in some instances data extras) are freely available on our website: http://www.umanitoba.ca/faculties/medicine/units/mchp/

Below is a list of MCHP deliverables with status as of March 31, 2009.

1.1.1 Released Deliverables

The Direct Cost of Hospitalizations in Manitoba, 2005/06 by Gregory Finlayson, Julene Reimer, Matthew Dahl, Matthew Stargardter, and Kari-Lynne McGowan (March 2009)

This report provides a valuable update to work first published by MCHP in 1999. It includes a cost list showing the direct cost of hospitalization for all discharges in Manitoba in 2005/06 and updates the method of calculating these costs to be consistent with methods that are used elsewhere. While very detailed information is provided for different categories of hospitalizations (i.e., different age groups and case complexities), a summary value is provided for each type of discharge. In addition to the cost list, we have provided updated values that may be used for economic evaluations. The average cost per weighted case allows researchers to conduct population-based hospitalization costing studies. These studies can provide information relevant to policy development.

Physician Resource Projection Models by Alan Katz, Bogdan Bogdanovic, Oke Ekuma, Ruth-Ann Soodeen, Dan Chateau, and Chris Burnett (February 2009)

This project provides scenarios that incorporate different assumptions that have an impact on the demand for physicians in four key areas identified by Manitoba Health and Healthy Living: Family Medicine, Pediatrics, General Surgery, and Orthopedic Surgery. Two sets of models were developed: (1) models that project the service needs of the population given various characteristics like age, sex, socioeconomic status, comorbidities, etc; (2) models that project the number of services that can be provided by the physician workforce given their characteristics such as age, sex, number of years since graduation, average workloads, etc. MCHP used historical data housed in the Population Health Research Data Repository to develop and test these models. The output of the project was not a definitive answer to the question: "How many physicians are needed in Manitoba?" but provides tools that can be used by Manitoba Health and Healthy Living and potentially other organizations, such as the University of Manitoba's Faculty of Medicine to project supply and demand under different conditions.

Manitoba Child Health Atlas Update by Marni Brownell, Carolyn De Coster, Robert Penfold, Shelley Derksen, Wendy Au, Jennifer Schultz, and Matthew Dahl (November 2008)

Children in Manitoba are generally healthy, although there are significant disparities in child outcomes across socioeconomic status and region of residence, as well as by gender and age. In order to develop strategies to try to reduce health inequalities and improve the health status of all Manitoba children, up—to—date and comprehensive information on a range of health status indicators is required. Providing information on child health status indicators at regional and sub—regional levels is necessary in order for program—developers and policy—makers to focus on areas where improvements in child outcomes are necessary.

An Initial Analysis of Emergency Departments and Urgent Care in Winnipeg by Malcolm Doupe, Anita Kozyrskyj, Ruth-Ann Soodeen, Shelley Derksen, Charles Burchill, and Shamima Huq (May 2008)

Emergency departments (EDs) are intended to provide rapid access to essential care for acutely ill patients. Most of the research on EDs has been conducted using data from the United States and Europe, and the majority of Canadian-based research has been carried out in Alberta, Ontario, Quebec, and the Maritime Provinces. With some exceptions, very little research on EDs has been conducted in Manitoba. MCHP used data from all six of the adult EDs in the Winnipeg Regional Health Authority (WRHA), and also from the Urgent Care Centre (UC) at the Misericordia Health Centre in the WRHA. This report investigates the strengths and limitations of these data; describes users of EDs and UC in the WRHA; and provides suggestions for conducting follow-up and policy-relevant research.

1.1.2 Delivered Deliverables

Development of Composite Measures / Indices of Health and Health System Performance (Co-PI: Colleen Metge, Co-PI: Dan Chateau) (October 2008)

While hundreds of indicators exist that measure specific aspects of health, use of health services, and health system performance, there is a lack of high quality composite measures in key strategic areas. For example, within the province there is no single measure that tells us what is happening overall for "chronic diseases," "waiting times," or "patient safety." Indicators at the population / system-wide level would be useful for strategic planning and reporting. This project will, through a literature review, expert consultation and previous experience, construct composite indicators in three or four areas. Indicators will be reported for Manitoba's regions over time. Summary measures will be produced in a few dimensions of health and health care.

Effects of Drug Listing Decisions on Appropriate Utilization (Co-PI: Anita Kozyrskyj, Co-PI: Colette Raymond) (April 2009)

The purpose of this deliverable is to determine the impact of provincial formulary listing decisions on the utilization of several commonly prescribed classes of medication within the population of Manitoba. This report will evaluate the impact of different formulary listings (open access, limited access and special approval) and changes to these listings have on drug use within the population. Incident and prevalent drug utilization will be explored by age groups, socioeconomic status as well as region of residence. Drug classes of interest include: narcotic analgesics, non-steroidal anti-inflammatories, osteoporosis medications, antipsychotics, antihypertensives, diabetes medications, proton pump inhibitors, inhaled medications for asthma and chronic lung disease, psychostimulants for children and antibiotics.

Updated Regional Health Authorities Indicators Atlas (PI: Randy Fransoo) (June 2009)

Regional Health Authorities (RHAs) will be required to produce comprehensive community health assessment reports by September 2009. To complete these assessments, the RHAs will require region and district-specific data on a range of key indicators of health status and healthcare use. This deliverable will update and refine key indicators from the 2003 RHA Atlas and incorporate new indicators from more recent reports such as the Mental Illness Report (2004) and Sex Differences Report (2005).

1.1.3 Ongoing Deliverables

Additional Resource Use by People Who Have a Chronic Disease (PI: Greg Finlayson)

MCHP has completed a deliverable that uses the administrative data to define who has a chronic condition, including arthritis, stroke, hypertension, heart disease, diabetes, and asthma. Now that it is possible to identify individuals with these conditions (and those without), there is opportunity to better understand the health services utilization patterns surrounding these populations. This deliverable will look at rates of health system use and estimate the cost of the 'extra' use by individuals with a chronic disease. Two approaches will be used: a population-based approach and a matching approach. A population-based comparison will show the additional cost associated with a chronic disease within the population. Matching compares individuals with and without selected chronic diseases (matched on such things as age, sex, region, and comorbidities), to determine the 'extra' resources required by those individuals with the chronic condition. The healthcare resources of interest are hospitals, physicians, personal care homes, home care use, and prescription drugs.

Levels of Care for Personal Care Home Admission (PI: Malcolm Doupe)

Levels of care for Personal Care Home (PCH) admission were developed in the 1970s. Given the major changes in PCH use since that time, these levels may be in need of revision. Recent use of the PCH level of care admission data suggest that the current system for determining levels of care may not be adequate for health system management purposes. The existing levels of care also do not distinguish specific care requirements, for example, cognitive impairment or dialysis, which have implications for staff time and medical supplies budgets. Implementation of the Minimum Data Set (MDS) in both the Home Care Program and PCHs in Winnipeg provides significantly enriched patient "assessment data" that is directly pertinent to levels of care requirement. Both versions of the MDS tool contain a variety of measures that reflect an individual's cognitive health, IADL and ADL functional limitations, informal supports, and indicators of socioeconomic status. These measures can be linked to the administrative data at MCHP, to create a thorough portfolio of home care and PCH recipients' level and type of impairment, disability, health care and drug utilization, demographics, and informal supports. When combined, the MDS and administrative data can be used to identify long-term care recipients with a continuum of health, healthcare use and related characteristics.

Evaluation of the Healthy Baby Program (Co-PI: Marni Brownell, Co-PI: Mariette Chartier)

In June 2001, Healthy Child Manitoba introduced the Healthy Baby Program – a two-part benefit program to improve birth and early outcomes for infants born to low SES moms. The program includes a prenatal income supplement and community supports. Some mothers received only the income supplement, some only the community supports and some both components of the program. Preliminary analyses suggest that the prenatal income supplement alone did not improve outcomes for infants and their moms. It is hypothesized that those receiving the income benefit as well as participating in the community support program will have significantly better outcomes than those receiving the income supplement alone, the community supports alone, or those not participating (using pre-Healthy Baby years for this final comparison). Outcomes to be analyzed include: maternal indicators such as number of prenatal visits, month of initiation of prenatal visits, and maternal depression in year after birth; infant indicators such as birth weight, gestation, feeding status (breastfed or not), Apgar scores, hospitalizations in first year, immunizations in first year, and continuity of care.

Physician Integrated Network Evaluation (PI: Alan Katz)

Long-term implementation, evaluation and monitoring of the Physician Integrated Network (PIN) initiative will involve comparing changes in process and outcome indicators to a baseline of the same indicators over time. This will be essential in tracking practice changes in primary care consistent with the PIN objectives. This deliverable will build on the PIN initiative's evaluation framework and determine long-term indicators for future application. Given the complexity and potential long-term impact of the PIN strategy, two deliverables are required. This deliverable will establish baseline indicators and will build on the preliminary profiles done as part of the early stages of PIN implementation.

Metis Health (PI: Patricia Martens)

This research project is a collaborative study between MCHP and the Manitoba Metis Federation (MMF). It will provide up-to-date indicators on health status and health services utilization for the Metis population of Manitoba. Although much has been reported about health disparities between First Nations populations compared to other Canadians, little research has been published on the health of the Metis population. This will be an atlas-type report of health and health services utilization for the Metis population. The kinds of indicators to be created for this report include current indicators of population health status such as premature mortality rates and potential years of life lost; indicators of health service use including the use of physicians, hospitals home care, nursing homes, preventive care, and prescription drugs; indicators of the quality of care being provided; and indicators of broader health determinants and lifestyle issues (from survey data).

Obesity and Healthy Living (Co-PI: Randy Fransoo, Co-PI: Pat Martens Co-PI: Robert Kerr)

Obesity is a major public health concern. The association of obesity with a variety of risk factors related to nutrition, physical activity and social determinants of health has been well documented in health literature. Health care providers are already observing an increase in the incidence of chronic diseases (such as diabetes and hypertension) directly resulting from the increased prevalence of obesity in the population. In order to develop effective policy and intervention programs for obesity and related chronic diseases (including diabetes) information on risk and preventive factors related to obesity is crucial. Potential factors of interest are those shared by successive cycles of the cross-sectional component of the National Population Health Survey (1994, 1996, 1998) and in specific cycles of the Canadian Community Health Survey (2000, 2003, 2005). Risk/preventive factors may be drawn from broad themes such as alcohol use, body image, selected chronic conditions (e.g. diabetes, hypertension), food insecurity, healthcare utilization and access, mental health, nutrition, physical activity, smoking, preventive health behaviours, socio-demographic factors, and stress (e.g. mastery, self esteem, self-perceived stress). Associations between levels of BMI and risk/preventive factors may be examined using odds ratios, regression models, and other approaches. The scope of the deliverable is to include the analysis of provincial trends over a 10-year period (utilizing the 1995-2005 individual survey cycles), as well as the analysis of regional differences utilizing the combined cycles of the CCHS.

Early Development Instruments (Co-PI: Rob Santos, Co-PI: Marni Brownell)

This deliverable will focus on the Early Development Instrument (EDI), a population-based and community-level measure of physical, social, emotional, language, and communication development in children entering Kindergarten. This is a key transition stage when children turn five-years-old. The EDI is collected province wide by all Manitoba public school divisions on behalf of the Healthy Child Manitoba Office (HCMO). This deliverable will build on previous and current MCHP deliverables and research related to children (e.g., child health atlas, socioeconomic status (SES) and educational outcomes, inequalities in child health, vulnerable children). It will include descriptive, correlation and regression analysis using the EDI, such as SES gradients in EDI outcomes; predictors of EDI outcomes; and EDI trends over time. Analyses will focus on both the population level as well as vulnerable subgroups of children.

Assessing the Value of Manitoba Housing Data (Co-PI: Greg Finlayson, Co-PI: Mark Smith)

Housing is well understood to be an important determinant of health. The Province of Manitoba, through Manitoba Family Services and Housing, Manitoba Housing and Renewal Corporation, and the Manitoba Housing Authority, has data about Manitobans who receive subsidized housing support. These datasets have been recognized as potentially valuable sources of information to inform population health assessment and program planning and evaluation. This deliverable will involve the transfer of de-identified housing datasets to MCHP for the purpose of assessing the quality and usefulness of the data. The deliverable will produce a limited set of analyses demonstrating the analytic and research potential of Manitoba's housing data.

Exploring the Intensive Care Unit Datasets: A First Look (Co-PI: Allan Garland, Co-PI: Randy Fransoo)

Hospital care is the largest component of health resource use in the developed world, including Canada. It is widely believed that a large portion of hospital resources goes to caring for critically ill patients in Intensive Care Units (ICUs). The demand for ICU care is projected to rise as the population ages, however, there are no reliable, population-based data addressing care of the critically ill in Canada, or anywhere else. The two goals of this deliverable are to create the tool needed to accurately analyze critical care in Manitoba, and to begin those analyses. This tool will arise from merging two existing, population-based, ongoing, health care databases currently supported by Manitoba Health & Healthy Living: (a) the clinical Manitoba ICU database (MICUDB) held by the Division of Critical Care Medicine at the University of Manitoba, and (b) the Population Health Research Data Repository (Repository) held by the Manitoba Centre for Health Policy.

Manitoba Immunization Study (Co-PI: Tim Hilderman, Co-PI: Alan Katz)

There are now several years of data reflecting the efforts to reach high-risk groups – the elderly and those with chronic disease – through the adult influenza and pneumonia immunization program. Given this, it is possible to look at the coverage and impact of the immunization program. This deliverable would choose a subset of immunizations for adults and children (e.g., pneumo and influenza; HIB and pertusis) and seek to more fully understand the scope and implications of coverage. There is an ongoing national initiative to examine adverse outcomes of flu immunization. This deliverable could be integrated into a Manitoba provincial/national initiative in the area of adverse outcomes.

Pharmaceutical Use in Manitoba: Opportunities to Optimize Use (Co-PI: Collette Raymond, Co-PI: Colleen Metge)

This deliverable will focus on four areas of pharmaceutical use in Manitoba with the objective of exploring opportunities for intervention to optimize that use. It will include an in depth exploration of the usage and prescribing patterns of each area with a view to understand the potential factors influencing use from multiple perspectives. The four areas of focus are psychoactive drug use in the elderly; drugs used to treat asthma and COPD in adults focusing on combination drugs; drugs used to treat diabetes mellitus; and biologic agents. The analyses will explore the factors that impact usage, including but not limited to, patient characteristics (region, socioeconomic status, age, gender, co-morbidity, doctor and pharmacy "shopping"); provider (initiator of the drug) characteristics (specialist status, country of training, group vs. solo practice, continuity of care in practice, funding mechanism); policy environment (propriety vs. non-propriety personal care home, access to pharmacy professionals); and pharmacare reimbursement policy.

Exploring the Relationship Between Housing, Mental Health and Other Health and Social Factors (PI: Mark Smith)

This deliverable will link the Manitoba Housing data at MCHP with mental health and other datasets to explore the relationship between housing, mental health and other health and social factors. It will be used to inform policy discussions and the development of policies and programs related to the homeless and other disadvantaged populations. It is understood that this deliverable is contingent upon the acquisition and validation of Manitoba's housing data.

Perinatal Services and Outcomes in Manitoba (Co-PI: Maureen Heaman, Co-PI: Malcolm Doupe)

General rates of full-term and pre-term births, stillbirths, and neonatal death rates should be measured and compared across regions of Manitoba and subsequently compared to national rates. A more in depth analysis of the demographic characteristics of women giving birth in Manitoba, the types of deliveries they are experiencing (e.g., caesarean section vs. vaginal delivery), the types of anesthesia utilized, and the rate at which women are induced, should be examined. Also, the place of birth (home vs. hospital), and the type and location of the hospital (relative to the mother's region of residence) should be further described, as well as consideration of key perinatal risk factors such as alcohol use during pregnancy.

Profile of Immigrant Health Status and Health Care Use Patterns (Co-PI: Bosu Seo, Co-PI: Randy Fransoo)

MCHP has been made aware of the potential of a federal immigration database linkage to MHHL data. Discussions with some of the RHAs have indicated the need for exploring the issue of immigrant health status, due to a high proportion of incoming immigrants to these regions. According to a recently released Statistics Canada report, 1 in 5 Canadians is an immigrant today, a proportion unequalled since the 1930s when the country's population had grown with the waves of emigrating Europeans. The number of immigrants to Manitoba more than doubled between 2001 and 2006 over the previous four years. People coming from the Philippines continue to lead the immigration to Manitoba but there are also substantial numbers from India, China, and Germany.

Francophone Health and Health Care Use Atlas (Co-PI: Mariette Chartier, Co-PI: Greg Finlayson)

According to the 2006 Census, 46,000 Manitobans' mother tongue is French and close to 104,000 Manitobans (9%) are bilingual. In recent discussions with MHHL the importance of an RHA Indicators Atlas type of deliverable focusing on Francophones living in Manitoba was discussed. Indicators will be selected to mirror previous work at MCHP, including the RHA Indicators Atlas Update. Extensive work will be required to identify "Francophone" populations in the administrative data using linkages with the Canadian Community Health Survey. This deliverable would assist in laying the foundation for the planning initiatives both provincially and at the RHA level.

1.2 Other Research

1.2.1 Research in Children's Health and Wellbeing

The Manitoba Centre for Health Policy maintained a strong focus on child health and well-being research in 2008/09. Several reports, journal articles and MCHP deliverables have been published from this work. The funded grants and projects listed below have allowed us to expand our data capabilities and broaden our collaborative partnerships on the global stage.

Funded Research:

RBC Financial Group Gift for Research in Children's Health

June 30, 2008 marked the end of the fifth and final year of the RBC Financial Group funding for Research in Children's Health. With this gift, MCHP has been able to increase collaborations and conduct fundamental research to further the understanding of the broader determinants of child health; discovering factors that reduce inequalities in health and educational success during childhood.

The ongoing collaborations with researchers in Canada, the United States and Australia have created unique opportunities to work with expanding data resources in the Repository. These collaborations will continue into the future thanks to the RBC Financial Group's gift to nurture collaborations in its early days.

