

ONTARIO WOMEN'S  
HEALTH EQUITY REPORT

# The POWER Study Framework

## *Chapter 2*

### AUTHORS

Jocalyn P. Clark, MSc, PhD

Arlene S. Bierman, MD, MS, FRCPC

### INSIDE

- Why focus on women's health?
- Conceptual framework
- Selecting indicators to drive change
- How findings are reported
- The scope of the POWER Study
- Towards a high-performing health system for women

power



Project for an Ontario Women's Health Evidence-Based Report

# LIST OF EXHIBITS

**EXHIBIT 2.1**  
**POWER Study Indicator Selection Criteria ..... 5**

**EXHIBIT 2.2**  
**POWER Study Gender and Equity Health Indicator Framework ..... 6**

**EXHIBIT 2.3**  
**Health System Strategy Map of the Ontario Ministry of Health  
 and Long-Term Care..... 8**

June 2009 • Volume 1 Ontario Women’s Health Equity Report  
Improving Health and Promoting Health Equity in Ontario

### ACKNOWLEDGEMENTS

The POWER Study is funded by Echo: Improving Women’s Health in Ontario, an agency of the Ministry of Health and Long-Term Care. This report does not necessarily reflect the views of Echo or the Ministry.

The POWER Study is a partnership between the Keenan Research Centre in the Li Ka Shing Knowledge Institute of St. Michael’s Hospital and the Institute for Clinical Evaluative Sciences (ICES) in Toronto.

### PUBLICATION INFORMATION

© 2009 St. Michael’s Hospital and the Institute for Clinical Evaluative Sciences

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the proper written permission of the publisher.

### CANADIAN CATALOGUING IN PUBLICATION DATA

Project for an Ontario Women’s Health Evidence-Based Report: Volume 1  
Includes bibliographical references  
ISBN: 978-0-9733871-1-7

### HOW TO CITE THIS PUBLICATION

The production of Project for an Ontario Women’s Health Evidence-Based Report: Volume 1 was a collaborative venture. Accordingly, to give credit to individual authors, please cite individual chapters and titles, in addition to the editors and book title.

For this chapter:

Clark JP, Bierman AS. The POWER Study Framework. In: Bierman AS, editor. Project for an Ontario Women’s Health Evidence-Based Report: Volume 1: Toronto; 2009.

For this volume:

Bierman AS, editor. Project for an Ontario Women’s Health Evidence-Based Report: Volume 1: Toronto; 2009.

The POWER Study  
Keenan Research Centre in the Li Ka Shing Knowledge Institute, St. Michael’s Hospital  
30 Bond St. (193 Yonge St., 6th floor)  
Toronto, ON, M5B 1W8  
Tel: (416) 864-6060, Ext 3946  
Fax: (416) 864-6057  
POWERStudy@smh.toronto.on.ca  
www.powerstudy.ca

# Our goal and approach

The goal of the POWER Study is to produce a comprehensive provincial Report on women's health. The Report will serve as an evidence-based tool to help policy makers, health care providers and consumers improve the health of, and reduce inequities among, the women of Ontario.

The POWER Study reports on a broad set of measures that focus on women's health status, their access to health care services, the quality of the care they receive and the outcomes of that care. These measures, known as indicators, were chosen by technical experts with input from a range of community-based stakeholders representing government, clinical and advocacy organizations. The process has allowed us to generate an up-to-date and comprehensive picture of women's health in Ontario. We report on the leading causes of morbidity and mortality among diverse groups of women across the province and also across the continuum of care.

---

## WHY FOCUS ON WOMEN'S HEALTH AND HEALTH CARE?

There are well-documented differences in the health of women and men, as well as in the kind of health care they receive. There are also documented variations in both health and health care **between** groups of women, depending on their age, income level, education, ethnicity and where they live.

Focusing specifically on women is important for several reasons. Women make up more than half the population, are frequent users of the health care system and have unique health care needs. They also tend to be the primary family caregivers and the main health care decision makers for their families.

Studying the differences in health and health care between women and men, and also between subgroups of women, can help us improve the health of all Ontarians. It can help us target areas where inequities exist, develop interventions to reduce these differences and monitor the effectiveness of our efforts to promote equity.

