



# Contents

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On the national level we have continued to play a leadership role in the evolution of the Pan-Canadian Real-world Health Data Network that will allow cross jurisdictional research initiatives. This group has developed a proposal to create the capacity to conduct Pan-Canadian research using a distributed analysis model. The provincial data centres like MCHP each currently

Alan





**W**HAT makes Manitobans healthy? Manitoba Centre for Health Policy (MCHP) is a research unit within the Department of Community Health Sciences, Max Rady College of Medicine, Rady Faculty of Health Sciences at the University of Manitoba. Our work focuses on the health and the determinants of health of Manitobans. The Centre was set-up in 1990 to manage a Population Data Repository and to use it for research into how factors like healthcare, health programs and policies, impact health outcomes.

The Population Health Research Data Repository is a comprehensive collection of administrative, registry, survey, and other databases primarily comprised of residents of Manitoba. It has been developed to describe and explain patterns of healthcare and profiles of health and illness, and, more recently, to facilitate inter-sectoral research in areas such as healthcare, education, and social services.

The administrative health database, for example, holds records for virtually all contacts with the provincial healthcare system (the Manitoba Health Services Insurance Plan), including physicians, hospitals, personal care homes, home care, and the pharmaceutical prescriptions of all registered individuals.

The Repository data is de-identified. Research is subject to a rigorous approval process to ensure compliance

# About MCHP

[mchp.ca/about.html](http://mchp.ca/about.html)

with the Personal Health Information Act and other applicable legislation. MCHP provides the infrastructure to support researchers' access to the data and analytic services. MCHP is staffed by approximately 55 full-time staff — researchers, data managers, data analysts, research coordinators and support staff. Our researchers benefit from collaboration with peers across Canada, the United States, Europe, and Australia. We also have an advisory board bolstered by high-profile representatives from research, healthcare, business, and government. MCHP acts as a steward of the data.

*MCHP passed a milestone this year – it's 25 years since we were founded! Some of our staff have been with us all that time and we benefit from their knowledge and wisdom, often!*

SEE TIMELINE PAGE 17





**M**CHP is a research centre of excellence that conducts world class population-based research on health, and the social determinants of health. We develop and maintain a comprehensive population-based data repository on behalf of the Province of Manitoba for use by the local, national and international research community. We promote a collaborative environment to create, disseminate and apply our research. Our work 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, communicate and apply knowledge, contributing to the cultural, social and economic well-being of the people of Manitoba, Canada and the world. MCHP works within the 'Integrative Research in Health and Well-being' theme within the University of Manitoba's Strategic Research Plan, and is a key component of the signature area on 'Population and Global Health'.

# Mission & Objectives

**mchp.ca/mission.html**

Our strategic objectives, which are detailed in our strategic operational plan, cover the following areas:

- 1 To maintain and enhance a population-based data repository (Repository) that meets the needs of researchers, graduate students, and analysts in a privacy-compliant environment
- 2 To advance the research capacities of the Centre and its affiliated researchers, to support research which is relevant, and uses the most appropriate methodologies
- 3 To integrate knowledge translation within our work, to measure the impact of our research on policy and practices, and engage the public in our research where relevant
- 4 To maintain the strong foundation needed for a centre of excellence, by securing adequate funding, supporting skilled staff, and being accountable for our funding



MCHP Research Scientists 2016

ER CHALLENGER VISIONARY INNOVATOR ADVENTURER REBEL PIONEER CREATOR EXPLORER DEFENDER TRAILBLAZER CHALLENGER VISIONARY INNOVATOR ADVENTURER REBEL PIONEER CREATOR EXPLORER DEFENDER TRAILBLAZER CHALLENGER VISIONARY INNOVATOR ADVENTURER REBEL P  
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# The Cost of Smoking: A Manitoba Study



# Research

with their administrative health data held in the Population Health Research Data Repository. We followed survey respondents for ten years after survey to measure the excess healthcare use and expenditures associated with smoking. Smoking rates have decreased from 1989 to 2011. The study found that smoking is associated with increased physician visits, hospitalizations, and prescription drugs. This increased healthcare use translates into excess annual costs: \$39M in physician costs, \$40M in prescription drugs, \$147M in hospital-related expenses, and \$18M in cancer-related costs for a total costs of \$244M a year.