Research projects funded in part from the RBC Financial Group Fund:

The Apgar Score as an Early Measure of Resilience *Project Description*

Dr. Doug Jutte, RBC Financial Group Child Health Clinical Research Fellow continues to work with Drs. Noralou Roos and Marni Brownell on publications and presentations from this research. They focused their efforts on two main projects as part of this research. The first project compares the associations of two groups of child health predictors (Biological: Apgar scores, birth weight, prematurity; and Social: SES, maternal age, unmarried parents) to later outcomes, such as hospitalization and educational performance. The second project examines the association between Apgar scores and long-term risk of mortality or hospitalization. Manuscripts have been prepared and submitted for both these projects. The manuscript associated with the first project has been submitted to *Epidemiology*. The manuscript from the second project has been submitted to *Paediatric and Perinatal Epidemiology*. Additional manuscripts are also being prepared from this work. MCHP will continue to build on the knowledge that was developed through the Award, into new and ongoing research projects.

Investing in At-Risk Kids Project Description

Drs. Noralou Roos and Marni Brownell have used population-based data from the Manitoba Departments of Health and Healthy Living, Education Citizenship and Youth, and Family Services and Housing to investigate the outcomes for at-risk children. They are also investigating why some children succeed in school and life despite being at risk. This research has garnered attention in Manitoba and elsewhere.

In 2008 they presented this research to groups in government (Manitoba Deputy Minister of Aboriginal and Northern Affairs, Healthy Child Manitoba Committee of Cabinet Ministerial Meeting); business groups (Manitoba Chambers of Commerce, Business Council of Manitoba) community-based organizations (Adolescent Parenting Centre, Coalition of Community Based Child Serving Agencies); the National Crime Prevention Meeting organized by Public Safety Canada, and the You Me and Injury Free Conference.

The Research

The research tracked 11,703 children - all those born in Manitoba in 1984 and 1985 - who still lived in Winnipeg when they turned 18. The factors that were associated with poor future success of those young people included:

- Being in a family that had at some point received income assistance (a measure of poverty);
- Being a child whose mother was a teenager when her first child was born;
- Being a child who spent some time in the foster care system, or under the protection of Manitoba Family Services. It has shown that approximately one-third of Winnipeg children and upwards of 40% of rural Manitoba's children have one or more of these three key risk factors. These children are much more likely to:
 - Not graduate from high school (2 to 4 times as likely to leave school without completing high school as children without any of the risk factors);
 - Become a teen mother (5 to 22 times as likely);
 - To receive income assistance as a young adult (4 to 30 times as likely as children without any of the risk factors) and;
 - More than twice as likely to be hospitalized in the first year of life.

Innovative policy options and programs targeting children and youth at risk are required to help break the cycle of risk. Further research continues as MCHP Research Scientists Drs. Noralou Roos, Marni Brownell, Leslie Roos, and Randy Fransoo and their collaborators at University of California, Columbia University, University of Toronto and University of Alberta conduct ongoing analyses on these datasets.

${\bf Manitoba/Australia\ Ongoing\ Collaboration:}$

Project Description

The relationship between MCHP and the Telethon Institute for Child Health Research in Perth, Australia began in 2004 when Professor Fiona Stanley visited MCHP as an RBC Financial Group Visiting Chair and a group from Winnipeg (Roos, Brownell and 3 others) subsequently traveled to Perth for a week at the Telethon Institute as part of a CIHR International Opportunity Grant. The collaboration brought together two groups with unusually rich population-based administrative data infrastructure, to build a program of collaborative research focusing on the health and well-being of children. Currently, Winnipeg and Perth are the leading experts of two of the forward-looking data linkage centres in the world - with data linkage capabilities at the population health level, across multiple datasets and time frames.

Dr. Noralou Roos spent three months on research leave in Australia in late 2008 to continue this research collaboration. She was invited to present an overview of MCHP's data linkage capabilities and her 'at-risk kids research' at the Cairns South Communities for Children: Mission Australia, as well as the National Data Linkage Symposium and the Inter-Ministerial Council on Early Child Development in Adelaide. The collaboration also allowed Drs. Les and Noralou Roos to travel to New Zealand in fall 2008 where Dr. Les Roos gave several presentations on the research sponsored by the Lupina Foundation.

MCHP hosted Ms. Colleen O'Leary, Research Associate from the Telethon Institute for Child Health Research, Perth, Australia in March, 2009. Colleen presented "Alcohol and Pregnancy Policy and Research in Australia Past, Present, and Future" at the Dept of Community Health Sciences Noon Colloquium Series. Colleen also attended several group meetings during her visit which were widely attended by various representatives from the University of Manitoba, Government of Manitoba, Her Honour Lenore Berscheid, and Children's Hospital.

In September 2008, MCHP hosted two PhD students, also from the Telethon Institute for Child Health Research. Amanda Langridge presented "Do monetary incentives increase birth rates in socially disadvantaged groups?" and "Socioeconomic inequalities in poor fetal growth in Western Australia, 1984-2006". Melissa O'Donnell gave the following presentations: "Increasing Prevalence of Neonatal Withdrawal Syndrome: Population study of Maternal Factors and Child Protection Involvement" and "Monitoring the Tip of the Iceberg: Patterns of Child Hospitalization for Maltreatment and Assault Related Admissions."

Success Despite the Odds: Identifying Factors that Promote Educational Success in High-Risk Adolescents (Roos N, Brownell M, Roos L; Granting Agency: SSHRC) Project Description

Using the Population Health Research Data Repository, MCHP Research Scientists are combining data from education, healthcare, and family services data systems, to better understand those characteristics of schools and neighborhoods which contribute to success in youths who have a high risk of educational failure. Some preliminary results are complete and several papers are in process.

Projects currently in progress under this theme are:

- Characteristics of Success Despite the Odds before/at School Entry.
- Characteristics of Success Despite the Odds from School Entry to Grade 9.
- Characteristics of Success Despite the Odds Focusing on Outcomes for Adolescents Through Young Adulthood.
- Characteristics of Success Despite the Odds Over the Life Course.
- Policy Implications of the Success Despite the Odds Studies.

Monitoring Early Literacy Intervention in Manitoba (Brownell M, Roos N; Granting Agency: Manitoba Education, Citizenship and Youth)

Project Description

The goal of this project is to develop a system for monitoring participation in - and outcomes of early literacy initiative (ELI) programs across the province. The specific objectives of the project are to:

- Link existing data on ELI programs to population registry data housed at MCHP to develop a profile of students participating in the programs (e.g., participation by area of residence, by SES characteristics, by previous experience in child care or nursery school). Currently, Reading Recovery is one of the most widely used ELI programs in the province, used in over 70% of the school divisions (Huggins et al., 2007). This program has been collecting systematic data on participating children for several years. In recent years all programs are collecting these data.
- Communicate the findings on how well current selection patterns serve at risk children to school personnel at the school, district and regional level.
- Explore the association between participation in preschool child care programs and nursery school and children's selection for the ELI programs.
- Compare the results from the Early Development Instrument (EDI) given to all Manitoba kindergarten students with the ELI program data (i.e., who is selected, who is not selected).

Collaborative Grants:

Economic Impact of Children in Care with FASD (Fuchs D, Brownell M, Burnside L, DeRiviere L, Chudley A, Longstaffe S, Halon-Dearman A, Granting Agency: PHAC)

Project Description

The present project is the culmination of several years of research conducted in partnership between the Faculty of Social Work and Family Services and Housing (Child Protection Branch) related to children in care with disabilities. The findings of this research will inform key planning strategies for meeting the needs of children and families affected by FASD. Understanding the economic impact of FASD also supports cost avoidance analysis enabling a determination of the cost saving potential of prevention initiatives.

As part of the development of an FASD economic impact model, the objectives of this project are to:

- Determine the utilization and cost of health, education and child care services provided to children with FASD in care of child welfare agencies in Manitoba.
- Compare the cost of services provided to children with FASD and services provided to children in care with no FASD but associated with parental alcohol abuse.
- Compare the cost of services provided to children with FASD in care and the cost of services provided to children with FASD not in care.

OSPREY: Building capacity for research to improve health services for mothers, babies and children. (Jorm L, Roberts C, Preen D, Simpson J, Moorin R, Haines M, Bambrick H, Holman C – Mentor: Roos, N; Granting Agency: National Health and Medical Research Council (Government of Australia).

Project Description

The OSPREY program will build human capacity, skills and methods to use linked health service data for research to inform improvements in health services for mothers, babies and children. It brings together experienced chief investigators from NSW and WA, and eminent national and international mentors. Through the program, nine team investigators working as independent researchers, will substantially develop Australia's capacity for health services research focused on a "healthy start to life."

Trajectories in Health and Use of Health and Social Services by Children with Developmental Disabilities: A Population-based Longitudinal Study (Shooshtari S, Yu CT, Brownell M, Martens P, Mills R; Granting Agency: MHRC)

Project Description

The proposed study is unique in that it will take a population-based perspective on service use by this population of children and also because it will follow the same group of children over several years. The ability to follow children longitudinally will allow the research team to examine the relationships between conditions in early childhood and the health outcomes of children later in life. The results of the proposed research will increase the understanding of some of the factors that influence the health of children and youths with developmental disabilities, and how the influence of these factors may change over childhood and adolescence.

Using Administrative Datasets to Examine Environmental Risk Factors for Autism (Ouellette-Kuntz H, Holden J, Lewis S, Smith G, Yu CT, Brownell M, Breitenbach M, Garcin N, Lloyd J, Ugnat A: Granting Agency: CIHR [Workshop])

Project Description

The purpose of this workshop is to bring together epidemiological researchers working in the field of autism, experts in environmental risk factor research, and national and provincial dataset holders from various sectors to discuss the feasibility of using administrative data to study the association between autism spectrum disorders ("autism") and exposure to environmental toxicants.

Enhancing Autism Spectrum Disorders Surveillance in Canada (Ouellette-Kuntz H, Brownell M, Shooshtari S: Granting Agency: Public Health Agency of Canada *Project Description*

Established in 2001, the National Epidemiologic Database for the Study of Autism in Canada (NEDSAC; www. nedsac.ca) monitors the prevalence of autism spectrum disorders (ASDs) among Canadian children. Manitoba is one of the NEDSAC surveillance regions and information identifies diagnosed cases of ASD to NEDSAC: Children's Special Services, part of Manitoba Department of Family Services and Housing. Since information from educational sources or diagnostic clinics in Manitoba is not obtained for NEDSAC, it is likely that not all diagnosed cases are captured and the true prevalence of ASDs in Manitoba is being underestimated. We recently received funding through the Public Health Agency of Canada's Enhanced Surveillance for Chronic Disease Program to explore the use of administrative datasets to augment our surveillance efforts. This project will use multiple sources of administrative data (education, physician visits, hospitalizations) to identify children who have ASD and to ascertain the overlap between ASD identification from NEDSAC and from administrative data sources.

The Manitoba 10 Year Birth Cohort – Studying Long Term Outcomes Using Linked Databases (Roos LL, Currie J, Stabile M, Oreopoulos P; Granting Agencies: Partnership for America's Economic Success, SSHRC, CIHR, CIAR and the RBC Financial Group)

Project Description

This project uses unique data from the Manitoba Population Health Data Repository and focuses on health, educational and income assistance outcomes involving all children and families in ten Manitoba cohorts born from 1979-1982 and 1984-1989. Collaborators include leading economists at the University of Toronto and Columbia University. The research has been disseminated widely, with talks being given at the Peking National University, the Chinese University of Hong Kong and the National Symposium on Data Linkage Research, Adelaide, South Australia. Most recently, Janet Currie has presented at Brown University, the NBER Labor Studies group, University of Pittsburgh, the Geary Institute at University College Dublin, the Claremont-McKenna Colleges, and at Columbia University. The following papers have come from this research:

A. Oreopoulos P, Stabile M, Walld R, Roos L. Short-, medium-, and long-term consequences of poor infant health: An analysis using siblings and twins (Journal of Human Resources 2008;43(1):88-138).

This work advances the existing literature on the effects of early infant health on subsequent health, education, and labor force attachment. First, a large sample of both siblings and twins was used; second, a variety of infant health measures were collected; and finally, children were tracked through their schooling years and into the labor force. The findings suggest that poor infant health predicts both mortality within one year and mortality up to age 17. Infant health is a strong predictor of educational and labor force outcomes; in particular, infant health is found to predict both high school completion and welfare takeup and length.

B. Currie J, Stabile M, Manivong P, Roos L. Child health and young adult outcomes (Journal of Human Resources, forthcoming).

Previous research has not asked how insults to child health after birth affect long-term outcomes. Does health at birth matter primarily because it predicts future health or through some other mechanism or because health insults matter more at some key ages than at others? Using the unique Manitoba data, children are followed until 2006, and their records are linked to provincial registries with outcomes data. We compare children with health conditions to their own siblings born an average of 3 years apart and control for health at birth. Early physical health problems are linked to outcomes primarily because they predict later health problems. Early mental health problems have additional predictive power even conditioned on future health.

Planned work builds on previous work regarding marital dissolution and education outcomes and examines the socioeconomic gradient looking at both outcomes and sibling correlations in these outcomes.

Evaluating the Long-Term Costs and Benefits of Community-Based Initiatives. Karnon J, Beilby J, Holton C, Hakendorf P, Ben-Tovim D, Ryan P, Eckermann S, Sayer M, Roos N, Woollacott A, Banham D, Pegram R, Thompson S, Elshaug A; Granting Agency: Australian Research Council (ARC).

Project Description

Dr. Roos met with the group when she was in Adelaide, suggesting how administrative data might be used as part of their evaluation efforts. The ultimate benefit from this research is a more efficient allocation of public funds to provide public services, i.e. an increase in the gain derived from the government budget. The relative advantages of alternative methods of delivering government services are subject to significant uncertainty, which means that policy decisions are often poorly informed. Improvements in the accuracy of predicting the costs and benefits of complex community-based initiatives will help policymakers identify the set of initiatives that provide the best outcomes for the community they serve, as well as informing the optimal specification of the individual initiatives.

New Funding Applications:

Child health researchers at MCHP have recently applied for grant funding for the following research projects: Combining clinic data on Fetal Alcohol Spectrum Disorder (FASD) with administrative data on health, education and social services (Brownell M, Longstaffe S, Hanlon Dearman A, Chudley A, Roos N; Granting Agency: CIHR)

Abstract

This project will make use of existing data sets to help inform policy development for children with FASD, by combining the population-based health and social administrative data sets held at the Manitoba Centre for Health Policy (MCHP) with data from the Clinic for Alcohol and Drug Exposed Children (CADEC). The specific objectives of the project are to: 1. develop a set of markers in the MCHP administrative data that can be used to identify children with FASD in order to estimate population prevalence; and 2. compare rates of health and social service utilization before and after their diagnosis for children identified as FASD through the CADEC data.

Does Manitoba's Home Visiting Program Improve the Well-Being of At-Risk Children? (Brownell M, Chartier M, Santos R, Burnside L; Granting Agency: CIHR)

Childhood maltreatment is considered the third most common public health concern for children, after asthma and allergies. According the Canadian Incidence Study of Reported Child Abuse and Neglect (CIS) released in 2005, the number of reported child maltreatment cases (except child sexual abuse) has increased over a 5 year period. Research suggests that home visiting programs are effective in decreasing child abuse and improving a wide range of child and family outcomes. Home visiting programs consist of regular home visits by nurses or trained paraprofessionals and are generally aimed at families with multiple parenting challenges who are at risk for neglecting or abusing their children. The goal of the study is to evaluate the impact of Manitoba's Families First Home Visiting Program on outcomes associated with child maltreatment and child well-being, using existing datasets.

Child Health and Wellbeing: A longitudinal study (Roos LL, Stabile M, Strohschein L, Currie J; Granting Agency: CIHR)

Abstract

Major health conditions in early childhood have been shown to affect long term outcomes and future wellbeing. We propose to use unique data from the Manitoba Population Health Repository to study the determinants of a series of outcomes relating to health, education, and labor force participation.

- The proposed research focuses on two interrelated objectives:
 To analyze how changes in family structure (such as divorce or parental death), changes which are often accompanied by residential mobility and school changes, affect children's long-term outcomes. Such changes are among the most important life events affecting child development.
- To integrate work on family structure and residential/school mobility with the child development research on the determinants of well-being.

1.2.2 The Lupina Foundation Project

In 2005, The Lupina foundation provided funding over five years to the Manitoba Centre for Health Policy to support web-based research and knowledge transfer. Under the leadership of Drs. Patricia Martens, Leslie Roos, Lisa Lix, and Mark Smith, this funding builds on the existing web-based knowledge transfer activities of MCHP. The gift covers five project areas including: ICD-10-CA/CCI, DPIN, Costing, Social Concepts, and Dissemination. As part of the project, extensive reviews and updates have been made to the MCHP online resources, such as the Glossary and the Concept Dictionary.

Transition to ICD-10/CCI: Current projects are: (a) documenting methods to identify cases of chronic disease using ICD-10-CA codes, (b) compiling resources that describe the Canadian Classification of Interventions, a system for categorizing surgical procedures and health care interventions developed by the Canadian Institute of Health Information to accompany ICD-10, and (c) investigating cross-provincial comparability of diagnosis-based and prescription drug-based measures of comorbid health conditions in chronic disease populations.

Prescription Drug Documentation: MCHP programmers and staff are developing a longitudinal DIN (Drug Identification Number) Master file which will make it possible to have a single file capturing all prescription drugs insured by the province over time. This integrated file will greatly facilitate pharmacoepidemiologic population-based analyses of utilization, appropriateness and effectiveness of drugs.

Methods for Costing Provincial Health Services: The complex methodologies that have been developed and refined in Manitoba to estimate hospital, prescription drug, physician, home care, and long-term care services are currently being updated. This work is important for monitoring longitudinal trends and conducting inter-provincial comparisons.

Social Determinants of Health: Beginning in 2005, MCHP researchers and staff initiated a major expansion of Concept Dictionary documentation to describe methods for measuring the social determinants of health, such as family structure and level of education. Recent concept development focused on intellectual disabilities, educational achievement indices, high school completion, multiple ways to measure socioeconomic status, and location of residence.