In the area of cardiac care, for example, previous research has shown that women with cardiovascular disease may experience longer delays accessing appropriate health care and, when they do, often receive poorer quality care than men.<sup>1</sup> These gaps may be greater for more vulnerable groups such as low-income women, Aboriginal women, immigrant women, women of colour and women living in rural or remote areas.<sup>2, 3</sup>

The POWER Study builds on previous women's health measurement and reporting efforts that have been conducted provincially, nationally and internationally:

- In 2002, the Ontario Women's Health Status Report provided an overview of women's health status and illness in the province.<sup>4</sup>
- The Ontario Hospital Report Cards report sex-stratified indicators on hospital performance and include indicators for select sex-specific conditions.<sup>5</sup>

- In 2003, the Canadian Institute for Health Information (CIHI), in conjunction with Health Canada, published a national women's health surveillance report using gender-based analyses to create a baseline for measuring and monitoring women's health status, and to stimulate further indicator development.<sup>6</sup>
- Several reporting efforts in the United States and Australia have added to our knowledge of women's health status and outcomes.<sup>7</sup>

These reports provided a foundation for the POWER Study Women's Health Equity Report. In order to make a meaningful contribution to the next generation of women's health reporting, we felt it was important to explicitly examine differences between subgroups of women. We were especially interested in investigating differences in women's health associated with women's socioeconomic status, their ethnicity and where they live.

We adopted an approach that integrates both clinical and population health measures and examines women's health across the continuum of care. We chose indicators that are modifiable; that is, where inequities in health and health care exist, there is potential for intervention and improvement.

## CONCEPTUAL FRAMEWORK FOR THE POWER STUDY

The conceptual framework of the POWER Study reflects the perspective we used to choose our indicators, analyze the data, interpret the findings and report our results. The framework has five features:

### **The POWER Study is guided by the holistic definition of women's health used by the former Ontario Women's Health Council.**

Women's health is defined as: "a state of emotional, social, cultural, spiritual and physical well-being, determined by the social, political and economic context of women's lives, as well as by biology. Women's health is defined by, and recognizes the

validity of, women's perceptions and life experiences of health and illness, the values and knowledge of women, and the role of women both as users and as providers of health care."<sup>8</sup>

### **The POWER Study framework emphasizes the importance of the social determinants of women's health.**

These are individual and societal factors which create the conditions for better or poorer health and for the delivery of health care. These social determinants include sociocultural factors, education, income, social status, housing, employment, health services, personal health practices and the physical environment.<sup>9</sup>

### **The POWER Study framework makes a distinction between "sex" and "gender."**

Sex refers to the biological differences between men and women, while gender refers to the differences associated with societal roles and the context of women's lives. It is usually difficult to separate the effects of sex and gender when studying women's health care, especially when all the available survey and administrative data are collected and reported only by sex. For example, while sex (male vs. female) influences who will get lung cancer and who will survive it, social factors influence who is more likely to smoke and is therefore at greater risk. These social factors differ by gender.

We felt it was vital to better understand how the interrelated factors of sex and gender influence health and health care. To generate the most helpful findings, we adopted a number of strategies to supplement the sex-disaggregated secondary data that were used in the POWER Study:

- We used the empirical and theoretical literature to help interpret and provide context to our findings.
- We provide an account of what we could not measure given current data availability and quality issues.

- We explicitly measured indicators for subgroups of women (by age, income, education, ethnicity and geography) to reflect some of the social factors that shape women's lives in Ontario.
- We are conducting additional research studies that use multivariable analyses to explore how social and economic status, ethnicity, education and other determinants influence women's health and health care. These will be reported in subsequent academic papers.

### **The POWER Study framework is centred around the concept of equity.**

A primary objective of this Report is to build the evidence base and tools needed to implement changes to reduce health inequities among women.

To accomplish this objective, we felt it was important to have a clear definition of what constitutes "inequity," which is defined by the International Society for Equity in Health as: "The systematic and potentially remediable differences in one or more aspects of health across populations or population groups defined socially, economically, demographically, or geographically."<sup>10</sup> By including "potentially remediable" as a key element, the definition focuses attention on identifying and addressing factors amenable to change.

The POWER Study incorporates equity analyses by using indicators that are capable of measuring differences between subgroups of women and are also modifiable. Results from these analyses are intended to inform the development and evaluation of interventions to reduce inequities in women's health.

