# 2013/14

## MANITOBA CENTRE FOR HEALTH POLICY ANNUAL REPORT



RESEARCH. DATA REPOSITORY. KNOWLEDGE TRANSLATION.



## ABOUT THE MANITOBA CENTRE FOR HEALTH POLICY

The Manitoba Centre for Health Policy (MCHP) is located within the Department of Community Health Sciences in the College of Medicine, Faculty of Health Sciences at the University of Manitoba. The mission of MCHP is to provide accurate and timely information to healthcare decision-makers, analysts and providers, so they can offer services that are effective and efficient in maintaining and improving the health of Manitobans. Our researchers rely upon the unique Population Health Research Data Repository (Repository) to describe and explain patterns of care and profiles of illness, and to explore other factors that influence health, including income, education, employment and social status. The Repository is unique in terms of its comprehensiveness, degree of integration, and orientation around an anonymized population registry.

Members of MCHP consult extensively with government officials, healthcare administrators, and clinicians to develop a research agenda that is topical and relevant. This strength, along with its rigorous academic standards, enables MCHP to contribute to the health policy process. MCHP undertakes five major research projects every year under contract to Manitoba Health. In addition, our researchers secure external funding by competing for research grants. We are widely published and internationally recognized. Further, our researchers collaborate with a number of highly respected scientists from Canada, the United States, Europe and Australia.



## MCHP VISION, MISSION AND VALUES

#### Vision:

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

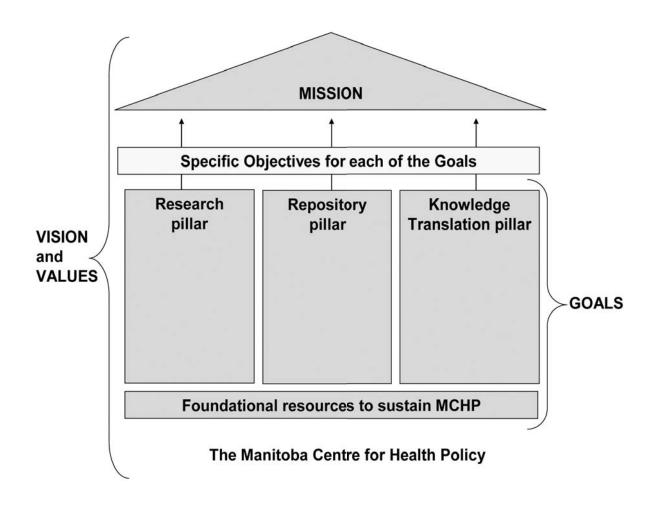
#### Values:

- 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-based 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 evidence-informed policy, programs, and services that maintain and improve the health and well-being of Manitobans.

The University of Manitoba's mission is to create, preserve and communicate knowledge, and thereby, contribute to the cultural, social and economic well-being of the people of Manitoba, Canada and the world. MCHP is situated within the University of Manitoba Strategic Plan Framework and the College of Medicine Strategic Framework.



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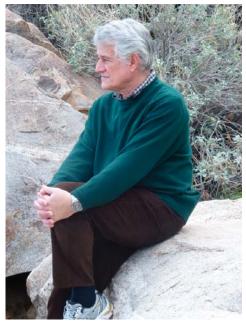
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## DR. NORMAN FROHLICH | 1941 - 2013

Dr. Norman Frohlich passed away on June 27, 2013, five days after suffering a massive stroke. Norm was an integral part of MCHP right from its inception; he contributed to several deliverable projects, and was primarily responsible for developing the Socio-Economic Factor Index, the longestrunning measure used at the centre for assessing socioeconomic status. Norm was also a valued member of the MCHP Advisory Board.

With the vision of a philosopher and the precision of a mathematician (he was both), Norm was essential to the development of MCHP's measurement methodologies. He recognized that because some census areas have so few people, using one characteristic of an individual's area of residence as an indicator of socioeconomic status (i.e. percent low income or percent low education) was less reliable than a measure built from several such indicators. Norm championed more advanced measurements, which MCHP has used ever since.



An award-winning researcher in the Faculty of Management, Norm was a Professor Emeritus who co-authored three books: Choosing Justice: An Experimental Approach to Ethical Theory, Modern Political Economy, and Political Leadership and Collective Goods. The former was awarded the Duncan Black Prize for paper of the year in the journal Public Choice.

Norm also extended his intellect to the Tri-Council Panel on Research Ethics as a panel member for over 10 years, during which time he moved into a leadership position. As Chair, Norm led the major task of revising the entire Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS). Norm was the driving force behind the revision, which included two complete drafts and two sets of public consultations over an intense two-year period. Norm crafted the core principles of the second edition of the TCPS—resepect for persons, concern for welfare, and justice—and ensured that all elements of the policy reflected and respected them.

Norm had a formidable intellect but he was, above all, a good soul—generous with his time and advice, interested in the views of others, with a great sense of humour and a deep humanity.

Chad Gaffield, President of the Social Sciences and Humanities Research Council, observed:

"Norman Frohlich personified the emerging ideal of a 21st century scholar and scientist. Based on a rich and diverse education, his research advanced the frontiers of knowledge, his pedagogy helped optimize the potential of countless students, and his engagement enhanced all our efforts to embrace robust ways of working on campus and beyond to ensure social, intellectual, and cultural benefits for Canada and the world."

His death was a shock and came all too soon.

In recognition of the excellent care he received in his final days, the Frohlich family has established a fund in Norman Frohlich's name. Contributions may be made through the Jewish General Hospital Foundation: (514) 340-8251.

## MESSAGE FROM OUR DIRECTOR



It is with mixed feelings that I write my final director's message for MCHP's 2013/2014 annual report. It has been an incredible privilege to direct MCHP for ten years. Now, I look forward to people taking the organization even further into exciting new places in the years to come. When I began my directorship, I embraced a few key ideas that I wanted to define my time: transparency, accountability, teamwork, and a sense of enjoyment in the workplace and in our accomplishments. Over the years, this has resulted in all sorts of changes to our executive structure, our decision-making approach, and our sense of cooperation for making MCHP an incredibly innovative and dynamic workplace—with, of course, all the support that our department, dean and university has given us.

And what a decade this has been! Much of MCHP's development in the last decade was made possible by our Leader's Edge grant from the Canada Foundation for Innovation (CFI) that has dramatically increased the capacity and accessibility of the Population Health Research Data Repository. Our first CFI grant built a lovely office space and began bringing in social databases. Our current CFI grant expanded things rapidly—sevenfold!—and allowed us to set up nine remote-access sites, two of which are slated to open this year (p.43). The numbers speak for themselves—there has never been so many people working on so much exciting research through MCHP. When you read this report, you'll catch the excitement of this exponential increase in research activity using our world-class Repository.

These developments have also resulted in an expansion of the ways our data can be used—especially for researching the social and societal determinants of health—and the growth of relationships among researchers, data providers, policy-makers, and healthcare providers. The projects highlighted in this report are the product of years of extensive processes of development and relationship-building. They are the culmination of years of effort from a diverse group of talented individuals who work at the leading edge of population-health and health services research. The leadership provided by MCHP research in collaborative projects like CIHR/HSFC Pathways to Health and Social Equity for Children (PATHS) and the CIHR Canadian Network for Observational Drug Effectiveness Studies (CNODES) demonstrate the possibilities of new analytical techniques, pan-Canadian collaborations, the increasingly advanced capabilities of the centre, and the kinds of research outcomes attainable with the cooperation and commitment of a sizable community.

MCHP is a close community. Typically, we see very little staff turnover, so the retirement of Bogdan Bogdanovic in November was a special time. Bogdan served 28 years as a data analyst specializing in physician billings data, well before MCHP officially became a centre in 1990. As we bade farewell and good luck there were as many smiles as red eyes. Twenty-eight years is a lot of wonderful memories. Recognition has never been far behind MCHP's achievements. This year, Leslie Roos received the prestigious McNaught-Taillon award, which is intended to recognize "outstanding individual contributions to Canadian health care through ... exemplary leadership and mentorship." CIHR's Institute of Health Services and Policy Research awarded Dr. Malcolm Doupe their Article of the Year prize for his paper on prominent risk factors among high-frequency users of emergency departments. Dr. Mariette Chartier's receipt of the Queen's Diamond Jubilee Medal recognizes the outstanding public service

represented by her research on projects like the Towards Flourishing Mental Health Promotion Strategy (p.40). And I was thrilled to receive the Order of Canada this year, becoming MCHP's third woman research scientist to be recognized (Dr. Evelyn Shapiro 2006, Dr. Noralou Roos 2004). That certainly speaks to MCHP's nurturing environment, for achieving great things with a great team!

As you will see in the lists of projects and publications, we have a vibrant group of research scientists who collaborate across the continuum of health and social services research. MCHP is in a strong position to make a transition to new leadership. The future holds many exciting opportunities to improve the performance of our healthcare system and the health of all Manitobans. The College of Medicine and Department of Community Health Sciences have identified MCHP as a research priority. We continue to work closely with the Centre for Healthcare Innovation, currently on the development of a SUPPORT Unit initiated by CIHR's Strategy on Patient-Oriented Research (SPOR). Kudos to Dr. Alan Katz, who is taking on the Acting Director role of MCHP as of April 1, 2014. His longstanding commitment to MCHP as a researcher of primary care, his stellar seven-year management of the centre's Associate Director of Research role, and his extensive contributions to my executive team have smoothed the transition considerably.

MCHP's research is based in Manitoba, but its reach is global. Among my personal highlights this year, I have enjoyed representing the centre at numerous conferences, including the Arctic Health Workshop in Denmark, and the 2013 International Lactation Consultant Association Conference in Melbourne. That I continue to receive such speaking invitations is a reflection of MCHP's international reputation. I was recently reminded, however, that there is no place like home. This April I was given a special "directorship retirement" party, which gathered over 300 wonderful people who have in various ways invested their energy and intelligence in the centre—from government, health regions, the university, and of course some of my own historical "past."

The fact is, accomplishments as great as ours would not have been been possible without the commitment of MCHP's many supporters. More deserve special mention than can fit on these pages:

- · Dr. Brian Postl, University of Manitoba Dean of Medicine
- · Dr. Sharon McDonald, Chair of the MCHP Advisory Board
- Dr. Stephen Moses, Department Head, Community Health Sciences
- · Hon. Erin Selby, MLA, Minister of Health
- Hon. Theresa Oswald, MLA, Minister of Jobs and the Economy, and former Minister of Health
- · Hon. Sharon Blady, MLA, Minister of Healthy Living and Seniors
- · Karen Herd, Deputy Minister of Health, Healthy Living and Seniors
- · Hon. James Allum, MLA, Minister of Education and Advanced Learning
- Gerald Farthing, Deputy Minister of Education and Advanced Learning
- · Hon. Kerri Irvin Ross, MLA, and Joy Cramer, Minister and Deputy Minister of Family Services
- Hon. Kevin Chief, MLA, and Jan Sanderson, Minister and Deputy Minister of Children and Youth Opportunities
- · Hugh Eliasson, Deputy Minister of Jobs and the Economy
- Hon. Peter Bjornson, MLA, Minister of Housing and Community Development
- Jeff Parr, Deputy Minister of Housing and Community Development
- Deborah Malazdrewicz, Executive Director of Health Information Management, Manitoba Health—our right-hand person who liaised bi-weekly with me on MCHP/Manitoba Health relationships
- Dr. Rob Santos, Executive Director, Science and Policy, Healthy Child Manitoba

- Jan Sanderson, CEO, Healthy Child Manitoba Office, Secretary to the Healthy Child Committee of Cabinet, and Deputy Minister of Children and Youth Opportunities
- Members of the Healthy Child Committee of Cabinet, for the incredible cooperation and collaboration, and the provision of many child data sources
- Dr. Mike Moffat (now retired) and Landis Esposito, Executive Director of Research and Applied Learning, WRHA, and WRHA Chief Privacy Officer
- Numerous individuals who provided input and feedback on our deliverables, especially those who have served tirelessly on our advisory groups or as part of deliverable research teams
- · All who attend our knowledge-translation workshops
- My executive assistant and office manager Carole Ouelette, whose tireless efforts, expert managerial skills, and creativity are responsible for so much of MCHP's success.
- The research scientists, staff, and students who make MCHP what it is—a wonderful community and a world-class research unit.

Vaturia of Martin Director, Manitoba Centre for Health Policy

CIHR/PHAC Applied Public Health Chair

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

# People



## MCHP WORKGROUPS

From data to deliverables, research questions to knowledge translation, MCHP continues to thrive because of the work of a dedicated and talented staff. These people are the foundation of the centre's many achievements. Below are the workgroups formed within this diverse body, each performing unique functions that help make MCHP a successful research unit.

#### Research Scientists

Research scientists at MCHP design and manage population-health research projects. Projects include research for deliverables for Manitoba Health, studies funded through peer-reviewed research grants, and writing peer-reviewed journal articles. MCHP scientists apply for grants to fund research in their areas of expertise. They also devote significant time to knowledge translation in the form of public presentations, educational presentations, briefings for government, op-eds, and radio and television interviews. Most of our scientists also teach graduate courses in Community Health Sciences, and supervise or mentor graduate students. Several also teach undergraduate medical students.

## **Research Project Coordinators**

This group coordinates deliverable project activities through all phases, acting as project managers and providing research assistance. Research project coordinators ensure procedures are followed for data access and use, report structure, and knowledge translation. They help develop analysis plans, document decisions for research methodology, create and monitor timelines, and facilitate communication in project teams and with external partners. Project coordinators also conduct literature searches on project topics and contribute to the presentation of results, including writing some sections of the report, presentations, and posters.

## Data Management

This group supports the development and use of the Population Health Research Data Repository including the initial acquisition, conversion and installation of databases, annual updates, and ongoing maintenance of over 70 administrative databases. Through the development and dissemination of data dictionaries, data quality assessments, data models, and other web-based resources such as MCHP's Concept Dictionary and Glossary, the Data Management Group provides detailed information about the Repository to researchers, analysts, and Remote Access Site (RAS) users.

## Repository Access Unit

The Repository Access Unit manages the approval processes for all research projects that make use of the Repository; it oversees compliance with MCHP policies and procedures that pertain to research projects and data use, including the requirements of data providers, the Health Research Ethics Board, the Health Information Privacy Committee, and other organizations. The access unit also tracks proposal reviews, project-specific approvals, and researcher agreements; and administers U of M PHIA pledge-of-privacy training. The access unit also runs accreditation sessions for all researchers and analysts working on approved projects, and it oversees other processes to ensure compliance with existing data-sharing agreements, legislation, and any other applicable regulations. Additionally, this group provides support to researchers for contacting data providers, including standardized approval processes, and follow-up.

## Data Analysts

Analysts provide data analysis, statistical support, and consulting for research projects carried out at MCHP. Analysis and data tasks fall in five general categories: 1) sampling strategies to identify and select relevant records and population cohorts; 2) techniques for aggregating person-level records to form longitudinal histories of healthcare utilization and social services interactions; 3) integration of information from records maintained in different Repository databases; 4) development of summary and descriptive statistics; 5) advice on the use and application of inferential statistical (significance testing and modeling to make inferences about populations) procedures of a range of complexity.

## Information Technology

This unit manages all information technology services at MCHP. This includes end-user support, application development, hardware, software, networking, partner access, security, and related services. The MCHP environment consists of over 120 endpoints and 40 servers/appliances that support research and operational requirements. All services are self-contained within MCHP in order to maintain a privacy-compliant environment.

#### Communications

The MCHP Communications Officer provides communications and marketing support to MCHP, develops and implements communication plans, and provides media relations expertise and advice.

#### **Finance Grants Accountants**

The MCHP Finance team provides accounting and personnel administration in the management and maintenance of MCHP finances. This involves the setup and daily administration of 46 grants and approximately 65 employees/students in 2013/2014. The MCHP Finance team ensures granting agency and payroll guidelines are met. The team also acts as on-site support for travel and purchasing inquiries.

## Research Support

This group provides research, administrative, and clerical support to researchers in the completion of deliverables, peer-reviewed journal articles, and grant proposals. Research Support group members perform tasks that fall under three general categories: 1. Deliverables (support for the production of report figures and tables, editing and preparing MCHP reports for publication); 2. Promotional and informational materials (overseeing MCHP printing requirements); and 3. Supporting public engagement (reception, planning knowledge-translation events, etc.).

#### Research Assistants

MCHP research assistants are students who provide support primarily to the Research Coordinator and Research Support groups. They may carry out a variety of tasks, such as creating and editing graphs, tables, and presentations; literature searches and other background research; creating reference lists; proofreading documents and checking data; updating documents; and occasional reception relief.

## MCHP FACULTY & STAFF

This is a list of all staff who worked at MCHP at any point between April 1, 2012 and March 31, 2013.

#### Executive

Dr. Patricia Martens, Director, Professor, Senior Research ScientistDr. Alan Katz, Associate Director, Research, Professor, Senior Research Scientist

Mark Smith, Associate Director, Repository, Research Scientist

Charles Burchill, Associate Director, Data Access & Use

John Dziadek, Associate Director, Administration

Carole Ouelette, Executive Assistant

#### Researcher Scientists

Dr. Marni Brownell, Associate Professor, Senior Research Scientist

Dr. Elaine Burland, Research Associate

Dr. Mariette Chartier, Assistant Professor, Research Scientist

Dr. Dan Chateau, Assistant Professor, Research Scientist and Statistician

Dr. Malcolm Doupe, Assistant Professor, Senior Research Scientist

Dr. Greg Finlayson, Research Scientist

Dr. Randy Fransoo, Assistant Professor, Senior Research Scientist

Dr. Alan Katz, Associate Director, Research, Professor, Senior Research Scientist

**Dr. Lisa Lix**, Professor, Research Scientist

Dr. Coleen Metge, Director, Research and Evaluation Unit, Centre for Healthcare Innovation, Senior Research Scientist

Dr. Patricia Martens, Director, Professor, Senior Research Scientist

Dr. Nathan Nickel, Assistant Professor, Research Scientist

Dr. Colette Raymond, Department of Pharmaceutical Services, Health Sciences Centre Hospital

Dr. Leslie Roos, Founding Director, Professor, Senior Research Scientist

Dr. Noralou Roos, Founding Director, Professor, Senior Research Scientist

Mark Smith, Associate Director, Repository, Research Scientist

#### **Data Analysts**

**Wendy Au** 

**Bogdan Bogdanovic** 

**Hui Chen** 

**Matt Dahl** 

**Shelley Derksen** 

**Natalia Dik** 

**Roxana Dragan** 

**Oke Ekuma** 

**Say Hong** 

Milton Hu

Sazzadul Khan

**Leonard MacWilliam** 

**Heather Prior** 

Joykrishna Sarkar Carole Taylor Randy Walld Marina Yogendran

#### **Repository Access**

Charles Burchill, Associate Director, Data Access and Use Jo-Anne Baribeau, Repository Access Coordinator Emily English, Repository Access Assistant

## Data Management and Documentation

J. Patrick Nicol, Lead Data Acquisition Officer
Say Hong, Data Management Analyst
Dave Towns, Data Acquisition Officer
Angela Tan, Data Acquisition Officer
Ken Turner, Repository Data Analyst
Tyler Ostapyk, Documentation Coordinator

#### **Research Coordinators**

Ruth-Ann Soodeen, Lead Research Coordinator Ina Koseva, Research Coordinator Chelsey McDougall, Research Coordinator Kari-Lynne McGowan, Research Coordinator Jennifer Schultz, Research Coordinator Tamara Thomson, Research Coordinator Jeff Valdivia, Research Coordinator Chun Yan Goh, Research Coordinator

## Research Support

Elisa Allegro
Angela Bailly
Eileen Boriskewich
Theresa Daniuk
Kara Dyck
Joshua Ginter
Wendy Guenette
Christina Kulbaba
Leanne Rajotte
Shannon Turczak

#### Communications

Hannah Pratt, Communications Officer

#### Research Assistants and Students

**Sneha Abraham** 

**Mireille Bohemier** 

Jill Bucklaschuk

**Susan Burchill** 

**Leah Crockett** 

**Pranay Das** 

**Julie Erickson** 

Jon Fisher

**Aynslie Hinds** 

Jessica Jarmasz

Meghan Kjarstanson

**Lindsay Larios** 

Mitchell Lyle

**Ayat Mneina** 

**Danielle Morin** 

Ada Jane Okonkwo

**Michael Paille** 

**Alex Peden** 

**Lorena Plastino** 

**Jason Randall** 

**Aaron Trachtenberg** 

**Camilla Tapp** 

**Elizabeth Wall-Wieler** 

**Shauna Zinnick** 

## Information Technology

**Rod McRae**, Information Technology Manager **Darrin Halabuza**, Information Technology Support

#### **Finance**

Sophie Buternowsky, Senior Grants Accountant

Ariel Bautista, Grants Accountant

Jeannie Chen, Grants Accountant

Linda Kostiuk, Grants Accountant

Nora Platte, Grants Accountant

Kirsten Giroux, Grants Accountant

Tannis Wills, Grants Accountant

## ADVISORY BOARD MEMBERSHIP

## Members by Position

#### **MCHP Director**

Dr. Patricia Martens

#### **Deputy Minister of Health**

Karen Herd

#### **MCHP Founding Directors**

Dr. Leslie Roos and Dr. Noralou Roos

#### Head of Community Health Sciences, Faculty of Medicine, University of Manitoba

Dr. Stephen Moses

#### **Treasury Board representative**

vacant

#### Dean of the Faculty of Medicine, University of Manitoba

Dr. Brian Postl

#### **Manitoba Health liaison**

Deborah Malazdrewicz

#### **Advisory Board Chair**

Dr. Sharon Macdonald

## **Appointed Members**

#### Up to seven appointees of Manitoba Health

Harvey Bostrom, Deputy Minister, Aboriginal and Northern Affairs

Gerald Farthing, Deputy Minister, Education and Advanced Learning

Monique Vielfaure Mackenzie, Executive Director, Regional Health Authorities of Manitoba

Jan Sanderson, Deputy Minister, Children and Youth Opportunities

Jeff Parr, Deputy Minister, Labour and immigration

#### Up to seven appointees of the University of Manitoba

Dr. David Collins, Vice Provost, Academic Planning and Programs, University of Manitoba

Dr. Digvir Jayas, Vice President, Research, University of Manitoba

Dr. Terry Klassen, Director of Research, Manitoba Institute of Child Health, U of Manitoba

Dr. S. Leonard Syme, Professor of Epidemiology and Community Health (Emeritus) University of California, Berkeley

Dr. Michael Moffatt, Executive Director, Research and Applied Learning Division, Winnipeg Regional Health Authority

Reg Toews, Former Chief Executive Officer, South Eastman RHA

Kevin Kavanagh, Member of the Community

#### Ex Officio Members

Dr. Alan Katz, Associate Director, Research, MCHP Mark Smith, Associate Director, Repository, MCHP Charles Burchill, Associate Director, Data Access and Use, MCHP John Dziadek, Associate Director, Administrative, MCHP

## MCHP Staff Support to Advisory Committee

Carole Ouelette, Executive Assistant

## MCHP AWARDS & HONOURS

#### **AWARDS AND DISTINCTIONS**

#### **Dr. Marni Brownell**

"Top Ten" list of early-childhood-development research in Canada. Centre of Excellence for Early Childhood Development. December 2013.

#### **Dr. Mariette Chartier**

Queen's Diamond Jubilee Medal, for extensive contributions to the research community. Manitoba Government. Presented by Premier Greg Selinger.



#### **Dr. Malcolm Doupe**

Article of the Year (\$10,000). CIHR Institute of Health Services and Policy Research. April 2013.

#### Dr. Lisa Lix

Best Clinician Abstract. International Society for Clinical Densitometry. 2013. Co-recipient with Dr. William Leslie.

#### **Dr. Patricia Martens**

Member of the Order of Canada (CM). Designated by the Governor General David Johnson. June 2013.

Fellow of the Royal Society of Canada (Academy of Life Sciences). Inducted November 2013.

Distinguished Professor. University of Manitoba. March 2014.

R.D. Defries Award. Canadian Public Health Association. June 2013.

Nominee for Medicine 1 Teaching Award. University of Manitoba Faculty of Medicine. April 2013.

Nominee for Pre-clerkship Inspiration Award. Manitoba Medical Students Association. January 2014.

Baby-Friendly Manitoba Lifetime Achievement Award. Presented by the Honourable Theresa Oswald, MLA. September 2013.

Patricia Martens Award for Excellence in Breastfeeding Research. Journal of Human Lactation. July 2013. N.B. This is a new, annual award, named in honour of Dr. Martens.



UNIVERSITY OF MANITOBA, FACULTY OF MEDICINE	

# Research



## MCHP RESEARCH SCIENTISTS



**Dr. Marni Brownell** 

Research Focus: Child health and well-being, with a particular focus on the social determinants of health, developmental disabilities, children in out-of-home care, developing population-level indicators of child health, and evaluations of programs designed to improve childhood development.

#### **Dr. Mariette Chartier**

Research Focus: Prevention and early intervention programs for children and their parents, mental health promotion, child abuse and neglect, perinatal health, health risk behaviours, and health of vulnerable populations.





Dr. Dan Chateau

Research Focus: Population Health Research Methods, Area Based Socioeconomic Measures, Social Determinants of Health, Health Equity Analysis, and Population Health Intervention Effectiveness

#### **Dr. Malcolm Doupe**

Research Focus: Health services utilization and the aging population, risk factors of home care and nursing home use, factors that influence quality care in in nursing homes; and health services utilization of emergency departments.





Dr. Greg Finlayson

Research Focus: funding methodologies, cost of health care for chronic conditions.

#### **Dr. Randy Fransoo**

Research Focus: Indicators of population health and health service use, rural health, obesity, cardiac care, and critical care





Dr. Alan Katz

Research Focus: Primary Care health service delivery, quality of care indicators, knowledge translation, and disease prevention

#### **Dr. Patricia Martens**

Research Focus: Health status and healthcare use of Manitoba's rural & northern residents, mental health, use of healthcare services by those with mental illness, the health of Aboriginal people, child health (including evaluating community intervention strategies to increase breastfeeding rates), and health inequities.



#### **Dr. Nathan Nickel**

Maternal and Child Health (MCH), using a lifecourse perspective; applying epidemiological methods of causal inference to MCH research; evaluations of programs and policies for improving MCH outcomes and reducing inequities; implementation research for evidence-informed healthcare practices; breastfeeding support and related health outcomes.





**Dr. Les Roos** 

Research Focus: Uses of information-rich research environments, longitudinal studies, child development, and research methods.