Dissemination and Evaluation: MCHP research scientists and staff regularly participate in local, national, and international meetings to spread the word about the value of the Concept Dictionary. Recent highlights include:

- MCHP research scientists and staff liaised with the Western Regional Training Centre in Health Services Research to train graduate students to use MCHP's web-based research resources in their own projects.
- Two major evaluation projects are currently in progress. Probe Research Inc., an independent research organization, is nearing completion of its three-phase evaluation of MCHP's web-based research resources. The evaluation has collected information via a review of website utilization statistics, an on-line survey, and key informant interviews. The second project is a qualitative evaluation of factors that have contributed to MCHP's success in an environment of academic rigor and policy relevance. The study will examine the challenges the Centre has faced and the opportunities that were embraced in order to flourish.

1.2.3 MCHP-Administered Research Grants

Canadian Institutes of Health Research

Martens PJ. CIHR/PHAC Applied Public Health Chair. \$925,000, 03/2008-02/2013. "What works at the population level? An Applied Public Health Chair program of research focusing on population & public health issues."

Roos LL, Forget E, Katz A, Kozyrskyj A, Menec V. \$100,000, 2007–2009. "Avoiding Hospitalization: Ambulatory Care Sensitive Conditions, Quality of Care, and Socioeconomic Status". Matched grant with Manitoba Health Research Council.

Skowronski D, Roos LL. \$93,594, 2006–2008. "Influenza vaccine effectiveness against serious outcomes"

Manitoba Health and Healthy Living

Martens P. \$11,625,000, 04/2007-03/2012. Manitoba Centre for Health Policy contract.

Manitoba Health Research Council

Doupe M, Martens PJ, Kozyrskyj A, Strang D, Lamont L, Whitbread L. \$112,850, 2007–2009. "Performing Activities of Daily Living Tasks: Determining why some nursing home residents experience declines in function."

Lix L. \$42,733, 07/2007–06/2009. "Variable Importance and Multiple Testing for Multivariate Logitudinal Data."

Roos LL, Forget E, Katz A, Kozyrskyj A, Menec V. \$100,000, 2007–2009. "Avoiding Hospitalization: Ambulatory Care Sensitive Conditions, Quality of Care, and Socioeconomic Status."

Social Sciences and Humanities Research Council of Canada

Roos NP, Brownell M, Roos LL. \$103,097, 04/2007–04/2009. "Success Despite the Odds: Identifying Factors that Promote Educational Success in High–Risk Adolescents."

1.2.4 Other Research Grants Accessing the Repository

These projects are not run (financially or administratively) through MCHP, and may access data from other sources in addition to the Repository. Listed in alphabetical order:

Bartlett J, Cook C, Carter S, Martens PJ, Elias B. \$200,000; 2008 – 2010. Implementing and Evaluating a Knowledge Translation Framework Using Metis-Specific Health Information to Adapt Manitoba's Health Programs & Services to Better Meet Metis Needs: The "Metis Need to Know Too" Project. CIHR Knowledge to Action Grant.

Bernatsky S, Lix L. \$227,600; 11/2006 – 10/2009. Administrative Database Research in Rheumatic Diseases: Novel Techniques. CIHR.

Bratu I, Chateau D, Leslie WD, Martens PJ, Katz A. \$35,000. Pediatric Appendicitis Rupture Rates: An Indicator of Disparities in Manitoba's Health Care System. Health Sciences Centre Foundation.

Cook C, O'Neil J, Elias B, Bartlett J, Mignone J, Lavoie JG, Bruche S, Martens PJ, Kaufert J, Eni R, Galley V. \$1,749,999; 2007 – 2010. Application for a Manitoba NEAHR Program.

Elias B, Martens PJ, O'Neil J, Mignone J. \$1,000,000; 2006 – 2011. Understanding and Addressing Health Disparities in First Nations Populations in Canada. Manitoba First Nations Health Report Card: A Collaborative Network Project to Reduce Health Disparities. CIHR.

Elias B, Turner D, Bruce S, Demers A, Griffith J, Kliewer E, Martens PJ, Czaykowski P. \$1,495,213; 04/2007 – 03/2012. Access to Quality Cancer Care for Manitoba's First Nations and Non-First Nations Population: Identifying Issues, Reducing Risk and Ensuring Equitable Access Program. CIHR / CCMB Team in First Nations Cancer Research.

Forget E, Roos N, Hum D, Simpson W, Lobdell R, Grant H, Hikel R, Burchill C, Nicol P, MacGregor J, Khair H. \$181,341; 10/2005 – 09/2008. The Town with No Poverty: The Long-term Consequences of a Canadian Guaranteed Annual Income Social Experiment. CIHR.

Hobson D, Leslie WD, Lix L, Burchill C. \$53,150; 06/2007 – 05/2008. Who Isn't Receiving Care in Manitoba? A Study of Variation in the Prevalence and Incidence of Individuals with Parkinson's Disease and their Patterns of Medical Care in Manitoba, 1984-2006. National Parkinson Foundation.

Jutte D, Brownell M, Derksen S, Bond R, Boyce T, Syme L, Sirski M, Guevremont A, Bodnarchuk JL, Au W, Backhouse K. \$60,000; 03/2004 – 04/2008. The Apgar Score as an Early Measure of Resilience. RBC Financial.

Katz A. \$1,469,086; 06/2007 - 05/2013. Access to Quality Cancer Care. CIHR / Cancer Care Manitoba Team in Primary Care Oncology Research. CIHR New Emerging Team Grant.

Katz A, Doupe M. \$100,000; 10/2005 – 09/2008. Testing the Effectiveness of Health Lines in Chronic Disease Management of Congestive Heart Failure. CIHR.

Kozyrskyj A, Becker A, Mai XM, Ramsey C. \$288,000/year; 09/2005 – 08/2012. Adolescent Females, Obesity and Asthma: An Inflammatory State. CIHR Interdisciplinary Capacity Enhancement Program.

Kozyrskyj A, HayGlass K, Becker A, MacNeil B, McGrath P, Mai XM. \$65,000; 08/2005 – 05/2008. Maternal Stress in Early Childhood and the Development of Asthma: A Cohort Study of Health Care Database Records and Immune System Function. AllerGen NCE Inc.

Kozyrskyj A, Ramsey C, Becker A, Ernst P. \$219,150; 04/2003 – 09/2008. Do Antibiotics in Early Life Contribute to the Development of Asthma in Children? CIHR Operating Grant.

Kozyrskyj A. \$50,000; 06/2007 – 07/2008. Postpartum Distress and Childhood Asthma: The Genetics and the Social and Ethical Impacts of this Genetic Association.

Kozyrskyj A. \$200,000; 09/2006 – 08/2008. Effects of Manitoba Pharmacare Formulary Policy on Utilization of Prescription Medications.

Kozyrskyj A. \$50,000; 06/2007 – 07/2008. Stress, Asthma and Atopy: Social-Spatial Investigations.

Kryger M, Roos L, Banno K, Chateau D, Ronald J, Manfreda J. \$662,856; 04/2000 – 03/2009. Impact of Sleep Disorders on Health (and Extension of Utilizations Studies to Include Narcolepsy and Restless Legs Syndrome). NIH.

Kwong J, Manuel D, Roos L, De Wals P, Moran K, Au W, Burchill C. \$1,091,729; 11/2006 – 01/2010. Evaluation of Ontario's Immunization Program: Phase II. CIHR.

Lalonde C, Chandler M, Kinew KA, O'Neil J, Elias B, Martens PJ, Mignone J, Burchill C, Hart M, Keeper T, Sinclair S, Meawasige A. \$507, 472; 01/2006 – 01/2009. Moving Beyond the BC Model: Exploring the Relations Between Cultural Continuity and Suicide and Risk Behaviours with Manitoba First Nations. CPHI.

Lavoie J, Forget E, Martens P, O'Neil J, Dahl M. \$150,000; 10/2006 – 09/2009. Using Evidence to Identify the Need for Investments in Primary Health Care Services on Manitoba First Nations Reserves. CIHR.

Leslie WD, Lix L, Morris S, Metge C, Caetano PA. \$215,000; 12/2008. Program: Epidemiology of Osteoporosis in Manitoba. I3 Innovus.

Leslie WD, Metge C, Weiler H, O'Neil J, Lix L, Greenberg C, Roos L, Doupe M, Salamon EA, Yuen CK, Tenenhouse AM, Cooke A. \$759,724; 09/2004 – 08/2008. First Nations Bone Health Study (FNBHS II) – Longitudinal Measurements and Outcomes. CIHR.

Lix L. \$240,421; 05/2008 – 05/2011. Classification Algorithms to Distinguish Chronic Disease Cases from Non-Cases in Administrative Data. CIHR.

Lyons RF, Warner G, Brown ER, Hobfoll SE, Labonte R, Martens PJ. \$290,000; 2005 – 2008. Knowledge Translation Strategies for Health Research Competition, Beyond Dissemination: Assessing Receptor Capacity to Use Research in Health Systems and Policy. CIHR.

Manuel D, Burchill C, Anderson G, Berthelot JM, Roos L, Mustard C, Booth G, Choi B, Hux J, Stukel T, Wu J, Maaten S, Lam K. \$628,306; 01/2005 – 03/2009. Population health Impact Assessment Tools – for Obesity and Diabetes Mellitus Type 2 (PHIAT-DM). CIHR.

Menec V, Dyck H, Tate R. 12/2005 – 06/2009. Population-Based Analysis of the Relationship between Neighbourhood and Individual Characteristics and Health Among Seniors. Funded through Canada Research Chair in Healthy Aging - CIHR.

Mutch A, Fransoo R, Sirski M. 06/2007 – 05/2009, Incidence of Dementia and Depression Following Open Heart Surgery or Percutaneous Coronary Intervention. Manitoba Health and Healthy Living.

Payne B, Chipperfield J, Tate R, Dyck H, Menec V. \$148,882; 07/2006 – 06/2008. A Study of Successful Aging in Manitoba. SSHRC.

Singh H, Penfold R, DeCoster C, Bernstein CN, Moffatt M. \$13,685; 08/2007 – 09/2008. Complications Associated with Lower Gastrointestinal Endoscopy: A Population-Based Study. CIHR and WRHA.

Skowronski D, Roos L, Law B, Metge C, Tweed A, Hottes T, Janjua N, Manuel D, Van Caeseele P, Hammond G, De Serres G, Li Y. \$183,672; 04/2007 – 03/2009. CIHR.

Targownik, L. 09/2008. The Effect of the Institution of PPI Restrictions on the Utilization of Gastroprotective Strategies in High Risk NSAID Users.

Targownik L, Bernstein C, Metge C, Roos L. \$69.384: 07/2006 – 06/2008. Use of a Population-based Health Care utilization Database to Study the Utilization and Outcomes Associated with Drugs Affecting the Upper Gastrointestinal Tract. CIHR.

Targownik, L, Leslie WD, Hussain F. 09/2008. The Effect of Proton Pump Inhibitor Use on Cardiac Outcomes in patients Using Clopidogrel.

Targownik L, Leslie WD. \$146,000; 03/2008 – 05/2009. Determining the Effect of Proton Pump Inhibitor Use on Bone Mineral Density and Development of Osteoporosis. CIHR.

Targownik L, Leung S, Lix L, Metge C. 05/2007 – 04/2008. The Risk of Respiratory Disease-Related Hospital Admissions Among Proton Pump Inhibitor Users with Chronic Respiratory Disease. CIHR.

Young TK, Lix L. \$370,000; 05/2006 – 04/2011. Averting Emerging Chronic Diseases in Northern Populations. CIHR Team in Circumpolar Health Research.

Zhong-Cheng L, Fraser WD, Heaman MI, Martens PJ, Smylie JK. \$225,000; 2005 – 2008. An Opportunity for New Researchers in Aboriginal Health competition, Community Characteristics and Birth Outcomes Among Canadian Aboriginal Women. CIHR.

1.2.5 Ongoing Theses Projects Accessing the Repository

Balogh R. "Primary Care Access Among Persons with an Intellectual Disability in Manitoba."

Bozat-Emre S. "Temporal Association Between Atypical Antipsychotic Medication Use and Falls Among Personal Care Home Residents in the Winnipeg Regional Health Authority."

Dart A. "The Natural History of Youth Onset Type 2 Diabetes in a Cohort of Manitoba Children and Adolescents."

Fransoo R. "How Does Health Status at Birth and Throughout Childhood Affect Children's Performance in School?"

Heron D. "The Impact of Universal Vaccination of Streptococcus Pneumoniae and Hemophilus Influenzae Type B: Looking at the Direct and Indirect ("Herd") Effects of Implementing a Universal Vaccination Program."

Khan S. "Does Respiratory Tract Infection by Respiratory Syncytial Virus (RSV) in the First Two Years of Life Contributes to the Development of Asthma Among Children in Manitoba?"

Lam K. "Who Are the High Users of Health Care Services? Determinants and Stability of Health Care Expenditure Trajectories in Manitoba?"

Ruth C. "The Influence of Socioeconomic Status on Morbidity in Late Preterm Infants."

Shaw S. "A Latent Variable Investigation of Determinants of Emergency Room Use."

Yallop L. "Rates of Diagnosis and Treatment of Attention Deficit Hyperactivity Disorder in Manitoba Children: Considering the Socioeconomic Gradient Across Age Groups."

2.0 Knowledge Translation

Each year one of the six MCHP deliverables is not a report, but instead encompasses all the activities surrounding research knowledge translation. The Manitoba Centre for Health Policy researchers and staff carry out more of these activities than is common among most academic units. The following represents the many areas of research knowledge translation done over the past year.

2.1 RHA Collaborative Research

2.1.1 The Need to Know Team Project

This project involves collaborative research by the Manitoba Centre for Health Policy, the eleven Regional Health Authorities, and Manitoba Health and Healthy Living. High-level planners and decision-makers from each RHA are chosen by their CEOs to attend these meetings. Dr. Patricia Martens is the Director of the project, and Dr. Randy Fransoo is the Co-Director. This project was originally funded through the Canadian Institutes of Health Research, Community Alliances for Health Research Program (2001-2006; where Patricia Martens was the PI). After completion of this grant in 2006, funding for these projects came through the Manitoba Health and Healthy Living. Meeting expenses have been funded through a national CIHR KT Award (2007-2008), and through the CIHR/PHAC Applied Public Health Chair awarded to Dr. Martens (2008-2013). The goals of this project are:

- To create knowledge directly relevant to the RHAs.
- To develop useful models for health information infrastructure, training, and interaction that will increase and improve capacity for collaborative research.
- To disseminate and apply health services and population health research to increase the effectiveness of health services and programs, and ultimately the health of RHA populations.

The Need to Know Team meets three times per year for two days at a time in Winnipeg. These meetings are designed to respond to the goals by including relevant activities. The fall meeting is concurrent with the annual MCHP Rural & Northern Healthcare Day, where The Need to Know Team members act as facilitators for round-table discussions on MCHP deliverables. Currently, members are brainstorming about a potential project in the area of Emergency Department services throughout Manitoba. As well, an RHA Indicators Atlas update, led by Dr. Fransoo, will be forthcoming in 2009. The Need To Know Team is also the working group for a new deliverable called "Exploring the Relationship between Housing, Mental Health and Other Health and Social Factors".

The Need to Know Team meetings (June 9-10, 2008; November 17, 2008; February 23-24, 2009) incorporate a variety of sessions designed to encourage two-way learning between researchers and planners/policy-makers. Some of the sessions attended by the Team members in the past year were:

- Chronic Disease Surveillance System National and Provincial Perspectives
- Qualitative Data Analysis 101 (Dr. Patricia Martens)
- "From Evidence to Action Phase 2" project presented by Pearl Soltys and Ashley Struthers (Co-PI: Martens PJ, Co-PI: Bowen S)
- A Day in the Life of Manitoba Health and Healthy Living (Mr. Louis Barre)
- Preview of the "Child Health Atlas Update: a Second Look" (Dr. Marni Brownell)
- Presentation on the Chronic Disease Cost deliverable (Mr. Greg Finlayson)
- CIHI Portal and 2006 Census Data
- Sample Size 101 (Dr. Dan Chateau)
- Healthy Smile Happy Child (Dr. Robert Schroth)

2.2 International Health Data Linkage Network

MCHP research scientists participated in and presented at the first meeting of the International Health Data Linkage Network - an international consortium meeting in London in December 2008. Representatives from a number of countries, including UK, Australia, Scotland, New Zealand, and Canada discussed opportunities for international collaboration and knowledge transfer.

2.3 Briefings

Prior to the release of a deliverable Manitoba Health and Healthy Living senior executive and managers, including the Deputy Ministers and Ministers, receive briefings which highlight the outcomes and recommendations of the particular report. Stakeholder groups are also briefed prior to relevant releases. These groups include Departments of Education, Citizenship and Youth; Family Services and Housing; Manitoba Medical Association; College of Physicians and Surgeons of Manitoba; Regional Health Authorities; and Manitoba Patient Safety Institute. Numerous briefings continue post-release on many deliverables as dissemination of findings occurs and interest is generated. Researchers brief the Advisory Board on deliverables in progress and deliverable working group members are briefed throughout the project by research teams. As well, MCHP research forums take place on a bi-weekly basis to update MCHP research scientists and collaborators on the status of deliverables' research, research methods and other Repository-related research. In addition, deliverables are often highlighted in the weekly Community Health Sciences Departmental Colloquium Series. Specific project briefings are listed below, however for a complete list of presentations given by MCHP research scientists, please view the *Presentations* section of this Annual Report.