### **The POWER Study framework was developed with stakeholder input.**

The perspectives and expertise of women's health stakeholders across the province were included and respected from the outset of the POWER Study. Stakeholders from a range of community organizations,



Photo courtesy of CAAWS – Mariann Domonkos Photography

government, and health care settings were instrumental in shaping the indicator selection and in helping to define priority reporting areas. We consulted specifically with groups and individuals who are most likely to use the Report findings. These include: policy makers interested in measurement and monitoring of the performance of the health care system; community-based health organizations that may use the findings to raise awareness and for advocacy purposes; and health care providers who may use our findings to improve the quality of care provided to women and thus improve their health outcomes.

Together **these five features make up the conceptual framework** which guided us in developing a health Report for Ontario women that is meaningful and actionable, both for decision makers and for other stakeholders in women's health across the province.



Source: Health Canada website and Media Photo Gallery, Health Canada, <http://www.hc-sc.gc.ca>  
 Reproduced with the permission of the Minister of Public Works and Government Services Canada, 2009.

## SELECTING INDICATORS TO DRIVE CHANGE

The POWER Study aims to be action-oriented. One of our major goals is **to provide evidence that can be used to stimulate and inform both health system change and greater accountability**. This is in line with the efforts of Ontario's Ministry of Health and Long-Term Care (MOHLTC), which recently undertook a major transformation agenda aimed at improving the quality and equity of care and also at making the health care system more patient-focused.

To achieve these goals, we report on a select set of evidence-based health indicators. These indicators were chosen using a rigorous process and well-defined selection criteria including relevance, scientific soundness and feasibility (see Exhibit 2.1).

We previously developed a Women's Health Indicator Framework as part of our work for the Health Canada women's health indicators project.<sup>11</sup> This Women's Health Indicator Framework was based on extensive literature review and analytic work and was built upon the Canadian Institute for Health Information (CIHI) health indicator framework.<sup>12</sup>

The health indicator framework used by CIHI and Statistics Canada is comprised of four broad categories: Health

Status; Non-Medical Determinants of Health; Health System Performance; and Community and Health System Characteristics. One strength of this framework is that it recognizes many medical and non-medical determinants of health, including gender. However, the CIHI health indicator framework also has important limitations for women's health reporting. It does not acknowledge that gender interacts with other health determinants to shape women's health, nor does it capture the pathways through which these factors operate.

The POWER Study Women's Health Indicator Framework is dynamic rather than static. It recognizes the pathways through which non-medical determinants of health are the primary determinants of health status, and that population and individual health outcomes are mediated by community and health system characteristics as well as by health system performance. This framework also recognizes that sex and gender influence how all these factors impact on women's experiences with care and on their health outcomes.

Based upon stakeholder input, we adapted the Women's Health Indicator Framework for the POWER Study to explicitly include equity. Our Gender and Equity Health Indicator Framework is presented in Exhibit 2.2.