#### **Dr. Noralou Roos**

Research Focus: Use of administrative data for managing the health care system, relationship between health care use and population health, child health and wellbeing, with a particular focus on the social determinants of health. As Director of EvidenceNetwork.ca she attempts to communicate evidence on these issues through the media.





**Mark Smith** 

Research Focus: Administrative data, mental health, chronic disease surveillance, social housing, homelessness, and poverty.

In addition to conducting research, MCHP Research scientists also teach and supervise students, and contribute to numerous committees. A list of educational and committee involvements can be found in Appendix 4 and Appendix 5, respectively.

## KEY DELIVERABLE RESEARCH FINDINGS

## Most Manitobans are Getting Healthier—but not Everybody

The 2013 RHA Atlas report provides up-to-date results for over 75 indicators of population-health status, healthcare use, and quality of care. This deliverable was the fourth of its kind since 1999, but the first to reveal improvement across many indicators. By all measures, the health status of Manitobans is improving over time: life expectancy is up, and mortality rates are down. However, this improvement was not shared by all Manitobans: residents of the healthiest areas got healthier, while those in the least healthy areas did not change. In terms of disease prevalence, some were stable and some decreased, while others increased—though those increases may also reflect progress. For example, improvements in care for patients with diabetes mean that associated mortality rates have decreased significantly. However, this means that more people are living with diabetes, which has important implications for the healthcare system.

Report: 2013 RHA Indicators Atlas. Randy Fransoo, Patricia Martens, The Need to Know Team, Heather Prior, Charles Burchill, Ina Koseva, Angela Bailly, and Elisa Allegro. Released October 2013.

## Many in our Hospitals Should be in Other Facilities

Who is in our Hospitals ... And Why? focused on patients using acute-care hospital beds in Manitoba, to determine who they were, where they came from, why they were there, and how long they stayed. Manitoba had just over 4,000 beds in 71 hospitals, and they provided just over 1,100,000 days of care, spread over 133,464 hospitalizations. The results showed that patient sickness level is the overwhelming driver of the use of hospitals in Manitoba, and this is strongly related to age. A key focus of this report was alternate-level-of-care (ALC) patients—mostly mostly those admitted to hospital for acute treatments, but could not be discharged promptly upon resolution of their acute needs because required supports or environments were not immediately available. Almost half were patients awaiting placement in personal care homes; but because their wait times were quite long, this group used over 85% of all ALC days coded. Overall, ALC days were the third-most frequent reason for the use of hospital days, though this varied significantly across Regional Health Authorities.

Report: Who is in our Hospitals ... And Why? Randy Fransoo, Patricia Martens, The Need to Know Team, Heather Prior, Charles Burchill, Ina Koseva, and Leanne Rajotte. Released September 2013.

## Manitobans Living in Social Housing Have Poorer Health

The two-part study, *Social Housing in Manitoba*, looked at data on 31,000 Manitobans living in social housing complexes that are owned and managed by the Department of Housing and Community Development. The premature mortality rate was twice as high in social housing as compared to all other Manitobans. The rate of suicide was four times higher, and in some regions, schizophrenia was as much as 8-10 times higher in the social-housing cohort. The latter finding is likely due to an increased need for social housing in this vulnerable population. In terms of education, children in social housing had lower rates of being deemed ready for school (in kindergarten testing) and had lower rates of high school completion compared with residents living elsewhere. For most of the health-status measures, poverty—not social housing—was found to be the most important factor in explaining the level of mental and physical health challenges facing those living in social housing.

Report: Social Housing in Manitoba, Part I: Manitoba Social Housing Data. Gregory Finlayson, Mark Smith, Charles Burchill, Dave Towns, William Peeler, Ruth-Ann Soodeen, Heather Prior, Shamima Huq, and Wendy Guenette. Part II: Social Housing and Health in Manitoba: A First Look. Mark Smith, Gregory Finlayson, Patricia Martens, Jim Dunn, Heather Prior, Carole Taylor, Ruth-Ann Soodeen, Charles Burchill, Wendy Guenette, and Aynslie Hinds. Released June 2013.

## TOP 10 DELIVERABLE DOWNLOADS, 2013/2014

- Perinatal Services and Outcomes in Manitoba (2012)89,939 downloads
- 2 Social Housing in Manitoba, Parts 1 and 2 (2013) 34,590 downloads
- 3 The 2013 RHA Indicators Atlas (2013) 27,230 downloads
- 4 Health Inequities in Manitoba (2010)23,303 downloads
- 5 Projecting Personal Care Home Bed Equivalent Needs in Manitoba Through 2036 (2012) 18,067 downloads
- 6 The Health and Health Care Use of Registered First Nations People Living in Manitoba (2002) 15,745 downloads
- 7 Assessing the Health of Children in Manitoba (2001) 14,319 downloads
- 8 Defining and Validating Chronic Diseases (2006)10,450 downloads
- 9 Patterns of Regional Mental Illness Disorder Diagnoses and Service Use in Manitoba (2004) 8,936 downloads
- 10 Effects of Manitoba Pharmacare Formulary Policy on Utilization of Prescription Medications (2009) 8,027 downloads

## **DELIVERABLES IN PROGRESS**

## The Cost of Publicly Supported Housing for Seniors - Implications for Future Funding Approaches

Canada's population is rapidly aging and we can expect that by 2030 about one in five Manitobans will be 65 years or older. Older adults are the predominant users of nursing homes in Canada, and policy-makers have recently implemented various initiatives under a strategy called Aging in Place, to support community-based alternatives to nursing homes. In Manitoba, the majority of these initiatives are currently being piloted in Winnipeg. Supportive Housing for Seniors is designed as the major strategy to offset future nursing-home demand. Research at MCHP estimates that this will be at least partially successful. However, client payment structures for supportive housing (where clients pay for rent, meals, laundry, housekeeping and drugs) and nursing homes (where per diem fees cover all services) are currently very different. Client affordability may therefore impact use of supportive-housing care. Furthermore, there is limited evidence comparing the government-funded operational costs and additional healthcare-use costs of these services (e.g., for clients who are transferred to emergency rooms, are hospitalized, etc.). This type of information is essential to ensure that supportive-housing strategies are a cost-effective alternative to nursing homes.

This study will compare the costs of supportive housing versus nursing homes in Winnipeg, to determine whether supportive housing is a viable financial alternative to nursing-home care. Knowledge developed from this research can be used to help plan future Aging in Place initiatives in Winnipeg and other health regions.

## Determinants of Patient Flow in Winnipeg Emergency Departments

The overall goal of this research is to define the relative impact that input, throughput, and output factors have on emergency department (ED) wait times in the Winnipeg Health Region (WHR). In the analysis to date, MCHP has shown show that wait times and patient characteristics vary substantially across WHR adult ED sites. In this deliverable, we will further analyze the extent to which ED wait times vary by site, and determine how much these differences can be attributed simply to differences in patient characteristics versus other factors—for example, we may find increased volumes of hospital admitted patients increases wait times at some but not all sites. The results of this study will contribute to ED healthcare policy and practice reform both provincially and nationally, by identifying factors associated most strongly with increased wait times, and in particular highlighting common (i.e., across all sites) versus site-specific differences in study findings, allowing decision makers to look for 'in-house' solutions for improving wait times.

In Manitoba, wait times have been identified as one of four healthcare reform priorities, recognizing that many challenges are associated with transitioning patients across different sectors of healthcare delivery. Based on the conceptual model of Asplin et al (2003), our research plan reflects a holistic approach to healthcare reform. We will identify not only how ED process factors (i.e., throughput) affect wait times, but also how various input factors—e.g., Do patients with timely access to primary care visit EDs for low acuity reasons? To what extent do lower-acuity visits impact wait times, both overall and for higher acuity visits?—and output factors—e.g., How often do patients leaving an ED require admission to hospital, nursing homes, and home care? How much ED visit time is spent waiting for this transitional care? What is the relative impact that each of these has on ED patient flow?—contribute to the increase of wait times.

## Physician Integrated Network (PIN) Longterm Change Analysis (PIN Phase 2)

PIN Phase 2 evaluates both health-service provision (processes) and health outcomes associated with primary care at PIN clinics. The analysis examines the following groups' study outcomes, including changes over time within each group:

- · Core patients of PIN sites (patients for whom primary care home has been confirmed)
- · Patients who have visited PIN sites, but are not core patients
- · Other primary-care clinics using advanced access
- · Other patients not included in the above

#### Health outcomes include:

- Hospitalizations
- · Outcomes of select PIN indicators (e.g. diabetes)

This deliverable uses the Population Health Research Data Repository for all analyses. Electronic-medical-record extracts are being used only to identify the core clinic patient cohort.

## **Evaluation of the Manitoba InSight Program**

The province's Stop FASD mentoring program identified as an evaluation priority by the Manitoba Government's interdepartmental committee on fetal alcohol spectrum disorder (FASD). Stop FASD has collected a decade's worth of primary data on program participants, including outcome data not available elsewhere on this population of women at elevated risk for having children affected by FASD. This deliverable was made possible when this data was transferred into the Population Health Research Data Repository (Repository) in 2010/2011. The deliverable focuses on the long-term health, social, and learning outcomes of participants and children in the province's Stop FASD over the last 10 years, drawing on key indicators from the Population Health Research Data Repository (Repository). The report will set the stage for future deliverables that support Manitoba's life-course FASD Strategy.

# Identification of Factors and Supports that Contribute to the Educational Success of Students in Foster Care (a Healthy Child Committee of Cabinet deliverable)

This deliverable will attempt to identify major factors and supports present in schools that contribute to the educational success of students in the care of foster families. Such factors and supports would include those pertaining to individual students, and those pertaining to foster families. The study will recommend such positive factors and supports are present in all schools. It will also identify further areas of research regarding what schools, school divisions, and Manitoba Education might do to further contribute to the educational success of students in foster care.

# The Future of Treatment and Care of Manitobans Living with Kidney Failure

In January 2011, the Canadian Institute for Health Information (CIHI) released the Canadian Organ Replacement Register (CORR) Annual Report: Treatment of End-Stage Organ Failure in Canada, 2000-

2009, which included information about kidney failure. According to the report, the number of Canadians living with kidney failure—also referred to as end-stage renal disease (ESRD)—has been increasing for 20 years; it also suggests that rates appear to be stabilizing since 2005. Manitoba Health does not agree with the statement that the rate of people living with kidney failure is declining. The Manitoba Renal Program (MRP) projects that 2010/11 will see at least a 7%-8% increase in patients diagnosed with kidney failure, who will require dialysis. The MRP says further that there will be a need for more dialysis stations, home haemodialysis, peritoneal dialysis, and funding for human resources to deliver the MRP service in the future. Understanding the true need in Manitoba will be important to future planning of equipment and resources. An MCHP deliverable could assist in answering these key questions:

- · What are the future needs for the renal health services (peritoneal dialysis, home haemodialysis and incentre dialysis in Manitoba?
- · What are the characteristics of the future population of Manitoba residents who will require renal replacement treatment (RRT) by dialysis (peritoneal, home haemodialysis or in-centre haemodialysis)?
- What is the geographic distribution of this population?
- · What preventive, screening-education measures/affiliations with existing programs might reduce the number of Manitobans who will require dialysis? (Description of modifiable risk factors).

#### Public Reporting Template for LTC Quality Indicators

There is a growing interest across Canada for greater accountability around personal-care-home (PCH) standards and quality-of-care indicators through public reporting. Manitoba Health is in the midst of developing its long-term-care strategy and a public 'report card' would support some of the goals and objectives of this strategy. Furthermore, the WRHA recently organized a working group on public accountability that is pursuing public reporting of Manitoba Health standards and MDS Quality Indicators, and will be looking at the feasibility of including measures from the Translating Research in Elder Care (TREC) research project at some time in the future. Finally, recent recommendations from the Office of the Auditor General of Canada challenged the healthcare system to move to more public reporting of key PCH performance measures and both the department and the Winnipeg RHA would like to begin that work.

An MCHP deliverable to develop a template of PCH quality indicators using MDS data from the Winnipeg RHA, and incorporating both provincial standards and best practices from the literature would create a tool that would benefit Manitoba Health planners, the WRHA and a public reporting framework that could be rolled out to the rural regions when MDS-LTC is launched rurally.

## Evaluation of the Manitoba Health Program IMPRxOVE

This deliverable evaluates the Improving Medication Prescribing and Outcomes Via Medical Education (IMPRxOVE™) program launched in June 2011. The MANITOBA IMPRxOVE™ program is a first in Canada initiative that is expected to improve the safety and health outcomes for Manitobans receiving medications for mental health disorders. MANITOBA IMPRxOVE™ uses Comprehensive Neurosciences of Canada's proprietary clinical algorithms and follows a proven "audit and feedback"-based intervention. Under the program, CNSC conducts monthly reviews of Drug Program Information Network (DPIN) pharmacy claims data to evaluate the quality and appropriateness of the prescription of psychiatric and related behavioral medications and to identify patients at risk due to inappropriate use. If a pattern of

practice that places a patient at high risk of a negative health outcome is identified, a feedback alert in the form of an educational mailing is sent to the prescriber.

Prior to launch, Provincial Drug Programs (PDP) obtained input from Dr. Murray Enns (Professor and Head, Department of Psychiatry, University of Manitoba), the Manitoba Centre for Health Policy (MCHP), and Dr. Harold Carmel (Vice President, Care Management Technologies) to delineate preliminary research objectives and hypotheses, criteria for evaluation, and data requirements fully to evaluate the impact of MANITOBA IMPRXOVE™. In consideration of the preliminary research framework, MCHP scientist Dan Chateau randomized the 1417 physicians eligible to receive a mailing into a control and active mailing group. It was proposed that the randomization would be maintained for a 12-month period, after which time data analysis would begin (September 2012).

Due to the innovative nature of MANITOBA IMPRXOVE<sup>™</sup>, PDP remains committed to evaluating the health-outcome impacts of the program on various parameters—including, but not limited to, medication usage, changes in prescribing practices, physician visits, and hospitalization rates. PDP notes that the involvement of the MCHP in the randomization and initial research discussions, combined with their expertise in working with Manitoba Health administrative data, makes MCHP the best option for coordinating the research plan to evaluate the MANITOBA IMPRXOVE<sup>™</sup> Program.

## The Costs of Smoking

The costs of smoking will be determined through a linkage of the Canadian Community Health Survey (CCHS) respondents with healthcare utilization data, mainly through the Repository housed at MCHP. In the CCHS, several definitions of exposure to tobacco products are included in the survey questions, including both current and past smoking and exposure to second-hand smoking. Differences in health care use patterns by smoking status will be done, including the use of information on physician and hospital visits, use of long-term care facilities, prescription drug use, and cancer incidence and mortality.

Smoking cost estimates can be adjusted for the effects of other risk factors, such as body weight, consumption of alcohol and sociodemographic information (including geography) obtained both through the CCHs at the individual level and through the Repository at aggregate area levels. This study is designed to provide estimates of cost for the population of Manitoba (not by individual areas of the province) to determine the Smoking Attributable Fraction of healthcare expenditures. A collaboration with CancerCare Manitoba will enable the inclusion of the costs of actual cancer treatments (such as radiation and chemotherapy), which are not available in the Repository.

## MIS information and hospital resource implications

As a by-product of the previous MCHP deliverable on MIS and hospital costs, some anomalies were evident. The average daily resource intensity weight could be considered a measure of the average 'level of sickness' (and associated cost of treatment) of people treated, by hospital, type of hospital and RHA. However, there were two interesting observations. First, the rank ordering of facilities was not what would have been expected (for example, The Pas had the third most complex and costly patients, and Victoria was well down the list). Secondly, there was often substantial variability in the rank between years (e.g., Concordia's rank went from 23 in 2003/04 to 4 in 2005/06). There are a variety of things that could produce these observations. This deliverable will discuss what might be driving the higher or lower ranking and variability, and why (according to the National Health Expenditure Trends Report

from CIHI) Manitoba is spending a greater percentage of its health care spending on hospitals than the overall Canadian results. Are there factors unique to Manitoba? If so, are these factors consistent across hospitals in the province or are there varying trends within Manitoba facilities that should inform health system planning?

## CancerCare MB data acquisition into the Repository

A data-acquisition deliverable that follows up on recommendations from the MCHP's five-year external review. It will support a broader base of cancer research in Manitoba, including additional support to the Cancer Patient Journey.

## The Mental Health of Manitoba's Children: Prevalence and use of the healthcare system

Canadian studies suggest that one in seven children experience mental disorders at any given time. However, less than a quarter of these children receive the clinical treatment services they require (Waddell, Offord, et al., 2002). This project will look at treatment prevalence of mental health disorders in children according to diagnostic categories, age, sex, geographic region and socioeconomic status. Diagnostic categories to be examined would include (but not be limited to) ADHD, Autism spectrum Disorders, conduct disorder, oppositional defiant disorder, as well as mood disorders and substance abuse in adolescents. Use of health services for mental health disorders, including hospitalizations, physician visits, treatment at MATC, and prescription medications will be explored. Use of other health and social services for those identified with mental health disorders will also be examined, as well as the relationship between mental health and educational outcomes. Additional analyses may examine the impact of mental health status of one or both parents, and the bidirectional impact of physical health and mental health. This report will inform ongoing work by the Healthy Child Manitoba Strategy, the Provincial Mental Health Strategy (Rising to the Challenge), as well as provide important data to support the new Oversight Committee for Child and Youth Mental Health.

## Models of Primary Care Delivery

There is much debate in today's healthcare system on the most effective primary care model in regards to activity, efficiency, reaching a targeted clientele and quality of care. Four models of service delivery exist in Winnipeg and this study seeks to directly compare and evaluate them in this context: fee-for-service physicians; PIN and non-PIN sites, community health clinics and the WRHA-managed Access Centres (integrated social services model).

An evaluation of access to care (exploring the implementation of the Open Access model), type of patient served (SES, presence of chronic disease, age/sex distribution), strength of affinity to the clinic (continuity of care) cost effectiveness and quality of care indicators could be explored across each model with a discussion on the strengths and weaknesses of each, how well the model has been implemented and recommendations on how each could be improved.

# RESEARCH PARTNERSHIPS AND COLLABORATIONS

## **Adjunct Scientists**

The Adjunct Scientist designation at MCHP was created to recognize the valuable contribution made to its research by external participants. Adjunct Scientists are involved in collaborative research with an MCHP Researcher, 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.

**Judith Bartlett,** MD, MSc, CCFP, Associate Professor, Department of Community Health Science, College of Medicine, Faculty of Health Sciences, University of Manitoba

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**Shelley Buchan,** MD, FRCP, Department of Community Health Sciences, College of Medicine, Faculty of Health Sciences, University of Manitoba

**Allison Dart**, MD, MSc, FRCPC, Assistant Professor, Department of Pediatrics and Child Health, College of Medicine, Faculty of Health Sciences, University of Manitoba

**Raisa Deber,** PhD, Professor, Institute of Health Policy, Management and Evaluation, University of Toronto; Director, CIHR Team in Community Care and Health Human Resources

**Carolyn De Coster,** PhD, RN, MBA, Executive Director, Clinical & Zone Analytics, Data Integration, Measurement and Reporting, Alberta Health Services; Research Assistant Professor, Department of Community Health Sciences, Faculty of Medicine; University of Calgary

**Brenda Elias,** PhD, Assistant Professor, Department of Community Health Sciences, College of Medicine, Faculty of Health Sciences, University of Manitoba

**Murray Enns**, MD, FRCPC, Professor and Head, Department of Psychiatry, College of Medicine, Faculty of Health Sciences, University of Manitoba; Medical Director, Adult Mental Health Program, Winnipeg Regional Health Authority

**Evelyn Forget,** PhD, Professor, Director, Graduate Program, Department of Community Health Sciences, College of Medicine, Faculty of Health Sciences, University of Manitoba

**Allan Garland,** MD, MA, Associate Professor, Department of Internal Medicine, Department of Community Health Sciences, Co-Head, Section of Critical Care, College of Medicine, Faculty of Health Sciences, University of Manitoba

**Maureen Heaman,** RN, PhD, Professor, College of Nursing, Faculty of Health Sciences, University of Manitoba; CIHR Chair in Gender and Health

**Tim Hilderman,** MD, FRCPC, Medical Lead, Communicable Disease Control, Public Health Programs and Strategies, Manitoba Health, Healthy Living and Seniors; Assistant Professor, Community Health Sciences, College of Medicine, Faculty of Health Sciences, University of Manitoba

**Doug Jutte,** MD, MPH, Assistant Adjunct Professor, UC-Berkeley-UCSF Joint Medical Program, Associate Director, Master's Degree in Health & Medical Sciences, School of Public Health, University of California, Berkeley

**Laurence Katz**, MD, FRCPC, Associate Professor, Department of Psychiatry, College of Medicine, Faculty of Health Sciences, University of Manitoba

**Anita Kozyrskyj,** PhD, Research Chair, Maternal-Child Health and the Environment, Associate Professor, Department of Pediatrics, Faculty of Medicine, University of Alberta

Meir Kryger, MD, FRCPC, Professor, Yale University School of Medicine

**William Leslie**, MD, FRCPC, Section of Nuclear Medicine, St. Boniface General Hospital; Professor, Department of Internal Medicine, Department of Radiology, College of Medicine, Faculty of Health Sciences, University of Manitoba

**Lisa Lix**, PhD, Professor and Manitoba Research Chair, Department of Community Health Sciences, and Director, Data Science Unit in the George and Fay Yee Centre for Healthcre Innovation, College of Medicine, Faculty of Health Sciences, University of Manitoba; Adjunct Professor, School of Public Health and Department of Community Health and Epidemiology, University of Saskatchewan.

**Doug Manuel,** MD, MSc, FRCPC, Senior Scientist, Ottawa Hospital Research Institute; PHAC/CIHR Chair in Applied Public Health Sciences; Senior Medical Advisor, Statistics Canada; Associate Professor, Department of Family Medicine, Department of Epidemiology and Community Medicine, University of Ottawa; Associate Scientist, C.T. Lamont Primary Care Research Centre, Élizabeth Bruyère Research Institute; Adjunct Scientist, Institute for Clinical Evaluative Sciences (ICES)

Michael Moffatt, MD, MSc, FRCPC, Professor, Winnipeg Regional Health Authority

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

**Hude Quan**, PhD, Professor, Department of Community Health Sciences, Faculty of Medicine, University of Calgary

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**Rob Santos,** PhD, Associate Secretary to Healthy Child Committee of Cabinet, Government of Manitoba; Executive Director, Science and Policy, Health Child Manitoba Office; Assistant Professor, Department of Community Health Sciences, College of Medicine, Faculty of Health Sciences, University of Manitoba

**Shahin Shooshtari**, PhD, Director, Interdisciplinary Health Program, Assistant Professor, Department of Family Social Sciences, Faculty of Human Ecology, Department of Community Health Sciences, College of Medicine, Faculty of Health Sciences, University of Manitoba; Researcher, St. Amant Research Centre

- **F. Estelle. R. Simons**, MD, FRCPC, FAAP, FACAAI, FAAAAI, Professor, Department of Pediatrics and Child Health, Department of Immunology, College of Medicine, Faculty of Health Sciences, University of Manitoba
- **S. Leonard Syme**, PhD, Professor Emeritus, Department of Epidemiology and Community Health/ Human Development, School of Public Health, University of California – Berkeley

**Laura Targownik**, MD, Associate Professor, Department of Internal Medicine, College of Medicine, Faculty of Health Sciences, University of Manitoba

#### Collaborators

Silvia Alessi Severini, University of Manitoba Meghan Azad, University of Alberta Charles N. Bernstein, University of Manitoba Robert Biscontri, University of Manitoba James F. Blanchard, University of Manitoba Songul Bozat-Emre, University of Manitoba Shawn Bugden, University of Manitoba Brenda Comaskey, University of Manitoba Bethan Davies, Imperial College London Carrie Daymont, University of Manitoba Ana Hanlon Dearman, University of Manitoba Sarita Jha, University of Manitoba Jamie Falk, University of Manitoba Marcia Finlayson, Queen's University Justin Gawaziuk, University of Manitoba Luiz Guidolin, University of Manitoba Jino Distasio, University of Winnipeg Ana Hanlon-Dearman, University of Manitoba Margaret Haworth-Brockman, University of Manitoba Brett Hiebert, University of Manitoba Carol Hitchon, University of Manitoba Douglas Hobson, University of Manitoba Depeng Jiang, University of Manitoba Asad Junaid, University of Manitoba Leanne Kosowan, University of Manitoba Allen Kraut, University of Manitoba Jeff Kwong, University of Toronto Ariella Lang, Victorian Order of Nurses Veronica Lau, University of Manitoba Josee Lavoie, University of Manitoba Michael Law, University of British Columbia Christine Leong, University of Manitoba

Rizwan Manji, University of Manitoba Ruth Ann Marrie, University of Manitoba Punam Mehta, Manitoba Metis Federation Colleen Metge, University of Manitoba Javier Mignone, University of Manitoba Thomas Mutter, University of Manitoba William Ong, University of Manitoba Helene Ouellette-Kuntz, Queen's University Vanessa Percy, University of Manitoba Virginie Pollet, University of Manitoba Rasheda Rabbani, University of Manitoba Malathi Raghavan, University of Manitoba Clare Ramsey, University of Manitoba Neda Razaz, University of British Columbia Kelly Russell, University of Manitoba Julianne Sanguins, University of Manitoba Rob Santos, University of Manitoba Leigh Anne Shafer, University of Manitoba Garry Shen, University of Manitoba Harminder Singh, University of Manitoba Carolyn Snider, University of Manitoba Genevieve Thompson, University of Manitoba Mahmoud Torabi, University of Manitoba Donna Turner, CancerCare Manitoba James Zacharias, University of Manitoba

Michelle (XiaoQing) Liu, University of Manitoba Sarvesh Logsetty, University of Manitoba Salaheddin Mahmud, University of Manitoba

## FEATURED PROJECTS

## PATHS Equity for Children (Pathways To Health and Social Equity)

The PATHS program of research aims at understanding what works to reduce inequity in children's outcomes. This program includes collaborations with external partners. Multiple interventions are being evaluated to determine their impact on:

- · the overall health and well-being of children and
- inequities in child health and well-being by (a) socioeconomic status, (b) geographic region, and (c) sex at different points during childhood.

PATHS comprises a series of 16 interrelated sub-projects, each designed to assess the impact of a different intervention. Each sub-project has its own team and set of objectives, but all projects will assess whether the intervention (a) reached its target population (i.e., universal or targeted), (b) improved outcomes, and (c) reduced outcome inequities (i.e., by socioeconomic status, geographic and/or gender). The final sub-project will be an integrative analysis that will be completed at the end of the grant. It will look at the interventions holistically to see whether combinations of programs are more effective than individual interventions, and whether combinations are more effective simultaneously or sequentially.