An Initial Analysis of Emergency Departments & Urgent Care in Winnipeg

Executive Management Committee, Manitoba Health and Healthy Living, April 2008

Development of Composite Measures/Indices of Health and Health System Performance

• Manitoba Health and Healthy Living, December 2008

Direct Cost of Hospitalizations in Manitoba

- MCHP / Manitoba Health and Healthy Living Annual Workshop, May 2008
- Manitoba Health and Healthy Living, July 2008
- Minister of Health, Minister of Healthy Living, September 2008
- MCHP Rural & Northern Healthcare Day, November 2008

Effects of Drug Listing Decisions on Appropriate Utilization

• MCHP / Manitoba Health and Healthy Living Annual Workshop, May 2008

Manitoba Child Health Atlas Update

- MCHP / Manitoba Health and Healthy Living Annual Workshop, May 2008
- MCHP Advisory Board, June 2008
- Manitoba Health and Healthy Living, August 2008
- Minister of Health, Minister of Healthy Living, September 2008
- MCHP Rural & Northern Healthcare Day, November 2008
- Department of Education, Citizenship and Youth Senior Management, January 2009

Physician Integrated Network Project

• MCHP Rural & Northern Healthcare Day, November 2008

Physician Resource Projection Model

- Manitoba Health and Healthy Living, April 2008
- Minister of Health, September 2008

Updated Regional Health Authority Indicators Atlas

MCHP / Manitoba Health and Healthy Living Annual Workshop, May 2008

What Works? A First Look at Evaluating Manitoba's Regional Health Programs and Policies at the Population Level

MCHP / Manitoba Health and Healthy Living Annual Workshop, May 2008

2.4 Workshops

Part of the mandate of Manitoba Centre for Health Policy is to ensure dissemination of the research in the form of a published report for each completed deliverable. To further disseminate these reports MCHP holds a minimum of two annual workshops in order to fulfill objectives in knowledge translation.

2.4.1 MCHP / Manitoba Health and Healthy Living Annual Workshop

The role of the Manitoba Centre for Health Policy / Manitoba Health and Healthy Living Workshop is to highlight MCHP research and present it to MHHL staff across a spectrum of departments. The fifth annual MCHP / MHHL Workshop was held on May 15, 2008 at the Niakwa Country Club.

The keynote presentation this year was Dr. Patricia Martens' deliverable, What Works? A First Look at Evaluating Manitoba's Regional Health Programs and Policies at the Population Level. While feature presentations at the workshop provide delegates with information into the research behind the deliverables, the highlight of the day lies in the facilitated roundtable discussions that follow. These discussions provide researchers, stakeholders, as well as health policy-makers and planners with valuable insight and allow them to explore the depth of the issues within the reports.

The latter half of the day was dedicated to previews of deliverables not yet released. Each presentation was followed by a question-and-answer period to foster the transfer of knowledge to and from researchers and workshop delegates. This year, three reports were presented:

- Manitoba Child Health Atlas, PI: Dr. Marni Brownell
- Effects of Drug Listing Decisions on Appropriate Utilization, PI: Dr. Anita Kozyrskyj
- Updated Regional Health Authority Indicator Atlas, PI: Dr. Randy Fransoo

2.4.2 MCHP Rural and Northern Healthcare Day

Geographic location within the province can lead to some differences in the health of local populations and delivery of health care services. For this reason the Manitoba Centre for Health Policy hosts an annual conference predominantly for non-Winnipeg regional health authorities.

The fifteenth annual Rural & Northern Healthcare Day was held on Tuesday, November 18, 2008 at Fort Garry Place. There were 180 people at the day's events, including representatives from all ten RHAs outside Winnipeg, as well as contingents from Manitoba Health and Healthy Living, the Manitoba Metis Federation, and graduate students from the Western Regional Training Centre. Representatives from the Canadian Institute for Health Information were also present and helped co-sponsor the day.

The workshop helps RHA managers and other delegates develop a greater awareness of the information and issues found in MCHP research, which in turn opens the door for further discussion on a number of levels that affect specific RHAs. The day acts as a catalyst to make positive change with presentations from MCHP research scientists who discuss information from upcoming reports.

Like the MCHP / MHHL Workshop, a keynote presentation was given on a recently released deliverable. This year Dr. Marni Brownell presented *Manitoba Child Health Atlas Update* – a 318-page report exploring "significant disparities in child outcomes across socioeconomic status and region of residence" within the province of Manitoba. This presentation was also followed by facilitated roundtable discussions.

Representatives from the provincial government can also use the information discussed during the day to create policy to improve the use of resources in various regions. These discussions create an opportunity for RHA and MHHL staff to stay connected to topics of interest within the various regions, which allows participants the ability to address issues locally in their regions.

The afternoon featured two previews of MCHP deliverables to be released. The *Physician Integrated Network Project* was presented by Dr. Alan Katz and Greg Finlayson presented information on his deliverable, the *Direct Cost of Hospitalization in Manitoba*.

2.5 Media Interviews

Brownell M. CPHI-funded Inequalities in Child Health work on educational outcomes across socioeconomic status. Interview with Rob Breckenridge, CHQR Radio "The World Tonight", Calgary AB, April 7, 2008.

Brownell M. Children's health regarding new children's hospital proposed in Saskatoon. Interview by CBC Radio Saskatchewan, June 25, 2008.

Brownell M. Child Health Atlas Update. Interview with Luke Eisbrenner, CJOB Radio "Drive with Luke Eisbrenner", Winnipeg MB, November 12, 2008.

Brownell M. Poverty-health link can't be ignored. Interview with Marlo Campbell from The Lance, November 13, 2008 (published November 20, 2008).

Burland E. Doctors Test Less Invasive Treatment for Uterine Fibroids. Interview with Marni Kagan from CTV News Winnipeg, January 8, 2009.

Finlayson, G. Cost of Hospitalizations in Manitoba. Interview with Jen Skerritt, Winnipeg Free Press, March 26, 2009.

Finlayson, G. Cost of Hospitalizations in Manitoba. Interview with Richard Cloutier, "Richard Cloutier Reports", CJOB Radio, March 26, 2009.

Finlayson, G. Cost of Hospitalizations in Manitoba. Interview with Margaux Watt, "Up To Speed", CBC Radio One, Winnipeg, MB, March 26, 2009.

Katz A. Crackdown demanded on drug reps' freebies. Interview with Jen Skerritt, Winnipeg Free Press, November 24, 2008.

Katz A. Insurance lets you jump health queue. Interview with Jen Skerritt, Winnipeg Free Press, June 25, 2008.

Katz A. Physician Resource Projection Model. Interview with Richard Cloutier, CJOB "Richard Cloutier Reports", Winnipeg MB, February 18, 2009.

Katz A. Physician Resource Projection Model. Interview with Marilyn Maki, CBC Radio One "Radio Noon", Winnipeg MB, February 18, 2009.

Katz A. Physician Resource Projection Model. Interview with Mychaylo Prystupa, CBC Television "CBC News at Six", Winnipeg MB, February 18, 2009.

Kozyrskyj A. Fast food linked to asthma. Interview with Sharon Kirkey, Winnipeg Free Press, Winnipeg, MB, January 28, 2009.

Martens PJ. Regional health authorities and "do they work" in Manitoba? Interview with Ross Romaniuk, The Sun, Winnipeg, MB, February 17, 2009.

Martens PJ. Relating Barack Obama's inauguration to the importance of the social determinants of health. Interview with Terry McLeod, CBC Radio Winnipeg, "Information Radio", Winnipeg, MB. January 20, 2009.

Martens PJ. Are regional health authorities working, or do we go back to a centralized provincial system? Interview with Mary Agnes Welch, Winnipeg Free Press, Winnipeg, MB, August 14, 2008.

Martens PJ. Infant mortality. Interview with Catherine Mitchell, Winnipeg Free Press, Winnipeg, MB, April, 2008.

Martens PJ. Budget Wish Lists. Interview with Mary Agnes Welch, Winnipeg Free Press, Winnipeg, MB, April 8, 2008.

Martens PJ. "What Works" deliverable. Interview with Nassima, CBC Radio-Canada, Winnipeg, MB, April 9 & 15, 2008 (aired April 20, 2008).

Martens PJ. "What Works" deliverable. Interview with Jillian Austin, Brandon Sun, Brandon, MB, April 9, 2008.

Martens PJ. "What Works" deliverable. Interview with Owen Deveron, CKLQ 880, Brandon, MB, April 9, 2008.

Martens PJ. "What Works" deliverable. Interview with Jen Skerritt, Winnipeg Free Press, Winnipeg, MB, April 9, 2008.

Martens PJ. "What Works" deliverable. Interview with Courtney James, CJOB, Winnipeg, MB, April 9, 2008.

Martens PJ. "What Works" deliverable. Interview with Joseph McAllister, Medical Post, Winnipeg, MB, June, 2008.

Metge C. Dispensing fees. Interview with Donna Carreiro, CBC Television Winnipeg, "CBC News at Six", Winnipeg MB, February 18, 2009.

2.6 Media Releases

Media Release for the report: Manitoba Child Health Atlas, November 12, 2008

Media Release for the report: Physician Resource Projection Model, February 18, 2009

Media Release for the report: The Direct Cost of Hospitalizations in Manitoba, March 26, 2009

2.7 CentrePiece Newsletter

The MCHP newsletter, *CentrePiece*, was published once during the 2008/09 fiscal year. Issue No. 20, Winter is available online at http://umanitoba.ca/faculties/medicine/units/mchp/newsletters.html. Hardcopies are also available by request.

2.8 Visitors

In September 2008, the Manitoba Centre for Health Policy hosted two PhD students, also from the Telethon Institute for Child Health Research. Amanda Langridge presented "Do monetary incentives increase birth rates in socially disadvantaged groups?" and "Socioeconomic inequalities in poor fetal growth in Western Australia, 1984-2006". Melissa O'Donnell gave the following presentations: "Increasing Prevalence of Neonatal Withdrawal Syndrome: Population study of Maternal Factors and Child Protection Involvement" and "Monitoring the Tip of the Iceberg: Patterns of Child Hospitalization for Maltreatment and Assault Related Admissions."

Professor Sir Michael Marmot presented a public lecture "Closing the Gap: Health Equity and the WHO Commission on Social Determinants of Health" on Tuesday, Feb. 3, 2009. Preceding this lecture Sir Marmot was hosted by MCHP in two smaller, by invitation-only sessions – the first focused on primary care and public health, and the second discussion focused on child health. A third MCHP hosted session on Indigenous health was held in the afternoon. Karen Serwonka, policy analyst in population health promotion, Public Health Division, from Manitoba Health and Healthy Living was also involved in organizing a further discussion with MHHL in the afternoon.

Professor Sir Michael Marmot MBBS, MPH, PhD, FRCP, FFPHM, FMedSci is Director of the International Institute for Society and Health and MRC Research Professor of Epidemiology and Public Health, University College, London. He has been at the forefront of research into health inequalities for the past 30 years. He was a member of the Royal Commission on Environmental Pollution for six years. In 2000 he was knighted by Her Majesty The Queen for services to Epidemiology and understanding health inequalities.

On February 25 representatives from Dalhousie University came to discuss population health research models. Dr. Martha Crago, VP Research and Gillian Wood, Director of Government Relations for Dalhousie University spent the day at MCHP gathering background information in order to establish a similar research facility in Halifax.

MCHP hosted Ms. Colleen O'Leary, Research Associate from the Telethon Institute for Child Health Research, Perth, Australia in March, 2009. Colleen presented "Alcohol and Pregnancy Policy and Research in Australia Past, Present, and Future" at the Dept of Community Health Sciences Noon Colloquium Series. Colleen also attended several group meetings during her visit which were widely attended by various representatives from the University of Manitoba, Government of Manitoba, Her Honour Lenore Berscheid, and Children's Hospital.

2.9 Research Resources

(see www.umanitoba.ca/faculties/medicine/units/mchp/resources/index.html)

The Manitoba Centre for Health Policy develops and maintains several web—based resources to facilitate the access and use of an information—rich research environment. With the shift to a University of Manitoba web template in April, 2008, MCHP's Research Resources were restructured to reflect five central components: Data Repository, Data Access, Research Protocol, Glossary, and Concept Dictionary. These resources provide information on the administrative requirements for using data from the Population Health Research Data Repository and documentation to facilitate processing and analysis of the data. They organize and centralize new knowledge so that others can use it — and then pass it on to succeeding generations of researchers. Development of these tools, largely supported by Lupina Foundation funding, is important for ensuring the high level of research productivity and competitiveness in funding applications for which MCHP research scientists are well known.

2.9.1 Data Repository

The Population Health Research Data Repository (Repository) housed at MCHP is a comprehensive collection of administrative, registry, survey and other databases primarily comprising residents of Manitoba. It was developed to describe and explain patterns of health care and profiles of health and illness, facilitating inter-sectoral research in areas such as health care, education, and social services. This section of the MCHP website was developed this past year to include a list of all databases housed in the Repository; development of summary descriptions is underway for each of these databases.

2.9.2 Data Access

MCHP acts as a steward for the databases housed in the Repository. The basic model for providing access is based on the principle that the database is owned by the parent Manitoba organization that contributed the specific data. Investigators interested in obtaining access to the Repository may submit proposals to MCHP for initial review. Administrative steps for obtaining approval to access data (*Proposal Review and Project Approval Process*) and for retaining access once the project is approved (*Ongoing Project Requirements*) were extensively revised this past year and are described in the Data Access section of the MCHP website.

2.9.3 Research Protocol

The Research Protocol provides an entry point to the Research Resources from the perspective of the sequence of activities that facilitate completion of a research project using the data housed in the Repository. These activities include developing the proposal, obtaining the necessary study approvals, defining the study design, managing the project, and publishing requirements and guidelines. New documentation was added, for example, to the study design section on observational study methods for making causal inferences.

2.9.4 Glossary

The Glossary is the entry point to both the Research Protocol and Concept Dictionary. It is a compilation of short definitions or terms used in MCHP deliverables and other publications. The main focus for Glossary content is population health, health services, and research methods. Each term contains a brief definition and the source for that definition, as well as including links to related terms and to more detailed information contained within the MCHP website or in non–MCHP websites.

2.9.5 Concept Dictionary

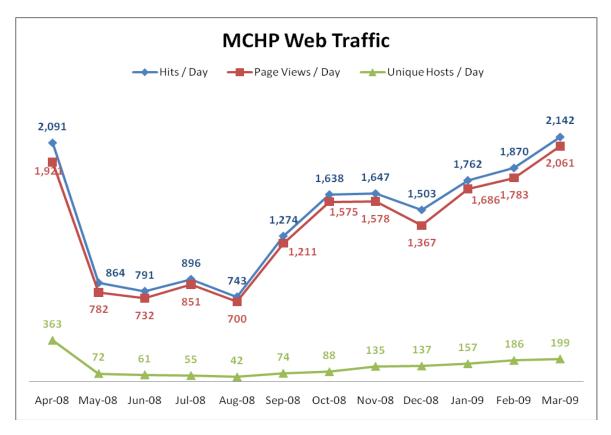
The Concept Dictionary contains detailed operational definitions of variables or measures used in MCHP research. For example, one concept that was added this year focuses on defining Child Health Indicators. This Concept provides a summary listing of the indicators used in the Child Health Atlas Update and links to detailed information contained in the Glossary, Concept Dictionary, Data Extras section related to this project, and to individual chapters of the report. SAS code for this concept is currently under development. This concept was published February 27, 2009, to the MCHP website at: http://mchp-appserv.cpe.umanitoba.ca/viewConcept.php?conceptID=1346.

2.10 Website

MCHP began monitoring website use in January 1998, using access logs from the University of Manitoba Apache WWW server. This approach permits counting the number of hits, page views, unique visitors, and other information regarding how and what was accessed on MCHP's website.

In April, 2008, MCHP modified its domain to reflect changes with the University of Manitoba's website structure. With the change MCHP started using the U of M's web template to keep the look of university-related consistent. This also required a restructuring of MCHP Research Resources including the Concept Dictionary, Glossary, and other internal databases. Search engines like Google do not automatically re-index web addresses in when changes like this are made and as such, there appears to be a considerable drop in web traffic to the MCHP site.

Since a hit is counted once for every time a browser, like Internet Explorer, goes to the server and requests a web page, careful analysis is required when interpreting this information. Hits for example, are counted once for each file loaded on a visitor's computer. This means that a hit is counted each time a web page is loaded and another hit is counted for each graphic within that page. For this reason, graphic files have been excluded from MCHP web statistics to paint a more accurate picture of visits to the MCHP website. Additionally, every time an internet crawler or bot is sent automatically by search engines as they update their own sites, a hit and a page view is counted and since the bot traffic cannot be easily distinguished from regular visitors browsing a site, the true number of visits measured in hits or page views may be skewed. Counting hits and page views however does not compensate for the fact that many different visitors may come from the same host when they are situated in a network behind a firewall. In this type of situation there may be 50 different visitors but they are all represented by a single host or unique visitor. On the other hand, because of the Concept Dictionary use at Monash University in Australia and mirroring of Epidemiology Supercourse lectures in approximately 39 servers worldwide, these figures might represent an underestimate of international interest.



2.10.1 Report Downloads

In 2008/09 MCHP began monitoring downloads of reports in .PDF format from the Reports page. There were 125,857 successful requests and 6,886 distinct hosts served. The table below represents the "Top 10" downloaded reports for 2008/09.