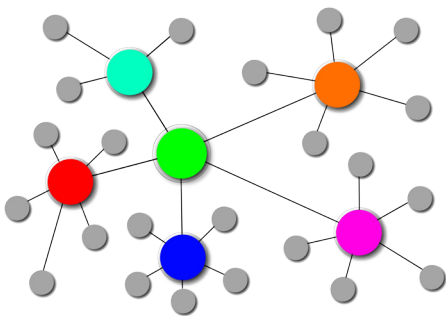
*MCHP Researchers use  
administrative health  
and social data from  
our Population Health  
Research Data Repository*



[illegible]

The objective of this report, released in October 2015, was to examine the outcomes of women and their children who have been involved in the Manitoba InSight program, an intensive mentoring program for women at high risk of having children with Fetal Alcohol Spectrum Disorder (FASD). By linking the clinical data within the InSight program database to the MCHP Repository we examined outcomes both during and after the program, with over 10 years of outcomes for earlier participants. We evaluated the impact on the mental, physical and perinatal health of the women and their children and their involvement with services such as social housing, Families First, prenatal care and Child and Family Services. This report will allow for planning and support of ongoing services to this at risk population and act as a baseline for further studies into FASD and its prevention and management.

## Cancer Data Linkage in Manitoba: Expanding the Infrastructure for Research



improves opportunities for population health and health services research for individuals who have been diagnosed with cancer. The overall purpose of this deliverable, released in January 2016, was to bring the Manitoba Cancer Registry data into the Research Data Repository housed at the Manitoba Centre for Health Policy (MCHP), in order to establish a broader base for cancer research using linked administrative health databases in Manitoba. This deliverable applied routine data quality evaluation tools developed at MCHP to the Manitoba Cancer Registry and then looked at some new measures of data quality used the linked data housed in the Repository. Through two demonstration projects that looked at comorbidity measures for predicting healthcare utilization, and emergency department use before and after diagnosis, we examined opportunities for new cancer research projects that involve linkage of cancer registry data to administrative data.

### Other Projects:

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

The PATHS program of research is entering its final stages. This program includes collaborations with external partners, and aims to understand what works to reduce inequity in children's outcomes.

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

*CNODES (Canadian Network for  
Observational Drug Effectiveness  
Studies)*

CNODES is an assembly of the top pharmaco-epidemiologists across Canada, working collaboratively to study drug safety and effectiveness. CNODES is funded by the Drug Safety and Effectiveness Network (DSEN) which

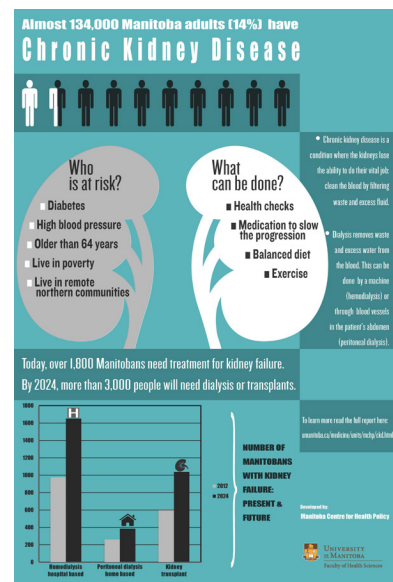
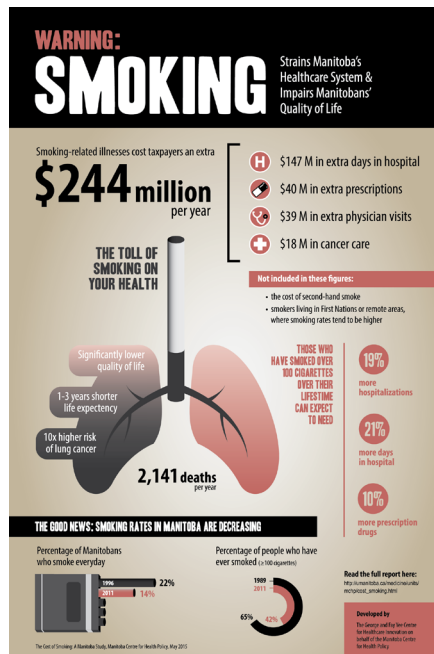
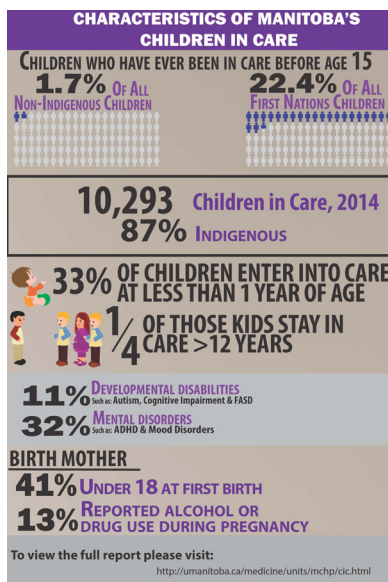
CNODES is using existing healthcare databases on over 27 million people across Canada and internationally to conduct expedited evaluations of the risks and benefits of certain medications and disseminate this information widely to clinicians, patients, and decision-makers. The program is funded by CIHR to June 2016, with approval for renewal.

