Introduction to the POWER Study
Chapter 1

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ONTARIO WOMEN’S HEALTH EQUITY REPORT
Improving Health and Promoting Health Equity in Ontario
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What is the POWER Study?

POWER stands for Project for an Ontario Women’s Health Evidence-Based Report. This multi-year project is funded by Echo: Improving Women’s Health in Ontario, an agency of the Ontario Ministry of Health and Long-Term Care.

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, Ontario, Canada.

More than 60 researchers from diverse backgrounds and with expertise in multiple disciplines are collaborating on the study. Their goal is to assemble and analyze comprehensive information on women’s health and health care across the continuum of care for important subgroups of Ontario’s population. The end result will be a Women’s Health Equity Report for Ontario. This is the first volume of the Report.

WHY DO WE NEED A WOMEN’S HEALTH EQUITY REPORT IN ONTARIO?

Health reports measure the performance of health care systems and the health of populations at a given point or points in time. They can serve as an effective tool for helping to improve overall population health and the quality and outcomes of care.

The POWER Study is looking at whether there are current inequities in health and health care in Ontario. Researchers are analyzing data to examine differences between women and men, as well as between different groups of women—for example, according to where they live in the province and their socioeconomic status.

The resulting Report will serve as an evidence-based tool for policy makers, providers and consumers in their efforts to improve health and reduce inequities in health care.

The two-volume Report focuses on key areas of importance to women’s health, by examining:

- the overall health of Ontario women, and their access to health care services, as well as how these are related to the social determinants of health
- the leading causes of illness and death among women, including cancer, cardiovascular disease, depression, musculoskeletal disorders, diabetes, Human Immunodeficiency Virus (HIV) infection; and women’s reproductive health.

See Chapter 2 for details on the conceptual framework for the POWER Study.
WHAT’S IN THIS VOLUME OF THE WOMEN’S HEALTH EQUITY REPORT?

The POWER Study Women's Health Equity Report will be produced and released in two volumes. This volume contains eight chapters (Exhibit 1.1). In addition to the current introduction, chapters include details on the conceptual framework underlying the research (Chapter 2), conclusions and policy implications (Chapter 8), and five main chapters detailed below:

Chapter 3 | Burden of illness

This chapter provides a detailed analysis of the burden of illness (the overall health and well-being) of Ontarians, and how it varies depending on sex, socio-economic status and geographical area of residence. Up-to-date reporting is provided on the prevalence of chronic conditions among Ontarians (both women and men), their current health and functional status, their risk factors for chronic diseases, the incidence of sexually-transmitted infections, and causes and patterns of mortality.

Chapter 4 | Cancer

Cancer is the second leading cause of death among Ontario women. In this chapter, we report on several of the most common forms of the disease, including cancers of the breast, reproductive system and lung, as well as colorectal cancer. We also provide information on cancer incidence, survival rates and end-of-life care; and include indicators that capture the continuum of cancer care (prevention, screening, treatment and follow-up).

Chapter 5 | Depression

Depression is a major health concern for Canadian women, who are more likely to experience depression than men. Serious and/or untreated depression has a large influence on quality of life. In this chapter we provide data on how well Ontario's health care system currently meets the needs of women and men with depression.

Chapter 6 | Cardiovascular Disease

Cardiovascular disease (CVD) is a leading cause of mortality and a major cause of disability for Ontario women. This chapter focuses on the three major types of CVD that affect both women and men in the province: ischemic heart disease, heart failure and stroke. We provide information on the quality of life of women and men with CVD and wait times for cardiovascular procedures.

Chapter 7 | Access to health care

Access to health care services continues to be an important issue for Ontarians in general and for women in particular. Lack of access to services can result in costly and potentially avoidable complications, increased morbidity (sickness) and reduced quality of life. In this chapter we report on access to primary care, specialist care and home care. We also provide information on rates of hospitalization for diabetes, asthma and heart failure that might be improved through better access to effective outpatient care.

The second volume of the POWER Study Women’s Health Equity Report will update and expand on indicators presented in Volume 1. In addition there will be new chapters on musculoskeletal disorders, diabetes, HIV infection and reproductive health, as well as chapters on high-risk subgroups of women (low-income, immigrant and older women) and social determinants of health.
WHO WORKED TO DEVELOP THE REPORT?

The POWER Study is a collaborative effort (Exhibit 1.2). Investigators belong to an interdisciplinary team of researchers with relevant content and methodological expertise from various fields, including health services research, medicine, nursing, social sciences and health care policy:

- The research team was organized into Working Groups, based on chapters of the Report (i.e., cardiovascular disease, cancer, depression). Each Working Group had its own lead investigator(s) and was supported by skilled and dedicated statisticians, analysts and research coordinators.
- A Technical Expert Panel (TEP) was convened for each chapter. The TEP selected the final indicators using a modified Delphi process (See page 5 – How did we choose our indicators?).
- An Advisory Council, comprised of representatives from diverse health care sectors and research areas, provided strategic support and recommendations on the POWER Study’s design, implementation and dissemination of information.