Rank	Deliverable	Requests
1	What Works? A First Look at Evaluating Manitoba's Regional Health Programs and Policies at the Population Level (2008)	27,477
2	Defining and Validating Chronic Diseases: An Administrative Data Approach (2006)	7,600
3	Sex Differences in Health Status, Health Care Use, and Quality of Care: A Population-Based Analysis for Manitoba's Regional Health Authorities (2005)	6,164
4	The Manitoba RHA Indicators Atlas: Population-Based Comparison of Health and Health Care Use (2003)	5,981
5	Patterns of Regional Mental Illness Disorder Diagnoses and Service Use in Manitoba: A Population-Based Study (2004)	5,970
6	Using Administrative Data to Develop Indicators of Quality Care in Personal Care Homes (2006)	5,542
7	Manitoba Child Health Update (2008)	4,710
8	The Health and Health Care Use of Registered First Nations People Living in Manitoba: A Population-Based Study (2002)	4,405
9	An Initial Analysis of Emergency Departments and Urgent Care in Winnipeg (2008)	3,224
10	Allocating Funds for Healthcare in Manitoba Regional Health Authorities: A First Step - Population-Based Funding (2007)	3,019

2.11 Education

2.11.1 Courses / Lectures in the Department of Community Health Sciences

Number	Title	Instructor
CHSC 7130	Methods in Health Services Research & Evaluation	Patricia Martens
CHSC 7310	Epidemiology of Health Care	Les Roos
CHSC 7400	Western Regional Training Seminar Directed Readings: Health and Aging Directed Readings: Epidemiologic Methods	Malcolm Doupe (Course Instructor) Malcolm Doupe Les Roos
CHSC 7410	Directed Readings: Epidemiology	Les Roos
CHSC 7470	Biostatistics I	Malcolm Doupe
CHSC 7480	Biostatistics II	Malcolm Doupe (occasional instructor)
CHSC 7520	Epidemiology	Marni Brownell (guest lecturer)

2.11.2 Courses in Other Departments

Faculty / Department	Course Title	Instructor
Medicine	Population Health Block 1	Alan Katz
Medicine	Physician Assistant Program	Patricia Martens
Medicine	Health Policy, Epidemiology and Research Design (Tutorial)	Patricia Martens
Medicine	Critical Appraisal of the Medical Literature (Tutorial)	Patricia Martens
Medicine	Population Health and Medicine (Med I Tutorial: Statistical Methods in Health Research	Malcolm Doupe, Patricia Martens, Randy Fransoo, Dan Chateau
Medicine	Population Health and Medicine (Med I Tutorial: Health Policy – Applying Concepts	Malcolm Doupe (Tutorial Leader)

2.11.3 Graduate Student Supervision

Student Name	Degree Sought	Advisor	Committee Member	Faculty Name
Afifi, Tracy	Ph.D.		Yes	Patricia Martens
Bozat, Songul	Ph.D.	Yes		Malcolm Doupe
Brown, Cara	M.Sc.		Yes	Malcolm Doupe
Burland, Elaine	Ph.D.	Yes	Yes Yes	Patricia Martens Malcolm Doupe Marni Brownell
Carr, Rachel	M.Sc.	Yes	Yes	Patricia Martens Randy Fransoo
Comaskey, Brenda	Ph.D.	Yes		Noralou Roos
Dart, Allison	M.Sc.	Yes		Patricia Martens
Decker, Kathleen	Ph.D.		Yes	Patricia Martens
Dyck, Myrna	Ph.D.		Yes	Malcolm Doupe
Finlayson, Greg	Ph.D.		Yes	Noralou Roos
Haworth-Brockman, Margaret	M.Sc.	Yes		Patricia Martens
Lamm, Ken	Ph.D.		Yes	Les Roos
Lavign, Salme	Ph.D.	Yes		Malcolm Doupe
LeClair, Leanne	Ph.D.		Yes	Noralou Roos
Lemaire, Jackie	Ph.D.		Yes	Patricia Martens
McPherson, Rachel	M.Sc.	Yes		Patricia Martens
Mutasingwa, Donatus	Ph.D.		Yes	Les Roos
Penner, Karen	Ph.D.		Yes	Patricia Martens
de Rocquigny, Janelle	M.Sc.	Yes		Noralou Roos
Rona, Hazel	M.Sc.	Yes		Malcolm Doupe
Rosella, Laura	Ph.D.		Yes	Les Roos
Ruth, Chelsea	M.Sc.		Yes	Marni Brownell
Soltys, Pearl	Ph.D.	Yes		Patricia Martens

2.11.4 Education Resources

MCHP's commitment to training researchers extends to students in such fields as Epidemiology and Health Services Research. The Educational Resources page (http://www.umanitoba.ca/faculties/medicine/units/mchp/education/index.html) provides links to site-specific and off-site teaching materials. The outline and readings for the graduate course, Epidemiology of Health Care, incorporates links to the Concept Dictionary and other documents available on the MCHP website. In addition, online tutorials for using SAS and geographic information system (GIS) software are provided. There are also links to lectures developed by MCHP research scientists for the University of Pittsburgh's Epidemiology SuperCourse, an internationally-recognized teaching resource.

2.11.5 SAS Tutorials

The SAS system provides a way of creating and/or accessing a variety of data sets, with techniques for manipulating the data to obtain output ranging from simple frequency tables to complex three-dimensional graphs. The goal of the MCHP online SAS tutorial is to provide the new user with enough knowledge of SAS to translate basic research questions into SAS code, enabling completion of the research project required by the Epidemiology of Health Care course at the University of Manitoba. Intermediate training material has been developed for new users of the MCHP data bases; this documentation covers arrays, do loops, first/last by-group processing, retain statements, and how to work with dates.

Additionally, there were three separate SAS tutorials ranging from beginner to intermediate levels offered in the 2008/09 fiscal year. These 2.5 day sessions (20 hours) were led by Charles Burchill, Manager of Program and Analysis Systems at MCHP, on the following dates:

- August 24-29
- September 13, 20
- September 11, 18, 25, Oct 2, 9

2.11.6 Training, Workshops and Tutorials

Brownell M, DeCoster C, Penfold R, Derksen S, Au W, Schultz J, Dahl M, Alagar L. Child health atlas update (Manitoba Health & Healthy Living – MCHP Workshop, Winnipeg MB, May 15, 2008)

Brownell MD. Inequalities in children's educational outcomes: Using administrative data to gain a population-based perspective (Canadian Society for Studies in Education/Human Resources and Social Development Canada Knowledge Translation Workshop, Gatineau QC, April 14, 2008)

Metge C. Workshop on Post Market Drug Safety and Effectiveness. Hosted by The McLaughlin Centre for Population Health Risk Assessment. Sponsored by the CIHR Expensive Drugs for Rare Diseases Initiative (EDRD), University of Ottawa, Ottawa ON, May 22-23, 2008)

Roos N, Brownell M, Fransoo R. Building on the evidence. Investing in at-risk kids: The path to increased productivity and decreased social costs (Manitoba Centre for Health Policy, Winnipeg MB, June 4, 2008)

Roos NP. Post market drug safety and effectiveness (Workshop hosted by the Canadian Agency for Drugs and Technologies in Health (CADTH), Canadian Health Services Research Foundation (CHSRF), Canadian Institute Health Research (CIHR/IHSPR, Canadian Patient Safety Institute (CPSI), and the Health Canada/National Pharmaceutical Strategy, Ottawa ON, May 22-23, 2008)

2.11.7 Colloquia in the Department of Community Health Sciences

2009

Katz A. Do I really want to do this? Physician resource planning for Manitoba. Community Health Sciences Colloquium & Grand Rounds, Winnipeg MB, January 23, 2009.

2008

Fransoo R, Martens P, Burland E, Dyck M, Erickson T, Malazdrewicz D, Bowen S. The Need To Know Team: Partnership for Effective Research & Health Policy Change, Winnipeg MB, April 2008.

Kozyrskyj A. Building a career on Manitoba's health care databases, 1994-2008. Community Health Sciences Colloquium & Grand Rounds, Winnipeg MB, May 30, 2008.

Martens P, Fransoo R, Erickson T, Dick S, Malazdrewicz D, Bowen S, Burland E, Soltys P. What do you need to know about The Need to Know Team? Different lenses, different perspectives on a research collaboration since 2001. Community Health Sciences Colloquium & Grand Rounds, Winnipeg MB, April 25, 2008.

2.12 Publications

2.12.1 Papers, Books / Book Chapters, Reports

2009

Afifi TO, Cox BJ, Martens PJ, Sareen J, Enns MW. The Relationship between Types and Frequency of Gambling Activities and Problem Gambling Among Women in Canada. *Can J Psychiatry* 2009; In Press.

Banno K, Ramsey C, Walld R, Kryger MH. Expenditure on health care in obese women with and without sleep apnea. *Sleep* 2009;32(2):135-136.

Bowen S, Erickson T, Martens P. More than "using research": the real challenges in promoting evidence-informed decision-making. *Healthc Pol* 2009;4(3):69-84.

Chochinov H, Martens PJ, Prior HJ, Fransoo R, Burland E, The Need to Know Team. Does a diagnosis of schizophrenia reduce rates of mammography screening? A Manitoba population-based study. *Schizophrenia Research* 2009; In Press.

Currie J, Stabile M, Manivong P, Roos LL. Child Health and Young Adult Outcomes. J Hum Resour 2009; In Press

Finlayson G, Reimer J, Dahl M, Stargardter M, McGowan K. *The Direct Cost of Hospitalizations in Manitoba*, 2005/06. Winnipeg, MB: Manitoba Centre for Health Policy. March 2009.

Katz A, Bogdanovic B, Ekuma O, Soodeen RA, Chateau D, Burnett C. *Physician Resource Projection Models*. Winnipeg, MB: Manitoba Centre for Health Policy. February 2009.

Kisely S, Lin E, Lesage A, Gilbert C, Smith M, Campbell C, Vasiliadis, H-M. Use of Administrative Data for the Surveillance of Mental Disorders in Five Provinces. *Can J Psychiatry* 2009; In Press.

Leslie WD, Pahlavan P, Tsang JF, Lix LM. Prediction of hip and other osteoporotic fractures from hip geomery in a large clinical cohort. *Osteoporosis International* 2009; In Press

Leslie WD, Tsang JF, Lix LM. A simplified system for absolute fracture risk assessment: Clinical validation in Canadian women. *Journal of Bone and Mineral Research* 2009; In Press

Lewis S, Martens PJ, Barre L. Estimating the return on investment from health services research: A theoretical and empirical analysis. In: *Panel on Return on Investment in Health Research: Making an Impact: A Preferred Framework and Indicators to Measure Returns on Investment in Health Research.* Ottawa ON: Canadian Academy of Health Sciences; 2009, pp. A21-A40.

Lix L, Metge CJ, Leslie WD. Measurement Equivalence of Osteoporosis-Specific and General Quality of Life Instruments in Aboriginal and Non-Aboriginal Women. *Qual Life Res* 2009;Mar 29. Epub.

MacDonald L, Fricke M, Wener P, Nelson M, Schonwetter DJ, Anderson JE; Manitoba Initiative For Interprofessional Education For Collaborative Patient-Centred Practice Working Group (Metge CJ). De novo learning in creating a graduate studies course on Interprofessional Education for Collaborative Patient-Centred Practice (IECPCP). *J Interprof Care*. 2009;23(2):195-197.

Martens PJ, Chochinov H, Prior HJ, Fransoo R, Burland E, The Need to Know Team. Are cervical cancer screening rates different for women with schizophrenia? A Manitoba population-based study. *Schizophrenia Research*. 2009; In Press

Martens, PJ. (2009). How and Why Does It "Work" at the Manitoba Centre for Health Policy? A Model of Data Linkage, Inter-Disciplinary Research, and Scientist/User Interactions. In School of Policy Studies of Queen's University. *Data Data Everywhere: Access and Accountability?* Kingston, ON: McGill-Queen's University Press.

Morin S, Tsang JF, Leslie WD. Weight and body mass index predict bone mineral density and fractures in women aged 40 to 59 years. *Osteoporosis International* 2009;20(3):363-370.

Protudjer JLP, Kozyrskyj AL, Becker AB, Marchessault G. Normalization strategies of children with asthma. *Qualitative Health Research* 2009;19:94-104.

Ready AE, Butcher JE, Dear JB, Fieldhouse P, Harlos S, Katz A, Moffatt M, Rodrique M, Schmalenberg J, Gardiner PF. Canada's physical activity guide recommendations are a low benchmark for Manitoba adults. *Applied Physiology, Nutrition, and Metabolism.* 2009;34:172-181.

Simonet F, Wilkins R, Labranche E, Smylie J, Heaman M, Martens P, Fraser WD, Minich K, Wu Y, Carry C, Luo ZC. Primary birthing attendants and birth outcomes in remote Inuit communities - a natural "experiment" in Nunavik, Canada. *Journal of Epidemiology and Community Health* 2009; In Press

Strohschein L, Roos N, Brownell M. Family structure histories and high school completion: Evidence from a population-based registry. *Canadian Journal of Sociology* 2009;34(1):83-103.

Wener P, Nelson M, Fricke M, MacDonald L, Anderson JE; Manitoba Initiative For Interprofessional Education For Collaborative Patient-Centred Practice Working Group (Metge CJ), Schönwetter DJ. Contributing to the sustainability of Interprofessional Education for Collaborative Patient-Centred Practice (IECPCP): a teaching resource manual. *J Interprof Care* 2009; 23(2):201-3.

2008

Balogh RS, Ouellette-Kuntz H, Brownell M, Colantonio A. Ambulatory care sensitive conditions in people with an intellectual disability. Abstract book of IASSID conference. *Journal of Intellectual Disability Research* 2008;52 (8-9):766.

Barnabe C, Elias B, Bartlett J, Roos LL, Peschken CA. Arthritis in Aboriginal Manitobans: Evidence for a high burden of disease. *Journal of Rheumatology* 2008;35(6):1145-1150.

Bolton JM, Metge C, Lix L, Prior H, Sareen J, Leslie WD. Fracture Risk from Psychotropic Medications: A Population-Based Analysis. *Journal of Clinical Psychopharmacology* 2008;28(4):384-391.

Bratu I, Martens PJ, Leslie WD, Dik N, Chateau D, Katz A. Pediatric appendicitis rupture rate: Disparities despite universal health care. *Journal of Pediatric Surgery* 2008;43(11):1964-1969.

Brownell M, De Coster C, Penfold R, Derksen S, Au W, Schultz J, Dahl M. *Manitoba Child Health Atlas Update*. Winnipeg, MB: Manitoba Centre for Health Policy. November 2008.

Cooke AL, Metge C, Lix L, Prior HJ, Leslie WD. Tamoxifen use and osteoporotic fracture risk: A population based analysis. *Journal of Clinical Oncology* 2008;26(32):5227-5232.

Deber R, Lam K, Roos N, Walld R, Finlayson G, Roos L. Canadian Healthcare: Need and Utilization in an Almost-Universal System. Harvard Health Policy Review 2008;9(1):46-55.

Doupe M, Kozyrskyj A, Soodeen R, Derksen S, Burchill C, Huq S. *An Initial Analysis of Emergency Departments and Urgent Care in Winnipeg*. Winnipeg, MB: Manitoba Centre for Health Policy. May 2008.

Forget EL, Roos LL, Deber RB, Walld R. Variations in lifetime health care costs across a population. *Healthcare Policy* 2008;4(1):61-80.

Fransoo R, Roos NP, Martens PJ, Heaman M, Levin B, Chateau D. How health status affects progress and performance in school: A population-based study. *Canadian Journal of Public Health* 2008;99(4):344-349.

Isaak CA, Marchessault G. Meaning of health: The perspectives of Aboriginal adults and youth in a northern Manitoba First Nations Community. *Canadian Journal of Diabetes* 2008;32:114-122.

Katz A. Primary healthcare renewal in Canada: Not there yet. Healthcare Papers 2008;8(2):34-38.

Katz A. The top 13: What family physicians should know about prostate cancer. Canadian Family Physician 2008;54(2):198-203.

Keselman HJ, Algina J, Lix LM, Wilcox RR, Deering KN. A generally robust approach for testing hypothesis and setting confidence intervals for effect sizes. *Psychological Methods* 2008;13(2):110-129.

Kozyrskyj AL, McDonald KL, Huq SI, Lix LM, Becker AB. Reply to the editor. *The Journal of Allergy and Clinical Immunology* 2008;122(3):657-658.

Leslie WD, Weiler HA, Lix LM, Nyomba BL. Body composition and bone density in Canadian white and Aboriginal women: The First Nations bone health study. *Bone* 2008;42(5):990-995.

Leslie WD, Tsang JF, Lix L. Validation of ten-year fracture risk prediction: A clinical cohort study from the Manitoba Bone Density Program. *Bone* 2008;43(4):667-671.

Leslie WD, Tsang JF, Lix LM. Effect of total hip bone area on osteoporosis diagnosis and fractures. *Journal of Bone and Mineral Research* 2008;23(9):1468-1476.

Lix L, Metge CJ, Leslie WD. Measurement equivalence of osteoporosis-specific and general quality of life instruments in aboriginal and non-aboriginal women. Abstract published in the Journal of Bone and Mineral Research 23(Suppl 1): 2008.

Lix LM, Yogendran MS, Leslie WD, Shaw SY, Baumgartner R, Bowman C, Metge C, Gumel A, Hux J, James RC. Using multiple data features improved the validity of osteoporosis case ascertainment from administrative databases. *Journal of Clinical Epidemiology* 2008;61(12):1250-1260.

Lix L, Yogendran MS, Mann J. Defining and Validating Chronic Diseases: An Administrative Data Approach. An Update with ICD-10-CA. Winnipeg, MB: Manitoba Centre for Health Policy, University of Manitoba. November 2008.

Lix L, Yogendran MS, Shaw SY, Burchill C, Metge C, Bond R. Population-based data sources for chronic disease surveillance. *Chronic Diseases in Canada* 2008;29(1):31-38.

Marchessault G. Canadian dietitians' perspectives on counseling clients about pulses: A needs assessment to direct resource development. Winnipeg, Manitoba: *Pulse Canada*, April, 2008.

Martens PJ. "First, do no harm." Evaluating mental health 'action' plans and policies with population-based data. *Policy Dialogue* 2008;18(Spring):19-21.

Martens PJ. The regional training centre: If we build it (well), they will come (guest editorial). *Healthcare Policy* 2008;3(Special Issue):7-9.

Metge CJ, Leslie WD, Manness LJ, Yogendran M, Yeun CK, Kvern B, Maximizing Osteoporosis Management in Manitoba Steering Committee. Postfracture care for older women: Gaps between optimal care and actual care. *Canadian Family Physician* 2008;54(9):1270-1276.

Metge CJ. Ethically speaking: Issues in the postmarketing evaluation of pharmaceuticals. *Clinical Therapeutics* 2008;30(7):1342-1344.

Metge CJ, Leslie WD, Manness LJ, Yogendran M, Yuen CK, Kvern B. Patterns of post-fracture care for older women in a publicly funded health care system: A population-based study. *Canadian Family Physician* 2008;54:1270-1276.

Moore DF, Lix L, Yogendran MS, Martens P, Tamayo A. Stroke surveillance in Manitoba, Canada: Estimates from administrative databases. *Chronic Diseases in Canada* 2008;29(1):22-30.

Smith DA, Edwards NC, Martens PJ, Varcoe C, Davies B. The Influence of Governance on Organizations' Experiences of Improving Care for Aboriginal People: Decolonizing Possibilities. *Pimatisiwin-Journal of Indigenous and Aboriginal Community Health* 2008;6(1): 3-28

Targownik LE, Metge C, Leung S, Chateau D. The relative efficacies of gastroprotective strategies in chronic users of non-steroidal anti-inflammatory drugs. *Gastroenterology* 2008;134(4):937-944.