The CNODES Manitoba site leads are 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, Lisa Lix, Elaine Burland and I Fan Kuo.

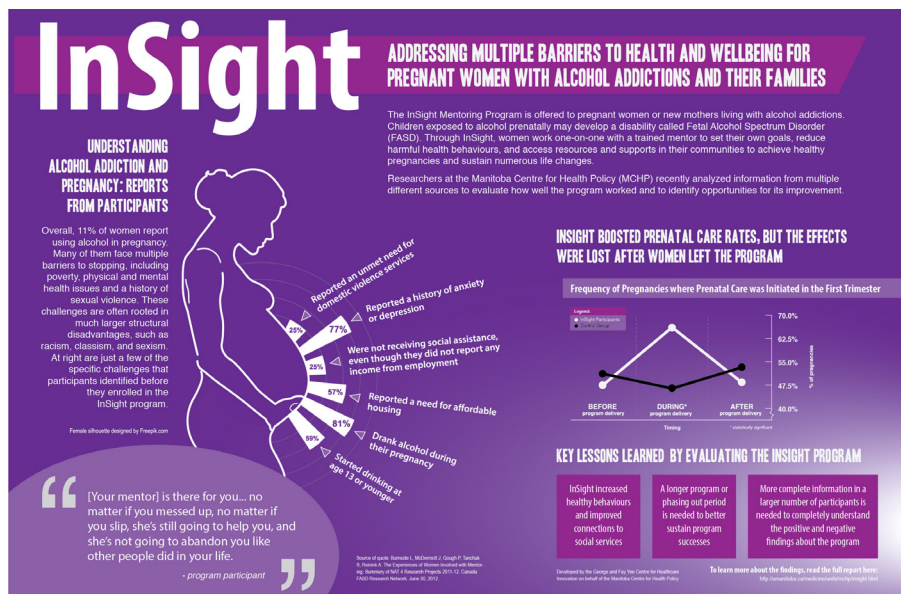
To date, seven CNODES sub-projects have been completed and five sub-projects are in progress, with more at the proposal and feasibility stage.



# [ Infographics ]



*MCHP uses infographics to share research findings from deliverables with a broad audience.*



# Education

MCHP researchers are supervising, co-supervising or on committees for 3 post-doctoral fellows, 26 doctoral and 25 master's students. MCHP also participated in University of Waterloo's Coop program taking an undergraduate

Financial support up to \$5,000 is provided through this award to students who are enrolled in the graduate program at the University of Manitoba (preferably in the Faculty of Health

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.



Iresha



Elizabeth



Tamara

In February 2016, Senate approved the creation of the Roos Prize. This prize will be awarded for the first time in 2016 to a recent full or part-time graduate student (min. 3.5 GPA) who has published or had accepted a paper of excellent quality in the past two years which incorporate research results using the Population Health Research Data Repository. This prize was created to honour the pioneering work of Drs. Leslie and Noralou Roos in the use of administrative data for research, their extensive publication and knowledge sharing reputations, and their role in the creation of the Manitoba Centre for Health Policy (MCHP).