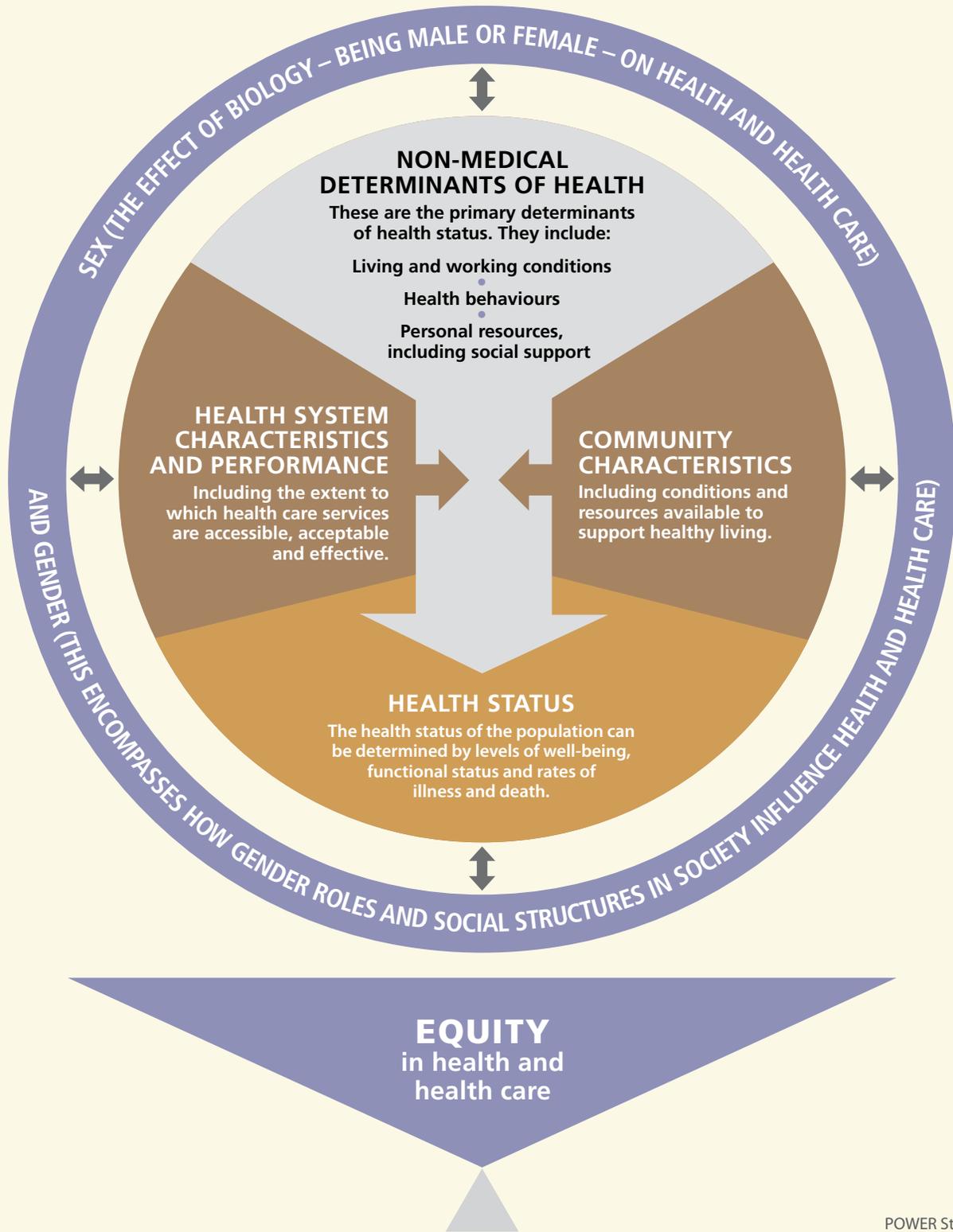
**EXHIBIT 2.1 | POWER Study Indicator Selection Criteria\***

<b>SELECTION CRITERION</b>	<b>DESCRIPTION</b>
<b>Relevance</b>	
Importance/Usefulness	<ul style="list-style-type: none"> <li>The indicator reflects an important health issue or aspect of health system functioning that matters to the health of the population group in question</li> <li>The indicator assists in monitoring and measuring health system performance over an extended period of time and is meaningful to stakeholders</li> </ul>
Amenable to Action	<ul style="list-style-type: none"> <li>The information being collected can be used to inform and influence policy or funding, alter behaviour of health services providers, or increase general understanding in the community in order to improve quality of care and population health</li> </ul>
<b>Scientific Soundness</b>	
Validity	<ul style="list-style-type: none"> <li>There is sufficient scientific evidence to support a link between the performance of an indicator and overall positive outcomes to patients</li> <li>The indicator measures what is both intended and acceptable to the community (face validity), covers relevant content or domains (content validity), and has predictive power (criterion validity)</li> </ul>
Reliability	<ul style="list-style-type: none"> <li>The same result will be obtained if measurements are repeated under identical conditions</li> </ul>
Risk-Adjusted or Stratified	<ul style="list-style-type: none"> <li>The extent to which non-modifiable influences or factors that differ among groups being compared can be controlled or taken into account when necessary for interpretation</li> </ul>
Interpretability	<ul style="list-style-type: none"> <li>Changes in the indicator are commonly understood to be good or bad</li> </ul>
Comparability	<ul style="list-style-type: none"> <li>The indicator can be compared over time, to other geographic areas or to other standards/benchmarks</li> </ul>
<b>Feasibility</b>	
Precisely Defined and Specified	<ul style="list-style-type: none"> <li>The extent to which the measure is standardized with explicit predefined requirements for data collection and calculation of the measure value or score</li> </ul>
Data Feasibility	<ul style="list-style-type: none"> <li>Data required for the indicator are available and of sufficient quality for the areas and time periods indicated, such that no unreasonable obstacles or constraints exist either on access to information or restrictions on its use</li> </ul>
Reliability of Data Collection	<ul style="list-style-type: none"> <li>The data for the indicator are collected in a consistent manner by one or more agencies over time</li> </ul>
<b>Equity</b>	
Health Disparities	<ul style="list-style-type: none"> <li>Indicator selection considers where gender, socioeconomic and ethnic disparities in health and health care are greatest, and where there are significant gender differences in health determinants</li> </ul>
<b>Comprehensiveness</b>	
Continuum of Care	<ul style="list-style-type: none"> <li>The indicator selection process seeks to identify health status and health care performance across the continuum of care, from population health to primary and tertiary care</li> </ul>

