

FINAL REPORT

National Consensus Conference on Population Health Indicators



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Final Report

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The conference, held on May 4, 1999, was hosted by CIHI in cooperation with the Federal/Provincial/Territorial Advisory Committees on Population Health and Health Services, Health Canada, and Statistics Canada.

**National Consensus Conference on
Population Health Indicators
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Executive Summary

In response to feedback from a consultation process on health information needs, the Canadian Institute for Health Information (CIHI) recently launched a collaborative project on health indicators. The purpose of the project is to identify what measures should be used to report on the health of Canadians and the health system and then to compile and make this information widely available. These indicators are primarily intended to support regional health authorities in monitoring progress in improving and maintaining the health of the population and the functioning of the health system for which they are responsible.

This vision can only be realized if we work together. Success depends on the collaboration and cooperation of governments, regional and local health organizations, key data custodians, and Canada's health research community. The active involvement of other stakeholders, such as the public, health advocacy groups, and caregivers is also essential.

Accordingly, on May 4, 1999, CIHI, in cooperation with the Federal/Provincial/Territorial Advisory Committees on Population Health and Health Services, Health Canada, and Statistics Canada, convened the first *National Consensus Conference on Population Health Indicators*. Participants advised on the selection of an initial core set of indicators that can be compiled from current data sources and the identification of potential indicators to be considered for future development. These indicators relate to:

- The overall health of the population served, how it compares to other regions in the province and country and how it is changing over time;
- The major non-medical determinants of health in the region;
- The health services received by the region's residents; and
- The characteristics of the community or the health system that provide useful contextual information.

Compilation, verification, and reporting of comparative data are now beginning for the indicators confirmed at the Consensus Conference. Over time, the initial indicators will be refined and expanded. The scope and utility of the core set of indicators will also increase as new data are developed, benchmarks are established, and knowledge grows.

Canadians care deeply about their health and their health system. As a nation, we want to continue to live healthy and productive lives. We want to make sure that health services are available where and when we need them. We want to make the best possible use of every dollar that is spent on health care. To do these things, we need better information.

Last year, the Federal Minister of Health's Advisory Council on Health Info-Structure, the Canadian Institute for Health information (CIHI), and Statistics Canada brought together over 500 people—health administrators, researchers, caregivers, government officials, health advocacy groups, and consumers—to identify health information needs. One of the priorities they identified was compiling comparable quality data on key indicators for health and health services, particularly at regional and community levels.

The Health Indicators Project

In response to the consultations, CIHI has launched a collaborative process to identify what measures should be used to report on the health of Canadians and the health system—and then to share this information with Canadians from coast-to-coast.

This core set of indicators will reflect the key strategic directions recently adopted by the Federal/Provincial/Territorial (F/P/T) Advisory Committee on Population Health and endorsed by the Conference of Deputy Ministers of Health:

- Ensuring positive and supportive living and working conditions in all our communities;
- Ensuring a safe, high quality physical environment;
- Ensuring individuals have opportunities for healthy development and supports to make choices that enhance their health and foster their independence;
- Ensuring appropriateness and affordable health services, accessible to all; and
- Reducing preventable illness, injury, and premature death.

The indicators are primarily intended to support regional health authorities in monitoring progress in improving and maintaining the health of the population and the functioning of the health system for which they are responsible. In addition, the indicators should assist with reporting to governing bodies, the public, and health professional groups. Ideally, the core set of indicators will:

- Be relevant to established health goals or strategic directions;
- Be based on agreed upon benchmarks, guidelines, or standards;
- Be collected using standardized data definitions and elements to ensure the resulting data meet technical data quality criteria; and
- Be available electronically across Canada to a regional or local level, as well as provincially and nationally.

Individual regions and interest groups may choose to supplement this core set of indicators with locally collected or special-purpose data focused on specific health priorities in the region. Definition and data collection for these supplemental indicators are outside the scope of this project.