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# Timeline

- Pat Martens receives the Order of Canada

# Data Management

[mchp.ca/resources/repository/index.html](http://mchp.ca/resources/repository/index.html)

**M**ANAGING the Population Health Research Data Repository and providing current, usable data in compliance with privacy and ethics regulations is core business for MCHP.

In recent years we have been successful in getting grants to support us build the data repository, and we brought in 3 new datasets this year, and we added to one other:

- Manitoba cancer screening data – the results of breast, cervix and colon cancer screens for Manitobans screened at a facility in Manitoba, one of the most complete cancer databases in Canada
- Procura homecare data – detail on home care services and visits to clients in Manitoba
- Canadian Primary Care Sentinel Surveillance Network (CPCSSN) Data - electronic medical record information of diagnoses, lab-testing, prescriptions

and more collected from participating primary-care providers in Manitoba

- Diagnostic Services Manitoba – we have now incorporated immunology and hematology testing data from all six Winnipeg hospitals, as well as data from Brandon Regional Health Centre Westman Laboratory with the Delphic chemistry laboratory testing data we had already.

*Our Population Health  
Research Data Repository  
has 70+ datasets*

Alongside our data repository we maintain a documentation library that stores knowledge about the databases. We store data descriptions, data models, data quality analyses, and link data concepts to our MCHP Concept dictionary.

We build strong working relationships with our data providers, meeting with them one on one regularly, and we also host a half-day workshop to highlight how we are using their data. MCHP investigators currently lead 62 projects, and MCHP supports 112 external investigator projects and 26 thesis projects.

The Repository and our skills and knowledge in managing it and its use, are in demand from external visitors. This year we hosted visitors from elsewhere in Canada, as well as USA and China, and we provided advice to the National Centre for Truth and Reconciliation,

Manitoba Inuit Association; Advanced Learning and Post-Secondary Education, Manitoba eHealth, Health Sciences Centre, Department of Community Health Sciences, George and Fay Yee Centre for Healthcare Innovation, and the Department of Microbiology.

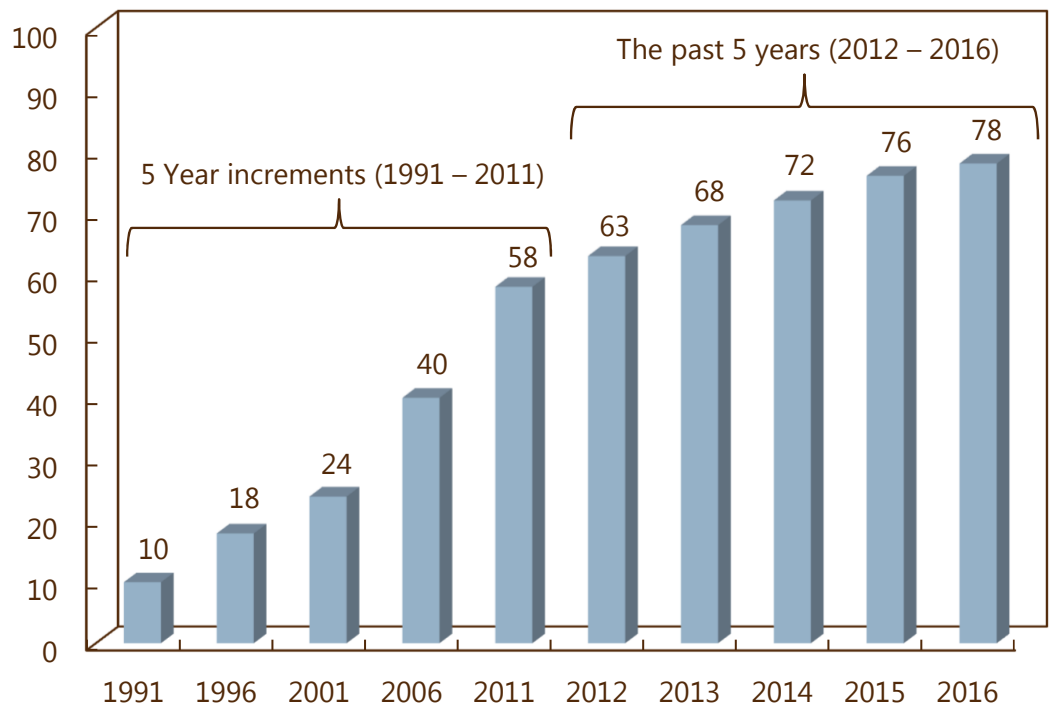
*Providing access to data*

Our Repository Access Unit manages and tracks the approval processes for all research projects that make use of the Repository. This year, with input from George and Fay Yee Centre for Healthcare Innovation (CHI) we mapped our processes from initial contact to the start of a project looking at potential bottle necks and places for efficiency gains.