#### The sub-projects are:

- Baby Friendly Hospital Initiative (BFHI)
- · Physician Integrated Network (PIN)
- · In-School Teen Clinics
- · Healthy Baby Program
- · Families First Home Visiting Program
- Social Housing
- · Healthy Buddies
- · Roots of Empathy (ROE)
- · Full-Day Kindergarten
- · Early Intervention for ADHD
- Early Psychosis Prevention and Intervention Program (EPPIS)
- · Community Schools Investigators' (CSI) Summer Learning Enrichment Program
- · Qualitative analysis: understanding mechanisms of inequality
- · Public Health Sensitive Conditions (PHSC)
- · Integrative Analysis

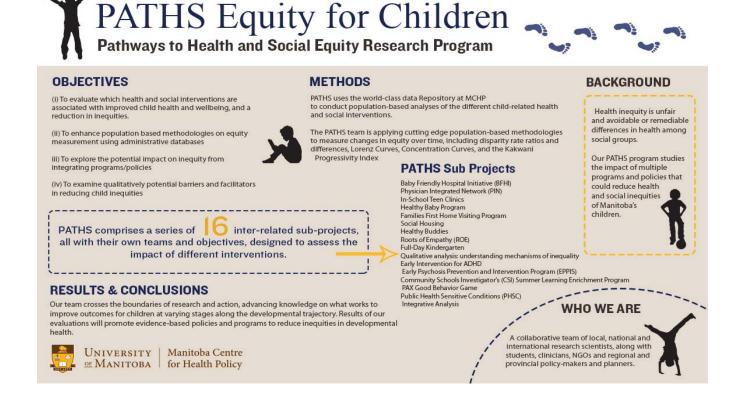
As of 2013/2014, one of the sub-projects is complete (Social Housing). A revised manuscript was resubmitted for consideration to *The American Journal of Public Health*. Nine of the other sub-projects are underway at various stages of analysis and writing. Two are near completion, and manuscripts with results-to-date have been submitted to peer-reviewed journals: Full-Day Kindergarten and the Baby Friendly Hospital Initiative (BFHI). A manuscript for Full-Day Kindergarten is in press with *Early Child Development and Care*.

Numerous PATHS-related abstracts were presented at conferences and several more have been accepted for upcoming conferences in 2014. One of our core PATHS researchers, Dr. Marni Brownell, received significant media attention related to findings for the Full Day Kindergarten project. She did

numerous interviews for print, online, and radio media, including the Globe and Mail, the Winnipeg Free Press, and CBC Radio. Citations for these abstracts and media features are given in Appendix 2 and Appendix 3.

The PATHS Advisory Board includes researchers, high-level policy-makers, community organizations and clinicians. The board meets biannually to review current findings and discuss upcoming research. Briefings have also been conducted with the Healthy Child Committee of Cabinet (HCCC) for two of the PATHS sub-projects: Social Housing and Full-Day Kindergarten. Another briefing for the HCCC, on the Families First sub-project, is scheduled for spring 2014.

PATHS continues to involve students in its projects, including two graduate students from the Department of Community Health Sciences, and two undergraduate students doing a placement for the Practicum in Interdisciplinary Health course in Human Ecology. This year a medical resident was involved in one of the sub-projects as part of a practicum for his Masters in Public Health. Also this year, Dr. Nathan Nickel, a post-doctoral student who joined MCHP and the PATHS team in 2012, was hired as a Research Scientist at MCHP and Assistant Professor in the Department of Community Health Sciences.



# CNODES (Canadian Network for Observational Drug Effectiveness Studies)

CNODES is an assembly of the top pharmacoepidemiologists across Canada, working collaboratively to conduct post-marketing drug safety and effectiveness studies. CNODES is funded by the Drug Safety and Effectiveness Network (DSEN) which has been established at the Canadian Institutes of Health Research (CIHR) in partnership with Health Canada as part of the federal government's Food and Consumer Safety Action Plan (FCSAP).

Even though prescription drugs undergo safety and effectiveness studies before they are approved, an estimated 10,000 Canadians die each year and 150,000 are hospitalized from adverse drug reactions. Provincial-level research is being conducted, but the databases used are often not large enough to study rare and serious adverse reactions, drugs used for uncommon diseases, and newly introduced medications.

CNODES is using existing healthcare databases on over 27 million people across Canada and internationally to conduct expedited evaluations of the risks and benefits of certain medications and disseminate this information widely to clinicians, patients, and decision-makers.

The CNODES Manitoba site leads are Patricia Martens, Dan Chateau, and Patricia Caetano. The Manitoba site team includes Alan Katz, Colette Raymond, Colleen Metge, Laura Targownik, Salah Mahmud, Shawn Bugden, Silvia Alessi-Severini, Matt Dahl, and Elaine Burland.



Keyes CL. The Mental Health Continuum: From Languishing to Flourishing in Life. J Health Soc Behav 2002;43:207-22.

To date, there have been eight CNODES sub-projects. Four are currently ongoing, and four were completed in 2013/2014, with manuscripts published or in press (see below). Two related projects focused on Manitoba results are also in progress: a sub-analysis of the study on Proton Pump Inhibitors and Community Acquired Pneumonia, led by Laura Targownik; and a project led by Colette Raymond and Dan Chateau examining the use of prescription medications before, during, and after pregnancy, led by Colette Raymond and Dan Chateau.

#### **Completed Projects (with Publications)**

High-Dose Statins and the Risk of Acute Kidney Injury. Manitoba site lead: Dr. Colette Raymond.

- Dormuth C, Hemmelgarn BR, Paterson JM, et al. Use of high potency statins and rates of admission for acute kidney injury: multicenter, retrospective observational analysis of administrative databases. BMJ 2013;346:f880. doi:10.1136/bmj.f880.
- Lenihan, C.R., Lafayette, R.A. High-Potency Statins and Acute Kidney Injury–Associated Hospitalizations. *Am J Kidney Dis.* 2013;62(5):877-879.

Proton Pump Inhibitors and Community Acquired Pneumonia. Manitoba site lead: Dr. Laura Targownik.

- Filion KB, Chateau C, Targownik LE, et al. Proton pump inhibitors and the risk of hospitalisation for community-acquired pneumonia: replicated cohort studies with meta-analysis. *Gut* 2013; doi:10.1136/gutjnl-2013-304738.

Antipsychotic Agents and Risk of Hyperglycaemic Emergencies (DKA project). Manitoba site lead: Dr. Silvia Alessi-Severini.

Lipscombe LL, Austin PC, Alessi-Severini S, et al. Atypical antipsychotics and hyperglycemic emergencies: multicentre, retrospective cohort study of administrative data. *Schizophrenia Research* 2014;154(1-3): 54-60.

The Effect of High Potency Statins on the Risk of Incident Diabetes in Patients with Occlusive Vascular Disease. Manitoba site lead: Dr. Colette Raymond.

Dormuth CR, Filion, KB, Paterson JM, et al. Higher potency statins and the risk of new diabetes: multicentre, observational study of administrative databases. *BMJ*. In press.

#### **Ongoing Projects**

Serotonin-Norepinephrine Reuptake Inhibitors and Renal Failure. Manitoba site lead: Dr. Salah Mahmud.

Isotretinoin Use Among Women of Reproductive Age and the Risk of Pregnancy and Adverse Pregnancy Outcomes Including Spontaneous Abortion and Major Congenital Malformation. Manitoba site lead: Dr. Shawn Bugden.

Domperidone Use in Parkinson's Disease and Risk of Serious Cardiac Events; Manitoba site lead: Dr. Shawn Bugden.

Safety of Incretin-based Therapies with Regards to Incidence of Pancreatitis and/or Pancreatic Cancer. Manitoba site lead: Dr. Laura Targownik.

# Towards Flourishing Mental Health Promotion Strategy

The Towards Flourishing Mental Health Promotion Strategy is a collaborative project between the Manitoba Centre for Health Policy, the Winnipeg Regional Health Authority, and Healthy Child Manitoba. Dr. Mariette Chartier (MCHP), Dr. Jennifer Volk (HCMO) and Ms. Marion Cooper (WRHA) were awarded a competitive grant of \$2.6 million over four years from Public Health Agency of Canada's Innovation Strategy (PHAC-IS)—Equipping Canadians: Mental Health Throughout Life—to develop and evaluate the Towards Flourishing strategy.

Towards Flourishing focuses on positive mental health as well as mental illness and distress. It involves all Manitoba health regions. The strategy includes training for public-health staff, a new mental-health facilitator role to support public-health teams, enhanced mental-health screening, curriculum-based education, simple evidence-based strategies for new parents, and improved access to supports and services.

Towards Flourishing is being guided by a developmental framework, and its development, implementation, and outcomes are being examined using a mixed-methods approach. Qualitative methods are used to evaluate the process and short-term impacts of implementation of the strategy following a case-study design. To determine the effectiveness of the strategy, mental-health outcomes of the parents and children participating in the project are being collected for analysis. This year, Towards Flourishing is interviewing parents, home visitors, public-health nurses and decision-makers to gain their perspective of the strategy's success in practice. These results will be available in spring.

Data collection of mental health surveys will continue into the fall, 2014. Over 700 surveys collected to date show parents reporting higher-than-expected rates of mental distress, including depression symptoms, psychological distress, and parental stress. Parents who reported high levels of positive mental health (emotional, psychological, and social well-being) were considerably less likely to experience symptoms of mental distress compared to women with lower levels of positive mental health. These findings shed some light on how dimensions of positive mental health are related to symptoms of mental illness, and point to the importance of promoting mental health as well as preventing mental illness. Encouraging women to engage in activities that promote their mental health may also decrease mental distress in the post-partum period.

# ONLINE RESEARCH RESOURCES

#### Overview

MCHP maintains internal and external versions of a glossary and a concept dictionary as aids for researchers, readers, and internal staff. These tools were developed at MCHP to support the application of a variety of theoretical frameworks, analytical techniques, statistical approaches and mapping resources appropriate for use with the Population Health Research Data Repository (Repository).

This year, 51 terms were added to the glossary, expanding it to 2,378 terms. Fifteen new concepts were added to the concept dictionary and 20 were updated. The total number of concepts is now 283.

## MCHP Concept Dictionary

The concept dictionary describes concepts developed at MCHP for analyzing data from the Repository. These are detailed, operational definitions of variables or measures used in MCHP research. They include a discussion of the issue(s) involved, approaches used, programming tips or cautions, SAS code (where not restricted for internal use), suggested readings, and references. This year's new concepts include:

- Episodes of Care: Methodology of Creating Hospital and ICU (Critical Illness) Episodes
- Social and Material Deprivation
- Palliative Care Data Sources and Method of Identification
- Chlamydia Method of Identification
- Gonorrhea Method of Identification
- Hepatitis B Method of Identification
- Human Immunodeficiency Virus (HIV) Method of Identification
- Syphilis Method of Identification
- Tuberculosis Method of Identification
- Families First Screening (FFS) / BabyFirst Screening (BFS) Method of Creating a FFS/BFS Dataset
- · Creating Drug Identification Number (DIN) Lists Using the SPD Server Updated DIN Master File
- Congestive Heart Failure (CHF)
- Total Respiratory Morbidity (TRM) Measuring Prevalence
- Physician Base Number Adding (available internally)
- Physician place of Practice Most Common patient Location (available internally)

# MCHP Glossary

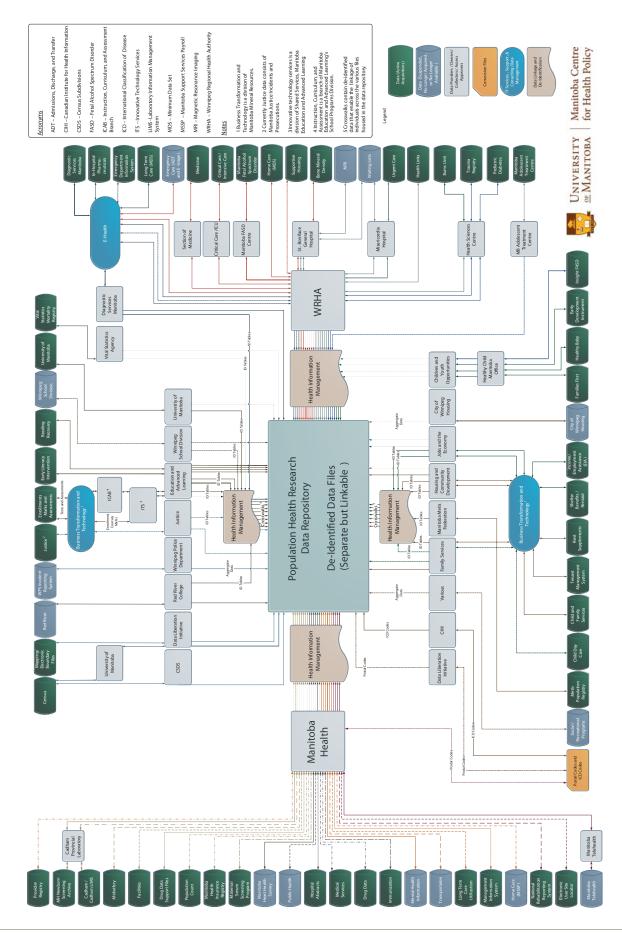
The glossary documents terms commonly used in population-health and health-services research. Each glossary term contains a brief definition (and its source), links to related glossary terms and concepts in the concept dictionary, and links to relevant external sites.

The MCHP Glossary is updated regularly with the release of new deliverables, which may contain new terms or revised definitions of existing terms. This year, terms were added or updated from the following:

- The 2013 RHA indicators Atlas
- Who is in our Hospitals ... and Why?
- · Social Housing in Manitoba. Part I: Manitoba Social Housing Data
- Social Housing in Manitoba. Part II: Social Housing and Health in Manitoba: A First Look

# Data Management





# DATA REPOSITORY AND RESEARCH

# Highlights

- · 218 active projects at MCHP
  - » 41 deliverables
  - » 61 MCHP projects led by MCHP investigators
  - » 91 externally administered research projects
  - » 25 thesis projects
- · 42 projects through remote access sites (including thesis projects)

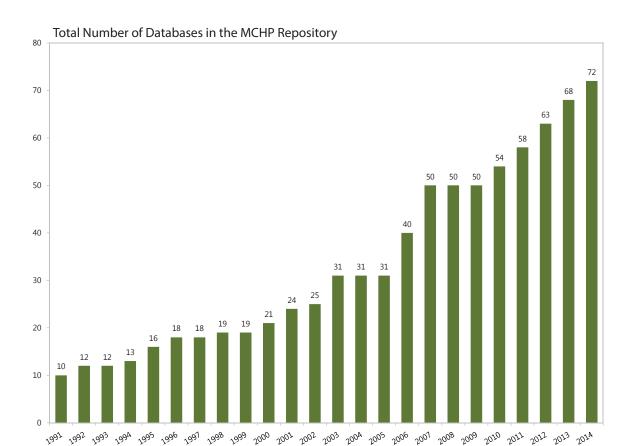
#### Overview

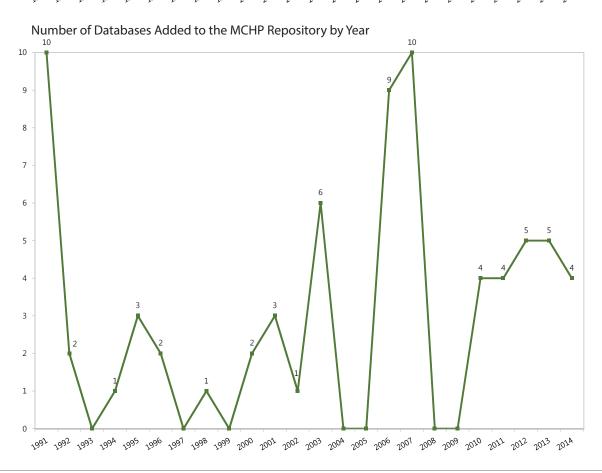
The Population Health Research Data Repository (Repository) housed at MCHP is a comprehensive collection of administrative, registry, survey, and other data primarily composed of residents of Manitoba. It was developed to describe and explain patterns of healthcare and profiles of health and illness, facilitating research in areas such as health, education, social services, and justice. A list of databases with available years of data is given in Appendix 7.

Approval processes for all research projects accessing the Repository are managed by the Repository Access Unit (see page 47 below). This unit oversees compliance with MCHP policies and procedures that pertain to research projects and data use, including the requirements of data providers, the Health Research Ethics Board, the Health Information Privacy Committee, and other organizations. The project counts highlighted above reflect all projects with current approvals to access the Repository. A complete list is given in Appendix 8. Some of these projects were completed before March 31, 2013, but maintained access approvals to to facilitate additional publications based on the same research.

# **Data Provider Meetings**

The data providers meeting, held annually in December, is a gathering of contacts from the government departments and health authorities that provide data to the MCHP Repository. The meeting also includes those that provide support to data providers, and those who work with them at MCHP. Various provincial government departments and arms-length organizations, as well as regional health authorities are invited: Manitoba Health, Healthy Child Manitoba, Family Services, Manitoba Education and Advanced Learning, Manitoba Jobs and the Economy, Manitoba Housing and Community Development, Manitoba Justice, Manitoba Adolescent Treatment Centre, Diagnostic Services Manitoba, and Manitoba Vital Statistics Agency. For any that are unable to attend, the Data Access unit arranges follow-up meetings. This year's meeting was to discuss the approval processes and amendment processes used within each department or ministry. The goal was to make processes consistent between departments and with MCHP. The meeting is also an opportunity to discuss other issues or developments with data providers. For instance, this year has seen significant changes in ministries and staff, and a number of new databases were added to the Repository.





# New Acquisitions in the Leaders CFI Initiative

As part of the 2010 Canada Foundation for Innnovation (CFI) Initiative grant awarded to MCHP, several new data acquisitions are in the process of being added to the Population Health Research Repository. As is the case with all data at MCHP, there are no names in any of the databases. These data can be linked to the other data in the Repository using the scrambled PHIN attached to each record.

#### **Manitoba Justice Data**

A complete copy of charges from the prosecutions department (PRISM), appearances in court (CCAINS) and provincial incarcerations (COMS) for the period beginning 2002 to the present. Records include information on perpetrators, victims, witnesses, and youth justice.

#### **National Rehabilitation System Data**

Adult clients (18 years and older) receiving services in specialty rehabilitation facilities or general (acute-care) facilities that provide rehabilitation services through designated units. Detailed clinical and functional information scores are included from 2007 to the present. Data are currently only for Winnipeg sites: Concordia Hospital, Deer Lodge Centre, Grace Hospital, Health Sciences Centre, Riverview Health Centre, Seven Oaks General Hospital, and St. Boniface Hospital.

#### **In-Hospital Pharmaceutical Data**

Prescription drugs dispensed in Winnipeg's two tertiary-care facilities (Health Sciences Centre and St. Boniface Hospital) for the period 2000 to the present, including costs.

#### **Manitoba Social Housing**

Information concerning clients in provincially owned and managed social housing (TMS) as well as those receiving housing benefits (Rentaid).

#### Diagnostic Services Manitoba (DSM) Laboratory Data

Laboratory data (chemistry to start with, and then eventually immunology, hematology, and microbiology) from the Health Sciences Centre, St. Boniface Hospital, Misericordia Health Centre, Concordia Hospital, Seven Oaks General Hospital, Grace Hospital, Victoria General Hospital, Deer Lodge Centre, Riverview Health Centre, Beausejour Health Centre and Westman Lab in Brandon, for various start dates between 2001-2006 to the present.

#### **University of Manitoba Student Data**

Enrollments, qualifications, programs, grades, awards, and degrees for University of Manitoba students, from 1947 to the present.

#### **Burns & Trauma Data**

Registries that track all major injuries and burns brought to Manitoba's trauma centre (located at the Health Sciences Centre in Winnipeg). This includes approximately 300-400 individuals per year. Type and severity of injury, vital signs, and a number of other details are recorded throughout the period from admission to discharge.

#### **Manitoba Adolescent Treatment Centre Data (MATC)**

MATC provides a range of mental health services to children and adolescents who experience psychiatric and/or emotional disorders. A full continuum of programs and services, both community and hospital based, are available to children, adolescents, and their families. These services range from brief intervention to intensive long-term treatment. Treatment is provided from a variety of perspectives and is delivered in partnership with parents and collateral agencies.

#### **Families First Home Visits**

Data collected as part of Healthy Child Manitoba's targeted, multi-year, provincial home-visiting program for families with newborns living under conditions of risk.

# INFRASTRUCTURE FOR SHARING KNOWLEDGE

The ISK was formed in September 2009 with the purpose of advancing and promoting best practices in administrative data documentation, developing common tools for documentation and data quality assurance, and facilitating communication of new developments in data management among researchers, analysts, and data managers from data centres across Canada. Participants include provincial and national organizations such as the Public Health Agency of Canada and Statistics Canada. Meeting annually, the group's goal is to improve metadata documentation and enhance the understanding of the science of data management both nationally and internationally.

Recently, a smaller group that includes a number of ISK members was formed. This group, known as the Data Knowledge and Metadata working group (DKM) is more international in scope and is focused more specifically on comparing Metadata tools and methodologies across organizations. A meeting will be held at the International Health Data Linkage Network conference in late April 2014 and will serve as an important first step toward developing best practices and standards for metadata tools and resources.

# DATA ACCESS AND ACCREDITATION

# Highlights

- · 44 people attended accreditation sessions
- · 319 people had current accreditation status
- · 51 projects reviewed for feasibility and costing
- · 40 projects signed researcher agreements

### Repository Access Unit

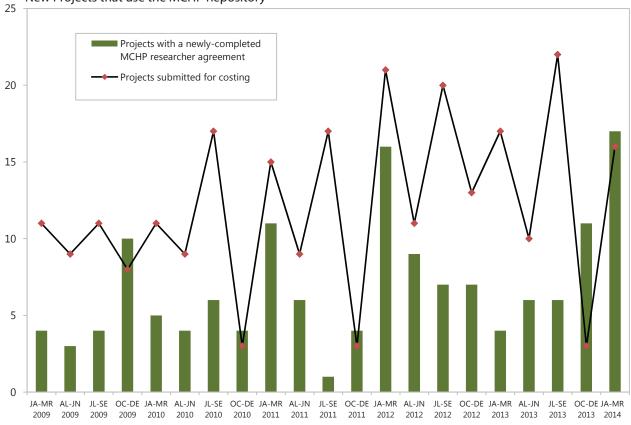
The Repository Access Unit manages the approval processes for all research projects that make use of the Population Health Research Data Repository. This unit oversees compliance with MCHP policies and procedures that pertain to research projects and data use, including the requirements of data providers, the Health Research Ethics Board, the Health Information Privacy Committee, and other organizations. The access unit also tracks proposal reviews, including feasibility and cost estimates, project-specific approvals and researcher agreements; and administers U of M PHIA pledge-of-privacy training. The access unit also runs accreditation sessions for all researchers and analysts working on approved projects (see below), and it oversees other processes to ensure compliance with existing data-sharing agreements, legislation, and any other applicable regulations. Additionally, the access group provides support for researchers when contacting data providers, including standardized approval processes, and follow-up.

A complete list of internally and externally administered research projects currently accessing the Repository, including student theses, is given in Appendix 8.

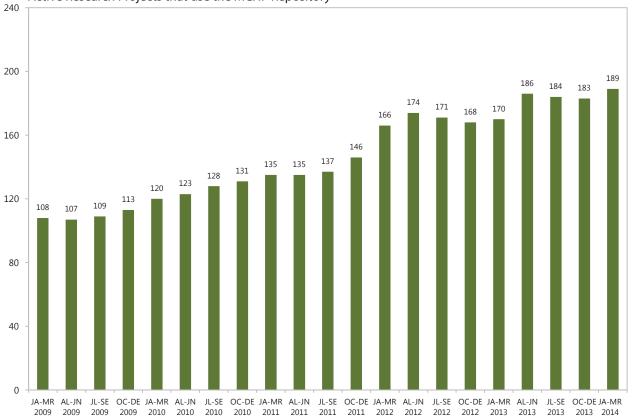
#### MCHP Accreditation

MCHP Accreditation sessions are held to provide new researchers and other employees with an overview of MCHP, with a focus on processes relating to data access and use. The accreditation session provides an overview of the centre's organization, available data, and requirements for data use and publication. An overview of the data in the Repository is provided along with how to find more information on individual datasets, including what approvals are required to use a data set. The session includes the completion of the University of Manitoba PHIA training module, and signing the University of Manitoba PHIA pledge of privacy. MCHP Accreditation is required for all principle investigators and all individuals who can connect to the MCHP computer network. Accreditation must be renewed annually by completing an online review of the approvals and use requirements.

### New Projects that use the MCHP Repository



#### Active Research Projects that use the MCHP Repository



# VISITORS WITH DATA-RELATED INTERESTS

External groups and individuals are often interested in learning about various aspects of the data at MCHP, including the centre's approach to data agreements, data management, documentation, etc. In January 2014, MCHP was visited by Statistics Canada. Josée Bégin (Director, Health Statistics), Vincent Dale (Assistant Director, Special Surveys), and Lynn Barr-Telford (Director Health, Justice, and Special Surveys) visited MCHP to discuss record linkage at the centre and gain insights from MCHP's success in this area. Topics included record linkage activities, agreements, governance, and best practices.

# REMOTE ACCESS SITES

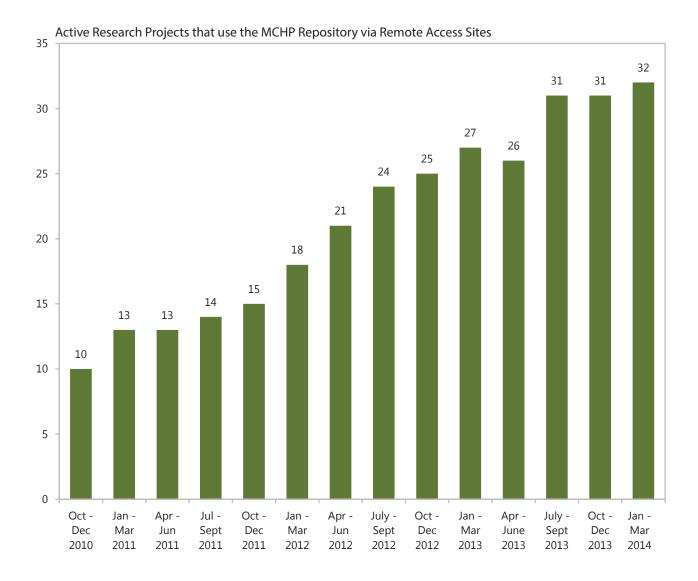
Remote Access Sites (RAS) enable data analysts and researchers that do not work directly for MCHP to complete analysis through a secure connection in identified locations. These sites provide extended opportunities for doing research with the repository without having to travel to MCHP offices, and/or continue to work outside of normal office hours. The site only provides terminal access to specific applications within MCHP, so there is no opportunity for direct data transfer or printing. Analysts request data through a vetting review process that ensures that the requested summary or aggregate results fit within the specific research project and meet the MCHP data-suppression or release requirements.