Targownik LE, Lix LM, Metge CJ, Prior HJ, Leung S, Leslie WD. Use of proton pump inhibitors and the risk of osteoporosis related fractures. *Canadian Medical Association Journal* 2008;179(4):319-326.

Targownik LE, Metge C, Leung S. Underutilization of gastroprotective strategies in aspirin users at increased risk of upper gastrointestinal complications. *Aliment Ther* 2008; 28(1):88-96.

Walker JR, Ediger JP, Graff LA, Greenfeld JM, Clara I, Lix L, Rawsthorne P, Miller N, Rogala L, McPhail CM, Bernstein CN. The Manitoba IBD cohort study: A population-based study of the prevalence of lifetime and 12-month anxiety and mood disorders. *American Journal of Gastroenterology* 2008;103(8):1989-1997

2.12.2 Presentations and Published Abstracts

2009

Balogh R. Applications of data housed at the Manitoba Centre for Health Policy (Partnership Forum: Developing an Ontario Data Linkage Strategy to Support Persons with an Intellectual Disability, Toronto ON, February 11, 2009)

Brownell M. DeCoster C, Penfold R, Derksen S, Au W, Schultz J, Dahl M. Child health atlas update (Manitoba Children and Youth Health Data Seminar: A "Manitoba Children's Agenda" Event, Winnipeg MB, March 6, 2009)

Brownell M. The Manitoba Centre for Health Policy: Using linked administrative databases to study child health and development (Partnership Forum: Developing an Ontario Data Linkage Strategy to Support Persons with ID, Toronto ON, February 11, 2009)

Ens C, Roos NP, Brownell M. Manitoba's at-risk child population: From info to action (Manitoba Children and Youth Health Data Seminar: A "Manitoba Children's Agenda" Event, Winnipeg MB, March 6, 2009)

Martens PJ. Mathemagic – the amazing power of math to help us understand life, health and the universe! (University of Manitoba Science, Energy, Technology SET Day for high school students, Winnipeg MB, February 20, 2009)

Martens PJ. So you think you can dance? Doing the tango between population health research and public health practice (without stepping on toes?) (Canadian Alliance for Regional Risk Factor Surveillance workshop – invited plenary speaker. Toronto ON, February 4, 2009) Available at: http://www2.webcastcanada.ca/carrfs/archives/index.php

Martens PJ. Access to Care in Rural and Remote Regions ('Best Brains' Consultation (CIHR IHSPR special invitation) for Saskatchewan. Regina SK, February 9, 2009) Note: this is by special invitation, where 3 CIHR-funded scientists have been asked to spend a day with top-level Saskatchewan government people sharing research about topics of interest.

Metge CJ, Prior H, Lix L, Leslie WD. Fracture Risk from Cardiovascular Medications: A population-based analysis. Montreal QU: Canadian Association for Population Therapeutics. April 19-21st, 2009. Podium presentation. Abstract published in the Canadian Journal of Clinical Pharmacology 2009; 16(1).

Romphf L, Martens PJ, Prior H, Fransoo R, Burland E, Burchill C, The Need to Know Team. "What Works" in Health Promotion and Breastfeeding: A Manitoba population-based study of the association of breastfeeding initiation rates with geographic and hospital characteristics. Accepted for poster presentation to British Columbia Perinatal Health Program Breastfeeding: The Smart Choice Stepping Up to Baby-Friendly. Vancouver, BC. February 19-21, 2009.

Roos N. Update on ongoing research with education data. (Department of Education, Winnipeg MB, March 18, 2009)

Smith M., Manitoba children and youth health data seminar ("Manitoba Children's Agenda" Event, St. Boniface Research Centre, Winnipeg, Manitoba, March 6, 2009)

2008

Balogh RS, Ouellette-Kuntz H, Brownell M, Colantonio A. Ambulatory care sensitive conditions in people with an intellectual disability (The 13th International Association for the Scientific Study of Intellectual Disabilities World Congress, Cape Town, Africa, August 28, 2008)

Bernier CD, Marchessault G, Becker AB, Benoit C, Kozyrskyj AL. Pre-adolescent boys and girls have different body image and dieting concerns. (Poster presentation at the Dietitians of Canada Annual Conference, "Embracing the Future", Winnipeg MB, June, 2008)

Brownell M, DeCoster C, Penfold R, Derksen S, Au W, Schultz J, Dahl M, Alagar L. Child Health Atlas update. (Keynote Speaker, 15th Annual MCHP/Rural & Northern Health Care Day, Winnipeg MB, November 18, 2008)

Brownell M, Roos N, Briggs G. Improving our understanding of teen motherhood in Manitoba: Implications for policy and program development (Adolescent Parenting Centre, Winnipeg MB, June 23, 2008)

Brownell M, De Coster C, Penfold R, Dahl M, Derksen S, Au W, Schultz W. Antibiotic prescriptions for children in Manitoba: The changing socio-economic gradient (Canadian Public Health Association 2008 Annual Conference, Halifax NS, June 2, 2008)

Brownell M. Equal opportunity for all? High school completion rates for high-risk youths (Statistics Canada Socio-Economic Conference, Ottawa ON, May 6, 2008)

Burland E, Martens PJ, Fransoo R, *The Need to Know* Team, Prior H, Burchill C, Romphf L. The Use of 20 Years of Administrative Data to Monitor Population-Level Hysterectomy Rates (1984/85-2003/04). Accepted for a poster presentation at the CAHSPR 2008 conference: "Bridging Silos". Gatineau, QC. May 26-28, 2008.

Currie J, Stabile M, Manivong P, Roos LL. Understanding the relationship between child health and long-term socioeconomic status (Presented at (1)Peking National University, Peking; (2)the Chinese University of Hong Kong, Hong Kong, China, June 2008)

Currie J, Stabile M, Manivong P, Roos LL. Child health and young adult outcomes (Presented at: (1) Brown University; (2) the Wharton School; (3) the NBER Labor Studies group; (4) Peking National University; (5) the Chinese University of Hong Kong; (6) University Paris 1-Sorbonne; (7) the University of Zurich, 2008)

Deber R, Lam KCK, Forget E, Walld R, Finlayson G, Roos LL. Spending beyond your means: Implications of the distribution of health expenditures (Canadian Association for Health Services and Policy Research, "Bridging Silos" Gatineau QC, May 26, 2008)

Doupe M. A summary of research from my CIHR pilot project in aging funds (Invited presentation at the CIHR Institute of Aging Advisory Board, Winnipeg MB, June 17, 2008)

Doupe M, Katz A. CHF patient health: The unique benefits of linked health lines and usual care interventions (The Canadian Association for Health Services and Policy Research, May 26-28, 2008)

Doupe M, Kozyrskyj A, Derksen S, Soodeen RA, Burchill C. Profiling frequent ED users in Manitoba: Implications for alternate care strategies. (The Canadian Association for Health Services and Policy Research, Gatineau QC, May 26-28, 2008)

Finlayson GS. Cost list for Manitoba hospital services. (Manitoba Centre for Health Policy Northern/Rural Day. Winnipeg MB, November 2008)

Finlayson GS. Cost list for Manitoba Health Services. (Minister Briefing. Winnipeg MB, September 2008)

Finlayson GS. Cost list for Manitoba Health Services. (Manitoba Health and Healthy Living Briefing, Winnipeg MB, July 2008)

Fransoo R, Martens PJ, The Need To Know Team. Caesarean sections: Does the Robson Index help explain variation in rates? (Canadian Association for Health Services and Policy Research Conference May 2008)

Halas G, Katz A. Exploring the impact of a computer-based prevention program (The College of Family Physicians of Canada "Family Medicine Forum", Toronto ON, November 2008)

Jutte D, Brownell M, Roos NP, Schippers C, Boyce WT, Syme SL. Interventions to Address Child Health Disparities: Using Epidemiology and Biology to Identify Risks and Opportunities. (Stanford University School of Medicine, Stanford CA, November 25, 2008)

Katz A. Invited Lecture. Familial cancer Risk: The Role of the Family Physician (University Seminar, Winnipeg, MB, December 2008)

Katz A, Halas G, deLeon-Demaré K, Demaré D, MacDonald J, Seo B. Health Status and Behaviours of Canadian Health Care Professionals (Poster presentation at the College of Family Physicians of Canada - Family Medicine Forum, Toronto, ON, November 2008)

Katz A. Making Communities of Practice Work. (Oral Abstract Presentation at the Third National Conference on Integrating Chronic Disease Prevention: Taking Action Together, November 2008)

Katz A. A Community of Practice for Skin Cancer Prevention. (CDPAC, November 2008).

Katz A. Administrative Data and Quality Improvement: Capacity and Opportunity. CIHR (Health Information Summit "Access to Data: Accountability and Responsibility", Toronto ON, October 2008)

Katz A. Pre-Symposium 1: Partnering for Patient Safety IV: Disclosure Session Evaluation (The Canadian Healthcare Safety Symposium 8: Healthcare and the Law, Winnipeg MB, October 2008)

Katz A. Disclosure of Adverse Events: Panel discussion (Partnering for Patient Safety, Winnipeg, MB, October.2008)

Katz A. Primary Prevention of Skin Cancer (National Skin Cancer Prevention Consultation, Toronto, ON, May 2008)

Katz A. Physician Resource Planning: Using What We Know (Canadian Association for Health Services and Policy Research, Gatineau QC, May 2008)

Katz A. Physician Integrated Network Evaluation (Canadian Association for Health Services and Policy Research, Gatineau QC, May 2008)

Katz A. Primary Care Physician Visits Prior CRC Diagnosis (International Primary Care and Cancer Research Group, Edinburgh, Scotland, April 2008)

Kozyrskyj A, Brownell M, Burnside L, Roos N. Data linkage, privacy approaches and a brief example: Relating child protection and hospital admissions data from Manitoba, Canada (Department of Human Services, State of Victoria, Melbourne, Australia, October 10, 2008)

Kozyrskyj A, Brownell M, Burnside L, Roos N. The health status of children before and after entry into foster care. You and me...injury free (Building an Injury Prevention Community Conference, Winnipeg MB, June 2, 2008)

Lam KCK, Roos LL, Forget E, Walld R, Finlayson G, Deber R. Who are the high spenders? (Canadian Association for Health Services and Policy Research, "Bridging Silos" Gatineau QC, May 26, 2008)

Lix L, Metge CJ, Leslie WD. Measurement equivalence of osteoporosis-specific and general quality of life instruments in aboriginal and non-aboriginal women. Abstract published in the Journal of Bone and Mineral Research 23(Suppl 1): 2008.

Luo ZC, Wilkins R, Heaman M, Martens P, Hart L, Smylie J, Simonet F, Wassimi S, Wu YQ, Fraser WD. Birth outcomes by urban versus rural residence and the extent of rural isolation among First Nations and non-First Nations –a study in Manitoba, Canada. Accepted for an oral presentation at SPER (Society of Perinatal and Pediatric Epidemiology) Annual Meeting. Chicago, Illinois, USA. June 24-25, 2008.

Marchessault G. Manitoba dietitians' perspective on counseling about pulses (Poster presentation at the Dietitians of Canada Annual Conference "Embracing the Future", June 2008)

Martens PJ. Seeing the big picture: Breastfeeding as part of a primary health care strategy (Ligue La Leche Quebec, provincial conférence, Montreal QC, November 14, 2008)

Martens PJ. The future of medicine ... Seeing through Rose-theorem-coloured glasses? (125th Anniversary of the Faculty of Medicine – Symposium. "Where do we go from here?" Winnipeg MB, November 1, 2008)

Martens PJ. Your health information – safe, secure and socially responsible. How MCHP ensures privacy yet uses information to inform health and social policy. (Prairie Health Information Privacy Day, Winnipeg MB, October 22, 2008)

Martens PJ. How and why 'does it work' at MCHP? A model of data linkage, interdisciplinary research, and scientist/user interaction. (CIHR Health Information Summit 2008 "Data, Data Everywhere: Access & Accountability", Toronto ON: October 20-21, 2008)

Martens PJ. So you think you can dance? Doing the population health tango between epidemiology and public health practice (Saskatchewan Epidemiology Association Annual General Meeting, Saskatoon SK: October 2, 2008)

Martens PJ, Romphf L. What works? A first look at evaluating Manitoba's Regional Health Breastfeeding Programs and Policies at the Population Level (Breastfeeding Committee of Canada teleconference. National teleconference session, September 15, 2008)

Martens PJ. The Manitoba Centre for Health Policy – What's new? (Regional Health Authorities' Managers (RHAM) Manitoba, Winnipeg MB: September 10, 2008)

Martens PJ. Planning and possibilities? MCHP, and The Need to Know Team model in Manitoba. (MB Provincial Planning Network, Winnipeg MB, September 3, 2008)

Martens PJ. Research, Repository and KT Lessons Learned: MCHP, and The Need To Know Team in Manitoba (Canadian Institute of Health Information Board of Directors Meeting, Winnipeg MB, June 5, 2008)

Martens PJ, Fransoo R, *The Need To Know* Team, Burland E, Prior H, Burchill C, Romphf L. "Mind the gap": Which Manitoba health outcomes show increased or decreased inequity over time, and what programs are associated with these? Accepted for an oral presentation at the CPHA 2008 conference. Halifax, NS. June 1-4, 2008.

Martens PJ, Fransoo R, The Need to Know Team, Prior H, Burland E. Romphf L, Burchill C. Oral session. What works in reducing polypharmacy in community-dwelling seniors: A Manitoba population-based perspective (Bridging Silos Conference, CAHSPR. Gatineau Quebec, May 26-28, 2008)

Martens PJ, Fransoo R, *The Need to Know* Team, Prior H, Burland E, Burchill C. Continuity of Care and its relationship to preventive and screening health care service use: A Manitoba population-based perspective. Accepted for a poster presentation at the CAHSPR 2008 conference: "Bridging Silos". Gatineau, QC. May 26-28, 2008.

Martens PJ. "Patterns of Mental Illness Disorder" – MCHP reports looking at suicide epidemiology (WRHA Research to Action: Using What We Know To Prevent Suicide, Winnipeg MB, May 21, 2008)

Martens PJ. What Works? A first look at evaluating Manitoba's regional health programs and policies at the population level (MCHP/Manitoba Health & Healthy Living Day, Winnipeg MB, May 15, 2008)

Martens PJ. First do no harm: Evaluating mental health 'action' plans and policies with population-based data (Plenary panel speech for the World Psychiatric Association Meetings (Section of Epidemiology and Public Health), Saskatoon SK, May 12, 2008)

Martens PJ. Invited plenary speaker: KT Lessons Learned: MCHP, and *The Need to Know* Team model in Manitoba (Health Research Transfer Network of Alberta, AHFMR; SEARCH Canada, Calgary Health Region, Faculty of Medicine of the University of Calgary. 13th annual Health Research Methods Course: Meaningful collaborations – leading to meaningful research and evaluation, Calgary Alberta, May 1, 2008).

Martens PJ. The Manitoba Centre for Health Policy: Who we are and what we do. (Visitors from Dalhousie University Faculties and President's Office, and the Government of Nova Scotia, Winnipeg MB, April 28, 2008)

Martin D, Katz A. Beyond headlines: Decoding the public-private debate for family physicians (College of Family Physicians of Canada "Family Medicine Forum, Toronto ON, November 2008)

Metge CJ. 2008 American Association of Colleges of Pharmacy (AACP) and the Association of Faculties of Pharmacy of Canada (AFPC) Annual Meeting, Chicago IL, July 19-23, 2008.