The access unit provides support for researchers to navigate the required project approval processes. Our process

mapping project showed that researchers and students who attended our accreditation session prior to submitting proposals complete their research projects significantly faster.

We have made further time savings for researchers by working with the Health Research Ethics Board who now send automated reminders and updates for researchers, work MCHP had to do before. This year, 63 people attended accreditation sessions (148 people with active accreditation), we reviewed the feasibility of 70 new projects, and set up 40 new Researcher Agreements. Remote access sites (RAS) enable data analysts and researchers access to the Repository from locations outside of the physical MCHP environment. These sites only provide terminal access to specific applications within MCHP. New for 2015 is access to R for statistical analyses.







**K**NOWLEDGE Translation is a key objective at MCHP. Our research is focused on addressing problems that Manitoba's policy planners and service providers need answers to. Close involvement of policy staff in our project teams, and advisory groups helps us to shape the questions early on and keeps our research focused on providing answers that can lead to improvements on the ground.

*The Need to Know team has been working together for 14 years*

Our *Need to Know* team, with membership from Manitoba Health Seniors and Active Living, Regional Health Authorities and other partners, has been meeting for 14 years, and continues to evolve. This group is essential for planning our interactive workshop days with staff of key organizations in Manitoba.

We are focused on developing our communication and knowledge translation strategy, and are examining how we measure impact. We have new staff leading in this area, our new Associate Director (Planning and Development) Dr. Selena Randall, and our new Communications Officer Shannon Turczak. This new team has pushed our public engagement activities this year through the development of a package of information to accompany deliverables that includes the full

# Knowledge Translation

[mchp.ca/kt.html](http://mchp.ca/kt.html)

deliverable report, a 4-page summary, YouTube videos and a public and media friendly infographic. We are promoting our reports through press conferences that lead to national media interviews on both TV and radio. Our research scientists are also writing Op-Eds through EvidenceNetwork.ca which have had coverage in newspapers across the country. We continue to seek new and effective ways to engage the public.

*MCHP deliverable package includes report, 4-pager, YouTube clips and infographics*

Over the last year MCHP has published 60 peer reviewed journal articles. Our research scientists have been invited to present their findings to academics, government, stakeholders, and policymakers in Canada and around the world over 90 times. We have an active social media presence with over 1,200 followers on Twitter, over 225 likes on



**M**CHP is lucky to have a team of highly skilled staff who all contribute to the work of the Centre. Below are all the staff who worked at MCHP at any point last year. Those who joined us during the year or changed roles are listed in italics, and those who we said goodbye to have \*\*.

**Executive** team provide leadership and direction to MCHP, build partnerships with those we need to work with, and find the resources MCHP needs to do its work:

Dr. Alan Katz, Director

Charles Burchill, Associate Director (Data Access and Use)

Dr. Randy Fransoo, Associate Director (Research)

\*\*Carole Ouelette, Executive Assistant

*Dr. Selena Randall*, Associate Director (Planning and Development)

Mark Smith, Associate Director (Repository)

*Shannon Turczak*, Executive Assistant, Communications Officer

**Research Scientists** design and manage research projects, including deliverables for Manitoba Health and studies funded through peer reviewed research grants. Our research scientists also teach undergraduate and graduate courses and mentor students:

Dr. Marni Brownell, Associate Professor

Dr. Mariette Chartier, Assistant Professor

Dr. Dan Chateau, Assistant Professor

Dr. Malcolm Doupe, Associate Professor

*Dr. Jennifer Enns*, Post-doctoral Fellow

\*\*Dr. Greg Finlayson, Research Scientist

Dr. Randy Fransoo, Assistant Professor

Dr. Alan Katz, Professor

Dr. Lisa Lix, Professor

Dr. Coleen Metge, Associate Professor

Dr. Nathan Nickel, Assistant Professor

Dr. Colette Raymond, Research Scientist

Dr. Leslie Roos, Professor

Dr. Noralou Roos, Professor

# People

[mchp.ca/aboutpeople.html](http://mchp.ca/aboutpeople.html)