Over the last several years MCHP support for these sites has been funded by the CFI Leading Edge Fund "The Manitoba Centre for Health Policy' "LEADERS" initiative: Leading Edge Access and Data Enhancement Research Strategy", Project Leader: Dr. Patricia Martens. This funding winds down on October 31, 2014 and discussions have taken place with each of the sites regarding cost recovery to MCHP for the maintenance of the RAS site and costs incurred by MCHP to support the project. These costs include, but are not limited to, disk-space use, system access, support time to assist in the understanding the data, vetting requests, system support and analytic support.

Currently there are seven RAS terminals, located at these sites:

- Room T155, MCHP, Department of Community Health Sciences, University of Manitoba
- · Faculty of Human Ecology, University of Manitoba
- · Faculty of Pharmacy, University of Manitoba
- George and Fay Yee Centre for Health Care Innovation, University of Manitoba (terminal currently at Manitoba Institute of Child Heath)
- Centre for Global Public Health (CGPH), Department of Community Health Sciences, University of Manitoba
- Vaccine and Drug Evaluation Centre
- · Concordia Hospital, Winnipeg Regional Health Authority

Two additional RAS terminals are currently being negotiated: Seven Oaks Hospital (Renal program) and St. Boniface Hospital (Cardiac Unit) are currently setting up the necessary space and agreements.



# Knowledge Translation



# **INFORMING PLANNERS & STAKEHOLDERS**

#### The Need To Know Team



Since its establishment in 2001, *The Need To Know* Team has enabled a collaboration between MCHP, the Regional Health Authorities (RHAs), and Manitoba Health. This collaboration has provided an opportunity for knowledge exchange and learning between researchers, planners, and policy-makers.

The Need To Know Team is led by Dr. Patricia Martens (Director) and Dr. Randy Fransoo (Co-Director). Members of the team include MCHP researchers and staff, as well as high-level planners and decision-makers from Manitoba Health and each RHA, as chosen by the representatives' CEOs.

The Need To Know Team was originally funded through the Canadian Institutes of Health Research (CIHR) Community Alliances for Health Research Program (2001-2006). Subsequent meeting expenses have been funded through a series of awards: the national CIHR KT Award (2007-2008), the Evidence to Action research project (2005-2008), Dr. Martens' CIHR/PHAC Applied Public Health Chair Award (2008-2013), and Dr. Fransoo's Gerry McDole Professorship Award in Improved Healthcare Delivery to Rural, Remote and Underserved Populations of Manitoba (2010-2013). The team is also the KT partner for the ongoing PATHS Equity for Children project (CIHR / Heart & Stroke, 2011-2016).

The Need To Know Team meets in Winnipeg three times per year for two days at a time. These meetings are designed to respond to team goals by including activities relevant to the current and ongoing research projects at MCHP. The fall meeting precedes the annual MCHP RHA Workshop, where The Need To Know Team members facilitate roundtable discussions of MCHP deliverables. This year's meetings were held on June 17-18, October 28-29, and February 3-4.

The Need To Know Team also provides feedback for the selection of research topics for deliverable projects led by MCHP. To date, the team has co-authored seven deliverables. Many team members also sit on advisory groups for other deliverables, bringing the unique perspective of their RHA. In 2013/2014 The Need To Know Team contributed as a co-author or advisory-group member for the following deliverables:

- "Who Is in Our Hospitals... And Why?" (co-author)
- "Manitoba RHA Indicators Atlas 2013" (co-author)
- "Housing and Health in Manitoba: A First Look" (advisory group)
- "MIS Information and Hospital Resource Implications" (co-author)

The Need to Know Team was also involved as a regional consultation group for the CIHR "PATHS Equity for Children" projects.

#### Current members of *The Need To Know* Team

- Suzanne Dick, Interlake-Eastern RHA
- Dr. Karen Robinson, Interlake-Eastern RHA
- Jo-Ann Welham, Interlake -Eastern RHA
- Dr. Randy Gesell, Northern RHA
- Lorraine Larocque, Northern RHA
- · Vivian Salmon, Northern RHA
- Joy Tetlock, Northern RHA
- Dr. Shelley Buchan, Southern Health/Santé Sud
- Jane Curtis, Southern Health/Santé Sud
- Ales Morga, Southern Health/Santé Sud
- · Jody Allen, Prairie Mountain Health
- Maggie Campbell, Prairie Mountain Health
- Michelle Gaber, Prairie Mountain Health
- Nancy McPherson, Prairie Mountain Health
- Trish Bergal, Winnipeg RHA
- Patti MacEwan, Winnipeg RHA
- Dr. Colleen Metge, Winnipeg RHA
- Kristin Anderson, Manitoba Health
- Della Beattie, Manitoba Health
- Sonia Busca Owczar, Manitoba Health
- Nathan Hoeppner, Manitoba Health
- · Rachel McPherson, Manitoba Health
- Heather Sparling, Manitoba Health
- Dr. Patricia Martens, MCHP
- Dr. Randy Fransoo, MCHP
- Dr. Kristy Wittmeier, Centre for Healthcare Innovation, and Winnipeg RHA
- Dr. Elaine Burland, MCHP
- Dr. Nathan Nickel, MCHP
- Heather Prior, MCHP
- Charles Burchill, MCHP
- Mark Smith, MCHP
- Kara Dyck, MCHP

#### Past members of The Need To Know Team

We would like to thank the following people who were part of *The Need To Know* Team in the past year and who have left the team:

- Dr. Patricia Caetano, Manitoba Health
- · Nancy Hughes, former Churchill RHA

# INFORMING GOVERNMENT

# Manitoba Health Workshop

#### May 3, 2013

The 10<sup>th</sup> annual MCHP and Manitoba Health workshop was attended by approximately 75 people, including representatives from the Manitoba Health departments of Health Information Management, Primary Health Care, Public Health, Acute, Tertiary and Specialty Care, and several others. The day consisted of two keynote presentations: "Perinatal Services and Outcomes in Manitoba" by Dr. Maureen Heaman, and "How are Manitoba's Children Doing?" by Dr. Marni Brownell. Both were followed by roundtable discussions. Other MCHP reports were previewed at this workshop—specifically, "Social Housing and Health in Manitoba: A First Look" by Mark Smith, "Defining the Capabilities of the Newly Implemented Emergency Use Data Systems in Winnipeg" by Dr. Malcom Doupe, and "Manitoba RHA Indicators Atlas 2013" by Dr. Randy Fransoo.

# WRHA Workshop

#### June 6, 2013

Approximately 120 participants attended the 10<sup>th</sup> Annual MCHP WRHA workshop. This group represented a wide range of WRHA professional health-service fields. Jointly planned by MCHP and the WRHA, the day focused on rethinking the older adult continuum of care. It was a follow-up of the successful discussions about older adults at the 2012/2013 workshop. This year's workshop also proved to be a good means for partnership development and strategic planning.

Using a slightly different format than last year, the morning session focused on system-level discussions by having representatives from several different sectors seated at each table. Presentations consisted of a keynote titled "Integration of Care Across Our Continuum: A researcher's and a decision-maker's perspective" by Dr. Malcolm Doupe and Lori Lamont, Vice President and Chief Nursing Officer, WRHA; and snapshots of three MCHP deliverables: 1. "Projecting Personal Care Home Bed Equivalent Needs in Manitoba Through 2036" by Dr. Dan Chateau; 2. "Supportive Housing vs PCH Use: What is the financial difference?" by Dr. Malcolm Doupe; and 3. "Waiting in Hospital for PCH Admission: Alternate Levels of Care" by Dr. Randy Fransoo.

In the afternoon, guests were asked to switch tables and were seated with others in their sector. Presentations began with "Care at the Provider-Recipient Interface: What works well and opportunities for change?" by Eliette Allec, Director of Home Care, WRHA, and Linda Norton, Interim Executive Director of the Long Term Care Program, WRHA. Additional deliverable snapshots were presented, including "PCH Quality Care Report Cards" by Dr. Malcolm Doupe and "Ambulatory Care: Are we providing coordinated care?" by Dr. Alan Katz. Roundtable discussions followed, in which areas for improvement were identified and prioritized at the system, program, and research levels.

# RHA Workshop

#### October 29, 2013

This year marked the 20<sup>th</sup> anniversary of the annual MCHP RHA Workshop, formerly known as the MCHP Rural and Northern Healthcare Workshop. The new, more inclusive name reflects the attendance of the Winnipeg Health Region, which was invited to participate for the first time. Approximately 130 participants attended, including representatives from all regional health authorities, Manitoba Health, the Canadian Institute for Health Information, and graduate students from the Western Regional Training Centre. The focus of the workshop was two MCHP reports—"Manitoba RHA Indicators Atlas 2013" and "Who is in our Hospitals... and Why?"—both presented by Dr. Randy Fransoo. Following each keynote presentation were roundtable discussions among RHA staff and board members, who were divided according to health region. Discussion was facilitated by local members of *The Need to Know* Team. These discussions allow participants to dig deep into the study results and find data relevant to the stories that unfold in specific regions.

Along with the keynotes, there was a panel presentation by the CIHI Sparsely Populated Regions Advisory Group, and a preview of Dr. Marni Brownell's deliverable, "Identification of Factors and Supports that Contribute to the Educational Success of Students in Foster Care".

# Legislature Breakfast

#### Jan 14, 2014

Following last year's successful knowledge translation event, MCHP once again held a breakfast at the Manitoba Legislative Building. Dr. Patricia Martens and Dr. Alan Katz met with Members of the Legislative Assembly (MLAs) and government staff to provide an update on happenings at MCHP. We described additions to the MCHP Repository from government administrative datasets, initiatives to ensure that the research is widely disseminated regionally, provincially, nationally and internationally, and research projects, including recent deliverables. Attendees included deputy ministers and MLAs, as well as representatives from: Finance; Education & Advance Learning; Federal-Provincial Relations; Canada-U.S. and International Relations; Children and Youth Opportunities; Agriculture, Food and Rural Development; Healthy Living & Seniors; and Housing and Community Development.

# Manitoba Government Annual Workshop

What participants thought:

- · "Excellent, well organized. Great variety of topics and presentations. Would like to attend next year!"
- "Discussion and insight was very helpful. Having multiple departments at each table helped extend the conversation."

#### February 20, 2014

This year was the second annual knowledge exchange between MCHP and the Manitoba Government. This event was designed to share research results with non-health government departments and discuss how MCHP research might relate to other kinds of policy planning. Many government departments were represented by close to 75 people in attendance, including Children and Youth Opportunities, Housing and Community Development, Family Services, Healthy Child Manitoba, Education and Advanced Learning, and Jobs and the Economy.

The morning focused on social housing and health. Mark Smith gave the keynote presentation "Social Housing and Health in Manitoba: A First Look". There were also two guest speakers who presented on this topic: Dr. Tom Carter, Senior Scholar in the Department of Geography at the University of Winnipeg presented "The Value of Housing: Much More than Economics!" and Ben Fry, Housing Manager in Community Mental Health (WRHA) presented "Community Wellness Initiative."

The afternoon included a sneak peek of Dr. Malcolm Doupe's deliverable "The Cost of Publicly Supported Housing for Seniors—Implications for Future Funding Approaches". Several presentations on the PATHS Equity for Children project were given: "PATHS Equity for Children: Overview" by Dr. Marni Brownell; "Children in Social Housing—Does "Place" Make a Difference? A PATHS Equity Project" by Dr. Greg Finlayson; "Is the Families First Home Visiting Program Effective at Improving Children's Outcomes? A PATHS Equity Project" by Dr. Mariette Chartier; and "The Long-Term Impact of Full-Day Kindergarten: A PATHS Equity Project" by Dr. Marni Brownell.

Roundtable discussions were held in the morning and afternoon to discuss social housing and health in Manitoba and the PATHS Equity for Children project. To encourage cross-sectoral collaboration, each table included representatives from several government departments.



The second annual knowledge exchange between MCHP and the Manitoba Government.

# Briefings

#### **Emergency Department Information System**

Doupe, Malcolm. Defining the Capabilities of the Newly Implemented Emergency Use Data System in Winnipeg. Briefing for Manitoba Health. August 21, 2013.

Doupe, Malcolm. Defining the Capabilities of the Newly Implemented Emergency Use Data System in Winnipeg. Briefing for Manitoba Minister of Health. October 15, 2013.

Doupe, Malcolm. Defining the Capabilities of the Newly Implemented Emergency Use Data System in Winnipeg. Briefing for Winnipeg Regional Health Authority. August 26, 2013.

#### **PATHS Equity for Children**

Martens, Patricia. The effect of "place" on education and health outcomes for children living in social housing: does neighbourhood socioeconomic status make a difference? Briefing for the Healthy Child Committee of Cabinet. Jan 13, 2014.

Brownell, Marni. Long-term impact of full-day kindergarten. Briefing for the Healthy Child Committee of Cabinet. Jan 13, 2014.

#### **RHA Indicators Atlas 2013**

Fransoo, Randy. Briefing for Manitoba Health. September 19, 2013.

Fransoo, Randy. Briefing for Manitoba Minister of Health. October 15, 2013.

#### Who is in our Hospitals ... And Why?

Fransoo, Randy. Briefing for Manitoba Health. June 25, 2013.

# INFORMING THE PUBLIC

#### MCHP Website

#### **Highlights:**

- · 34% increase in website traffic
- · 2.1 million hits
- · 145,621 unique visitors
- · 30,559 repeat visitors

In the figure below, the count of 'hits' represents each time a webpage or file is loaded on a visitor's computer. Though most software also count separate hits for each graphic on a webpage, for a more accurate picture of visits, we exclude those counts. Our website followed an upward trend in 2012-2013, which continued into the first several months of 2013/2014. Fluctuations in the curve follow the rhythms of an academic calendar—holidays, grant deadlines—and spikes often occur after the release of a new major resource. After the summer break, during which MCHP web traffic normally drops, web traffic maintained year-over-year gains at a rate of about 185,000 hits per month.

MCHP uses social media to engage a variety of existing and potential audiences. Updates, media releases, research findings, awards and achievements, and other highlights are posted to Twitter and Facebook in real time, directing traffic to our website and others where MCHP is featured.

#### Comparision of Visits to the MCHP Website in 2012/13 to 2013/14



#### **EVIDENCENETWORK.CA**

EvidenceNetwork.ca is an evolving online Canadian health-care resource designed with the needs of journalists in mind. The project is funded by the Canadian Institutes of Health Research and the Manitoba Health Research Council. The site communicates the latest findings on controversial health policy issues and facilitates direct contact with over 80 health policy experts.

With the assistance of the Communications Director, the network's experts publish op-ed pieces in major Canadian newspapers to inform the public on key topics, including the aging population, obesity, healthcare costs and spending, and several others. In 2013, our experts wrote 115 different op-eds, which were reprinted 375 times in major Canadian media outlets and several more times in smaller newspapers and online venues across the country, reaching a total of more than 1500 publications. Canada's top five media outlets—Le Devoir, the Globe and Mail, National Post, La Presse, and the Toronto Star—are increasingly receptive to EvidenceNetwork.ca op-eds. Twelve were published by these papers in 2011, 29 in 2012, and 36 in 2013.

All op-eds are licensed with Creative Commons, and can be found on the website. Social media platforms, including Twitter, Facebook, and LinkedIn are used to direct interest to the website and to the op-eds. Increasingly, key media outlets come to EvidenceNetwork.ca asking for material. The Hill Times, which is read widely by Ottawa politicos, recently requested material for their annual Hill Times Health Policy Briefing. Nine of the eighteen pieces published in this briefing are authored by our experts and advisors.

Evidence published in the media often results in attention from policy-makers. Dr. Marni Brownell (an MCHP research scientist and EvidenceNetwork.ca expert) published a commentary in the Winnipeg Free Press on Manitoba's high rates of children in care. She was subsequently invited to testify before the Phoenix Sinclair Inquiry into Child Maltreatment, and her testimony contributed to the inquiry's focus on prevention issues and to several of the recommendations coming out of the inquiry. This is but one significant example of the EvidenceNetwork.ca's regular public engagement with health-policy evidence via op-eds.

Four MCHP research scientists are EvidenceNetwork.ca experts: Dr. Marni Brownell (Social Factors in Children's Health), Dr. Malcolm Doupe (Aging Population, Nursing Homes, Home Care), Dr. Alan Katz (Primary Care Delivery and Disease Prevention), and Dr. Noralou Roos (Poverty and Well Being). Dr. Eric Bohm, Dr. Jino Distasio, Dr. Rick Linden, Dr. Verena Menec, Dr. Jitender Sareen, and Dr. Robert Schroth are other Manitoba-based experts with EvidenceNetwork.ca.

The website contains 12 healthcare topics and offers credible, evidence-based information to the media, policy makers, academics and the general public. In 2013/2014, four new topics were added: Mental Health, Obesity, Pharmaceutical Policy, and International Health Systems. For the last topic, we added experts to the network on other health-care systems worldwide. These systems are examples from which Canada should learn.

2013/2014 also saw the creation of a backgrounders page intended to help journalists understand the context and current, available evidence on specific health-policy issues, as well as new pages highlighting events and providing additional resources for journalists.

EvidenceNetwork.ca's second e-book has just been published: *Making Evidence Matter in Canadian Health Policy* is available on Apple, Google Play, Kindle, and as a PDF document. Since its publication in 2013, our first eBook, Canadian Health Policy in the News: Why Evidence Matters has garnered more than 13,000 reads.

In May 2013, EvidenceNetwork.ca hosted Dr. John Lister, Senior Lecturer in Journalism at the Coventry University Department of Media and Communication. He presented a web seminar entitled "What We've Learned: Working With journalists Across Europe on Health Reporting."

In fall 2013, EvidenceNetwork.ca hosted Trudy Lieberman's Fulbright-sponsored tour of Canada, which included stops in Montreal, Ottawa, Toronto, and Winnipeg. Lieberman is former President of the Association of Health Care Journalists in the U.S. Full details of Dr. Lieberman's tour are available on the EvidenceNetwork.ca webpage, "Raising the Bar on Health Policy Reporting: Trudy Lieberman's Cross-Canada Tour."

EvidenceNetwork.ca's future goals include the continued expansion of current activities and the development of an international panel of healthcare journalists.

#### MCHP in the News

MCHP researchers are routinely interviewed by a variety of media agencies for their expertise in health policy and health-policy research. The releases of deliverables are especially productive times at MCHP for public knowledge translation. Some of our researchers also write op-eds on topics related to their fields. A complete list of interviews, articles, media features, media releases, and op-eds is available in Appendix 3.

# Education



# **HIGHLIGHTS**

- 42 supervised graduate students
- 20 thesis projects accessing the repository
- 7 graduate courses taught
- 7 undergraduate courses taught
- 9 award-winning students

#### Overview

MCHP's commitment to population-health research includes growing the next generation of scientists. Our staff supervises and advises undergraduate and graduate students in the fields of epidemiology and health services research. MCHP researchers teach courses, lead tutorials, and give guest lectures in graduate and undergraduate university programs. Details of teaching activities are given in Appendix 5. MCHP also provides educational resources to students and professionals, and recognizes student achievement.

### **Student Supervision**

Student supervision is a core activity of full-time researchers at MCHP. These activities facilitate collaborations at the University of Manitoba, and at institutional, provincial, national, and international levels. In 2013/2014, the majority of MCHP researchers supported students in supervisory and advisory roles, as thesis committee members, or as external examiners. In addition to supervising or advising 19 University of Manitoba graduate students, MCHP researchers participated as thesis committee members and external reviewers for another 22. Nine graduate students from other Canadian institutions were supported in various capacities. A complete list of undergraduate and graduate student projects, detailing MCHP involvement, is given in Appendix 6.

Mentorship of undergraduate students included eight medical students enrolled in the Multiple Specialty Rotation Clerkship Program. The Multiple Specialty Rotation involves researching, writing, and presenting short projects related to current public health issues, programs, and policies. Three additional undergraduate students this year participated in a larger research project under the direction of Mark Smith. The students' work was enabled by University of Manitoba Undergraduate Research awards. The resulting report—"Investigating Access to Health and Social Services for Residents of Manitoba Housing"—was released in November, and is available on the MCHP website.

# Ongoing and Completed Thesis Projects Accessing the Repository

Thesis projects benefit significantly from the data available in MCHP's Population Health Research Data Repository. Students who require access to the Repository must apply and obtain accreditation training from MCHP's data access unit. Access can be maintained throughout a thesis project and after its completion to facilitate publications. Appendix 8 shows all ongoing and completed thesis projects that accessed the Repository in 2013/2014. Some projects were completed before March 31, 2013, but maintained access to facilitate publications, including two MCHP researchers: Dr. Elaine Burland and Dr. Greg Finlayson.

# Student Awards and Recognition

Recognizing achievement is an important part of student supervision and mentorship. At MCHP, academic excellence is rewarded predominantly in the form of graduate student awards. This section also recognizes students who have earned other forms of recognition for their MCHP-supervised research, or other research work that makes significant use of the Population Health Research Data Repository.

### Graduate Students Awarded by MCHP

#### **Evelyn Shapiro Award for Health Services Research**

Financial support up to \$5,000 is provided by MCHP to students who are enrolled in the graduate program at the University of Manitoba (preferably in the Faculty of Medicine) and whose thesis research uses the Population Health Research Data Repository. This award was designed to support the work of graduate students in an area of health services research by subsidizing the cost of data access. To qualify, applicants must demonstrate academic achievement (min. cumulative 3.75 GPA) and show strong research potential in the field of health services. This award was established in the name of Dr. Evelyn Shapiro, a renowned health services researcher, formerly of MCHP, whose contributions include the development of Manitoba's home care program.

#### Leah Crockett, MSc student

Community Health Sciences, Faculty of Graduate Studies

Advisor: Dr. Marni Brownell

"Long-term follow up of late preterm births in Manitoba: How does socioeconomic status impact later childhood outcomes?"

- · MHRC/MICH Coordinated Studentship Award
- · Western Regional Training Centre Stipend

#### Taruwona Manyanga, MSc student

Community Health Sciences, Faculty of Graduate Studies

Advisor: Dr. Randy Fransoo

"Does the increase in BMI associated with Initiation of insulin therapy among youth newly diagnosed with Type 1 Diabetes predict overweight or obesity at age 18?"

MHRC Coordinated Studentship Award (with University of Manitoba Graduate Fellowship)

#### Heather Skelton, MSc student

Medical Rehabilitation, Faculty of Graduate Studies

Advisor: Dr. Marni Brownell

"Fine motor/visual motor skills as a component of school readiness: What can we learn from the Early Development Instrument?"

#### Elizabeth Wall-Wieler, MSc student

Community Health Sciences, Faculty of Graduate Studies

Advisor: Dr. Leslie Roos

"Early adult outcomes: A life course exploration of childhood and adolescent development."

• MHRC Coordinated Studentship Award (with University of Manitoba Graduate Fellowship)

# Graduate Students Supervised by MCHP Researchers

#### Lindsey Dahl, MSc student

Community Health Sciences, Faculty of Graduate Studies

Advisor: Dr. Randy Fransoo

· Western Regional Training Centre Stipend

#### John-Paul Kuwornu, PhD candidate

Community Health Sciences, Faculty of Graduate Studies

Advisor: Dr. Lisa Lix

"Modeling costs for episodes of healthcare utilization."

 Manitoba Health Research Council Coordinated Studentship Award (University of Manitoba Graduate Fellowship and Manitoba Lung Association Studentship)

#### Deanna Mackay, MSc student

Community Health Sciences, Faculty of Graduate Studies

Advisor: Dr. Alan Katz

Western Regional Training Centre Stipend

#### Lorena Plastino, MSc student

Community Health Sciences, Faculty of Graduate Studies

Advisors: Dr. Marni Brownell and Dr. Joe Kaufert

Western Regional Training Centre Stipend

#### Shauna Zinnick, MSc student

Community Health Sciences, Faculty of Graduate Studies

Advisor: Dr. Malcolm Doupe

"Developing and Implementing a Validated Tool to Define the Types of Care Provided by Nursing Home Health Care Aides, and to Allocate Their Time Spent Doing These Different Activities"

MHRC Studentship Award

# Undergraduate Students Supervised by MCHP Researchers

#### **Lindsay Larios, BSc student**

"Investigating Access to Health and Social Services for Residents of Manitoba Housing."

Advisor: Mark Smith

University of Manitoba Undergraduate Student Research Award

#### Mitchel Lyle, BSc student

"Investigating Access to Health and Social Services for Residents of Manitoba Housing."

Advisor: Mark Smith

· University of Manitoba Undergraduate Student Research Award

#### Michael Paille, BSc student

"Investigating Access to Health and Social Services for Residents of Manitoba Housing."

Advisor: Mark Smith

University of Manitoba Undergraduate Student Research Award

#### **Educational and Technical Resources**

MCHP's educational contributions extend to the provision of educational and technical tutorials and workshops. Most of these resources are provided on our website, on the Educational Resources page: http://umanitoba.ca/faculties/medicine/units/community\_health\_sciences/departmental\_units/mchp/education/index.html. This page links to site-specific and off-site teaching materials, including readings and lecture materials for CHSC 7310 Epidemiology of Health Care, a graduate course taught by MCHP researchers. These materials link to MCHP research resources like the MCHP Concept Dictionary and student research guidelines.

Technical resources available on the resources webpage include workshop materials and offsite tutorials for using SAS software, and structural equation statistical modeling techniques. 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 new users with enough SAS knowledge to translate basic research questions into code. This level of training enables the completion of the research project required by CHSC 7310 Epidemiology of Health Care. Intermediate training material is also available for new users. This documentation covers arrays, do loops, first/last by-group processing, retain statements, and how to work with dates. This year, MCHP offered five in-person SAS tutorials, ranging from beginner to intermediate levels. These 20-hour courses were developed and led by Charles Burchill, Associate Director of Data Access and Use at MCHP.

UNIVERSITY OF MANITOBA, FACULTY OF MEDICINE	

# Finance



# FINANCIAL REPORT

The Manitoba Centre for Health Policy gratefully acknowledges the support of the Manitoba Government through our five-year funding agreement with Manitoba Health. The budget given in Table 1 below shows expenditures charged against this fund. In addition to the \$2.325 million received from Manitoba Health, MCHP researchers secure funding from individual and multi-project grants and career awards. MCHP also generates revenue in the form of repository access fees paid by externally administered research grants. In 2013/2014, new funds from these sources totaled approximately \$3.26 million (Figure 2). A percentage breakdown of MCHP's total annual budget is given below in Figure 1.