The Consultation Process

The Health Indicator Project is designed to complement and build on initiatives that are already underway or under development at the national level and in Canada's provinces and territories. To facilitate this process, an Advisory Group was established including representatives from the Canadian Institute for Health Information, the F/P/T Advisory Committees on Population Health and Health Services, Health Canada, and Statistics Canada.

The first step in working towards a common core set of health indicators was to conduct an environmental scan to identify and review related initiatives and to assess the feasibility of possible indicators given the availability and comparability of data from national sources. An iterative modified Delphi process involving regional, provincial/ territorial, and other experts was then undertaken to develop a draft set of health and health care indicators that reflect:

- The overall health of the population served, how it compares to other regions in the province and country and how it is changing over time;
- The major non-medical determinants of health in the region;
- The quality of health services received by the region's residents; and
- The characteristics of the community or the health system that provide useful contextual information (see Table 1).

These indicators formed the basis of deliberations at the first *National Consensus Conference on Population Health Indicators*. This conference was hosted by CIHI in cooperation with the F/P/T Advisory Committees on Population Health and Health Services, Health Canada, and Statistics Canada. The aim of the consensus conference was to achieve an agreement on initial measures of the health of Canadians, factors that affect our health, and the performance of the health system. Eighty-one experts from regions (23% of participants), provincial/territorial governments (21%), the federal government (12%), national associations (15%), academics/ researchers (16%) and other groups, including consumers, (12%) provided practical advice on where to start based on what can be done with the data and methods that are currently available. Appendix A presents a list of participants.

Table 1: Health Indicators—A Framework*

Health Status			
Deaths	Health Conditions	Human Function	Well-Being
A range of age-specific (e.g. infant mortality) and condition specific (e.g. AIDS deaths) mortality rates, as well as derived indicators (e.g. life expectancy and potential years of life lost).	Alterations or attributes of the health status of an individual which may lead to distress, interference with daily activities, or contact with health services; it may be a disease (acute or chronic), disorder, injury or trauma, or reflect other health-related states such as pregnancy, aging, stress, congenital anomaly, or genetic predisposition. (WHO)	Levels of human function are associated with the consequences of disease, disorder, injury and other health conditions. They include body function/ structure (impairments), activities (activity limitations), and participation (restrictions in participation). (ICIDH-2, Beta 2 version)	Broad measures of the physical, mental, and social well-being of individuals.
Non-Medical Determinants of Health			
Health Behaviours	Living and Working Conditions	Personal Resources	Environmental Factors
Aspects of personal behaviour and risk factors that epidemiological studies have shown to influence health status.	Indicators related to the socio-economic characteristics and working conditions of the population, that epidemiological studies have shown to be related to health.	Measures the prevalence of factors, such as social support and life stress, that epidemiological studies have shown to be related to health.	Environmental factors with the potential to influence human health.
Health System Performance			
Acceptability	Accessibility	Appropriateness	Competence
All care/service provided meets the expectations of the client, community, providers and paying organizations, recognizing that there may be conflicting, competing interests between stakeholders, and that the needs of the clients'/ patients' are paramount. (CCHSA)	The ability of clients/ patients to obtain care/ service at the right place and the right time, based on respective needs. (CCHSA)	Care/service provided is relevant to the clients'/patients' needs and based on established standards. (CCHSA)	An individual's knowledge and skills are appropriate to the care/service being provided. (CCHSA)
Continuity	Effectiveness	Efficiency	Safety
The ability to provide uninterrupted, coordinated care/service across programs, practitioners, organizations, and levels of care/service, over time. (CCHSA)	The care/service, intervention or action achieves the desired results. (CCHSA)	Achieving the desired results with the most cost-effective use of resources. (CCHSA)	Potential risks of an intervention or the environment are avoided or minimized. (CCHSA)
Community and Health System Characteristics			
Characteristics of the community or the health system that, while not indicators of health status or health system performance in themselves, provide useful contextual information.			