*Dr. Chelsea Ruth*, Assistant Professor

Mark Smith, Research Scientist

**Research Coordinators** coordinate deliverable project activities:

Elaine Burland

Ina Koseva

*Farzana Quddus*

Chelsey McDougall

Jennifer Schultz

Ruth-Ann Soodeen

*Wattamon Srisakuldee*

Tamara Thomson

Jeff Valdivia

\*\*Chun Yan Goh

**Research Assistants** are students carrying out a variety of support tasks for research coordinators and our research support team:

Susan Burchill

Alexandra Decker (Co-op placement University of Waterloo)

Jessica Jarmasz

Iresha Ratnayake





MCHP Staff 2016

ER CHALLENGER VISIONARY INNOVATOR ADVENTURER REBEL PIONEER CREATOR EXPLORER DEFENDER TRAILBLAZER CHALLENGER VISIONARY INNOVATOR ADVENTURER REBEL PIONEER CREATOR EXPLORER DEFENDER TRAILBLAZER CHALLENGER VISIONARY INNOVATOR ADVENTURER REBEL P  
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TRAILBLAZER CHALLENGER VISIONARY INNOVATOR ADV



## **Data, Documentation and Access**

team supports the development and use of the Population Health Data Repository:

\*\*Jo-Anne Baribeau

Charles Burchill

*Kara Dyck*

Say Hong

Emily Jones

Jaime Kirkland

\*\*Justine Orr

Gurpreet Singh Pabla

Mark Smith

Angela Tan

Dave Towns

Ken Turner

**Data Analysts** provide data analysis and statistical support for research projects:

Wendy Au

*Andrew Basham*

Charles Burchill

Hui Chen

Matt Dahl

Shelley Derksen

Natalia Dik

Roxana Dragan

Oke Ekuma

Say Hong

\*\*Milton Hu

\*\*Sazzadul Khan

Leonard MacWilliam

Yao Nie

Heather Prior

*Joykrishna Sarkar*

Carole Taylor

Randy Walld

Marina Yogendran

## **Information Technology specialists**

manage all our information technology services within MCHP and to researchers accessing our Remote Access Sites:

Darrin Halabuza

Rod McRae

**Finance Grant Accountants** set up and administer grants, and ensure we all get paid on time, and monitor our finances:

Ariel Bautista

Sophie Buternowsky

Jeannie Chen

**Research Support** provide administrative, research and clerical support to researchers in the completion of deliverables, peer-reviewed journal articles and grant proposals; and they support our knowledge translation events and communications:

Eileen Boriskewich

Theresa Daniuk

\*\*Joshua Ginter

\*\*Wendy Guenette

\*\*Christina Kulbaba

Scott McCulloch

Leanne Rajotte

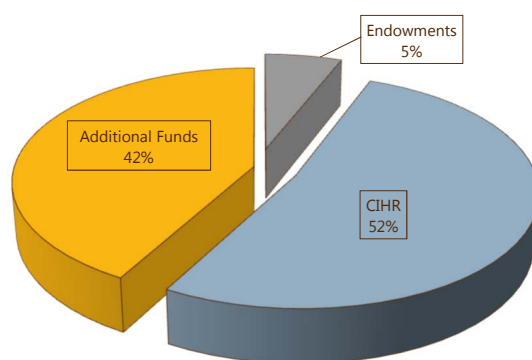
*Phyllis Ritchie*

*Dale Stevenson*

*MCHP values:  
collaboration, excellence,  
innovation, social  
relevance, stewardship,  
teamwork*

**M**CHP is generously supported by Manitoba Government through a five-year funding agreement with Manitoba Health, Seniors and Active Living (MHSAL). The budget shows how we spend these funds.