Table 1: Annual Budget (Manitoba Health Portion), April 1, 2013 - March 31, 2014

<u>Salaries</u>	
Staff	1,611,245.52
Staff Benefits	278,450.14
Payroll Levy	36,096.48
External Contracts	50,233.77
Transfer to CFI Matching*	148,500.00
Salaries Subtotal	\$ 2,124,525.91
Other Expenditures	
General Office Expenses	96,380.33
Equipment	
Purchases	32,849.38
Maintenance	34,431.94
Travel	32,754.34
Transfer to CFI Matching*	 3,796.13
Other Expenditures Subtotal	\$ 200,212.12
Total Expenditures	\$ 2,324,738.03

<sup>\*</sup>These funds were approved (June 1, 2005) to be transferred for use as a Partner Contribution to MCHP's CFI grant

Table 2: Summary of Funding Sources, April 1, 2013 – March 31, 2014

Contracts  Manitoba Health	<u>Amount</u> 2,325,000.00
	\$2,325,000.00
Research Grants	
Canada Foundation for Innovation	
Leading Edge Access and Date Enhancement Research Strategy  —	478,238.94
	\$478,238.94
Canadian Institutes of Health Research	
Canadian Network for Observational Drug Effect Studies, database team	310,000.00
Canadian Network for Observational Drug Effect Studies, knowledge translation team	20,000.00
PATHS equity for children: A program of research into what works to reduce the gap for	400,000.00
Manitoba's children. Injecting evidence into health policy coverage: Working with the media	129,701.00
_	\$859,701.00
Children's Hospital Foundation Inc.	4000,000
Factors that predict out-of home care during childhood	3,570.00
- Tuctors that predict out of frome care during childhood	\$3,570.00
Manitoba Health Research Council	45,570.00
Linking unique clinical and health care use files to better understanding nursing home quality	
care	33,333.00
	\$33,333.00
Manitoba Research and Innovation Fund	
Leading Edge Access and Date Enhancement Research Strategy	478,238.94
	\$478,238.94
Public Health Agency of Canada	
Validation Study on Manitoba Administrative Data for the Purpose of ASD Surveillance	49,316.28
Towards Flourishing: Improving the mental health among new mothers in the Manitoba	
Families First home visiting program	687,893.00
	\$737,209.28
University of Toronto	
Paying for primary care: Relationship between incentives and patient/provider characteristics	20,000.00
<del>-</del>	\$20,000.00
Davanua	\$20,000.00
Revenue	400 140 1E
Repository access and data analysis	498,149.15
	\$498,149.15
Endowments/Personnel Awards	122 557 00
Endowed Chair in Child Health	133,557.00
The Gerry McDole Professorship	24,999.00
	\$158,556.00
Total MCHP Funding	<b>\$5 591 996 21</b>
iotal wich runding	\$5,591,996.31

Figure 1: Funding Sources as a Percent of Annual Budget, April 1, 2013 – March 31, 2014

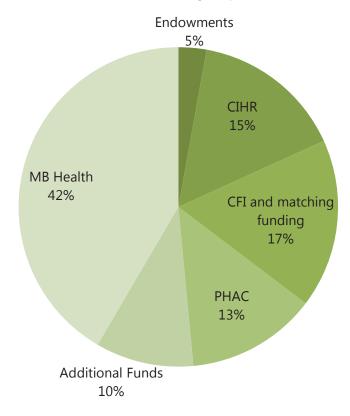
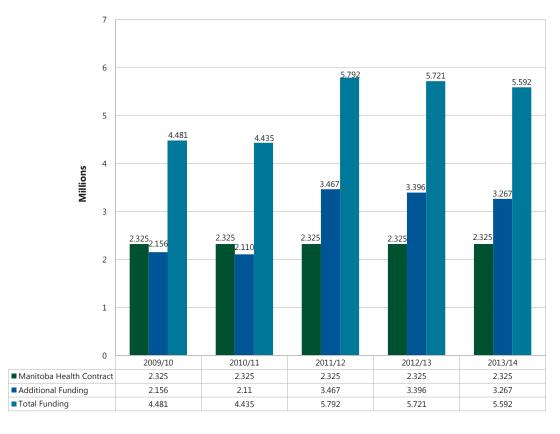


Figure 2: MCHP Total Annual Budget, Five-Year Trend



# **ENDOWMENTS AND GIFTS**

#### **Endowed Chair in Child Health**

Awarded by the Department of Science, Technology, Energy and Mines, Province of Manitoba to support an outstanding child health researcher to coordinate and lead child health research at MCHP.

# Evelyn Shapiro Health Services Research 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 Population Health Research Data Repository housed by the Manitoba Centre for Health Policy.

#### Personnel Awards

Fransoo, R. The Gerry McDole Professorship in Improved Healthcare Delivery to Rural, Remote and Underserved Populations of Manitoba. \$150,000, 2010-2013.

#### MCHP-Administered Research Grants

#### **Canadian Foundation on Fetal Alcohol Research**

Brownell M, Hanlon-Dearman A, Elias B, Chateau D, Phillips-Beck W, Roos N, Chudley A, Longstaffe S. \$50,000, 2011-2013. "Utilization of Health and Social Services by Manitoba First Nations Children with FASD."

#### **Canada Foundation for Innovation**

Martens PJ. \$1,453,780, 2010-2014. "Leading Edge Access and Data Enhancement Research Strategy". Matching funds provided by MRIF.

#### **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."

Martens PJ, Caetano PA, Alessi-Severini S, Chateau D, Katz A, Mahmud S, Metge C, Raymond C, Vercaigne L, Bugdan S, Targownik L. \$320,000, 2011-2015. "Canadian Network for Observational Drug Effect Studies (**CNODES**), Database Team."

Martens PJ, Caetano PA, Levy A, Sketris I. \$75,000, 2011-2015. "Canadian Network for Observational Drug Effect Studies (**CNODES**), Knowledge Translation Team."

Martens PJ, \$1,900,000, 2011-2013. "PATHS equity for children: A program of research into what works to reduce the gap for Manitoba's children." Programmatic grant with CIHR and the Heart and Stroke Foundation of Canada.

Roos NP, Martens PJ, Cassels, AK, Hirst N, Driedger SM, Katz A, et al. \$370,800, 2009-2013. "Injecting evidence into Health Policy Coverage: 'KT'ing the Mythbusters." Matched grant with Manitoba Health Research Council.

Roos LL, Roos NP, Samuel SM, Bolton JM, Katz L. \$98,984, 2011-2014. "Childhood Social Factors in Development – the CHILDSOC Project."

Roos NP, Martens, PJ, Nuamah O, et al. \$397,321, 2012-2015 "Injecting Evidence into Health Policy Coverage: Working with the Media."

#### **Children's Hospital Foundation Inc.**

Brownell M, \$3,570, 2013-2014 "Factors that predict out-of home care during childhood: A comparison of three developed countries."

#### **Manitoba Health**

Martens PJ. \$11,625,000, 2010–2015. Manitoba Centre for Health Policy operating contract.

#### **Manitoba Health Research Council**

Brownell M, Yallop L. \$3725, 2011-2013. "Attention-deficit/hyperactivity disorder in Manitoba adults: A population-based study." Dissertation award.

Doupe M, \$100,000, 2011-2014. "Linking unique clinical and health care use files to better understanding nursing home quality care."

Fransoo R, \$51,580, 2010-2013. "Temporal Trends and Sex Differences in Acute Myocardial Infarction (AMI) incidence, mortality, and treatments in Manitoba 1985 to 2010."

Roos NP, Martens, PJ, Nuamah O, et al. \$94,000, 2012-2015. "Injecting Evidence into Health Policy Coverage: Working with the Media." (matching fund with CIHR award)

#### Manitoba, Innovation, Energy and Mines

Brownell M, Elias B. \$15,000, 2011-2013. "Incident Mapping."

#### **Manitoba Research and Innovation Fund**

Martens PJ. \$1,453,780, 2010-2014. "Leading Edge Access and Data Enhancement Research Strategy". Matching funds provided by CFI.

#### **Public Health Agency of Canada**

Brownell M, Hanlon-Dearman A, Shooshtari S, et al. \$150,000, 2012-2014. "Validation Study on Manitoba Administrative Data for the Purpose of ASD Surveillance."

Chartier M \$2,584,085, 2011-2015. "Towards Flourishing: Improving the Mental Health among New Mothers in the Manitoba Families First Home Visiting Program (Phase 2).

#### Sunnybrook Research Institute (CIHR collaborative sub-agreement)

Stukel TA, Katz A. \$132,216, 2011-2012. "Health Care System Sustainability through Longitudinal Efficiency: Improve Quality and Lower Costs."

### University of Toronto (sub-agreement of CIHR)

Katz, A. \$60,000, 2012-2016. "Paying for Primary Care: Relationship between Incentives and Patient/ Provider Characteristics."

#### Winnipeg Rh Institute Foundation Inc.

Doupe, M. \$12,000, 2013-2018. "2012 Rh Award."

#### York University (sub-agreement of SSHRC)

Doupe M. \$6,000, 2010-2017. "Re-imagining long-term residential care: An international study of promising practices."

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# Appendices

# **APPENDIX 1: PUBLICATIONS**

# **Books and Book Chapters**

#### 2014

Roos LL. Manitoba Centre for Health Policy. In: Michalos AC, ed. *Encyclopedia of Quality of Life Research*, Springer; 2014.

#### 2013

Martens PJ. Interpretation of Statistics and Quantitative Research. Chapter 11 in Mannel R, Martens PJ, Walker M (co-editors). Core Curriculum for Lactation Consultant Practice (ILCA), Third Edition. Sudbury, MA: Jones & Bartlett, 2013. (released July 2012)

#### Journal Articles

#### 2014

Alsabbagh WM, Dagenais J, Yan L, Lu X, Lix LM, Shevchuk Y, Teare GF, Blackburn DF. Use and misuse of ezetimibe: analysis of use and cost in Saskatchewan, a Canadian jurisdiction with broad access. *Can J Cardiol* 2014;30(2):237-243.

Blais C, Dai S, Waters C, Robitaille C, Smith M, Svenson LW, Reimer K, Casey J, Puchtinger R, Johansen H, Gurevich Y, Lix LM, Quan H Tu, K. Assessing the burden of hospitalized and community-care heart failure in Canada. *Can J Cardiol* 2014;30(3):352-358.

Bolton JM, Au W, Walld R, Chateau D, Martens PJ, Leslie WD, Enns MW, Sareen, J. Parental bereavement after the death of an offspring in a motor vehicle collision: A population-based study. *American Journal of Epidemiology* 2014;179(2):177-185.

Brennan SL, Leslie WD, Lix LM. Is lower income associated with an increased likelihood of qualification for treatment for osteoporosis in Canadian women? *Osteoporosis International* 2014;25(1):273-279.

Broten L, Lacaille D, Avina-Zubieta J, Joseph L, Hanly J, Peschken C, Lix L, Svenson L, O'Donnell S, Jean S, Pineau C, Clarke A, Fortin P, Smith M, Bélisle P, Hudson M, Badley E, Bergeron L, Bernatsky S. Systemic autoimmune rheumatic disease prevalence in Canada: Updated analyses across seven provinces. *Journal of Rheumatology* 2014;41(4):673-679.

Choi BCK, Decou ML, Rasali D, Martens PJ, Mancuso M, Plotnikoff RC, Neudorf C, Thanos J, Svenson LW, Denny K, Orpana H, Stewart P, King M, Griffith J, Erickson T, van Dorp R, White D, Ali A. Enhancing capacity for risk factor surveillance at the regional/local level: a follow-up review of the findings of the Canadian Think Tank Forum after 4 years. *Archives of Public Health* 2014;72(1):2. doi: 10.1186/2049-3258-72-2.

Clouston K, Katz A, Martens P, Sisler J, Turner D, Lobchuk M, McClement S, Crow G. Does access to a colorectal cancer screening website and/or a nurse-managed telephone help line provided to patients by their family physician increase fecal occult blood test uptake?: Results from a pragmatic cluster randomized controlled trial *BMC Cancer* 2014;14:263 [Epub ahead of print].

Dart AB, Martens PJ, Rigatto C, Brownell MD, Dean HJ, Sellers EA. Earlier onset of complications in youth with type 2 diabetes. *Diabetes Care* 2014;37(2):436-443.

Filion KB, Chateau D, Targownik LE, Gerson A, Durand M, Tamim H, Teare GF, Ravani P, Ernst P, Dormuth CR, and the CNODES Investigators. Proton Pump Inhibitors and the Risk of Hospitalization for Community-Acquired Pneumonia: Replicated Cohort Studies with Meta-Analysis. Gut 2014;63(4):552-558.

Kredentser MS, Martens PJ, Chochinov HM, Prior HJ. Cause and rate of death in people with schizophrenia across the lifespan: A population-based study in Manitoba, Canada. J Clin Psychiatry 2014;75(2):154-161.

Lau D, Eurich ET, Majumdar SR, Katz A, Johnson JA. Working-age adults with diabetes experience greater susceptibility to seasonal influenza: A population-based cohort study. Diabetologia 2014;57(4):690-698.

Leslie WD, Lix LM. Comparison between various fracture risk assessment tools. Osteoporosis International 2014;25(1):1-21.

Leslie WD, Lix LM, Yogendran MS, Morin SN, Metge CJ, Majumdar SR. Temporal trends in obesity, osteoporosis treatment, bone mineral density and fracture rates: A population-based historical cohort study. Journal of Bone and Mineral Research 2014;29(4):952-959.

Lipscombe LL, Austin PC, Alessi-Severini S, Blackburn DF, Blais L, Bresee L, Filion KB, Kawasumi Y, Kurdyak P, Platt RW, Tamim H, Paterson JM and the Canadian Network for Observational Drug Effect Studies (CNODES) Investigators\*. Atypical antipsychotics and hyperglycemic emergencies: multicentre, retrospective cohort study of administrative data. Schizophrenia Research 2014;154(1-3): 54-60. (\*note: Patricia J. Martens is a CNODES investigator and co-PI of the CNODES collaborative team).

Lix LM, Yan L, Blackburn D, Hu N, Schneider-Lindner V, Teare GF. Validity of the RAI-MDS for ascertaining diabetes and comorbid conditions in long-term care facility residents. BMC Health Services Research 2014;14(1):17. doi: 10.1186/1472-6963-14-17.

March J, Sareen J, Gawaziuk JP, Doupe M, Chateau D, Hoppensack M, Nour S, Husarewycz W, Palitsky D, Khan S, Leslie WD, Enns MW, Stein MB, Asmundson GJ, Medved M, Logsetty S. Increased suicidal activity following major trauma: A population-based study. J Trauma Acute Care Surg 2014;76(1):180-184.

Norton PG, Murray M, Doupe MB, Cummings GG, Poss JW, Squires JE, Teare GF, Estabrooks CA. Facility versus unit level reporting of quality indicators in nursing homes when performance monitoring is the goal. BMJ Open 2014;42(2):e004488.

Randall JR, Walld R, Finlayson G, Sareen J, Martens PJ, Bolton JM. Risk of suicide and suicide attempts associated with recent diagnosis of mental disorders: a population-based propensity score-matched analysis. Accepted in the Can J Psychiatry, February 21, 2014.

Raghavan M, Martens PJ, Burchill C. Exploring the relationship between socioeconomic status and dogbite injuries through spatial analysis. Accepted for publication in Rural & Remote Health.

Rosella L, Peirson L, Bornbaum C, Kotnowski K, Lebenbaum M, Fransoo R, Martens P, Caetano P, Ens C, Gardnier C, Mowat D. Supporting collaborative use of the diabetes population risk tool (DPoRT) in health-related practice: A multiple case study research protocol. Implementation Science 2014;9(1):35.

#### 2013

Alessi-Severini S, Dahl M, Schultz J, Metge C, Raymond C. Prescribing of psychotropic medications to the elderly population of a Canadian province: A retrospective study using administrative databases. *PeerJ* 2013;1:e168.

Balogh R, Ouelette-Kuntz H, Brownell M, Colantonio A. Factors associated with hospitalizations for ambulatory care sensitive conditions among persons with an intellectual disability-a publicly insured population perspective. *Journal of Intellectual Disability Research* 2013;57(3):226-239.

Bernatsky SB, Lix LM, Lacaille D, O'Donnell S, Bombardier C, The Administrative Data Rheumatology Research and Surveillance Group. Consensus statements for the use of administrative health data in rheumatic disease research and surveillance. *Journal of Rheumatology* 2013;40(4):537.

Bolton JM, Au W, Leslie WD, Martens PJ, Enns MW, Roos LR, Katz LY, Wilcox HC, Erlangsen A, Chateau D, Walld R, Spiwak R, Seguin M, Shear K, Sareen J. Parents bereaved by offspring suicide. A population-based longitudinal case-control study. *JAMA Psychiatry* 2013;70(2):158-167.

Brennan SL, Leslie WD, Lix LM. Associations between adverse social position and bone mineral density in women aged 50 years or older: data from the Manitoba Bone Density Program. *Osteoporosis International* 2013;24(9):2405-2412.

Brownell M, Jutte DP. Administrative data linkage as a tool for child maltreatment research. *Child Abuse & Neglect* 2013;37:120-124.

Brownell MD, Hanlon-Dearman AC de B, MacWilliam LR, Chudley AE, Roos NP, Yallop LP, Longstaffe SEA. Use of health, education, and social services by individuals with fetal alcohol spectrum disorder. *Journal of Population Therapeutics and Clinical Pharmacology* 2013;20(2):e95-e106.

Burland E, Martens P, Brownell M, Doupe M, Fuchs D. The evaluation of a fall management program in a nursing home population. *The Gerontologist* 2013;53(5):826-838.

Cui Y, Doupe M, Katz A, Nyhof P, Forget E. Economic evaluation of Manitoba health lines in the management of congestive heart failure. *Healthcare Policy* 2013;9(2):36-50.

Decker KM, Turner D, Demers AA, Martens PJ, Lambert P, Chateau D. Evaluating the effectiveness of cervical cancer screening invitation letters. *Journal of Women's Health* 2013;22(8):687-693.

Dormuth CR, Hemmelgarn BR Paterson JM James MT Teare GF, Raymond CB, Levy AR, Garg AX, Ernst P, for the CNODES investigators\*. High Potency Statins and Acute Kidney Injury: A Multicenter Retrospective Observational Analysis of Administrative Databases. BMJ 2013:346:f880. doi: 10.1136/bmj.f880. (\*note: Patricia J. Martens is a CNODES investigator and co-PI of the CNODES collaborative team)

Estabrooks CA, Poss JW, Squires JE, Teare GF, Morgan DG, Stewart N, Doupe MB, Cummings DD, Norton PG. A profile of residents in prairie nursing homes. *Canadian Journal on Aging* 2013;32(3):223-231.

Fransoo R, Martens PJ, The Need to Know Team, Burland E, Prior HJ, Katz A, Nickel NC, Chateau D. The rising prevalence of asthma: true increase, diagnostic exchange, or diagnostic accuracy? *Healthcare Policy* 2013;8(4):27-34.

Fransoo R, Bucklaschuk J, Prior H, Burland E, Chateau D, Martens P, Need to Know Team. Social gradients in surgical sterilization rates: Opposing patterns for males and females. *J Obster Gynaecol Can* 2013;35(5):454-460.

Garland A, Ramsey CD, Fransoo R, Olafson K, Chateau D, Yogendran M, Kraut A. Rates of readmission and death associated with leaving hospital against medical advice: A population-based study. *CMAJ* 2013;185(14):1207-1214.

Garland A, Olafson K, Ramsey CD, Yogendran M, Fransoo R. Epidemiology of critically ill patients in intensive care units: A population-based observational study. *Crit Care* 2013;17(5):R212.

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## Reports

#### 2013

Finlayson G, Smith M, Burchill C, Towns D, Peeler W, Soodeen RA, Prior H, Huq S, Guenette W. *Social Housing in Manitoba. Part I: Manitoba Social Housing Data*. Winnipeg, MB: Manitoba Centre for Health Policy; 2013.

Fransoo R, Martens P, The Need to Know Team, Prior H, Burchill C, Koseva I, Bailly A, Allegro E. *The 2013 RHA Indicators Atlas*. Winnipeg, MB: Manitoba Centre for Health Policy; 2013.

Fransoo R, Martens P, The Need to Know Team, Prior H, Burchill C, Koseva I, Rajotte L. Who is in our Hospitals...and why? Winnipeg, MB: Manitoba Centre for Health Policy; 2013.

Katz A, Martens P, Chateau D, Bogdanovic B, Koseva I, McDougall C, Boriskewich E. *Understanding the Health System use of Ambulatory Care Patients*. Winnipeg, MB: Manitoba Centre for Health Policy; 2013.

Smith M, Finlayson G, Martens P, Dunn J, Prior H, Taylor C, Soodeen RA, Burchill C, Guenette W, Hinds A. *Social Housing in Manitoba*. *Part II: Social Housing and Health in Manitoba*: A *First Look*. Winnipeg, MB: Manitoba Centre for Health Policy; 2013.

# **APPENDIX 2: PRESENTATIONS**

#### 2014

Brownell M. PATHS Equity for Children: an overview. Evidence to Action: Second Annual Knowledge. Paper presented at: Exchange Between MCHP and Manitoba Government; February 20, 2014; Winnipeg, MB.

Brownell M. Risk assessment: lessons from Manitoba, Canada. Frontiers of Risk Epidemiology in Early Childhood. Paper presented at: Expert meeting at the German Youth Institute; January 30, 2014; Munich Germany.

Brownell M. The long-term impact of full-day kindergarten. Paper presented at: Evidence to Action: Second Annual Knowledge Exchange Between MCHP and Manitoba Government; February 20, 2014; Winnipeg, MB.

Doupe M. The Cost of Publicly Supported Housing for Seniors - Implications for Future Funding. Paper presented at: The Need to Know Team Workshop No. 39; February 3-4, 2014; Winnipeg, MB.

Heaman MI, Kingston DA, Brownell MD, Helewa ME, Derksen SA, McGowan KL. Predictors of prenatal and postpartum psychological distress: A population-based study in Manitoba, Canada. Paper presented at: Society for Gynecologic Investigation 61st Annual Scientific Meeting; March 28, 2014; Florence, Italy.

Katz A, Singer A. Opportunities for Practice Reflection and Continuous Improvement, Peer Collaboration and Education Session. Paper presented at: Manitoba Peer-to-Peer Network; January 29, 2014; Winnipeg, MB.

Leslie WD, Lix LM, Morin SN, Majumdar SR, Winzenrieth R, Hans D. Difference in spine TBS between men and women: Real or technical? Paper presented at: Annual meeting of the International Society of Clinical Densitometry; February 20-22, 2014; Orlando, Florida.

Leslie WD, Majumdar SR, Lix LM. Lies, damn lies and reclassification statistics: Implications for assessing new risk factors for improving fracture risk prediction with FRAX. Paper presented at: Annual meeting of the International Society of Clinical Densitometry; February 20-22, 2014; Orlando, Florida.

Martens PJ, Fransoo R. MCHP – getting to the heart of MCHP/RHAM collaborations. Paper presented at: RHAM Council of Chairs meeting; February 13, 2014; Winnipeg, MB. Invited speaker.

Martens PJ. MCHP – who we are and what we do. Paper presented at: CancerCare MB Board of Directors; January 16, 2014; Winnipeg, MB. Invited speaker.

Roos N, Uzonna J, Keynan Y, Kobinger G. 'Publish to Flourish' Workshop, organized by the Medical Microbiology Student Council, University of Manitoba; March 19, 2014; Winnipeg, MB.

Wall-Wieler E, Roos LL, Chateau D. Early Childhood is Overrated – A Life Course Perspective Using Siblings and Populations. Poster Presented at: Canadian Institute for Advanced Research Ideas Exchange Symposium in Honour of Clyde Hertzman; February 6, 2014; Toronto, ON.

#### 2013

Alsabbagh MW, Lemstra M, Eurich D, Lix LM, Wilson TW, Watson E, Blackburn DF. Socio-economic status and non-adherence to anti-hypertensive drugs: A systematic review and meta-analysis. Paper presented at: Canadian Association of Population Therapeutics; November 2013; Toronto, ON.

Arim RG, Guèvremont A, Kohen DE, ABrehaut JC, Miller AR, McGrail K Brownell M, Lach LM, Rosenbaum, PL. The implementation of a Case-Mix System approach to categorizing child health using Canadian administrative health data. Poster presented at: Canadian Association of Paediatric Health Centres; October 20-23, 2013; Toronto, ON.

Azad MB, Dahl ME, Brownell M, Chartier M, Letourneau N, Kozyrskyj AL. Role of maternal distress in the perinatal programming of allergic disease. Paper presented at: DOHAD: Developmental Origins of Health and Disease; November 17-20, 2013; Singapore.

Brownell M, Chartier M, Santos R. The effects of poverty on educational outcomes: findings from the Manitoba Centre for Health Policy. Workshop presented to: Instruction, Curriculum and Assessment Branch, Manitoba Education; April 17, 2013; Winnipeg MB.

Brownell M, Chartier M. How are Manitoba's Children Doing? Workshop presented to: Provincial Healthy Child Advisory Committee; October 3, 2013; Winnipeg MB.

Brownell M, Hanlon-Dearman A, Chudley A, MacWilliam L, Longstaffe S, Roos N, Yallop L. Use of health and social services by children and youths with FASD. Paper presented at: Canadian Association for Health Services and Policy Research, 2013 Annual Conference; May 28, 2013; Vancouver BC.

Brownell M, Martens P, Katz A, Chateau D, Burland E, Nickel N, Goh CY and the PATHS Equity Team members. Overview of the PATHS Equity for Children Research Program. Poster presented at: Canadian Public Health Association National Conference; June 11, 2013; Ottawa, ON.

Brownell M, Martens P, Katz A, Chateau D, Burland E, Nickel N, Goh CY and the PATHS Equity Team Members. Overview of the PATHS Equity for Children research program. Paper presented at: Canadian Association for Health Services and Policy Research, 2013 Annual Conference; May 28, 2013; Vancouver BC.

Brownell M. How are Manitoba's children doing? Paper presented at: Family Services and Labour Lunch and Learn Session; May 24, 2013; Winnipeg MB.

Brownell M. Identification of factors and supports that contribute to the educational success of students in care. Paper presented at: 20th Annual RHA Workshop; October 29, 2013; Winnipeg, MB.