POWER Study

\*Developed from a comprehensive review of indicator selection criteria used by other reporting bodies and projects, with specific acknowledgment to the indicator selection criteria developed by the National Committee for Quality Assurance (<http://www.ncqa.org/tabid/415/Default.aspx>) and those used by the Ontario MOHLTC Health System Score Card.

**EXHIBIT 2.2** | POWER Study Gender and Equity Health Indicator Framework



## HOW THE POWER STUDY FINDINGS ARE REPORTED

When reported in the POWER Study, indicators are first stratified by sex and then by important social determinants of health including—when possible—income, education and ethnicity. This has yielded essential information about differences between and among women and men, as well as insights into how the social determinants of health may affect subgroups differently.

We report our results for the province overall and then—when sample size allows—at the level of Ontario’s 14 Local Health Integration Networks (LHINs).

## THE SCOPE OF THE POWER STUDY

The POWER Study provides the most comprehensive provincial women’s health report to date. The Report focuses on inequities in health and health care associated with sex, income, education, geography, and—when possible—with women’s ethnicity, immigration status and knowledge of official languages. By doing this we identify many opportunities for improvement.

Nevertheless, there are important areas of women’s health that we do not address. For example, the Report provides only limited measures of Aboriginal women’s health due to data limitations. We do not look at important vulnerable subgroups of Ontario women such as women with disabilities and Deaf women, lesbian and bisexual women, homeless women and women who have experienced violence. Previous research and advocacy efforts suggest that these groups are more likely to experience poor health, to encounter barriers in accessing care and report receiving poorer quality care.<sup>4, 6, 13-15</sup>

However, the secondary data sources that we use do not contain information to adequately measure issues related to their health and health care experiences.

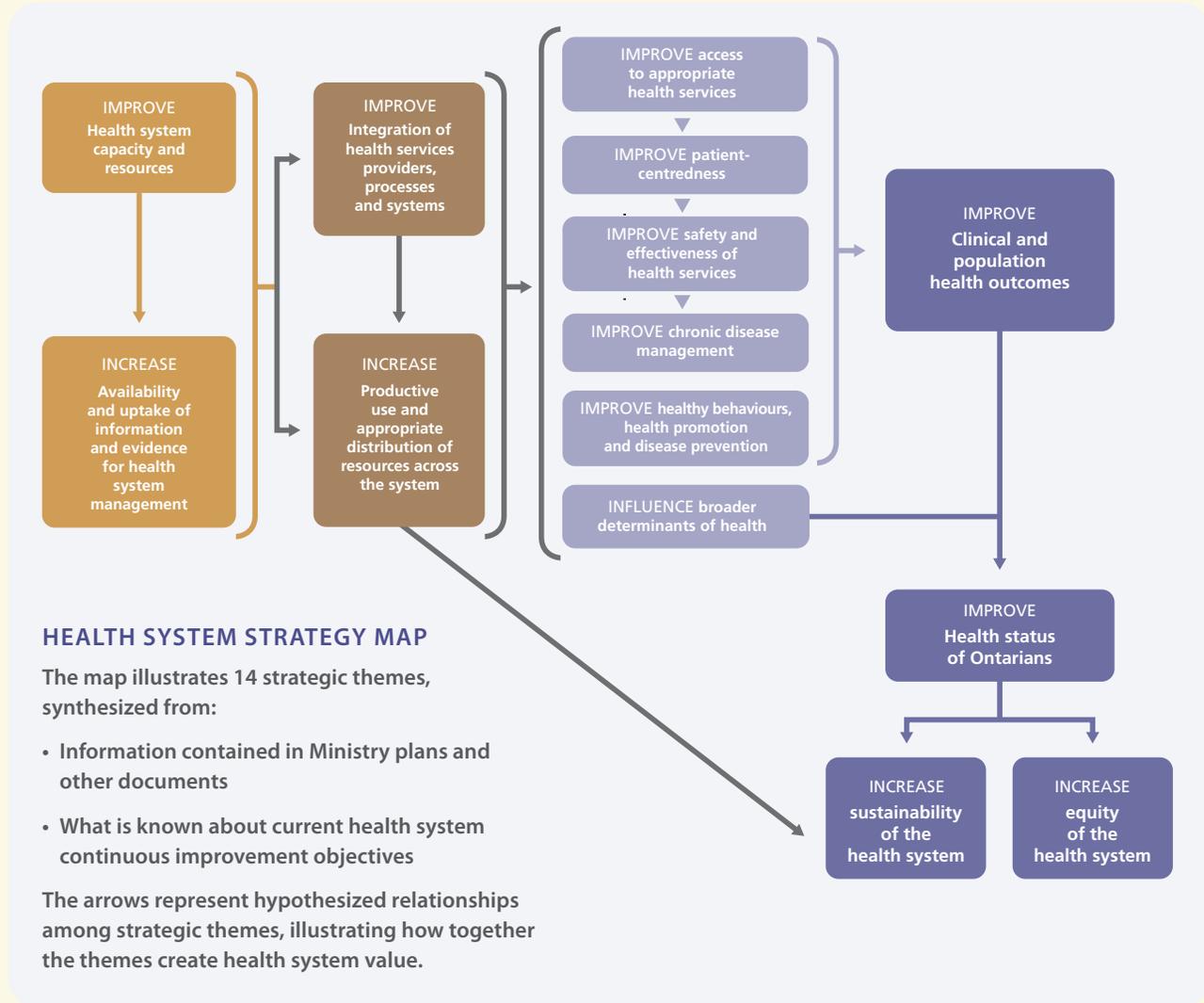
We hope the POWER Study Women’s Health Equity Report provides a robust baseline for understanding women’s health in Ontario and identifies areas where health care data are insufficient. In turn, we hope our work stimulates additional research and advocacy that will benefit all subgroups of women in this province.