* Where possible, the framework's thematic dimensions are aligned with those used in other ongoing initiatives. For example, some of the dimensions in the Health Status category are based on concepts from the World Health Organization's (WHO) International Classification of Functioning and Disability (ICIDH-2, Beta 2 Version). Similarly, the dimensions in the Health System Performance category reflect those currently used by the Canadian Council on Health Services Accreditation (CCHSA). Changes to this area will be considered as the CCHSA's Achieving Improved Measurement (AIM) project and provincial/territorial frameworks evolve.

Consensus Conference Outcomes

Participants at the May 4, 1999 Consensus Conference on Population Health Indicators primarily addressed the selection of an initial core set of indicators to populate the framework that can be compiled from current data sources in at least several jurisdictions. Participants first voted on a draft list of indicators, derived from the environmental scan and subsequent consultations.

Indicators where the average of votes was 7.5/10 or higher were automatically retained; those with a score of less than 7 were rejected. Indicators with scores between 7 and 7.5 were reviewed based on voting patterns and discussion at the conference. Based on feedback, the placement of some indicators in the framework was altered, definitions were changed, or indicators were placed on the list for potential future development. Indicators where a resolution was not determined at the conference were rejected if there was substantial variation in participants' votes (standard deviation greater than 2).

A revised list of indicators is presented in Table 2. For more information on the definitions and data sources for these indicators, see Appendix B.

Table 2: Health Indicators Confirmed at the Consensus Conference

Health Status			
Deaths	Health Conditions	Human Function	Well-Being
<ul style="list-style-type: none"> • Infant mortality • Perinatal deaths • Life expectancy • Circulatory deaths • Cancer deaths • Respiratory deaths • Suicide • Unintentional injury deaths • Pertussis deaths* • AIDS deaths* • Potential Years of Life Lost (< 75) • Inequalities in life expectancy* 	<ul style="list-style-type: none"> • Overweight* • Arthritis • Diabetes • Asthma • Chronic pain* • Depression* • Injury hospitalizations • Food and waterborne diseases 	<ul style="list-style-type: none"> • Functional health • Disability-days* • Activity limitation • Health expectancy 	<ul style="list-style-type: none"> • Self-rated health • Self-rated 'excellent' health for 2 consecutive years • Self-esteem • Mastery
Non-Medical Determinants of Health			
Health Behaviours	Living and Working Conditions	Personal Resources	Environmental Factors
<ul style="list-style-type: none"> • Smoking rate • Youth smoking rate • Smoking initiation (average age)* • Regular heavy drinking • Physical activity • Breastfeeding 	<ul style="list-style-type: none"> • High school and post-secondary graduation • Unemployment rate • Long-term and youth unemployment • Low income rate • Children in low income families • Income inequality • Housing affordability • Crime rate and youth crime rate • Decision-latitude at work* 	<ul style="list-style-type: none"> • School readiness • Social support • Life stress 	
Health System Performance			
Acceptability	Accessibility	Appropriateness	Competence
	<ul style="list-style-type: none"> • Influenza immunization, 65+ • Screening mammography, women age 50-69 • Pap smears, age 18-69 • Childhood immunizations** 	<ul style="list-style-type: none"> • Vaginal birth after caesarean • Breast-conserving surgery • Caesarean sections 	
Continuity	Effectiveness	Efficiency	Safety
	<ul style="list-style-type: none"> • Quitting smoking • Low birthweight • Pertussis • Measles • Tuberculosis • HIV • Chlamydia • Pneumonia and influenza hospitalizations • Deaths due to medically-treatable diseases • Ambulatory Care Sensitive conditions 	<ul style="list-style-type: none"> • Surgical day case rates • May Not Require Hospitalization • % Alternate Level of Care days • Expected compared to actual stay 	<ul style="list-style-type: none"> • Hip fractures
Community and Health System Characteristics			
<ul style="list-style-type: none"> • Population count • Teen pregnancy*/teen births* • Expenditures per capita • Doctors and nurses per capita • Hospital days per capita (possibly by duration of stay)* 		<ul style="list-style-type: none"> • CABG rates • Hip replacement • Knee replacement • Hysterectomy • Myringotomy 	

* = Based on feedback from the Conference, proposed indicators are under review for feasibility, comparability, availability of data; some indicators are also under review for significant proposed changes in definition.