Brownell M. Putting the pieces together: using linked data at the Manitoba Centre for Health Policy to study child outcomes. Paper presented at: Saskatchewan Epidemiology Association 2013 Fall Symposium; November 7, 2013; Regina, SK. Keynote presentation.

Brownell M. Putting the pieces together: Using the population health research data repository to study children's developmental trajectories. Paper presented at: the Community Health Sciences Colloquium and Grand Rounds; April 19, 2013; Winnipeg, MB.

Brownell MD, Hanlon-Dearman A, Chudley A, MacWilliam L, Longstaffe S, Roos NP, Yallop L. Use of Health and Social Services by Children and Youths with Fetal Alcohol Spectrum Disorder. Paper presented at: First International Conference on Prevention of FASD; September 23, 2013; Edmonton, AB.

Brownell, M. How do experiences in childhood translate into health inequity? Paper presented at: Canadian Mental Health Association 2013 Annual Conference; October 17, 2013; Ottawa, ON. Keynote Address.

Chartier MJ, Attawar D, Volk J, Quddus F, McCarthy J-A, and the Towards Flourishing Team. Integrating a Mental Health Promotion Strategy for Families in the Postpartum Period: Perspectives from Parents and Public Health Staff. Paper presented at: Canadian Association of Health Services and Policy Research Conference; May 29 2013; Vancouver, BC.

Chartier MJ, Dart A, Komenda P, Tangri N, Nickel N, Walld R, Bogdanovic B, Burchill C, McGowan K, Rajotte L. Care of Manitobans Living with Chronic Kidney Disease. Paper presented at: Manitoba Centre for Health Policy –Advisory Board; May 23, 2013; Winnipeg, MB.

Chartier MJ, Dart A, Komenda P, Tangri N, Nickel N, Walld R, Bogdanovic B, Burchill C, McGowan K, Rajotte L. Care of Manitobans Living with Chronic Kidney Disease. Paper presented at: Manitoba Centre for Health Policy – Manitoba Health Workshop; May 3, 2013; Winnipeg, MB.

Chartier MJ, Volk J, Cooper M, and the Towards Flourishing Team. Vers l'épanouissment. Paper presented at: Table de recherche de la coalition de la petite enfance; May 16, 2013; Winnipeg, MB.

Chartier MJ, Volk J, Cooper M, and the Towards Flourishing Team. Towards Flourishing Mental Health Promotion Strategy. Paper presented at: Policy Discussion Forum: Exploring Sustainability of Mental Health Promotion in Manitoba; May 10, 2013; Winnipeg, MB.

Coo H, Ouellette-Kuntz H, Lam YM, Brownell M, Flavin M, Roos LL. Can we confirm an association between shorter interpregnancy intervals and autism? Poster presented at: IMFAR 2013, Donostia/San Sebastián; May 2-4, 2013; Basque Country, Spain.

Dansu B, Lix LM, Sajobi T. Testing for response shift in longitudinal health related quality of life data. Paper presented at: Canadian Health Student Research Forum; June 3-6, 2013; Winnipeg, MB.

Dansu B, Sajobi T, Lix LM. Statistical inference for discriminant function coefficients in doubly multivariate data. Paper presented at: Statistical Society of Canada annual meeting; May 26-29, 2013; Edmonton, AB.

Doupe M, Mcgregor M, Sivananthan S. Provincial Variation in Publically-funded Nursing Home Bed Supply in Canada: Exploring what matters. Paper presented at: Re-imagining Long-Term Care workshop (Do Regulations Make it Harder to Care?); May 28, 2013; Toronto ON.

Doupe M. Defining the Capabilities of the Newly Implemented Emergency Use Data System in Winnipeg. Paper presented to: Winnipeg Regional Health Authority Board of Directors; September 24, 2013; Winnipeg, MB.

Doupe M. Seniors' Housing Transitions and the Housing Continuum/Continuum of Care in Manitoba. Paper presented to: National Housing Research Committee; November 4, 2013; Ottawa, ON. <a href="http://nhrc-cnrl.ca/sites/default/files/Malcolm%20Doupe\_DN\_E.pdf">http://nhrc-cnrl.ca/sites/default/files/Malcolm%20Doupe\_DN\_E.pdf</a>. Accessed May 13, 2014

Doupe, M. Key Issues in Long-term Care Reform: A research perspective. Paper presented at: 30th Annual Centre on Aging Spring Research Symposium; May 6, 2013; Winnipeg, MB.

Finlayson GE, Smith M, Martens P. Brownell, M. Fransoo R, Roos L, Bolton J, the PATHS Team. Neighbourhoods and social housing – does it make a difference for children? Paper presented at: Canadian Public Health Association National Conference; June 10-13, 2013; Ottawa, ON.

Fournier-Gawryluk J, Clifton R, Brownell M, Atleo M. Our education system: the good, the bad and the solutions. Paper presented at: University of Manitoba Visionary Conversations series; May 22, 2013; Winnipeg, MB.

Fransoo R, Martens P, The Need To Know Team, Prior H, Burchill C. Alternate Level of Care (ALC) Patients in Hospitals: Who are they? Poster presented at: CAHSPR conference; May 28-30, 2013; Vancouver, BC.

Fransoo R. Health and health equity in Prairie Mountain Health. Paper presented at: Workshop with XX of PMH region; March 14, 2014; Brandon, MB.

Fransoo R. Health and health inequity. Paper presented at: Day-long workshop with board members and senior management team of Southern RHA; November 8, 2013; Niverville, MB.

Fransoo R. Presentation and discussion of results from a number of MCHP research projects with members of the Brandon Urban Aboriginal Peoples' Council; April 29, 2013; Brandon, MB.

Green M, Wong ST, Lavoie JG, Kwong J, MacWilliam L, Patterson S, Liu G, Katz A. Admission to Hospital for Pneumonia and Influenza Attributable to Pandemic H1N1 Influenza. Paper presented at: Health Services and Policy Research Conference; December 3, 2013; Wellington, New Zealand.

Heaman MI, Martens PJ, Brownell MD, Chartier MJ, Helewa ME, Derksen SA, Lennon S. The association of inadequate prenatal care and maternal-infant outcomes: A population-based study. Paper presented at: BIT's 2nd International Congress of Gynaecology and Obstetrics 2013, in conjunction with the 1st Annual Global Health Conference; October 12, 2013; Dalian, China.

Katz A, Martens P, Brownell M, Chateau D, Burland E, Nickel N, PATHS Equity Team Members. Overview of PATHS Equity for Children Program of Research. Paper presented at: Health Services and Policy Research Conference; December 2, 2013; Wellington, New Zealand.

Katz A, Martens P, Chateau D, Bogdanovic B, Koseva I. Do Specialists Provide Better Quality of Care for Patients with Chronic Disease? Paper presented at: Canadian Association for Health Services and Policy Research, 2013 Annual Conference; May 29, 2013; Vancouver BC.

Katz A, Swanson A, Woodgate R, Duhamel T. Primary Prevention Syndicate – Challenge Grants. Paper presented at: Partners in Planning for Healthy Living Annual General Meeting; May 31, 2013; Winnipeg, MB.

Katz A. Primary Prevention – Developing a research agenda to reduce chronic disease incidence. Winnipeg, Manitoba, October 8, 2013.

Katz A. Primary Prevention Research in Manitoba: Opportunities and Priorities. Paper presented at: Primary Prevention Research Workshop; May 4, 2013 Winnipeg, MB.

Katz A. Service Quality Partners: The Manitoba Health Research Advantage: The MCHP Data Resource. Winnipeg, MB, September 2013.

Kendall C, Lix LM, Liu J. Latent variable scoring methods for response shift in longitudinal patient-reported outcomes. Paper presented at: 41st Annual Meeting of the Statistical Society of Canada; May 26-29, 2013; Edmonton, AB.

Kohen DE, Arim RG, Guèvremont A, Brehaut JC, Miller AR, McGrail K Brownell M, Lach LM, Rosenbaum PL. Implementing the Children with Special Health Care Needs (CSHCN) Screener using Canadian administrative health data. Poster presented at: Canadian Association of Paediatric Health Centres; October 20-23, 2013; Toronto, ON.

Kuwornu JP, Lix LM, Quail JM, Wang E, Osman M, Teare GF. Determinants of time to an episode of care for a recurrent chronic obstructive pulmonary disease exacerbation. Paper presented at: 2013 Annual Canadian Association for Health Services and Policy Research; May 26-30, 2013; Vancouver, BC.

Kuwornu JP, Lix LM, Shooshtari S. Methods for measuring multimorbidity clusters using population-based data. Paper presented at: Canadian Health Student Research Forum; June 3-6, 2013; Winnipeg, MB.

Lataianu B, Feng C, Lix LM. Local dependence in latent class analysis: A computational example. Paper presented at: 41st Annual Meeting of the Statistical Society of Canada; May 26-29, 2013; Edmonton, AB.

Leslie B, Lix LM, Brennan S. Is lower income associated with an increased likelihood of qualification for treatment of osteoporosis in Canadian women? Paper presented at: American Society for Bone and Mineral Research Annual Meeting; October 4-7, 2013; Baltimore, Maryland.

Leslie B, Lix LM, Brennan S. The performance of FRAX® according to different levels of socioeconomic status. Paper presented at: American Society for Bone and Mineral Research Annual Meeting; October 4-7, 2013; Baltimore, Maryland.

Levitt C, Katz A, Mangin D, Pirotta M, Reeve J, Bazemore A, Haggerty J. Research as Core Business of Colleges/Academies of Family Medicine/General Practice: Is It Overlooked? Poster presented at: North American Primary Care Research Group Annual Meeting; November 12, 2013; Ottawa, ON.

Lix LM, Nie Y. Estimating completeness of rheumatoid arthritis prevalence estimates in administrative health databases: application of capture-recapture methods through a retrospective cohort study and simulation study. Paper presented at: Canadian Society of Epidemiology and Biostatistics Student Conference; June 22-23, 2013; St. John's, NL.

Lix LM, Kuwornu JP, Kephart G, Sidkar K, Quan H. Completeness of physician billing claims for diabetes prevalence estimation. Paper presented at: Canadian Society of Epidemiology and Biostatistics Conference; June 22-23, 2013; St. John's, NL.

Lix LM, Nie Y. Estimating completeness in administrative databases for ascertainment of Parkinson's disease: Application of capture-recapture methods. Paper presented at: 26th Canadian Health Student Research Forum; June 3-6, 2013; Winnipeg, MB.

Lix LM, Yao X. Multiple imputation for measurement error correction in administrative health databases: Effect of the misclassification mechanism. Paper presented at: 10th International Conference on Health Policy Statistics; October 9-11, 2013; Chicago, Illinois.

Manyanga T, Fransoo R, Martens P, Prior H, Chateau D. Do Overweight or Obese individuals in Manitoba use more health services than others? Poster presented at: CAHSPR conference; May 28-30, 2013; Vancouver, BC.

Martens PJ, Chochinov H, Prior H. The end-of-life experience for people living with schizophrenia: where do people die, and of what cause? A population-based comparative study in Manitoba, Canada. Paper presented at: Canadian Public Health Association National Conference; June 10-13, 2013; Ottawa, ON.

Martens PJ, Tamblyn R. CIHR Programmatic Grant Writing 101. Paper presented at: CIHR IHSPR Grant Writing Workshop – CAHSPR Conference; May 27, 2013; Vancouver, BC. Invited workshop leader.

Martens PJ. Breastfeeding – a public health imperative. Paper presented at: ILCA International Conference; July 24-28, 2013; Melbourne, Australia. Invited plenary speaker.

Martens PJ. Taking the mystery out of planning research studies. Paper presented at: Morning workshop for ILCA International Conference; July 24-28, 2013; Melbourne, Australia. Invited Speaker.

Martens PJ. Getting Evidence into Action: Dressed for Success – the power of linkages. Paper presented at: InspireNet BC – 4<sup>th</sup> Annual Conference; September 16, 2013; Vancouver, BC. Invited plenary speaker.

Martens PJ. Reflections on the CancerCare Journey – from suspicion to diagnosis ... a research scientist becomes a client. Paper presented at: Community Care Cancer Conference; September 20, 2013; Winnipeg, MB. Invited panel member.

Martens PJ. Seeing the big picture of northern health and healthcare of Metis and First Nations people in Manitoba: do healthcare patterns reflect underlying need? Paper presented at: Arctic Health Workshop, Aarhus University; April 17-18, 2013; Aarhus, Denmark. Invited plenary speaker.

Martens PJ. Taking the mystery out of planning research studies – Quantitative research and program evaluation designs. Paper presented at: Ecology of Infectious Diseases Summer Institute; May 6, 2013; Winnipeg, MB. Invited lecturer.

Martens PJ. A few of my favourite things: neat Manitoba breastfeeding research studies, and beyond. Paper presented at: Healthy Child Manitoba Office: Baby Friendly Conference; May 7, 2013; Winnipeg, MB. Invited plenary speaker.

Martens PJ. Dress for success: The power of linkages. Paper presented at: CIHI Health Data Users' Day: Building capacity, making connections; May 27, 2013; Vancouver, BC.

Martens PJ. Reflections on the CancerCare Journey – from suspicion to diagnosis ... a research scientist becomes a client. Paper presented at: CancerCare Journey Steering Committee; July 17, 2013; Winnipeg, MB.

Martens PJ. Remaining Relevant – lessons learned from MCHP. Paper presented at: CIHI Board of Directors' Meeting; June 20, 2013; Winnipeg, MB. Invited speaker.

Martens PJ. Survivor Ottawa: writing a summary winner for CIHR! Paper presented at: University of Manitoba ORS Session: Effectively communicating and selling your research project in your research summary! May 31, 2013; Winnipeg, MB.

Metcalfe A, Lix LM, Johnson J, Bernier F, Currie G Lyon AW, Tough SC. Impact of under-ascertaining comorbid conditions at delivery on estimated disease prevalence in pregnant population. Paper presented at: Society for Epidemiologic research/Society for Prenatal Epidemiologic Research annual meeting; June 17-18, 2013; Boston, Massachusetts.

Metge CJ, Chartier M, Shaw S, Taylor C, Charette C, Chateau D, the PATHS Team. Decreasing inequity in child outcomes (PATHS): The effect of In-School Clinics on teen pregnancy & STI rates. Paper presented at: Canadian Public Health Association National Conference; June 10-13, 2013; Ottawa, ON.

Nickel NC, Labbok MH. No child left behind: Policy relevant approaches to measuring and reporting trends in breastfeeding inequalities. Paper presented at: 2013 Annual Meeting & Exposition of the American Public Health Association; November 2013; Boston, Massachusetts.

Nickel NC, Martens PJ, Chateau D, Sarkar J, Taylor C, Goh CY, Burland E, Brownell M. Check under the blankets: Have improvements in breastfeeding rates left some behind? Paper presented at: CPHA Conference: Moving Public Health Forward: Evidence, Policy, Practice; June 2013; Ottawa, ON.

Nickel NC, Martens PJ, Chateau D, Sarkar J, Taylor C, Goh CY, Burland E, Brownell M. Are improvements in breastfeeding leaving some behind? Monitoring trends in health inequalities-A PATHS Equity for Children Project. Paper presented at: 2013 Annual CAHSPR Conference; May 2013; Vancouver, BC.

Nickel NC, N MacHardy, Labbok MH, Barnett J, Bonuck K. Relationship of human milk feeding with infant health outcomes: A longitudinal analysis of BINGO and PAIRINGS study data. Paper presented at: 2013 Annual Meeting & Exposition of the American Public Health Association; November 2013; Boston, Massachusetts.

Nickel NC. Baby Friendly Quality Improvement Efforts. Paper presented at: 2013 Baby Friendly Manitoba Conference; September 2013; Winnipeg, MB.

Roos N. EvidenceNetwork.ca – Opportunities. Paper presented to: George and Fay Yee Centre for Healthcare Innovation, Leadership Team; November 28, 2013; Winnipeg, MB.

Sajobi T, Lix LM, Sawatzky R, Mayo N, Hopman W. Relative weight analysis for response shift detection in longitudinal health-related quality of life. Paper Presented at: International Society for Quality of Life Research Conference; October 9-12, 2013; Miami, Florida.

Sawatzky R, Chan E, Sajobi T, Zumbo B, Lix LM. An explanatory model for response shift in the SF-36 in an inflammatory disease cohort. Paper presented at: International Society for Quality of Life 20th Annual Research Conference; October 9-12, 2013; Miami, Florida.

Sexton KA, Walker JR, Graff L, Clara I, Lix LM, Carr R, Rogala L, Miller N, Bernstein C. Neuroticism and early disease activity predict more active 50 year course of inflammatory bowel disease in a community sample. Paper presented at: Canadian Psychological Association Annual Convention; June 13-15, 2013; Quebec City, QC.

Shooshtari S, Brownell M, Ouellete-Kuntz H, Naghipur S, Temple B, Yu CY, Hennen B, Dik N, Burchill C. Comparing Hospitalized Dental Care between Persons With and Without Developmental Disabilities in Manitoba. Paper presented at: The Canadian Association of Public Health Dentistry 2013 Scientific Conference and Annual General Meeting; September 28, 2013; Toronto, ON.

Smith M, Finlayson G, Brownell M, Martens P, Chateau D, Fransoo R, Bolton J, Roos L, Burland E, Goh CY and the PATHS Equity Team Members. Children, social housing and neighbourhoods: a PATHS Equity for Children project. Paper presented at: Canadian Association for Health Services and Policy Research, 2013 Annual Conference; May 28, 2013; Vancouver, BC.

Smith M, Finlayson G, Martens P, Dunn J, Prior H, Taylor C, Soodeen R, Burchill C, Guenette W, Hinds A. Social Housing and Health in Manitoba: A First Look. Paper presented at: 4th SHIP Conference; August 28-30, 2013; St. Andrews, Scotland.

Smith M, Finlayson G, Martens P, Dunn J, Prior H, Taylor C, Soodeen R, Burchill C, Guenette W, Hinds A. Social Housing and Health in Manitoba: A First Look. Winnipeg, MB, June 2013.

Smith M. Beyond 'Big Data': Assessing the quality and utility of administrative data for research use. Paper presented at: 4th SHIP Conference; August 28-30, 2013; St. Andrews, Scotland.

Turner D, Elias B, Hall M, Musto G, Kliewer E, Demers A, Hart L, Munro L, Avery-Kinew K, Sagan M, Martens P. Cancer incidence, stage distribution and treatment patterns in Manitoba's First Nations: using cancer registry data in a collaborative environment to improve cancer control. Paper presented at: North American Cancer Registry conference; June 8-14, 2013; Austin, Texas.

Volk S, Chartier M, the Towards Flourishing Project Team. Towards Flourishing: Mental health promotion for families. Paper presented at: Canadian Public Health Association Convention; June 2013; Ottawa, ON.

Wall-Wieler E, Roos LL. Adolescent Health and Educational Achievement: A Life Course Exploration of Siblings and Twins. Poster Presented at: 2013 CSEB National Student Conference; June 22-23, 2013; St. John's, NL.

Wall-Wieler E, Roos LL. Adolescent Health and Educational Achievement: A Life Course Exploration of Siblings and Twins. Poster Presentation at: 2013 Canadian Association for Health Services and Policy Research; May 29-30, 2013; Vancouver, BC.

Wall-Wieler E, Roos LL. Adolescent Health and Educational Achievement: A Life Course Exploration of Siblings and Twins. Poster Presented at: 12th Annual Meeting of the Canadian Health Economist's Study Group; May 22-23, 2013; Winnipeg, MB.

Wong S, Johnston S, Levesque JF, Haggerty J, Scott C, Burge F, Hogg W, Katz A, Glazier R. Organizational, Provider and Patient Surveys: Tools for Performance Measurement in Primary Health Care. Poster presented at: North American Primary Care Research Group Annual Meeting, Ottawa, ON, November 11, 2013.

Wong ST, Green M, Lavoie JG, Wu L, Ma T, Kadhim AJ, Singal D, Katz A. Variation in Approaches to the Management of Pandemic H1N1 Influenza in First Nations Communities in 3 Provinces of Canada. Paper presented at: Health Services and Policy Research Conference; December 3, 2013; Wellington, New Zealand.

Wong ST, Wodchis W, Hogg W, Katz A, Cooke T, Lahtinen M, Wu L, QUALICO-PC Canadian Working Group. QUALICO-PC in Canada-Recruitment, Responses, and Initial Cross Country Comparison with Australia and New Zealand. Paper presented at: Health Services and Policy Research Conference; December 4, 2013; Wellington, New Zealand.

# APPENDIX 3: MEDIA FEATURES AND RELEASES

#### Media Features

Brownell M. Full day kindergarten [live interview]. *Weekday Morning Show*. CBC Information Radio with Marcy Markusa. October 8, 2013.

Brownell M. Study disputes benefits of all-day kindergarten. Winnipeg Free Press. October 12, 2013.

Brownell M. Study disputes benefits of all-day kindergarten. Brandon Sun. October 9, 2013

Brownell M. Benefits of full-day kindergarten challenged in new study. *The Globe & Mail*. October 11, 2013.

Brownell M. Full day kindergarten [Live interview]. *Newstalk* with Larry Fedoruk. 610 CKTB. October 24, 2013.

Brownell M. How a five-year-old taught her mom to read every night. *The Globe and Mail*. November 28, 2013.

Brownell M. Broken childhoods [inquiry testimony]. Printed in story by Mary Agnes Welch; *Winnipeg Free Press*. February 8, 2014.

Chartier M. Ministerial Conference on Canadian Francophones [interview]. CBC Radio-Canada. September 3<sup>rd</sup> 2013.

Doupe M. Comparing the quality of nursing home care in Manitoba and the U.S. [Video]. Evidence Network website platform; 2013. http://umanitoba.ca/outreach/evidencenetwork/archives/17190.

Fransoo R. In the shadow of the bulge. Winnipeg Free Press, August 24 2013.

Fransoo R. People waiting for nursing homes taking up many hospital beds: study. *Winnipeg Free Press*. September 27, 2013. http://www.winnipegfreepress.com/local/People-waiting-for-nursing-homes-taking-up-many-hospital-beds-study-225505842.html. Accessed on May 13, 2014.

Fransoo R. Non-acute care third leading cause for hospital bed use, occupying 264 beds [interview]. CJOB Radio with Richard Cloutier. September 27, 2013.

Fransoo R. Those waiting to leave clog hospitals. Winnipeg Free Press. September 28, 2013.

Fransoo R. Nursing home wait ties up hospital beds: study [interview]. CTV Morning Live. October 1, 2013.

Fransoo R. Report: Manitobans Getting Healthier, Living Longer [interview]. 680 CJOB Radio with Kim Lawson. October 25, 2013.

Fransoo R. Report: Manitobans Getting Healthier, Living Longer [interview]. 680 CJOB Radio with Richard Cloutier. October 25, 2013.

Fransoo R. Manitobans living longer, but health gap widening between rich, poor. *Winnipeg Free Press*. October 25, 2013. http://www.winnipegfreepress.com/breakingnews/Manitobans-living-longer-but-health-gap-widening-between-rich-poor-229246941.html. Accessed on May 13, 2014.

Fransoo R. Manitobans getting healthier, study shows. *CBC News*, October 25, 2013. http://www.cbc.ca/news/canada/manitoba/manitobans-getting-healthier-study-shows-1.2252031. Accessed on May 13, 2014.

Fransoo R. Defying doctors? [interview]. CTV National Interview, December 3, 2013.

Fransoo R. One in four Winnipeggers have mood or anxiety disorder: Report. *Winnipeg Sun.* January 27, 2014.

Fransoo R. Letting kids help kids. Winnipeg Free Press. February 11, 2014

Fransoo R. Older kids can help reduce diabetes in younger ones: Manitoba study. *Winnipeg Free Press*. February 11, 2014.

http://www.ctvnews.ca/health/older-kids-can-help-reduce-diabetes-in-younger-ones-manitoba-study-1.1680207#ixzz2tKvaeQ2R. Accessed on May 13, 2014.

Fransoo R. Mentoring by older kids can help cut diabetes in younger children, Manitoba researchers find. *Toronto Star*. February 14, 2014.

Fransoo R. Canada's obesity rates triple in less than 30 years [interview]. CBC National News with Cameron Macintosh. March 4, 2014.

Fransoo R. Canada's obesity rates triple in less than 30 years [interview]. CBC Radio-Canada with Anne-Laure Favereaux. March 4, 2014.

Katz A. The doctor dilemma. Winnipeg Free Press. March 1, 2014.

Martens PJ. Census Picture far from Perfect. Winnipeg Free Press. September 22, 2013.

Martens PJ. Not Making Census. Winnipeg Free Press. September 15, 2013.

Martens PJ. The Provincial Breastfeeding Strategy [interview]. CTV Winnipeg with Alesia Fieldberg. September 30, 2013.

Martens PJ. Baby Friendly Hospitals and World Breastfeeding Week [interview]. *Morning Live*. CTV Rdaio with Eleanor Coopsammy. September 30, 2013.

Martens PJ. Canadian income data 'is garbage' without census, experts say. *The Globe & Mail*. October 4, 2013.

Martens PJ. The National Household Survey and problems with income variables. *The Globe and Mail*. September 27, 2013.

Martens PJ, Fransoo R. The Manitoba experience of RHA amalgamations [interview]. Chronicle Herald in Halifax with Aaron Beswich. February 27, 2014.

Roos N. Beware drug store dispensing fees. Winnipeg Free Press. April 4, 2013.

Roos N. Beware drug store dispensing fees. *The Huffington Post*. April 4, 2013.

Roos N. Beware drug store dispensing fees. *Medical Post*. April 4, 2013.

Smith M. Manitoba Housing residents ill, injured much more often than other Manitobans: Report. *Winnipeg Free Press.* June 5, 2013.

Smith M. MCHP Deliverable: Social Housing in Manitoba [interview]. CJOB Radio with Richard Cloutier. June 5, 2013.

Smith M. Public housing's health alarm. Winnipeg Free Press. June 6, 2013.

Smith M. Health issues in Manitoba housing [interview]. Morning Live. CTV Radio. June 6, 2013.

Smith M. MCHP Deliverable: Social Housing in Manitoba [interview]. Global Television. June 6, 2013.

Smith M. MCHP Deliverable: Social Housing in Manitoba [interview]. Breakfast Television Winnipeg. June 6, 2013.

## Media Releases

Manitobans Getting Healthier and Living Longer, Health Gap Widens Between Rich and Poor [deliverable press release]. Winnipeg, MB: Manitoba Centre for Health Policy. October 25, 2013.

Manitoba Housing Residents Surveyed on Access to Services [deliverable press release]. Winnipeg, MB: Manitoba Centre for Health Policy. December 10, 2013.