Metge CJ. Development and progress in interprofessional education and development (All Together Better Health IV Conference, Karolinska Institutet, Stockholm Sweden and Faculty of Health Science, Linköping University, Linköping, Sweden, June 2-5, 2008)

Metge CJ. An inconvenient truth: Research & practice in a time of uncertainty (Co-Chair. Teachers of Pharmacy Administration Conference Montreal QC, October 17-18, 2008)

Metge CJ. Invited presentation Real World Drug Safety and Effectiveness: What does real world drug safety and effectiveness have to do with me?.(Canadian Therapeutics Congress Plenary, Quebec City, QC, July 28, 2008 (World Conference on Clinical Pharmacology and Therapeutics)

Metge CJ. Real world drug safety and effectiveness: What does real world drug safety and effectiveness have to do with me? (Invited presentation. Canadian Therapeutics Congress Plenary, Quebec City QC, July 28, 2008)

Metge CJ. Faculty Development Session: Teaching and Evaluation Professionalism (Department of Medical Education, Faculty of Medicine, Winnipeg MB, October 1, 2008)

Metge CJ. Medication use, safety and effectiveness. (2008 Midwest Social and Administrative Pharmacy Conference, Chicago IL, July 23-25, 2008)

Metge C, Targownik LE, Lix M, Prior HJ, Leung S, Leslie WD. Proton pump inhibitors and the risk of osteoporosis related fractures (IXth World Conference on Clinical Pharmacology and Therapeutics, Quebec City QC, July 27-August 1, 2008)

Murray RP, Ekuma O, Bond R, Burchill C, Barnes GE. Alcohol pattern and cardiovascular disease: A prospective study of four definitions of pattern (Annual Meeting of the Kettil Bruun Society for Epidemiological Research on Alcohol, Victoria BC, June 2-6, 2008)

Robinson JR, Roos LL. Rural mental health services for people with severe and persistent mental illness: Organization and effectiveness (World Psychiatric Association Conference, Saskatoon SK, May 11, 2008)

Roos LL. From health research to social research: Privacy, methods, approaches ("More Than the Sum of its Parts" Second National Symposium on Data Linkage Research, Adelaide, South Australia, October 21, 2008)

Roos LL, Brownell M, Jutte D. What data linkage adds to understanding the determinants of child wellbeing (Keynote speaker, "More than the Sum of its Parts" Second National Symposium on Data Linkage Research, Adelaide, South Australia, October 21, 2008)

Roos L. Making a complex repository work: Nuts and bolts ("More Than the Sum of its Parts" Second National Symposium on Data Linkage Research, Adelaide South Australia, October 20, 2008)

Roos LL. From health research to social research: Privacy, methods, approaches (Presented at: (1)The School of Population Health, University of Melbourne, October 8; (2) The Department of Human Services, State of Victoria, Melbourne Australia, October 8 & 9, 2008)

Roos LL. Demonstration of the research resources at the Department of Human Services, State of Victoria, Melbourne Australia, October 2008

Roos LL. Internet-based research and teaching resources at the Manitoba Centre - a demonstration (National Drug and Alcohol Research Centre, Sidney, New South Wales Australia, September 30, 2008)

Roos N. Data linkage for health policy: Examples from the Manitoba Centre for Health Policy. (South Australian Health Staff, Adelaide AU, October 23, 2008)

Roos N, Brownell M, Jutte D. The power of data linkage: Getting beyond no data, no problem, no action (Inter-Ministerial Council on Early Child Development, Adelaide AU, October 23, 2008)

Roos NP, Brownell M, Jutte D. Insights in early childhood/schooling policy issues from record linkage - A Canadian perspective (Performance Information Management Group of the Council of Australian Governments (COAG), Adelaide South Australia, October 22, 2008)

Roos N, Brownell M, Jutte D. What data linkage adds to understanding the determinants of child wellbeing (Keynote speaker, "More Than the Sum of its Parts" Second National Symposium on Data Linkage Research, Adelaide South Australia, October 21, 2008)

Roos N, Brownell M, Jutte D. Data linkage research for early childhood policy development - a Canadian perspective (Keynote speaker, "More Than the Sum of its Parts" Second National Symposium on Data Linkage Research, Adelaide South Australia, October 20, 2008)

Roos N, Brownell M, Jutte D. What data linkage adds to understanding child health issues (Second National Symposium on Data Linkage Research, Adelaide Australia, October 20-21, 2008)

Roos NP. The Manitoba Centre for Health Policy. How we operate, what we do (Department of Human Services, State of Victoria, Melbourne Australia, October 8, 2008)

Roos N, Brownell N, Fransoo R, Jutte D. Investing in at-risk kids: The path to increased productivity and decreased social costs (Winnipeg Poverty Reduction Council meeting, Winnipeg MB, October 2, 2008)

Roos N, Brownell M, Jutte D. Investing in at-risk kids: The path to increased productivity and decreased social costs (Cairns South Communities for Children, Mission Australia, September 2, 2008)

Roos N, Brownell M, Fransoo R. Investing in at-risk kids: The path to increased productivity and decreased social costs (Early Development Index, Lunch and Learn Series, Healthy Child Manitoba, Winnipeg MB, June 26, 2008)

Roos NP, Brownell M, Fransoo R. Investing in at-risk kids: The path to increased productivity and decreased social costs (Coalition of Community-based Child Serving Agencies, Broadway Neighbourhood Centre, Winnipeg MB, June 5, 2008)

Roos N, Brownell M, Fransoo R. At-risk kids (National Crime Prevention Meeting, Marlborough Hotel, Winnipeg MB, April 28, 2008)

Roos N, Brownell M, Fransoo R. Educational needs of at-risk kids (Education in Low-Income Communities Research Forum. Hosted by Council of School Leaders (COSL) of the Manitoba Teachers' Society and Manitoba Education Research Network (MERN), Winnipeg MB, April 25, 2008)

Shooshtari S., Martens P. Comparing health and health care utilization patterns between persons with and without developmental disabilities in Manitoba: Implications for planning, policy and service provision. Accepted for oral presentation at the New Directions in Population Health Research: Linking Theory, Ethics and Practice conference, Regina, SK, Canada. Nov. 12-14, 2008.

Shooshtari S., Martens P. Health and Health Care Utilization Patterns of Older Adults Living with an Intellectual Disability in Manitoba, Canada. Accepted for oral presentation at the 13th International Association for Scientific Study of Intellectual Disabilities (IASSID) World Congress, Cape Town, South Africa, August 25-30, 2008.

Skowronski DM, Hiebert B, Hottes TS, Roos LL, Van Caeseele De Serres, G. Selection bias in the measure of vaccine protection against serious but non-specific influenza outcomes in seniors: Examination through linked Manitoba databases (Canadian Immunization Conference, Toronto ON, November 30 - December 3, 2008)

Smith M, Roos LL. Managing complexity: Directions for the future (Inaugural Meeting of the International Health Data Linkage Consortium, London UK, December 4, 2008)

Smith M. Manitoba Centre for Health Policy – The Need to Know Presentation (PHO Network Collaboration, Vancouver BC, September 16-17, 2008)

3.0 People

3.1 MCHP Executive Committee Members

Patricia Martens, Director, Associate Professor, Senior Research Scientist Alan Katz, Associate Director - Research, Associate Professor, Senior Research Scientist Mark Smith, Associate Director - Repository, Research Scientist Paulette Collins, Chief Administrative Officer Carole Ouelette, Executive Assistant and Office Manager

3.2 MCHP Faculty and Staff

The following is a list of all staff who worked at MCHP at any point between April 1, 2008 and March 31, 2009.

Director

Patricia Martens, Director, Associate Professor, Senior Research Scientist

Research Scientists

Marni Brownell, Senior Research Scientist; Assistant Professor – University of Manitoba

Mariette Chartier, Research Scientist; Assistant Professor – University of Manitoba

Dan Chateau, Research Scientist/Statistician; Research Associate - University of Manitoba

Malcolm Doupe, Senior Research Scientist; Assistant Professor – University of Manitoba

Greg Finlayson, Research Scientist; Research Associate - University of Manitboa

Randy Fransoo, Research Scientist; Assistant Professor – University of Manitoba

Allan Garland, Research Scientist; Associate Professor, University of Manitoba; Internist, WRHA

Tim Hilderman, Research Scientist; Medical Officer of Health - MHHL

Alan Katz, Associate Director - Research; Senior Research Scientist; Associate Professor - University of Manitoba

Anita Kozyrskyj, Research Scientist; Associate Professor – University of Alberta

Lisa Lix, Senior Research Scientist; Associate Professor and Centennial Chair - School of Public Health, University of Saskatchewan

Patricia Martens, Director; Senior Research Scientist; Associate Professor - University of Manitoba

Colleen Metge, Research Scientist; Associate Professor - University of Manitoba

Colette Raymond, Research Scientist; Clinical Assistant Professor – University of Manitoba; Clinical Pharmacist – WRHA

Leslie Roos, Founding Director; Senior Research Scientist; Professor – University of Manitoba

Noralou Roos, Founding Director; Senior Research Scientist; Professor - University of Manitoba

Rob Santos, Research Scientist; Scientific Director - Healthy Child Manitoba

Evelyn Shapiro, Senior Research Scientist; Professor and Senior Scholar - University of Manitoba

Mark Smith, Associate Director - Repository; Research Scientist

Research Coordinators

Elaine Burland, Research Project Coordinator Kari-Lynne McGowan, Research Project Coordinator Jennifer Schultz, Research Project Coordinator Ruth-Ann Soodeen, Lead Research Project Coordinator

Data Acquisition

J. Patrick Nicol, Lead Data Acquisition Officer William Peeler, Data Acquisition Officer

Data Documentation and Access

Jo-Anne Baribeau, Repository Access Coordinator Ruth Bond, Manager of Repository Access and Documentation Ken Turner, Repository Data Analyst

Programming, Systems Development, Security and Information Technology

Wendy Au, Data Analyst

Bogdan Bogdanovic, Data Analyst

Charles Burchill, Manager, Program & Analysis Systems

Matthew Dahl, Data Analyst

Shelley Derksen, Data Analyst

Natalia Dik, Data Analyst

Oke Ekuma, Data Analyst

Don Fotti, IT Support

Shamima Huq, Data Analyst

Leonard MacWilliam, Data Analyst

Phongsack Manivong, Data Analyst

Rod McRae, IT Manager

Heather Prior, Data Analyst

Monica Sirski, Data Analyst

Randy Walld, Data Analyst

Marina Yogendran, Data Analyst

Communications

Jack Rach, Communications Officer

Brigit Waples, Communications Officer and Research Support

Research Support

Angela Bailly, Research Support

Theresa Daniuk, Research Support

Wendy Guenette, Research Support

Shannon Lussier, Research Support

Yuan Wang, Research Support

Finance

Kirstin Giroux, Grants Accountant

Linda Kostiuk, Grants Accountant

Sherry LaPlante, Senior Grants Accountant

Research Assistants

Eileen Bell, Research Assistant

Songul Bozat-Emre, Research Assistant

Claire Dickens, Research Assistant

Carla Ens, Research Assistant

William Grafton, Research Assistant

Brett Hiebert, Research Assistant

Chel Hee Lee, Research Assistant

Jill MacGregor, Research Assistant

Janelle Mann, Research Assistant

Linda Romphf, Research Assistant

Souradet Shaw, Research Assistant

Deepa Singal, Research Assistant

Stephanie Smith, Research Assistant

Pearl Soltys, Research Assistant

Arane Thavaneswaran, Research Assistant

Lauren Yallop, Research Assistant

3.3 Special Awards and Honours

Patricia Martens: awarded the CIHR/PHAC Applied Public Health Chair (March 2008-February 2013)

3.4 Advisory Board Members

The role of the Advisory Board is to develop a broad perspective on problems confronting our health system and to provide potential solutions to these problems. The Advisory Board also serves to advise and assist the Manitoba Centre for Health Policy to determine an appropriate set of activities to meet MCHP goals and objectives; and to assure the long–term viability of MCHP by meeting twice a year. The following people served as members of MCHP's Advisory Board for all or part of the fiscal year ending March 31, 2009.

Chair:

Brian Postl, M.D., Chief Executive Officer, Winnipeg Regional Health Authority

Ex Officio Members:

Lawrence Elliot, Acting Department Head, Community Health Sciences, Faculty of Medicine, University of Manitoba Sharon Macdonald, Department Head, Community Health Sciences, Faculty of Medicine, University of Manitoba Patricia Martens, Director, Manitoba Centre for Health Policy Tannis Mindell, Treasury Board, Province of Manitoba

Leslie Roos, Founding Director, Manitoba Centre for Health Policy Noralou Roos, Founding Director, Manitoba Centre for Health Policy Dean Sandham, Dean, Faculty of Medicine, University of Manitoba Arlene Wilgosh, Deputy Minister of Health

Appointees of Manitoba Health and Healthy Living

Martin Billinkoff, Deputy Minister, Family Services and Housing Harvey Bostrom, Deputy Minister, Aboriginal and Northern Affairs John Clarkson, Deputy Minister, Manitoba Energy, Science and Technology Gerald Farthing, Deputy Minister, Education, Citizenship and Youth Heather Reichert, Deputy Minister, Advanced Education and Literacy Monique Vielfaure Mackenzie, Chief Executive Officer, South Eastman RHA

Appointees of the University of Manitoba

David Collins, PhD, Dean & Professor, Faculty of Pharmacy, University of Manitoba
Joanne Keselman, PhD., Vice President, Academic, University of Manitoba.
Fraser Mustard, MD, PhD., O.C., President, The Founder's Network, Toronto
Luis Oppenheimer, MD, Provincial Director of Patient Access, WRHA S.
Leonard Syme, PhD, Professor of Epidemiology and Community Health (Emeritus) University of California, Berkeley
Mark Taylor, MD, Vice President Medical Affairs, Lakeridge Health Corporation

3.5 MCHP Adjunct Scientists

The designation of Adjunct Scientist at the Manitoba Centre for Health Policy was created to recognize the valuable contribution made to its research by external participants. Adjunct Scientists are involved in collaborative research with an MCHP Research Scientist, have an ongoing commitment to health services research, have previous research involvement with scholarly publications, and/or have clinical/policy expertise that is of assistance to MCHP Scientists in framing research questions, interpreting results of particular analyses and advising on the policy implications of the findings.

Fred Aoki, MD, Professor, Departments of Medical Microbiology/Internal Medicine/Pharmacology and Therapeutics, University of Manitoba, Assistant Dean (admissions), Faculty of Medicine

Charlyn Black, MD, ScD, Senior Faculty Member, Centre for Health Services and Policy Research; Professor, Department of Health Care and Epidemiology, University of British Columbia

Sharon Bruce, PhD, Assistant Professor, Department of Community Health Sciences, University of Manitoba

Shelley Buchan, MD, FRCP, Medical Officer of Health, Regional Health Authority-Central Manitoba Inc.

Keumhee Chough Carrière, PhD, Professor, Department of Mathematical Sciences, University of Alberta

Raisa Deber, PhD, Professor, Department of Health Policy, Management and Evaluation, Faculty of Medicine, University of Toronto

Carolyn De Coster, PhD, Senior Researcher, Health Outcomes, Calgary Health Region; Assistant Professor, Department of Community Health Sciences, Universities of Manitoba and Calgary.

Brenda Elias, PhD, Assistant Professor, Co-Director, Centre for Aboriginal Health Research, University of Manitoba

Evelyn Forget, PhD, Professor, Department of Community Health Sciences, Faculty of Medicine, University of Manitoba

Allan Garland, MD, MA, Associate Professor, Internal Medicine, Department of Community Health Sciences, University of Manitoba

Maureen Heaman, RN, PhD, Associate Professor and Associate Dean, Research, Faculty of Nursing, Director, Manitoba Centre for Nursing and Health Research, University of Manitoba

Philip Jacobs, D Phil, CMA, Professor, Department of Medicine (Gastroenterology), University of Alberta

Doug Jutte, MD, MPH, School of Public Health, University of California, Berkeley

Meir Kryger, MD, FRCPC, Director, Sleep Medicine Research and Education, Gaylord Hospital, Wallingford, CT

Barbara Law, MD, FRCPC, Chief Vaccine Safety, Surveillance and Outbreak Response Division, Centre for Immunization and Respiratory Infectious Diseases

William Leslie, MD, FRCPC, Section of Nuclear Medicine, St. Boniface General Hospital; Professor, Internal Medicine and Radiology, Faculty of Medicine, University of Manitoba

Doug Manuel, BSc, MD, MSc, FRCPC, Assistant Professor in the Department of Public Health Sciences, University of Toronto, Scientist, Institute of Clinical Evaluative Sciences

Blake McClarty, MD, FRCP, Associate Professor, Department of Radiology, University of Manitoba; Clinical and Research Director, Magnetic Resonance Imaging Unit, St. Boniface General Hospital

Verena Menec, PhD, Associate Professor, Department of Community Health Sciences, Director, Centre on Aging, University of Manitoba

Michael Moffatt, MD, Executive Director, Research and Quality, Winnipeg Regional Health Authority

Steve Morgan, PhD, Associate Professor, School of Population and Public Health; Associate Director, Centre for Health Services and Policy Research, University of British Columbia

Nazeem Muhajarine, PhD, Associate Professor and Research Faculty, Department of Community Health and Epidemiology, University of Saskatchewan

Robert P Murray, PhD, Associate Professor and Director, Alcohol and Tobacco Research Unit, Department of Community Health Sciences, University of Manitoba

John O'Neil, PhD, Professor and Dean, Faculty of Health Sciences, Simon Fraser University

Robert Penfold, PhD, Principal Investigator, The Research Institute at Nationwide Children's Hospital, Columbus, Ohio

Rolf Puchtinger, Epidemiologist, Chronic Disease Branch, Manitoba Health and Healthy Living

Hude Quan, PhD, Assistant Professor, Department of Community Health Sciences, University of Calgary

Robert Reid, MD, PhD, Associate Director, Department of Preventive Care, and Investigator, Center for Health Studies, Group Health Cooperative of Puget Sound, Seattle, Washington

Jan Roberts, MD, PhD, Medical Officer of Health, South Eastman Region, Manitoba; Assistant Professor, Department of Community Health Sciences, University of Manitoba

Phil St. John, MD, MPH, Acting Head, Section of Geriatrics, Assistant Professor, Department of Internal Medicine, University of Manitoba

Rob Santos, PhD, Scientific Director and Senior Policy Advisor, Healthy Child Manitoba Office, Healthy Child Committee of Cabinet, Government of Manitoba; and Assistant Professor, Department of Community Health Sciences, Faculty of Medicine, University of Manitoba Center For Health Policy

Shahin Shooshtari, PhD, Assistant Professor, Departments of Family Social Sciences, and Community Health Sciences, University of Manitoba; Researcher, St. Amant Research Centre

Estelle Simons, MD, FRCPC, Bruce Chown Professor and Head, Section of Allergy and Clinical Immunology, Department of Pediatrics and Child Health, University of Manitoba

Mark Stabile, PhD, Associate Professor, School of Public Policy & Governance, University of Toronto

Leonie Stranc, PhD, Coordinator, Surveillance and Information, Public Health Division, Manitoba Health and Healthy Living

Len Syme, PhD, Department of Epidemiology, School of Public Health, University of California – Berkeley

Laura Targownik, MD, Assistant Professor, Department of Internal Medicine, University of Manitoba

Diane Watson, PhD, Faculty, Centre for Health Services and Policy Research, University of British Columbia

3.6 Collaborators

Many people collaborate with MCHP researchers, enabling a broad variety of research studies to take place. Collaborative research helps to increase access to and use of the Repository, to investigate questions beyond the scope of MCHP researchers, and to explore valuable issues relating to population health, health policy and the determinants of health.