### Additional Funding 2015-16



Budget 2015-16	2,325,000.00
Carry-over from 2014-2015	<u>25,273.16</u>
	<b>2,350,273.16</b>

<b>Salaries</b>	
Staff	1,754,695.83
Staff Benefits	315,100.41
Payroll Levy	40,467.33
External Contracts	<u>50,609.36</u>
<b>Salaries Subtotal</b>	<b>2,160,872.93</b>
<b>Other Expenditures</b>	
General Office Expenses	103,936.77
Equipment:	
Purchase	40,232.84
Maintenance	21,133.93
Travel	<u>29,047.96</u>
<b>Other Expenditures Subtotal</b>	<b>194,351.50</b>
<b>TOTAL EXPENDITURES</b>	<b>2,355,224.43</b>

## MCHP Summary of Total New Funding 2015-2016 (by Source)

	<u>Amount</u>
<b><u>Contracts</u></b>	
Manitoba Health	2,325,000.00
<i>Total</i>	<b>2,325,000.00</b>
<b><u>Research Grants</u></b>	
<b>Canadian Institutes of Health Research</b>	
Brownell M    Envision: Evaluating Home Visiting Interventions for Manitoba First Nations Families	250,000.00
Brownell M    Neonatal and Childhood Neurodevelopment, Health and Educational Outcomes of Children Exposed to Anti-depressants and Maternal Depression During Pregnancy	46,250.00
Brownell M    PATHS equity for children: A program of research into what works to reduce the gap for Manitoba's children.	400,000.00
Chartier M    PAX - Good Behaviour Game in First Nations Communities: Enhancing and Adapting a School-Based Mental Health Promotion and Suicide Prevention Strategy	56,087.00
Chateau D    Canadian Network for Observational Drug Effect Studies, database team	240,010.00
Chateau D    Canadian Network for Observational Drug Effect Studies, knowledge translation team	20,000.00
Chateau D    Pathways to Health Equity: Levelling the playing field. An international conference for research into health equity.	10,000.00
Katz A    Demystifying the complex relationship of urban food security and health equity (DECODE) - The impact of urban form on health equity: towards an understanding of food security.	50,000.00
Roos NP    Injecting evidence into health policy coverage: Working with the media	82,302.00
Roos NP    Treat Poverty to Improve Health and Well-Being	95,000.00
<i>Total</i>	<b>1,249,649.00</b>
<b>Centre Hospitalier Universitaire Sainte-Justine</b>	
Brownell M    Long-term Clinical and Financial Impact of Asthma Control During Pregnancy and Preschool Years on Disease Evolution Until Adulthood	21,375.00
<i>Total</i>	<b>21,375.00</b>
<b>Manitoba Health Research Council</b>	
Nickel NC    Manitoba Infant Feeding Database - A capture recapture study.	81,449.00
<i>Total</i>	<b>81,449.00</b>
<b><u>Revenue</u></b>	
Data Access/Remote Access Site Fees	693,973.00
<i>Total</i>	<b>693,973.00</b>
<b><u>Endowments/Awards</u></b>	
Endowed Chair in Child Health	134,961.00
Research Start-up Funds	75,000.00
<i>Total</i>	<b>209,961.00</b>
<b>Total MCHP Funding</b>	<b>4,581,407.00</b>





**M**ANITOBA Centre for Health Policy is supported by an advisory board representing:

- ex officio MCHP staff
- seven members appointed by Manitoba Health (deputy ministers from departments sharing data with us)
- seven members appointed by University of Manitoba (university administrative staff and external advisors).

The advisory board meets twice a year to hear about the centre's activities and to provide advice on areas of development for the centre.

In 2015, we updated our strategic plan, and consulted the advisory board on our draft plan, benefiting from their insight.

# Advisory Board

**[mchp.ca/aboutadvisoryboard.html](http://mchp.ca/aboutadvisoryboard.html)**

Tel: (204) 789-3819  
Fax: (204) 789-3910  
Email: [info@cpe.umanitoba.ca](mailto:info@cpe.umanitoba.ca)

Please direct all media inquiries to:

The best way to keep up to date with what's happening at MCHP is to subscribe to our news list. We'll periodically send you notice of recently released reports, events, and other material from MCHP.

# Contact Us

**We're social too!**

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Manitoba Centre for Health Policy -  
University of Manitoba

**[umanitoba.ca/medicine/units/mchp](http://umanitoba.ca/medicine/units/mchp)**