Manitoba Housing Residents Have Higher Levels of Physical Problems and Mental Health Problems [deliverable press release]. Winnipeg, MB: Manitoba Centre for Health Policy. June 3, 2013.

Non-Acute Care third Leading Cause for Hospital Bed Use, Occupying 264 Beds [deliverable press release]. Winnipeg, MB: Manitoba Centre for Health Policy. September 27, 2013.

# APPENDIX 4: COMMITTEE INVOLVEMENT OF MCHP RESEARCH SCIENTISTS

#### Dr. Marni Brownell

Expert Panel on Timely Access to Health and Social Data for Health Research and Health System Innovation

Technical Working Group for the PHAC/CIHI "Pan Canadian Baseline Report on Health Inequalities

Expert Working Group for CIHI Report "Trends in Health Inequity in Canada"

Child Data Centre Development Project Advisory Group, Alberta

Health Care Access Research and Developmental Disabilities (HCARDD) Advisory Board, Centre for Addiction and Mental Health, Toronto, Ontario

International Society for the Prevention of Child Abuse and Neglect (ISPCAN)

Pan-Canadian EDI Academic Group

Advisory Group, Congenital Anomalies Surveillance System in Manitoba

CIHR Peer Review Committee – Health Research Training B

Manitoba Institute for Child Health

Forum for Early Child Development Monitoring

International EDI Technical Group

Advisory Committee on the Development of an Economic Impact Model for Fetal Alcohol Spectrum Disorder

Canadian Association for Health Policy and Services Research

Manitoba Centre for Health Policy Research Funding Committee

College of Reviewers for the Canada Research Chairs Program

St. Amant Centre Community Research Advisory Committee

Canadian Public Health Association

Peer Review Committee, Canadian Initiative on Social Statistics (CISS), Strategic Joint Initiative of SSHRC and Statistics Canada

Society for Research in Child Development

#### **Dr. Mariette Chartier**

Provincial Healthy Child Manitoba Advisory Committee, Healthy Child Manitoba

Executive Committee, Community Health Sciences, Faculty of Medicine, University of Manitoba

Table de recherche, Coalition francophone de la petite enfance

#### Dr. Dan Chateau

**Health Information Privacy Committee** 

Health Sciences Centre Foundation Grant Review Committee

#### **Dr. Malcolm Doupe**

Chair, Annual Knowledge Translation Workshop between The Winnipeg Ongoing Health Region and Manitoba Centre for Health Policy

Academic Selection Committee, and Director of Manitoba First Nations Centre for Aboriginal Health, University of Manitoba

Scientific Advisory Committee, CancerCare Manitoba Foundation Research Operating Grants

Peer Review Committee Member, Social/Population Health Scientific Committee, Manitoba Health Research Council (MHRC)

Reviewer, Abstracts for the Canadian Association of Health Services and Policy Research (CAHSPR) Annual Conference

Board of Directors, Middle Church Home of Winnipeg, Inc.

Planning Committee to Develop the Manitoba Framework for Alzheimer's Disease and Related Dementias

Aging in Place Implementation Advisory Committee, Community Housing with Services Review, Manitoba Health

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

Graduate Committee, Community Health Sciences, Faculty of Medicine, University of Manitoba

University Representative, Health Information Privacy Committee, Manitoba Health and Health Living

Chair, Annual Workshop for the Winnipeg Regional Health Authority / Manitoba Centre for Health Policy

#### **Dr. Greg Finlayson**

Director, Carolyn Sifton Foundation Inc.

Working Group to Create a Canadian Consortium of Cancer Costing

National Physician Database Technical Working Group, Canadian Institute for Health Information

Coordinator, bi-weekly research forums, Manitoba Centre for Health Policy

Member, Canadian Association for Health Services and Policy Research

#### **Dr. Randy Fransoo**

CIHI Pan-Canadian forum on high users of health care (2014-)

CIHI Expert Advisory Group on Hospital Performance (2013-2014)

Department of CHS Graduate Program Committee (2011-)

CIHI advisory group on health indicators for sparsely populated regions (2009-)

Manitoba Critical Care Research Group (2007-)

Cardiovascular Health And Research in Manitoba (CHARM) group (2006-)

Manitoba Community Health Assessment Network (1997-)

#### Dr. Alan Katz

CancerCare Manitoba Guidelines Implementation Steering Committee

Board Member, Canadian Doctors for Medicare

External Reviewer for the Health Research Council of New Zealand

Chair, Research Committee, Department of Family Medicine

Executive Management Committee, Department of Family Medicine

Fiscal Committee, Department of Family Medicine

Medical School Interviews, Faculty of Medicine, University of Manitoba

#### **Dr. Lisa Lix**

American Statistical Association

Canadian Society for Epidemiology and Biostatistics

Statistical Society of Canada

Co-Chair, Science Committee, Canadian Chronic Disease Surveillance System, Public Health Agency of Canada

Planning Committee, 2014 Meeting of the International Health Data Linkage Network

Case Studies Committee, Statistical Society of Canada

Program Committee, Collaborative Graduate Program in Biostatistics, College of Graduate Studies, University of Saskatchewan

Salary Review Committee, School of Public Health, University of Saskatchewan

Research Committee, School of Public Health, University of Saskatchewan

Graduate Program Chairs Committee, School of Public Health, University of Saskatchewan

Health Data Access Working Group, Saskatchewan Academic Health Sciences Network

Advisory Committee, Saskatoon Health Region Public Health Observatory

Expert Advisor, Manitoba Longitudinal Study of Young Adults

Co-Chair, Faculty Advisory Committee, 2013 Statistical Society of Canada Student Conference

Past-President, Biostatistics Section, Statistical Society of Canada

Grants Review Committee, Health Services Evaluation and Interventions Research – A, Canadian Institutes of Health Research

Administrative Data Cardiovascular Working Group, Chronic Disease Surveillance, Public Health Agency of Canada

Founding member, P/T Administrative Data Arthritis Working Group, Chronic Disease Surveillance, Public Health Agency of Canada

#### **Dr. Patricia Martens**

Faculty committee for selection of Chair in Health Systems Innovation, November 2013

Scientific Advisory Committee, Second International Health Data Linkage Conference (Vancouver, BC), April 2014

CIHI Expert Advisory Group on Health System Performance. January – December 2013.

Provincial Health Innovation Network Committee

Manitoba KT Node of KT Canada

Invited Core Member of the Australian National Health and Medical Research Council's International Expert Review Panel (IERP) for the Partnership Centres Program

Reconsideration of Admissions Decisions Committee, Faculty of Medicine, University of Manitoba

Inaugural Scientific Advisory Committee, Institute for Clinical Evaluative Sciences

Advisory Committee to the Population Health Status Reporting Initiative (invited member), National Collaborating Centre for Determinants of Health

Promotion and Tenure Committee, Department of Community Health Sciences, Faculty of Medicine, University of Manitoba

Committee on PhD Comprehensive Examinations, Department of Community Health Sciences, Faculty of Medicine, University of Manitoba

CIHR's Financing, Sustainability, and Governance Working Group – member (Chair: Dr. Pierre-Gerlier Forest). 2011-2013

Faculty Executive Council of the Faculty of Medicine (CHS representative). January 2011 – January 2013.

CHSRF Board of Trustees member (Chair: Dr. Brian Postl). (2009-2014). Finance subcommittee (2009); Governance subcommittee vice-chair (2010); Finance and Investments subcommittees Vice-chair (2011, 2012, 2013).

Member of the Senate Committee on University Research (2006-2009, 2009-2012, 2012-2014), University of Manitoba

Member of the Physician Integrated Network Indicator Advisory Group, Manitoba Health & Healthy Living (2008+)

#### **Dr. Nathan Nickel**

American Journal of Public Health, Peer Reviewer

International Journal for Equity in Health, Peer Reviewer

Journal of Public Health Nutrition, Peer Reviewer

International Breastfeeding Journal, Peer Reviewer

Journal of Mixed Methods Research, Peer Reviewer

BMC Public Health, Peer Reviewer

Journal of Human Lactation, Peer Reviewer

Breastfeeding Medicine, Peer Reviewer

International Data Linkage Conference, Peer Reviewer

American Public Health Association, Peer Reviewer

American Public Health Association

University of North Carolina at Chapel Hill, Alumni Committee

#### **Dr. Leslie Roos**

College of Reviewers, Canada Research Chairs Program

#### **Dr. Noralou Roos**

Member, Canadian Academy of Health Sciences, Standing Committee on Assessments (SCA)

Member, Knowledge Translation Canada

Member, Association of Health Care Journalists

Member, College of Reviewers, Canada Research Chairs Program

Chair, Scientific Panel for E-Health Centres, Medical Research Council, UK

Member, Winnipeg Poverty Reduction Council, Strengthening the Core Working Group.

Member, Academic Enhancement Group, University of Manitoba

Member, United Way of Winnipeg, Early Childhood and Education Working Group

International Faculty Member of the Robert Wood Johnson Health and Society

Scholars Program, Universities of San Francisco and Berkeley

Member, United Way Board of Trustees

Member, University of Manitoba Bannatyne Campus Research Ethics Board

Chair, Promotion and Tenure Committee, Department of Community Health Sciences, University of Manitoba

Member (Scientist), Manitoba Institute of Child Health (MICH)

# APPENDIX 5: COURSES TAUGHT BY MCHP RESEARCH SCIENTISTS

Undergraduate Courses Taught in Various Faculties

Faculty	Course Number	Course Title	Role of MCHP Researchers
Psychiatry		Child and Adolescent Psychiatry	
		Research Methods, Biostatistics, and Critical Review	Dan Chateau (co-instructor)
Medicine	PAEP 7045	Research and Clinical Practice	Dan Chateau (co-instructor)
Medicine		Population Health and Medicine (Block I):	
	PH007, PH012, PH014, PH017	Statistical Methods in Health Research 1-4	Dan Chateau (instructor)
			Malcolm Doupe (tutorial leader) Randy Fransoo (tutorial leader) Patricia Martens (tutorial leader)
	PH020	Applying Statistical Methods in Health Research	Nathan Nickel (tutorial leader)
	PH010	Applying Research Design 3	Alan Katz (instructor & tutorial leader)
	PH013	Secondary Prevention–Screening	Alan Katz (instructor & tutorial leader)
	PH019	Primary, Secondary and Tertiary Prevention 1	Alan Katz (instructor & tutorial leader)
	PH023	Primary, Secondary and Tertiary Prevention 2	Alan Katz (instructor & tutorial leader)
	PH022	Tertiary Prevention–Diagnosis and Treatment	Alan Katz (instructor & tutorial leader)
	PH030	Using the Medical Literature 1	Alan Katz (instructor & tutorial leader)
	PH031	Using the Medical Literature 2	Alan Katz (instructor & tutorial leader)
	PH035	Using the Medical Literature 4	Alan Katz (instructor & tutorial leader) Nathan Nickel (tutorial
	PH066	Canada's Health Care Systems & Physicians' Roles	leader) Alan Katz (instructor & tutorial leader)
	PH069	Health Policy - Applying the Concepts	Malcolm Doupe (tutorial leader)
Medicine		Human Development (Block II)	
		Med III Scholarship in Medicine	Randy Fransoo (tutorial leader) Nathan Nickel (tutorial leader)
Medicine	N/A	Biostatistics and Research Design Review for the MCCQE Licensing Examination	Patricia Martens (instructor)
Nursing (Queen's University)	NURS 800	Advanced Measurement, Design & Analytic Techniques (Advanced Research Design and Analysis)	Gregory Finlayson (instructor)

#### Graduate Courses Taught in the Department of Community Health Sciences

Course Number	Course Title	Role of MCHP
Course Number	Course Title	Researchers
CHSC 7130	Methods in Health Services Research and Evaluation	Randy Fransoo
CH3C /130	INJethous in Health Services Research and Evaluation	(co-instructor)
		Patricia Martens
		(co-instructor)
		Nathan Nickel
		(co-instructor)
CHSC 7310	Enidemialagy of Health Care	Marni Brownell
CH2C /210	Epidemiology of Health Care	(co-instructor)
		Noralou Roos
		(co-instructor)
CHSC 7500	Care Concents in Dublic Health	Randy Fransoo
CH3C /300	Core Concepts in Public Health	(co-instructor)
CHSC 7610	Tools for Causal Inference	Nathan Nickel
CH2C /010	Tools for Causal Interence	(instructor)
CHSC 7620	Statistical Methods for Policy Evaluation and Health Equity	Nathan Nickel
CH3C 7620	Research	(instructor)
CHSC 7730	Tonics in Health Comises Descents	Malcolm Doupe
CH3C //30	Topics in Health Services Research	(instructor)
CUSC 9600	Sonior Sominar in Community Health Sciences	Leslie Roos
CHSC 8600	Senior Seminar in Community Health Sciences	(instructor)

#### Professional Courses Taught in the Department of Community Health Sciences

Due arrene	Course Title	Role of MCHP
Program	Course Title	Researchers
International		
Medical	Critical Thinking and Clinical Reasoning:	Alam Kata (imatus atau)
Graduate	International Medical Graduate Program (Orientation)	Alan Katz (instructor)
Program		

# APPENDIX 6: STUDENT RESEARCH

#### **Undergraduate Student Supervision**

Student Name	Project Area	Degree	Program	Role of MCHP Researchers
Agostinho, Andrea	Type II Diabetes in Canada	BSc (Med)	Multiple Specialty Rotation	Advisor: Malcolm Doupe
Barber, Colin	Injuries among working youth	BSc (Med)	Multiple Specialty Rotation	Advisor: Randy Fransoo
Chapman, Stacy	Barriers to population-based screening	BSc (Med)	Multiple Specialty Rotation	Advisor: Malcolm Doupe
Grexton, TJ	Water quality	BSc (Med)	Multiple Specialty Rotation	Advisor: Randy Fransoo
Kaefer, Nadine	Vaccination of healthcare workers	BSc (Med)	Multiple Specialty Rotation	Advisor: Malcolm Doupe
Larios, Lindsay	Social housing	B.S.W.	Social Work	Advisor: Mark Smith
Lussier, David	bicycle helmet use	BSc (Med)	Multiple Specialty Rotation	Advisor: Randy Fransoo
Lyle, Mitchell	Social housing	B.S.W.	Social Work	Advisor: Mark Smith
Paille, Michael	Social housing	B.H.St.	Human Ecology	Advisor: Mark Smith
Vanderhooft, Rebecca	Home care	BSc (Med)	Multiple Specialty Rotation	Advisor: Randy Fransoo
Zhang, Jason	Head injuries	BSc (Med)	Multiple Specialty Rotation	Advisor: Malcolm Doupe

#### Graduating MSc Students Supported by MCHP Researchers

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Student Name	Degree Sought	Department	MCHP Scientist Role
Bhaskaran, Joanna	Obesity among immigrant children	Psychology	Advisor: Randy Fransoo
Galloway,	Precedence-type test based on the Nelson-Aalen estimator of the cumulative hazard	Statistics	Advisor: Lisa Lix
Katherine	function		

#### Graduating MSc Students Supported by MCHP Researchers, Other Universities

Student Name	Degree Sought	Department	MCHP Scientist Role
Yan, Lin	Topic: Quality of the Resident Assessment Instrument Minimum Dataset (RAI-MDS)	Public Health,	Advisor: Lisa Lix
		University of	
		Saskatchewan	

### Continuing PhD Students Supervised or Advised by MCHP Researchers

Student Name	Topic	Department	MCHP Scientist Role
Comaskey, Brenda	Maternal depression and school readiness: A Manitoba population-based study	Community Health	Supervisor: Noralou Roos
		Sciences	
Erickson, Julie	Changes in the health status of older adults with mental illness admitted to personal	Psychology	Co-Advisor: Malcolm Doupe
	care homes		
Hinds, Aynslie	Evaluation of the Community Wellness Initiative for support of tenants' mental health	Community Health	Supervisor: Patricia Martens
	and wellness	Sciences	
Kuwornu, J.P.	Modeling costs for episodes of healthcare utilization	Community Health	Advisor: Lisa Lix
		Sciences	
Lavigne, Salme	Effects of power toothbrushing on caregiver compliance and on oral and systemic	Community Health	Advisor: Malcolm Doupe
	inflammation in a nursing home population	Sciences	
Randall, Jason	Risk and protective factors for suicidal behaviour in adolescents and young adults	Community Health	Co-Supervisor: Patricia
		Sciences	Martens
Singal, Deepa	Investigating the characteristic and health care utilization of women who have given	Community Health	Supervisor: Leslie Roos
	birth to children with Fetal Alcohol Spectrum Disorder	Sciences	
Singal, Deepa	Investigating the characteristic and health care utilization of women who have given	Community Health	Advisor: Marni Brownell
	birth to children with Fetal Alcohol Spectrum Disorder	Sciences	
Villafranca, Alex	"M.I.R.A.C.L." clinical trials promising to "C.U.R.E." and "H.E.A.L.": The potential for	Interdisciplinary	Co-Advisor: Malcolm Doupe
	patient manipulation in clinical trial naming	Studies	

#### Continuing PhD Students Otherwise Supported by MCHP Researchers

Student Name	Торіс	Department	MCHP Scientist Role
Comaskey, Brenda	Maternal depression and school readiness: A Manitoba population-based study	Community Health	Committee Member: Marni
		Sciences	Brownell
Halas, Gayle	N/A	Interdisciplinary	Committee Member: Alan
			Katz
Haworth-	Gender, deprivation and health in Winnipeg	Community Health	Examining Committee
Brockman,		Sciences	Member: Randy Fransoo
Kehler, Scott	N/A	Kinesiology	External Committee Member:
			Randy Fransoo
LeClair, Leanne	Community supports for parents of young children: A needs assessment	Community Health	Committee Member: Noralou
		Sciences	Roos
Lemaire, Jackie	Community health assessment process in Manitoba through an income equity lens: a	Applied Health	Committee Member: Patricia
	retrospective collective case study	Sciences	Martens
Penner, Karen	Stop, wait, or go: Inhibitory control in four-year-old children born very prematurely	Psychology	External Committee Member:
			Patricia Martens
Randall, Jason	Risk and protective factors for suicidal behaviour in adolescents and young adults	Community Health	Committee Member: Lisa Lix
		Sciences	
Spiewak, Rae	An examination of risk and protective factors among spousal suicide survivors	Community Health	Committee Member: Patricia
		Sciences	Martens
Taillieu, Tammy	Pregnancy and intimate partner violence: assessing the long-term physical and mental	Applied Health	Committee Member: Marni
	health outcomes	Sciences	Brownell
Thiessen, Kellie	A case study of the implementation of regulated midwifery in Manitoba	Applied Health	Committee Member: Patricia
		Sciences	Martens
Turcotte, Dana	Effects of immunomodulatory treatment in relapsing remitting Multiple Sclerosis	Pharmacy	Committee Member:
			Malcolm Doupe

#### Continuing PhD Students Supported by MCHP Researchers, Other Universities

Student Name	Degree Sought	Department	MCHP Scientist Role
Alsabbagh, W.	Cardiovascular health and medication adherence	Pharmacy and	Committee Member: Lisa Lix
		Nutrition,	
		University of	
		Saskatchewan	

#### Continuing MSc Students Supervised or Advised by MCHP Researchers

Student Name	Topic	Department	MCHP Scientist Role
Crockett, Leah	Long-term follow-up of late preterm births in Manitoba: What is the association	Community Health	Advisor: Marni Brownell
	between socioeconomic status and later childhood outcomes?	Sciences	
Dahl, Lindsey	N/A	Community Health	Supervisor: Randy Fransoo
		Sciences	
de Rocquigny,	Manitoba's Fracophone children: What determines EDI scores?	Community Health	Supervisor: Noralou Roos
Janelle		Sciences	
Erickson, Tannis	Chronic disease risk factor surveillance, community-based health surveys of school	Community Health	Supervisor: Patricia Martens
	students and interventions in rural Manitoba	Sciences	
Manyanga,	Does the increase in BMI associated with initiation of insulin therapy among youth	Community Health	Supervisor: Randy Fransoo
Taruwona	newly diagnosed with type 1 diabetes predict overweight or obesity at age 18?	Sciences	
Nie, Y.	Capture-recapture models for chronic disease case ascertainment in administrative	Community Health	Advisor: Lisa Lix
	health data	Sciences	
Plastino, Lorena	N/A	Community Health	Advisor: Marni Brownell
		Sciences	
Preveen, Saila	N/A	Community Health	Supervisor: Alan Katz
		Sciences	
Turner, Sarah	N/A	Community Health	Co-Advisor: Marni Brownell
		Sciences	
Wall-Weiler,	Early adult outcomes: A life course exploration of childhood and adolescent	Community Health	Supervisor: Leslie Roos
Elizabeth	development	Sciences	
Zinnick, Shauna	Developing and implementing a validated tool to define the types of care provided by	Community Health	Advisor: Malcolm Doupe
	nursing home health care aides, and to allocate their time spent doing these different	Sciences	
	activities		

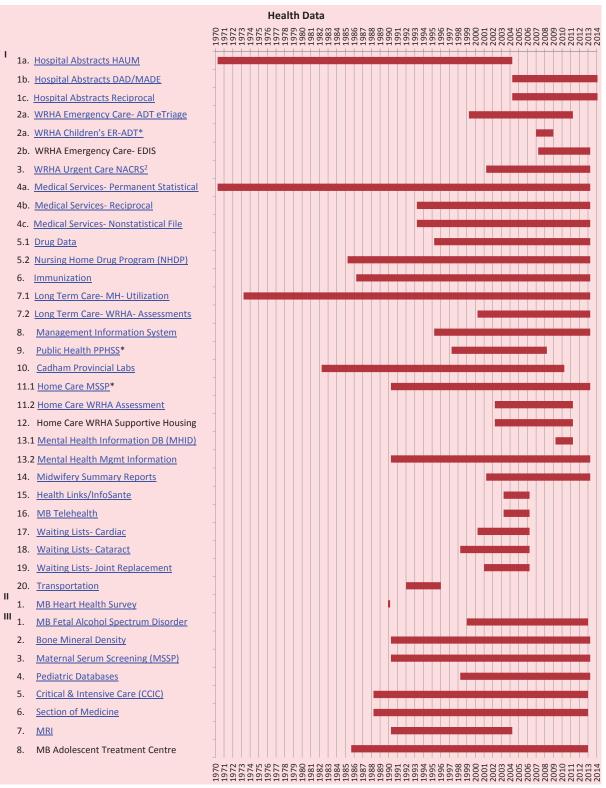
#### Continuing MSc Students Otherwise Supported by MCHP Researchers

Student Name	Торіс	Department	MCHP Scientist Role
Brigs, Gemma	Examining traffic injury prevalence and severity using individual-level factors	Community Health	Committee Member: Marni
		Sciences	Brownell
Graumann, Lori	The relationship of gluteus medius strength and endurance to stability, targeting and	Medical	Committee Member:
	agility	Rehabilitation	Malcolm Doupe
Heinrichs, Dustin	N/A	Human Ecology	Committee Member: Marni
			Brownell
Manyanga,	Does the increase in BMI associated with initiation of insulin therapy among youth	Community Health	Committee Member:
Taruwona	newly diagnosed with type 1 diabetes predict overweight or obesity at age 18?	Sciences	Malcolm Doupe
McArthur, Jennifer	The role of social engagement in health services use for baby-boomers and older	Community Health	Committee Member:
	adults	Sciences	Malcolm Doupe
Pierce, Lorelei	Breastfeeding experiences of low-income women in the City of Winnipeg: A qualitative	Nursing	Committee Member: Patricia
	study		Martens
Rush-Sirski, Andrea	Using spatial epidemiology as a tool to better understand influenza-like illnesses:	Community Health	Committee Member: Alan
	lessons for pandemic preparedness	Sciences	Katz
Skelton, Heather	Fine motor/visual motor skills as a component of school readiness: What can we learn	Medical	Committee Member: Marni
	from the Early Development Instrument?	Rehabilitation	Brownell
Turnbull, Danielle	Psycho-stimulant medication use in the bsence of attention deficit hyperactivity	Psychology	External Committee Member:
	disorder		Marni Brownell
Turner, Sarah	Breastfeeding and child development	Community Health	Committee Member: Nathan
		Sciences	Nickel

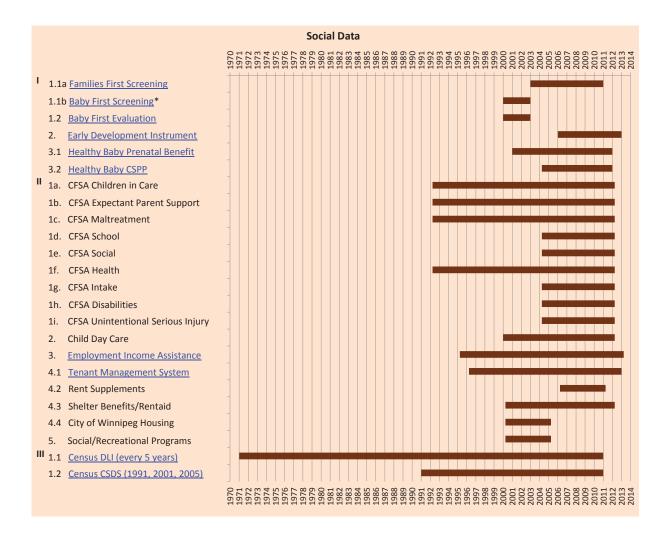
#### Continuing MSc Students Supported by MCHP Researchers, Other Universities

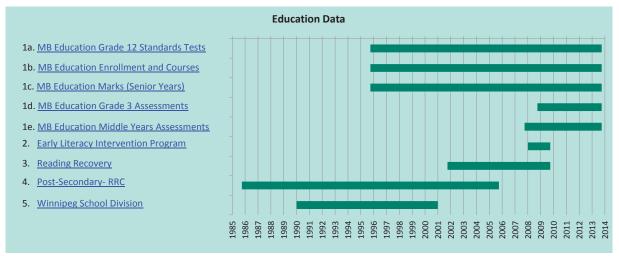
Student Name	Topic	Department	MCHP Scientist Role  Advisor: Lisa Lix	
Aftab, H.	Health service utilization in individuals with psychiatric co-morbidities, A population-based analysis	Community Health and Epidemiology, University of Saskatchewan		
Bowen, Michael	N/A	School of Health Information Science, University of Victoria	External Examiner: Alan Katz	
Boyko, J.	Warfarin adherence	Pharmacy and Nutrition, University of	Committee Member: Lisa Lix	
Glew, R.	Anti-psychotic medication use in residents of long-term care facilities	Community Health and Epidemiology, University of Saskatchewan	Advisor: Lisa Lix	
Kendal, C.	Testing longitudinal change in the presence of measurement error	Mathematics and Statistics, University of	Advisor: Lisa Lix	
Lataianu, B.	Violations of the assumption of conditional independence in latent class analysis models for chronic disease in administrative health data	Collaborative Biostatistics Program, University of	Advisor: Lisa Lix	
Reynolds, Shannon	Cost-effectiveness of registered nurses	Health Policy, Management and Evaluation, University of Toronto	External Advisor: Malcolm Doupe	
Yao, S.	Impact of Saskatchewan Seniors' Drug Plan Benefit to medication utilization and adherence among Saskatchewan residents	Pharmacy and Nutrition, University of Saskatchewan	Committee Member: Lisa Lix	

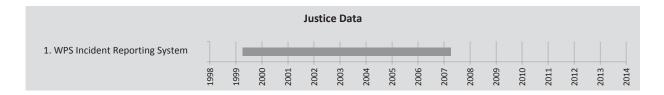
# APPENDIX 7: AVAILABLE YEARS OF DATA



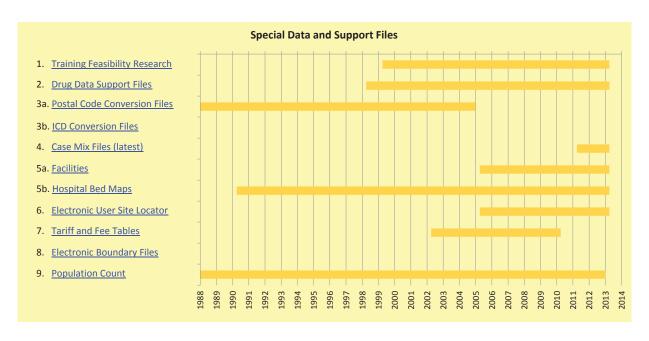
<sup>&</sup>lt;sup>2</sup> Urgent care data are not available for the years 2005/06 to 2009/10.
\* These data are not available in their current form beyond the last year shown in this chart. There may be alternative sources for some of the











# APPENDIX 8: RESEARCH PROJECTS ACCESSING THE POPULATION HEALTH RESEARCH DATA REPOSITORY

This is a list of research projects with current approvals to conduct research using the Population Health Research Data Repository. It is separated into three general categories: MCHP administered research, which refers to any research overseen either financially or administratively by MCHP or an MCHP affiliated researcher; externally administered research, which may involve MCHP affilliated researchers, but does not fall under the centre's oversight; and student thesis projects. Note that analysis may be complete on many of these projects. However, researchers often maintain current access approvals to facilitate publications.