- **Key stakeholders** in women’s health across Ontario were consulted at the outset of the project, and their opinions and feedback shaped both priority-setting and the indicator selection process. Stakeholders included government representatives, health care providers, health data providers, representatives of women’s health organizations and consumers. Consultations were held to:
  - engage with stakeholders by creating awareness about the POWER Study and its objectives
  - provide a forum for discussing how we can improve access, quality, and outcomes of care for the women of Ontario
  - elicit stakeholders’ needs in terms of how the POWER Study can be most useful
  - help set priorities for reporting in specific areas
  - develop ideas and partnerships for strategic dissemination
WHAT IS AN INDICATOR?

To generate the Women's Health Equity Report, the POWER Study used “indicators.” Indicators are measures that reflect the health of a population or the performance of health care processes and outcomes. For example:

- Health indicators can assess the life expectancy of the population, or the percentage of the population who are smokers, or whether women with breast cancer are getting recommended treatments such as radiation therapy after a lumpectomy.

- To get a sense of Ontario women’s overall health, we could determine how many have been diagnosed with diabetes or high blood pressure. Or we could look at surveys which ask women to rate their own health and to state whether health problems are limiting their activities.

- To assess women’s access to health care in Ontario, we might measure how many women say they have a family doctor or feel they can get care when it’s needed.

- To evaluate equity in health and health care among women, we could measure what percentage of lower-income versus higher-income women receive regular screening tests to find diseases when they are most treatable—for example, Papanicolaou (Pap) tests to detect cervical cancer.

- Finally, to assess quality of care in Ontario, we might look at how many women are receiving recommended treatments after a disease or condition has been diagnosed—for example, medications prescribed after a heart attack.
HOW DID WE CHOOSE OUR INDICATORS?

Indicators were chosen via a rigorous selection process, with input and agreement from experts in the field. We conducted an extensive review of existing indicators from peer-reviewed and “grey” (unpublished) literature. From this review, potential indicators were selected according to specified criteria (i.e., their impact on women’s quality of life, functioning and well-being, and whether they affected large groups of women generally or specific populations). We sought to identify indicators which would be most useful to the broadest number of stakeholders:

- The indicators would be amenable to intervention and improvement by those in the public health, health care and non-health sectors.
- The indicators allowed for comparison between and among different subgroups of women by socioeconomic status, ethnicity and geography. To this end, we took into account where inequalities were known to be greatest and where there were significant gender differences, both in health determinants and health outcomes.
- The indicators measured performance across the continuum of care in Ontario, from population health to primary care to tertiary care.

The resulting extensive list of indicators was then reviewed by each Working Group to identify a potential list of indicators for inclusion.

For each chapter, a Technical Expert Panel (TEP), consisting of experts in the field relevant for that chapter, was involved in the final selection of indicators. The TEPs used pre-defined indicator selection criteria (see Chapter 2, Exhibit 2.1) and participated in a modified Delphi process, consisting of an online survey (Survey Monkey) and an “in-person” meeting to rate and select the indicators. Indicators were excluded if limitations in data availability prevented their measurement—even if they had the potential to provide relevant and important information (NOTE: In each chapter of the Report we highlight key areas where data were unavailable or limited, under the heading “What we can’t measure”).

WHAT DATA DID WE USE?

To create this volume of the Women’s Health Equity Report, POWER Study researchers used a variety of secondary data sources. Data were drawn from routinely collected administrative health care databases (such as those which track hospitalizations and visits to the doctor), population health surveys, vital statistics data sets and disease registry data. Information on data sources is available in the Appendices of each chapter.

HOW DID WE ANALYZE THE DATA?

At the provincial level, we report on indicators by sex (women vs. men) and by age, and then stratify them by socioeconomic status (income, education). We provide a breakdown of analyses for selected indicators by ethnicity, immigration status, and knowledge of official languages.

At the level of Local Health Integration Networks (LHINs), we analyzed data first by sex, and then stratified by age, income and education wherever possible.

In order to ensure consistency in methodology and data analysis across all chapters we were supported by a Methods Working Group comprised of statisticians, programmers, analysts and researchers. Indirect standardization was used for age-adjustment and risk-adjustment models were used when indicated.

In the next chapter (Chapter 2), we build on the information presented here, by expanding upon the conceptual framework which guided the selection of indicators for the POWER Study.