Tracie Afifi, Department of Community Health Sciences, University of Regina

Silva Alessi-Severini, Faculty of Pharmacy, University of Manitoba

Rubab Arim, Ottawa Hospital Research Institute

Jennifer Baker, Healthy Living Coordinator of Primary Health Care & Aboriginal Health, Central Regional Health Authority

Robert Balogh, Graduate Student, University of Toronto

Hilary Bambrick, Visiting Fellow, National Centre for Epidemiology and Population Health, Australia National University

Judy Bartlett, University of Manitoba, and Manitoba Metis Federation

John Beilby, Department of Clinical Biochemistry at PathWest, Nedlands and Adjunct Associate Professor in the Department of Surgery and Pathology, University of Western Australia

David Ben-Tovim, School of Medicine, Flinders Medical Centre

Sasha Bernatsky, Department of Medicine, McGill University

Jane Bertrand, Early Childhood Education, Ryerson University

Robert Biscontri, Department of Accounting and Finance, I H Asper School of Business, University of Manitoba

Eric Bohm, Department of Surgery, Faculty of Medicine, University of Manitoba

Michel Boivin, School of Psychology, Laval University

Gillian Booth, Division of Endocrinology & Metabolism, St. Michaels Hospital, Toronto

Sarah Bowen, Department of Public Health Sciences, University of Alberta

Leanne Boyd, Manager of Policy Development, Research and Evaluation, Healthy Child Manitoba

Ioana Bratu, Pediatric General Surgery, Stollery Children's Hospital, Edmonton

Gemma Briggs, PhD Student, Department of Community Health Sciences, University of Manitoba

Chris Burnett, Manitoba Health and Healthy Living

Sheila Carter, Manitoba Metis Federation

Harvey Chochinov, Faculty of Medicine, University of Manitoba, and Manitoba Palliative Care Research Unit, CancerCare Manitoba

Bernard Choi, Public Health Agency of Canada, Health Canada

Cathy Cook, Centre for Aboriginal Health Research, University of Manitoba, Winnipeg Regional Health Authority

Andrew L Cooke, Head of Radiation Oncology, CancerCare Manitoba

Brian Cox, Department of Psychiatry, Faculty of Medicine, University of Manitoba

Susan Dahinten, School of Nursing, University of British Columbia

Allison Dart, Graduate Student, Pediatric Nephrology, Health Sciences Centre, Winnipeg, Manitoba

Phillippe De Wals, Department of Social & Preventive Medicine, Laval University

Marc Del Bigio, Department of Pathology, Faculty of Medicine, University of Manitoba

Habtu Demsas, Selkirk Medical Centre

Dhali H.S. Dhaliwal, President and Chief Executive Officer, CancerCare, Manitoba

Jeanette Edwards, Regional Director, Primary Health Care, Winnipeg Regional Health Authority

Brenda Elias, Centre for Aboriginal Health Research, University of Manitoba

Murray Enns, Department of Psychiatry, Faculty of Medicine, University of Manitoba

Don Fuchs, Faculty of Social Work, University of Manitoba

Melissa Fuerst, Dietician, Department of Family Medicine, St. Boniface General Hospital

Hugh Grant, Department of Economics, University of Winnipeg

Eva Grunfeld, Department of Medicine, Nova Scotia Health

David Grynspan, Department of Pathology, Faculty of Medicine, University of Manitoba

Mary Haines, The Sax Institute, University of Technology (Sydney, Australia)

Paul Hakendorf, Faculty of Health Sciences, Flinders University, South Australia

Greg Hammond, Cadham Provincial Lab, Manitoba Health

Ana Hanlon-Dearman, Department of Pediatrics & Child Health, Faculty of Medicine, University of Manitoba/Children's Hospital

Marion Harrison, CancerCare Manitoba

Duane Hartley, Charleswood Medical Clinic

Clyde Hertzman, Human Early Learning Partnership (HELP), University of British Columbia

Ron Hikel, Hampshire Consulting, (Toronto, Ontario)

Douglas Hobson, Department of Internal Medicine, Faculty of Medicine, University of Manitoba, and Manitoba Movement Disorders Clinic

Jeanette Holden, Department of Psychiatry, Queen's University

D'arcy Holman, School of Population Health, University of Western Australia

Chris Holton, Faculty of Health Sciences, University of Adelaide

Derek Hum, Department of Economics, University of Manitoba

Robert C. James, Private Scholar

Jon Karnon, Faculty of Health Sciences, University of Adelaide

Linda Kawa, Ambulatory Care Program, Brandon Regional Health Center

Marc Lachance, Canadian Council on Learning

Gerald Konrad, UPCON Lead Physician, Family Medical Center, St. Boniface General Hospital

Yatish Kotecha, Assiniboine Clinic

Mark Kristjanson, Kildonan Medical Centre, Seven Oaks General Hospital

Jeff Kwong, Graduate Student, University of Toronto

Marc Lachance, Canadian Council on Learning

Josee Lavoie, Department of Community Health Sciences, University of Northern British Columbia

John LeBlanc, Department of Psychiatry, Dalhousie University

Yahong Li, Department of Epidemiology, University Hospital, Saskatoon

Richard Lobdell, Department of Economics, University of Manitoba

Zhong-Cheng Luo, Department of Obstetrics and Gyneocology, Hospital Sainte Justine, University of Montreal

Susan McClement, Manitoba Palliative Care Research Unit, CancerCare Manitoba

Janelle Mann, Graduate student, Queen's University

Trina Mathison, Physician, Dauphin Medical Clinic

Constance Milbrath, Human Early Learning Partnership (HELP), University of British Columbia

Rachael Moorin, Centre for Health Services Research, University of Western Australia

Suzanne Morin, Research Institute of the McGill University Health Centre (RI MUHC), McGill University

Alan Mutch, Department of Anesthesia, Faculty of Medicine, University of Manitoba

Paul Nyhof, Health Links-Info Sante, Misericordia Hospital

Helene Ouellette-Kuntz, Department of Community Health & Epidemiology, Queen's University

Payam Pahlavan, St. Boniface General Hospital

Sunil Patel, Gimli Community Health Centre

David Preen, Centre for Health Services Research, University of Western Australia

Cheryl Rockman-Greenberg, Department of Pediatrics & Child Health Administration, University of Manitoba

Christine Roberts, Kolling Institute of Medical Research, University of Sydney

Chelsea Ruth, Graduate Student, Division of Neonatology, Women's Hospital, Winnipeg, Manitoba

Philip Ryan, Faculty of Health Sciences, University of Adelaide

Elizabeth A Salamon, University of Manitoba, St. Boniface General Hospital

Julianne Sanguins, University of Manitoba, Manitoba Metis Federation

Jitender Sareen, Department of Psychiatry, University of Manitoba

Ruth Simkin, Health Action Centre, CancerCare Manitoba

Judy Simpson, School of Public Health, University of Sydney

Wayne Simpson, Department of Economics, University of Manitoba

Harminder Singh, Section of Gastroenterology, Faculty of Medicine, University of Manitoba

Jeff Sisler, Primary Care Oncology, CancerCare Manitoba

Dawn Smith, Faculty of Health Sciences, School of Nursing, University of Ottawa

Janet Smylie, Department of Family Medicine, University of Ottawa

Matthew J Stargardter, Prairie Research Associates

Moira Stewart, Centre for Studies in Family Medicine, Schulich School of Medicine and Dentistry, University of Western Ontario

Lisa Strohschein, Department of Sociology, University of Alberta

Alan M Tenenhouse, Emeritus Professor of Medicine, McGill University

Karen Toews, Rural Family Physician, CCPN Physician, Steinbach Family Medical Center

Donna Turner, Epidemiology and Cancer Registry, CancerCare Manitoba

Russell Wilkins, Statistics Canada

Robin Williams, Medical Officer of Health, Niagara Region, St. Catherines Ontario

Cornelius Woelk, Family Physician, Dr. C.W. Wiebe Medical Centre

Mavis Wood, Parkland Regional Health Authority

Angela Woollacott, Department of Modern History, Politics, International Relations and Security, MacQuarie University, New South Wales, Australia

Jianhong Wu, Department of Mathematics and Statistics, York University

3.7 Committees

Marni Brownell

- Member, Advisory Committee on the Development of an Economic Impact Model for Fetal Alcohol Spectrum Disorder
- Member, Early Childhood Information and Data Strategy Sub-Committee
- Robert Wallace Chair in Evidence-Based Child Health Search Committee, Faculty of Medicine, University of Manitoba
- Member, Peer Review Committee, Canadian Institutes of Health Research (CIHR) for operating grants
 "Intervention Research (Healthy Living and Chronic Disease Prevention)" launched by the Institutes of Nutrition,
 Metabolism & Diabetes (INMD), Population & People's Health (IPPH) and Aboriginal People's Health (IAPH).
- Member, Provincial Public Health Statistical System committee, Province of Manitoba
- Member, College of Reviewers for the Canada Research Chairs Program
- Invited Member, Expert Panel to inform the Public Health Agency of Canada: On The Public Health Horizon: "A Look Forward at Child Health and Development in the Coming Decade"
- Member, Early Childhood Learning Knowledge Center Committee
- Member, Manitoba Centre for Health Policy Research Funding Committee
- Member, St. Amant Centre Community Research Advisory Committee

Malcolm Doupe

- Organizing Committee Member, Canadian Association on Gerontology 38th Annual Scientific Meeting, October 22-24, Winnipeg, Manitoba
- Acting Site Director, Western Regional Training Program, University of Manitoba.
- University Representative, Health Information Privacy Committee, Manitoba Health and Health Living
- Member, Community Health Sciences, Faculty of Medicine, University of Manitoba, BSc Medicine Student Selection Committee
- Manitoba Centre for Health Policy Representative and Organization Member, Manitoba Institute for Patient Safety, Inc
- Member, Executive Committee, Department of Community Health Sciences, Faculty of Medicine, University of Manitoba
- Member, Health Research Ethics Board (Bannatyne Campus), Faculty of Medicine
- Member, Graduate Committee, Community Health Sciences, Faculty of Medicine, University of Manitoba
- Book Review Editor, Canadian Journal on Aging

Greg Finlayson

- Director, Carolyn Sifton Foundation Inc.
- Member, Diagnostic Services of Manitoba Research and Innovation Funding Committee
- Member representing the American Public Health Association, US Lifeguarding Standards Coalition
- Student Senator, University of Illinois at Chicago
- Member, University of Illinois at Chicago Committee on Research
- Advisory Board Member, Encyclopedia of Health Services Research

Randy Fransoo

- Manitoba Health Research Council Review Panel
- Department of Community Health Sciences Executive Committee
- Critical Care / Respirology Collaborative Research Group
- Manitoba Cardiac Sciences Program Research Committee
- Manitoba Early Child Development Advisory Committee
- Manitoba Community Health Assessment Network
- Volunteer Board of Directors, Carter Daycare Inc

Alan Katz

- Chair, Research Committee, Department of Family Medicine, University of Manitoba
- Member, Executive Management Committee, Department of Family Medicine, University of Manitoba
- Member, Fiscal Committee, Department of Family Medicine, University of Manitoba
- Member, Peer Review Panel, Manitoba College of Physicians and Surgeons
- Chair, Primary Prevention Action Group, Canadian Partnership Against Cancer
- Advisory Council, Canadian Strategy for Cancer Control: Primary Prevention Action Group
- Member, E-Health Research Advisory Council
- Member, CancerCare Manitoba Guidelines Implementation Steering Committee
- Member, Chartbook on Quality Healthcare advisory committee; Canadian Health Services Research Foundation
- Member, Canadian Doctors for Medicare Board
- Member, CIHR Health Services Evaluation and Interventions Research A: Review Committee
- Member, E-Health Research Advisory Council, Manitoba Health and Healthy Living

Patricia Martens

- Member, CIHI Expert Analytic Advisory Group
- Member, CHSRF Governance Committee
- Member, Winnipeg Health Sciences Centre Birth Centre Advisory Committee
- Interviewer for the Admissions to Faculty of Medicine (MMI)
- Committee Member, CIHR IPPH Summer Institute for Graduate Students
- Member, ILCA Research Committee (International Lactation Consultant Association)
- Member, Physician Integrated Network Indicator Advisory Group, Manitoba Health & Healthy Living
- Member, Presidential Advisory Committee for the Appointment of a Vice-President (Research).
- Special Invitation to the British High Commission: Ottawa, Ontario: June 11, 2008. UK-Canada Workshop on Tackling Obesities and Future Choices.
- Member, Manitoba E-Health Research Advisory Committee
- Member, Science Advisory Committee of the Mental Health Commission of Canada
- Vice-Chair and member, Institute Advisory Board, Institute of Population and Public Health, CIHR
- Member, Headship Search Committee for the Department of Surgery
- Member, Senate Committee on University Research, University of Manitoba
- Member, Centres for Research Development (CRD) Program Evaluation Advisory Group, CIHR IPPH
- Member, Network of Centre Directors in Health Services and Policy Research (CIHR IHSPR, CHSRF, CAHSPR)
- Member, Manitoba Health Community Health Assessment & Health Indicator Expert Resource Group
- Editorial Review Board member, Journal of Human Lactation
- Member, Executive Committee, Department of Community Health Sciences

Colleen Metge

- Member, Senate Committee on Awards (SCOA), University of Manitoba
- Member, Association of Faculties of Pharmacy of Canada (AFPC) Program Evaluation Task Force
- Member, American Association of Colleges of Pharmacy
- Member, Association of Faculties of Pharmacy in Canada
- Chair, Canadian Teachers of Pharmacy Administration
- Member, Canadian Association of Population Therapeutics (CAPT)
- Member, Expert Advisory Committee for the Vigilance of Health Products (Health Canada)
- Member, International Society for Pharmacoepidemiology
- Alumni Member, Lambda Kappa Sigma

Leslie Roos

- Associate Emeritus, Population Health Program, Canadian Institute for Advanced Research
- Member, CIHR Grant Review Committee for the Institute of Health Services & Policy Research
- Member, Alberta Laboratory Support Committee
- Member, College of Reviewers, Canada Research Chairs Program
- Member, Manitoba Centre for Health Policy Advisory Board

Noralou Roos

- Member, Provincial Health Child Advisory Committee, Healthy Child Manitoba
- Member, Drug Safety and Effectiveness Network Workshop Planning Committee
- International Faculty Member, Robert Wood Johnson Health and Society Scholars Program, Universities of San Francisco and Berkeley
- Member, United Way Board of Trustees
- Mentor, Canadian Institute for Advanced Research, New Investigator's Network
- Member, IHSPR Drug Policy Sub-Committee
- Member, CHEPA Advisory Council
- Member, University of Manitoba Bannatyne Campus Research Ethics Board
- Member, Healthcare Policy Editorial Advisory Board
- Lead, the Canadian Drug Policy Development Coalition
- Chair, Promotion and Tenure Committee, Department of Community Health Sciences, University of Manitoba
- Member, Expert Advisory Symposium for Human Early Learning Partnership, University of British Columbia
- Member (Scientist), Manitoba Institute of Child Health

Evelyn Shapiro

- Senior Scholar, Department of Community Health Sciences
- Member, Gerontological Advisory Committee, Department of Veterans Affairs
- Chair, Family Care Committee, Sub-Committee of the Gerontological Advisory Committee, Department of Veterans Affairs
- Member, Search Committee, Department of Community Health Sciences

Mark Smith

- Member, Manitoba Chronic Disease Surveillance Advisory Committee
- Member, First Nations Regional Longitudinal Health Survey (FNRLHS) Atlantic Regional Advisory Committee
- Co-Chair, National Diabetes Surveillance System (NDSS), Scientific Working Group, Public Health Agency of Canada
- Member, Outcomes Research Task Force (ORTF), National Hypertension Surveillance Strategy, Public Health Agency of Canada
- Member, Drug Evaluation Alliance of Nova Scotia (DEANS), Nova Scotia Department of Health
- Member, Network of Center Directors in Health Services and Policy Research, CHSRF
- Member, Joint Data Access Committee of the Perinatal Epidemiology Research Unit, the Population Health Research Unit and the Reproductive Care Program of Nova Scotia.
- Chair, Privacy, Security and Confidentiality Subcommittee, Population Health Research Unit, Dalhousie University

4.0 Finance

In addition to the \$2.325 million in funding received from Manitoba Health and Healthy Living (as detailed in Figure 1), MCHP researchers continued their success in receiving career awards and research grants in peer-reviewed competitions as detailed under MCHP Administered Research. MCHP operating funds from these other sources for 2008/2009 fiscal year totaled approximately \$1.974M (Figure 2).

4.1 Endowments/Gifts

Endowed Chair in Child Health

Awarded by the Department of Science, Technology, Energy and Mines, Province of Manitoba, this award supports an outstanding child health researcher to coordinate and lead child health research at MCHP and comes available in June 2009.

Evelyn Shapiro Health Services Endowed Research Award

This award provides support to a graduate student in the Faculty of Graduate Studies, specifically in the Faculty of Medicine, whose thesis research will use The Repository housed by the Manitoba Centre for Health Policy.

RBC Foundation Gift for Research in Children's Health

The RBC Foundation gave a gift of \$750,000 over the period from July 2003 through June 2008. These funds provide financial support for senior investigators, clinicians, visiting scholars, and graduate fellows to conduct research in the broader determinants of children's health.

The Lupina Foundation Gift

A gift of \$685,000 over the period July 2005 to June 2010 for the project, "Research Knowledge Transfer—A Web–Based Concept Dictionary" was made by the Lupina Foundation. This funding enables MCHP to expand its documentation on healthcare costing methods and prescription drug utilization, and facilitate national and international collaborations on these and other methodological issues.

Personnel Awards

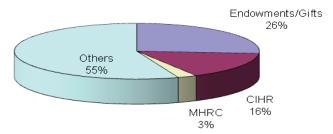
- Alan Katz: Clinical Research Professorship in Population Health, Manitoba Medical Services Foundation Award, 2006–2009, \$150,000
- Lisa Lix: CIHR New Investigator Award, 2006–2008, \$275,000
- Patricia Martens: CIHR New Investigator Award, 2003–2008, \$275,000
- Patricia Martens: CIHR/PHAC Applied Public Health Chair, 2008–2013, \$925,000
- Noralou Roos: Canada Research Chair in Population Health, 2001–2008, \$1,225,000
- Randy Fransoo: Manitoba Health Research Council Dissertation Award, 2007-2008, \$4,750

Figure 1: Manitoba Centre for Health Policy Yearly Budget, April 1, 2008 – March 31, 2009

Manitoba Centre for Health Policy	
Salaries	
Staff	1,627,421.00
Staff Benefits	292,936.00
Payroll Levy	32,548.00
External Contracts	70,000.00
Salaries Subtotal	\$2,022,905.00
Other Expenditures	
General Office Expenses	150,500.00
Equipment	
Purchases	101,595.00
Maintenance	15,000.00
Travel	35,000
Other Expenditures Subtotal	\$414,200.00
TOTAL EXPENDITURES	\$2,325,000.00

Figure 2: Additional operating funds received in 2007/2008

Additional Funds Available in 2008/09



Endowments/Gifts:

Energy, Science & Technology Endowed Chair in Child Health The Lupina Foundation Evelyn Shapiro Award for Health Services Research RBC Foundation (children's health)