# MCHP Administered Research (alphabetical by granting institution)

#### **Canadian Foundation on Fetal Alcohol Research**

Brownell M, Hanlon-Dearman A, Elias B, Chateau D, Phillips-Beck W, Roos N, Chudley A, Longstaffe S. \$50,000, 2011-2014. Utilization of Health and Social Services by Manitoba First Nations Children with FASD.

#### **Canadian Institutes of Health Research**

Brownell M, Randall J, Nickel N, et al. \$2,000,000, 2012-2017. PATHS: The Manitoba Healthy Baby Program.

Brownell M, Lang A, Doupe M, Derksen S, Toon L, Strumph E. \$401,653, 2013-2016. Health and Social Impact on the family Following Fetal/Infant Death.

Chartier M. PATHS: Community Schools Investigator's (CSI) Summer Learning Enrichment Program.

Chartier M, Isaac M, Brownell M, et al. \$2,000,000, 2012-2017. PATHS: Families First Home Visiting Program.

Chateau D, Cooper M, Chipperfield J, et al. \$2,000,000, 2013-2018. PATHS: Early Psychosis and Prevention Intervention Service (EPPIS).

Deber R, Roos L, Katz A, et al. \$360,156, 2012-2014. Paying for Primary Care: Relationship between Incentives and Patient Profiles.

Fransoo R, Nickel N, Hinds A, et al. \$2,000,000, 2012-2017. PATHS: Roots of Empathy

Katz A, Burchill C, Taylor C, at al. \$171,542, 2010-2014. Canadian Perspectives on the Quality of Primary Health Care.

Katz A, Sinclair S, Lavoie J, Yogendran M. \$2,498,679, 2013-2018. Mapping Hospitalizations for Ambulatory Care Sensitive Conditions in First Nation and Rural and Remote Communities.

Katz A, Stukel T, Bogdanovic B, MacWilliam L, Dik N. \$300,000, 2009-2015. Healthcare System Sustainability through Longitudinal Efficiency: Improved Quality and Lower Costs.

Kozyrskyj A, Becker A, Ernst P, et al. \$219,150, 2003-2014. Do Antibiotics in Early Life Contribute to the Development of Asthma in Children?

Martens P, Brownell M, Chateau D, et al. \$2,000,000, 2012-2017. PATHS: The effect of WHO/UNICEF Baby Friendly Hospital Initiative (BFHI) Accreditation Process.

Martens P, Brownell M, Smith M, et al. \$2,000,000, 2012-2017. PATHS: Relationships Among Government Supported Housing, Children's Outcomes, and Neighborhoods.

Martens P, Chateau D, Raymond C, et al. \$14,000,000, 2011-2015. DSEN-cNODES: The Canadian Newwork for Observational Drug Effect Studies.

Martens P, Chochinov H, Prior H. \$8,945, 2010-2015. Addressing the Landscape of End-of-Life for Patients with Schizophrenia. Combination grant with Harvey Chochinov Research Chair.

Martens PJ, Fransoo R, Roos L. \$2,000,000, 2011-2014. PATHS: Program: Paths Equity for Children: A Program of Research into what Works to Reduce the Gap for Manitoba's children. Programmatic grant with Heart and Stroke Foundation of Canada.

Metge C, Nickel N, Randall J, et al. \$2,000,000, 2012-2017. PATHS: School Clinics' Effect on Teen Pregnancy Reduction Efforts (TPRE) and STI Reduction.

Nickel N, Hinds A, Randall J, et al. \$2,000,000, 2012-2017. PATHS: Physician Integrated Network (PIN).

Nickel N, Martens P, Finlayson G, Chateau D, Labbok M. \$35,105, 2013-2014. Cost of Not Breastfeeding. Awarded in conjunction with PHAC Applied public Health Chair award by Patricia Martens.

Roos L, Deber R, Forget E, et al. \$200,000, 2007-2014. Avoiding Hospitalization: Ambulatory Care Sensitive Conditions, Quality of Care, and Socioeconomic Status. In combination with MHRC.

Roos L, Lam K, Bond R, et al. \$284,230; 2004-2014. Exploring Alternative Funding Models for Canadian Health Care. In combination with University of Manitoba.

Roos L, Nickel N, Hinds A, et al. \$2,000,000, 2012-2017. PATHS: Full-Day Kindergarten.

Smith M, Burchill C, Rochette L. \$99,900, 2013-2015. Canada Crazy for Our Children and Youth Mental Health.

Smith M, Raymond C, martens P, et al. \$2,000,000, 2014-2019. PATHS: Early Intervention Program for Children Living with ADHD. Programmatic grant with Heart and Stroke Foundation of Canada.

#### **Harvey Chochinov Research Chair**

Martens P, Chochinov H, Prior H. \$9,500, 2010-2015. Addressing the Landscape of End-of-Life for Patients with Schizophrenia. Combination grant with CIHR.

#### **Heart and Stroke Foundation of Canada**

Smith M, Raymond C, martens P, et al, \$100,000, 2011-2013 PATHS: Early Intervention Program for Children Living with ADHD. Programmatic grant with CIHR.

#### **Manitoba Centre for Health Policy**

Raymond C, Falk J, Leong C, Chateau D, Dahl M. \$40,000, 2013-2014. Use of Prescription medications Before, During, and After Pregnancy in Manitoba.

Roos L, Chateau D, Nickel N, et al. \$4,000, 2012-2015. Advancing Life Course Research.

Roos L, Roos N, Edgerton J, et al. \$26,800, 2009-2014. The Manitoba 10 year Birth Cohort: Studying Long Term Outcomes using Linked Databases. Part of the MCHP RBC award.

#### **Manitoba Health Research Council**

Doupe M, Dik N. \$100,000, 2011-2014. Linking unique clinical and health care use files to better understanding nursing home quality care.

Fransoo R, Taylor C, Ekuma O, et al. \$103,380, 2010-2014. Temporal Trends and Sex Differences in Acute Myocardial Infarction (AMI) incidence, mortality, and treatments in Manitoba 1985 to 2010.

Roos L, Deber R, Forget E, et al. \$200,000; 2007-2014. Avoiding Hospitalization: Ambulatory Care Sensitive Conditions, Quality of Care, and Socioeconomic Status. In combination with CIHR.

#### **Manitoba Institute for Child Health**

Brownell M, O'Donnell M, Gilbert R, Ubbesen M. \$3,570, 2013-2014. Factors that Predict Out-of-Home Care during Childhood: A comparison of Three Developed Countries.

MacWilliam L, Yogendran M, Ekuma O, et al. \$12,500, 2010-2015. Combining Clinic Data on Fetal Alcohol Spectrum Disorder (FASD) With Administrative Data on Health, Education and Social Services: Analysis of Service Utilization. Combination grant with Manitoba Medical Service Foundation.

#### **Manitoba Medical Service Foundation**

Kozyrskyj A, HayGlass K, Becker A, et al. 2005-2015. Maternal Stress in Early Childhood and the Development of Asthma: A Cohort Study of Health Care Database records and Immune System Function.

MacWilliam L, Yogendran M, Ekuma O, et al. \$12,500, 2010-2015. Combining Clinic Data on Fetal Alcohol Spectrum Disorder (FASD) With Administrative Data on Health, Education and Social Services: Analysis of Service Utilization. Combination grant with Manitoba Institute of Child Health.

#### **Multiple Sclerosis Society of Canada**

Marrie RA, Ekuma O, Finlayson M, Finlayson G, Jiang D. \$284,832, 2013-2014. A Longitudinal, Multi-Method Investigation of Transitions into Nursing Homes among People with Multiple Sclerosis.

#### **Public Health Agency of Canada**

Chartier M, Walld R, Volk J, Cooper M. \$2,584,085, 2011-2015. Towards Flourishing: Improving the Mental Health Amount New Mothers in the Manitoba Families First Home Visiting Program (Phase II).

#### Social Sciences and Humanities Research Council of Canada

Roos L, Dragan R, Burrough, et al. Child Health and Socioeconomic Status: New Approach.

Roos N, Chateau D, Martens P, et al. 2007-2014. Success Despite the Odds: Identifying Factors that Promote Educational Success in High-Risk Adolescents.

#### **United Way of Winnipeg**

Roos N, Wall-Wieler E, MacWilliam L, Prior H, Burchill C. \$2,957, 2012-2015. PEG/MCHP – Winnipeg Graduation Rate Project.

#### **University of Manitoba**

Doupe M, Palatnick W, Snider C, et al. Factors Affecting Patient Flow in Winnipeg Emergency Departments.

Liu M (XiaoQuing), Anhalt A, Fazio J, et al. \$100,000, 2011-2014. A Feasibility Study for 'the Manitoba Twin Registry: A Resource for Genetic and Epigenetic Studies.'

Roos L, Lam K, Bond R, et al. \$284,230; 2004-2014. Exploring Alternative Funding Models for Canadian Health Care. In combination with CIHR.

# Externally Administered Research

Alessi-Severini S, Derksen S. \$19,640; 2013-2014. Use of Prescription Medications for Smoking Cessation in the Province of Manitoba. Pfizer.

Alessi-Severini S, Biscontri R, Kozyrskyj A, et al. \$35,000; 2007-2014. Use of Antipsychotic Agents in Manitoba: Prescribing and Cost-Effectiveness. MMSF.

Alessi-Severini S, Bolton J, Sareen J, et al. \$24,000; 2009-2014. Use of Psychotropic Medications in Manitoba: A Population-Based Study. HSCF.

Becker A, Kozyrskyj A, Douville R, et al. 2002-2014. Origins of Asthma in Childhood: The Role of Gene: Environment Interactions. CIHR.

Bernstein C, Blanchard JF, Shaw S, et al. 2011-2014. Manitoba IBD Long-Term Outcomes Study. Personal HSC Funds.

Bernstein C, Targownik L, Nugent Z, et al. \$30,000; 2014. The Relationship Between Mode of Maternal Delivery and Inflammatory Bowel Disease. HSC

Bolton J, Finlayson G, Au W, et al. \$27,682.84; 2011-2014. Physical Disease and the Risk of Suicide: A Study of the Manitoba Population. Thorlakson Foundation Grant.

Bolton J, Sareen J, Chateau D. \$59,280; 2014. Improving the Predication of Suicide in a High-Risk Emergency Department Cohort. Brain and Behaviour Research Foundation.

Bolton J, Sareen J, Martens P, et al. \$100,000-\$200,000; 2010-2014. Consequences of Suicide Bereavement: A Population-Based Study in Manitoba. CIHR

Bugden S. Dik N, Burchill C, Khan S. \$6,525; 2012-2014. Cross Sectional Analysis of Opioid Use in Manitoba. URGP.

Cui Y, Metge C, Moffat M, et al. 2012-2014. Analysis to use Predictive Models to Describe the Need for Admissions to Virtual Wards: a Program for Reducing Hospitalization and Re-admission to Hospital. WRHA.

Elias B, Martens PJ, Mignone J, et al. \$787,324; 2006-2014. Manitoba First Nations Health Care Report: A Collaborative Network Project to Understand Health Disparities –Indicators of Population Health Status for Registered First Nations People Living in Manitoba. CIHR

Forget E, Roos NL, Hum D, et al. \$181,341; 2005-2014. The Town with No Poverty: The Long-term Consequences of a Canadian Guaranteed Annual Income Social Experiment. CIHR.

Graham R, Dragan R, Burchill C, et al. \$32,870; 2013-2014. Academic Performance in Healthy Young Children Exposed to General Anesthesia. MICH.

Garland A, Marrie RA, Fransoo R, et al. \$75,925; 2011-2014. The Interface between Chronic Inflammatory Disease and Critical Illness: A Pilot Study. HSCF and MHRC.

Hanlon-Dearman, A. \$247,000; 2014. Exploring the Feasibility of Using EDI to Identify Children with FASD in Manitoba. PHAC.

Heaman M, Kingston D, Brownell M, Ekuma O. \$30,000; 2010-2014. Pathways between Pre- and Postnatal Maternal Psychological Distress and Childhood Anxiety. MICH.

Heaman M, Martens PJ, Brownell M, et al. \$100,000; 2009-2014. Predictors and outcomes of prenatal care: vital information for future service planning. CIHR Maternal & Child Health Operating Grant.

Hitchon C, Peschken C, Katz A, et al. \$35,000.00; 2011-2015. Health Care Use and Costs in Rheumatoid Arthritis. Health Sciences Centre Foundation.

Hitchon C, Peschken C, Katz A, et al. \$35,000; 2012 -2014. The Burden of Rheumatoid Arthritis and Systemic Autoimmune Rheumatic Disease in Manitoba First Nations People: A Pilot Study. HSCF.

Hobson D, Leslie W, Lix L, Burchill C, Azimaee M. \$53,150; 2007-2014. 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 Comprehensive Care Award.

Junaid A, Taylor C, Azimaee M. \$25,000.00; 2010-2014. Efficacy of Intensive Management of Peripheral Arterial Disease versus Usual Care. University of Manitoba, Internal Medicine.

Jutte D, Boyce T, Syme L, et al. 2004-2013. The Apgar Score as an Early Measure of Resilience.

Katz L, Sareen J, Distasio J, et al. \$3,745,900; 2009-2014. Research Demonstration Project in Homelessness and Mental Health (Winnipeg): 12-Month Administrative health Outcomes Study. Mental Health Commission of Canada.

Kowalski S, Burchill C, Fransoo R. \$20,500; 2013-2014. The Effects of High Spinal Anesthesia on Peri-Operative Patients Undergoing Cardiac Surgery: A Retrospective Study. University of Manitoba – Department of Anesthesia, AOC Grant Competition.

Kozyrskyj A, Azad M, Becker A, Field C, To T. \$90,000; 2013-2014. Antibiotic Use During Infancy and Development of Overweight in Childhood. CIHR.

Kozyrskyj A, Azad M, Scott J, et al. \$90,830; 2012-2014. The Impact of Antibiotics on Intestinal Microbiota of Infants. CIHR.

Kozyrskyj A, Derksen S, Burchill C, Azad M, Becker A.. \$1,379,400; 2008-2014. Increasing Use of Gastroesophgeal Reflux Disease Drugs in Infants: Impact on their Intestinal Microbiota. CIHR.

Kozyrskyj A, Chartier M, Brownell M, et al. \$50,000; 2010-2015. Maternal Distress and the Development of Atopic Disease in Children: Potential Pathways and Interventions. AllerGEN NCE Inc.

Kraut A, Raymond C, Ekuma O, et al. \$83,854; 2012-2015. A Comparison of Usage of Opioid Medications by Workers' Compensation Board Claimants and Other Manitobans. WCB.

Kwong J, Manuel D, Roos L, et al. \$1,091,729; 2006-2014. Evaluation of Ontario's Universal Immunization Program: Phase II. CIHR, PHAC, Sanofi Pasteur Limited.

Lavoie J, Forget E, Martens PJ, O'Neil J, Dahl M. 2007-2015. Using Evidence to Identify the Need for Investments in Primary Health Care Services on Manitoba First Nation Reserves. CIHR.

Leslie W, Greenberg C, Lix L, et al. \$700,000; 2004-2014. First Nations Bone Health Study (FMBHS II): Longitudinal Measurements and Outcomes, Canadian Institutes of Health Research.

Leslie W, Lam A, Lix L, et al. \$215,000; 2008-2014. Program: Epidemiology of Osteoporosis in Manitoba. i3 Innovus.

Leslie W, Lix L, Burchill C, Azimaee M. \$53,750; 2009-2014. Economic Burden of Osteoporosis in Manitoba and Canada. PATH.

Leslie W, Roos L, Lix L, et al. \$43,768; 2003-2014. Program: Epidemiologic Study of Osteoporosis in Aboriginal Manitobans. CIHR.

Leong C, Alessi-Severini S, Chateau D, et al. \$150,000; 2014. Characterizing the Trend in Benzodiazepine use Associated with a New Antidepressant Prescription Among Older Adults in Manitoba. University of Manitoba Office of VP, and Faculty of Pharmacy.

Leong C, Mamdani M, Juurlink D, Gomes T, MacDonald E. 2014. Characterizing the Trend in Antiepileptic Drug Utilization for Seizure and Non-Seizure Indications. University of Manitoba – Christine Leong Start-Up funds.

Liu M, Lau V, Burchill C, Walld R, Anhalt A. \$138,898; 2014. A Population Study on the Relationships between Autism Spectrum Disorders and Prenatal, Perinatal, and Comorbid Conditions. University of Manitoba – Michelle Liu Start-Up finds, MICH.

Lix L, Leslie W, Bowman C, et al. \$203,836; 2009-2014. Classification Algorithms to Distinguish Chronic Disease Cases from Non-Cases in Administrative Data. CIHR.

Lix L, Oen K, Yan L, Rosenberg A. \$100,000; 2013-2014. Validation of Administrative Data Diagnosis of Chronic Childhood Arthritis in Manitoba. SHRF.

Logsetty S, Burchill C, Sareen J, et al. \$30,000; 2014, Program: Long Term Outcomes in Pediatric Burns and their Parents. University of Manitoba – Department of Surgery 2012 Research Grant

Logsetty S, Sareen J, Doupe M, et al. \$35,000; 2011-2014. Novel Linkages between Clinical Files and Administrative Health Care Records in Manitoba: The Life Course in Mental Illness. HSCF.

Mahmud S, Burchil C, Prior H, Bozat-Emre S, Elliot L. \$30,000; 2013-2015. The Background Incidence Rate Project. University of Manitoba.

Mahmud S, Elliot L, Ronald A, et al. \$152,856; 2012-2014. Effectiveness of the GSK Pandemic H1N1 Influenza Vaccines in Preventing Hospitalization for Influenza and Pneumonia. GSK.

Mahmud S, Mostaco-Guidolin L, Ronald A, et al. \$181,755; 2012-2014. The Epidemiology and Clinical Outcomes of Invasive Pneumococcal Disease in Manitoba. Pfizer.

Mahmud S, Ronald A, Hinds A, et al. \$156,101; 2012-2015. Comparison of the Epidemiology and Clinical Outcomes of Laboratory-Confirmed Influenza A and Influenza B Cases in Manitoba. GSK.

Manji R, Hiebert B, Burchill C. \$14,875; 2013-2014. The Prolonged Stay Cardiac Surgery ICU patient: characterization and Long Term Outcomes. University of Manitoba – Department of Surgery 2012 Research Grant.

Marrie RA, Elliot L, Blanchard J, Yu N, Evans C. \$286,059; 2013-2014. The Manitoba Multiple Sclerosis Epidemiology Study: Comorbidity and Outcomes in Multiple Sclerosis. National Multiple Sclerosis Society.

Ouellette-Kuntz H, Brownell M, Roos L, et al. \$70,376.00; 2012-2014. Investigating the Association between Interpregnancy Interval and Autism Spectrum Disorders using the Manitoba Centre for Health Policy's Data Repository. CIHR.

Pollet V, Percy V, Rabbani R, Dik N. \$15,000; 2013-2014. The Incidence of Development Dysplasia of the Hip in Children for the Province on Manitoba. Pan-Am Clinic: Alexander Gibson Grant.

Ramsey C, Garland A, Fransoo R, et al. \$125,807; 2013-2014. Sex Difference in ICU Admissions: The Role of Social Support Factors. Tech Value Network.

Raymond C, Brownell M, Kozyrskyj A, et al. \$275,880.00; 2011-2014. Impact of Stimulant Use on Educational Outcomes in Manitoba High School Students. CIHR.

Raymond C, Dragan DR, Law M, Majumdar S, Morgan S. \$261,192; 2013-2015. Impact on Physician Detailing and Sampling for Generic Atorvastatin. CIHR.

Russel K, Burchill C, Hu M, et al. \$21,000; 2014-2015. Relationship between Concussion and Academic Performance among Manitoba Students in Grades 9-12. MMSF.

Ruth C, Brownell M, Javellana A, Dik N. \$34,125; 2013-2014. Children born to Mothers with Diabetes in Pregnancy in Manitoba: Long Term Neurodevelopmental, Educational, and healthcare Outcomes. MICH.

Ruth C, Au, W Walld R, Benlamri A. \$15,000.00; 2011-2013. The Association between Maternal SSRI Exposure and Neonatal Respiratory Disorders. MMSF & MICH.

Sanguins J, Bartlett J, Carter S, et al. 2011-2014. Depression, Anxiety Disorder, and Related health Care Utilization in the Manitoba Metis Population. CIHR.

Sanguins J, Bartlett J, Carter S, et al. \$35,000; 2011-2014. Ischemic heart Disease (IHD) and related health Care utilization in the Manitoba Metis Population. MMF Chronic Disease Surveillance Program.

Sanguins J, Bartlett J, Carter S, et al. 2011-2014. Study of Infant Mortality and Birth Profiles on the Manitoba Metis Population. MMF, PHAC.

Sanguins J, Carter S, Bassily M, Mehta P. \$49,385; 2013-2014. Situation Analysis of the Major Chronic Diseases in Metis Manitoba. PHAC.

Shen G, Martens PJ, Ludwig S, et al. \$100,000.00; 2012-2014. Impact of Diabetes during Pregnancy and Breastfeeding on Subsequent Diabetes in First Nations Mothers and Children. CIHR.

Shooshtari S, Brownell M, Martens PJ, et al. \$79,720; 2009-2013. Trajectories in Health and Use of Health Social Services by Children with Developmental Disabilities: A Population-based Study. MHRC.

Shooshtari S, Dik N. \$13,965; 2014-2015. Persons Aging with Intellectual Disability (ID) and Dementia in Manitoba. St. Amant Inc.

Singh H, Nugent Z, Bernstein C, et al. \$35,000.00; 2012-2014. Academic Performance among Children with Inflammatory Bowel Disease: A Population-Based Study. American College of Gastroenterology.

Singh H, Penfold R, DeCoster C, et al. \$13,685; 2007-2014. Complications Associated with Lower Gastrointestinal Endoscopy: A Population-Based Study. CIHR.

Snider C, Prior H, Burchill C, Brownell M, Elias B. \$20,000; 2014-2015. A multilevel Analysis of Risk and Protective Factors in Youth Homicide and Severe Intentional Injury. MMSF.

Targownik L, Yan L, Burchill C, et al. \$45,675; 2013-2015. Comparing GI Resource Utilization Between Users of Cox-2 Inhibitors and Non-Selective Nsaids. Pfizer.

Thompson G, Doupe M, Dik N, Prior H. \$90,000; 2013-2015. An Analysis of WRHA Palliative Care consults to Personal Care Home Residents. University of Manitoba.

Torabi M, Burchill C, Zhu C. \$1,700; 2011-2014. Spatial Modeling of Incidence Rates in the Province of Manitoba. CIHR.

Yu CT, Burchill C, Derksen S, et al. 2004-2014. Patterns of Health Care utilization Indicators by Persons With and Without Intellectual Disabilities in Manitoba: A Pilot Study. CIHR.

Zacharias J, Chen H, Dart A, Chochinov H. \$33,963.25; 2013-2014. Quality of Care Indicators in End Stage Renal Disease: A Comparison of Urban vs. Rural Care Models. HSCF.

# Thesis Projects

Anhalt, Angela. Comparing DNA Methylation and Gene Expression Profiles in Twins with Autism Spectrum Disorders.

Bozat-Emre, Songul. Temporal Association between Atypical Antipsychotic Medication Use and Falls Among Personal Care Home Residents in the Winnipeg Regional Health Authority. Community Health Sciences, University of Manitoba.

Burland, Elaine. The Evaluation of a Fall Management Program in a Personal Care Home (PCH). Community Health Sciences, University of Manitoba.

Comaskey, Brenda. Maternal Depression and School Readiness: A Manitoba Population Based Study. Community Health Sciences, University of Manitoba.

Crockett, Leah. Long Term Follow-Up of Late Preterm Births in Manitoba: What is the Association between Socioeconomic Status and Later Childhood Outcomes? Community Health Sciences, University of Manitoba.

Dart, Allison. The Natural History of Youth Onset Type 2 Diabetes in a Cohort of Manitoba Children and Adolescents. Community Health Sciences, University of Manitoba.

Davies, Bethan. The Association between Chlamydia Trachomatis and Adverse Reproductive Consequences and the Implications for Control Policy: A Population Based Retrospective Cohort Study.

de Rocquigny, Janelle. Manitoba's Francophone Children: What Determines EDI Scores? Community Health Sciences, University of Manitoba.

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