## TOWARDS A HIGH-PERFORMING HEALTH SYSTEM FOR WOMEN

We produce this report at a time when there is considerable focus on improving health and health care in Ontario. The Ontario Health Quality Council has identified nine attributes of a high performing health system for Ontarians: safe, effective, patient-centred, accessible, efficient, equitable, integrated, appropriately resourced and focused on population health.<sup>16</sup> The Ontario Ministry of Health and Long-Term Care has developed a strategy map that lays out the steps needed to achieve a health system which produces improved clinical and population health outcomes (see Exhibit 2.3).<sup>17</sup> The Ministry of Health Promotion has produced “Ontario’s Action Plan for Healthy Eating and Active Living.”<sup>18</sup>

Our indicators have been developed to support these objectives and will capture attributes of a high performing health system. These indicators are intended to be used as tools for transformation and improvement.

**EXHIBIT 2.3 | Health System Strategy Map of the Ontario Ministry of Health and Long-Term Care**



**SOURCE:** Health System Strategy Division, Ministry of Health and Long-Term Care, January 2007. This version of the Health System Strategy Map was current at the time of publication; however the health system strategy is currently under revision.

## REFERENCES

- Pilote L, Dasgupta K, Guru V, Humphries KH, McGrath J, Norris C, et al. A comprehensive review of sex-specific issues related to cardiovascular disease. *CMAJ* 2007; 176(6 Suppl):S1–S44.
- Grace SL, Fry R, Cheung A, Stewart DE. Cardiovascular disease. In: DesMeules M, Stewart DE, Kazanjian A, McLean H, Payne J, Vissandjée B, editors. *Women's Health Surveillance Report: A Multi-dimensional Look at the Health of Canadian Women*. Ottawa: Canadian Institute for Health Information; 2003. Accessed May 28, 2008 at [http://www.phac-aspc.gc.ca/publicat/whsr-rssf/pdf/WHSR\\_Chap\\_14\\_e.pdf](http://www.phac-aspc.gc.ca/publicat/whsr-rssf/pdf/WHSR_Chap_14_e.pdf).
- Chou AF, Brown A, Jensen RE, Shih S, Pawlson G, Scholle SH. Gender and racial disparities in the management of diabetes mellitus among Medicare patients. *Womens Health Issues* 2007; 17(3):150–61.
- Stewart DE, Cheung AM, Ferris LE, Hyman I, Cohen MM, Williams JI, editors. *Ontario Women's Health Status Report*. Toronto: Ontario Women's Health Council; 2002. Accessed May 28, 2008 at <http://www.womenshealth-council.on.ca/English/page-1-1661-1.html>.
- Hospital Report 2006: Acute Care. Toronto: Ministry of Health and Long-Term Care and Ontario Hospital Association; 2006. Accessed May 28, 2008 at [http://www.hospitalreport.ca/downloads/2006/AC/acute\\_report\\_2006.pdf](http://www.hospitalreport.ca/downloads/2006/AC/acute_report_2006.pdf).
- DesMeules M, Stewart DE, Kazanjian A, McLean H, Payne J, Vissandjée B, editors. *Women's Health Surveillance Report: A Multi-dimensional Look at the Health of Canadian Women*. Ottawa: Canadian Institute for Health Information; 2003. Accessed May 28, 2008 at <http://www.phac-aspc.gc.ca/publicat/whs-ssf/index-eng.php>
- Bierman AS, Clark JP, Vahabi M, Berlin M, Lin V. Can performance measurement drive equity? A women's health report card for Ontario. Unpublished paper.
- Ontario Women's Health Council. Accessed May 28, 2008 at <http://www.ontariowomenshealthcouncil.on.ca>.
- Wuest J, Merritt-Gray M, Berman H, Ford-Gilboe M. Illuminating social determinants of women's health using grounded theory. *Health Care Women Int* 2002; 23(8):794–808.
- International Society for Equity in Health. Definitions. Accessed November 8, 2007 at [http://www.iseqh.org/workdef\\_en.htm](http://www.iseqh.org/workdef_en.htm).
- Bierman A, Ko B, Mawani F. *Equity and Women's Health*. Report No. 6795-15-2003/6380018. Ottawa: Health Canada; 2007. Accessed May 28, 2008 at [http://www.hc-sc.gc.ca/sr-sr/alt\\_formats/hpb-dgps/pdf/finance/hprp-prpms/final/2007-bierman\\_e.pdf](http://www.hc-sc.gc.ca/sr-sr/alt_formats/hpb-dgps/pdf/finance/hprp-prpms/final/2007-bierman_e.pdf).
- Health Indicators 2007. Ottawa: Canadian Institute for Health Information and Statistics Canada; 2007. Accessed April 1, 2009 at [http://secure.cihi.ca/cihiweb/dispPage.jsp?cw\\_page=PG\\_770\\_E&cw\\_topic=770&cw\\_rel=AR\\_152\\_E#full](http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=PG_770_E&cw_topic=770&cw_rel=AR_152_E#full)
- Fay and Associates. *Key to Women's Health: A Health Promotion Framework to Prevent Stroke Among Marginalized Women*. Toronto: Ontario Women's Health Network; 2006. Accessed May 28, 2008 at <http://www.owhn.on.ca/stroke/report.pdf>.
- Khandor E, Mason K. *The Street Health Report 2007*. Toronto: Street Health; 2007. Accessed May 29, 2008 at <http://www.streethealth.ca/Downloads/SHReport2007.pdf>.
- Sen G, Östlin P, George A. *Unequal, Unfair, Ineffective and Inefficient-Gender Inequity in Health: Why It Exists and How We Can Change It*. Final Report to the WHO Commission on Social Determinants of Health; September 2007. Accessed May 29, 2008 at [http://www.who.int/social\\_determinants/resources/csdh\\_media/wgekn\\_final\\_report\\_07.pdf](http://www.who.int/social_determinants/resources/csdh_media/wgekn_final_report_07.pdf).
- Ontario Health Quality Council. *2006 First Yearly Report*. Toronto: The Council; 2006. Accessed May 28, 2008 at [http://www.ohqc.ca/pdfs/ohqc\\_report\\_2006en.pdf](http://www.ohqc.ca/pdfs/ohqc_report_2006en.pdf).
- Health Results Team for Information Management. *Ontario Health System Scorecard Technical Report*. Toronto: Ministry of Health and Long-Term Care; 2006.
- Ontario's Action Plan for Healthy Eating and Active Living. Toronto: Ministry of Health Promotion; 2006. Accessed May 28, 2008 at <http://www.mhp.gov.on.ca/english/health/HEAL/actionplan-EN.pdf>.