** = Limited data availability

Indicators for Future Development

While the focus of the Consensus Conference was on indicators that could be compiled from current, comparable data sources, several indicators were also proposed for potential future development. A preliminary list has been compiled in Table 3. This list is illustrative, not exhaustive. As the Health Indicators Project continues, this list will be expanded and refined.

Conference participants and others are encouraged to submit suggestions for additional indicators that should be considered for future development. To facilitate this process, a feedback form is provided in Appendix C.

Table 3: Illustrative Indicators for Potential future Development

Health Status			
Deaths	Health Conditions	Human Function	Well-Being
<ul style="list-style-type: none"> Smoking-attributable mortality 	<ul style="list-style-type: none"> Work injuries Prevalence of dementia Hepatitis C Cancer incidence 	<ul style="list-style-type: none"> Functional health Disability-days Activity limitation Health expectancy 	<ul style="list-style-type: none"> Sense of Coherence
Non-Medical Determinants of Health			
Health Behaviours	Living and Working Conditions	Personal Resources	Environmental Factors
<ul style="list-style-type: none"> Dietary practices Bicycle helmet use Condom use Protection from sun Seatbelt use Driving after drinking 	<ul style="list-style-type: none"> Percent of children “in care” Homelessness Number of “working poor” Housing quality Community cohesion 	<ul style="list-style-type: none"> Literacy rates Caregiver burden 	<ul style="list-style-type: none"> Exposure to second-hand smoke Air quality Water quality Toxic waste Ecological footprint
Health System Performance			
<ul style="list-style-type: none"> Baby-Friendly hospitals Percent of hospital cases with discharge planning Unmet health care needs Wait list information Cancer survival rates 30-day perioperative mortality 30-day mortality following MI Pertussis ICU admissions 		<ul style="list-style-type: none"> Complications and adverse effects of care Antibiotic prescribing Cholesterol testing PSA screening tests Low-volume surgery Patient/client satisfaction Decision-latitude for health professionals Employee satisfaction 	
Community and Health System Characteristics			
<ul style="list-style-type: none"> Cultural diversity Availability of licensed child care spaces Labour force participation rates 		<ul style="list-style-type: none"> Cost per weighted cases MRIs 	

Next Steps

Compilation, verification, and reporting of comparative data are now beginning for the indicators confirmed at the Consensus Conference. The plan is to use data that are available today to pilot the indicators at a regional level to ensure relevancy and validity.

Over time, the initial indicators will be refined and expanded. The scope and utility of the core set of indicators will also increase as new data are developed, benchmarks are established and knowledge grows. For example, the Health Information Roadmap Initiative (a program to update Canada's health information system to meet today's needs) includes some resources to start filling important gaps in available indicators over the next 3 to 4 years. Potential areas for future development include expanded data on personal risk factors, early childhood development, waitlists, drug utilization, home care and health expenditures. These domain-specific projects will contribute to filling many of the current gaps in the indicator framework based on consultations with key stakeholders.

This vision can only be realized if we work together. Success depends on the collaboration and cooperation of governments, regional and local health organizations, key data custodians, and Canada's health research community. The active involvement of other stakeholders, such as the public, health advocacy groups, and caregivers is also essential.

A number of mechanisms are being established to facilitate this process. For example, a Regional Reference Group has been created to provide expert advice on the information needs of Regional Health Authorities, to ensure the quality and consistency of the indicator data, and to provide guidance on the future development of the initiative. The project will also receive important guidance and advice from the F/P/T Advisory Committees, from the CIHI Board, provincial and territorial experts, specialist Advisory Groups established for other Roadmap projects, and from many other sources.

Appendix A

Participants

The National Consensus Conference on Population Health Indicators was attended by over 80 invited experts representing key stakeholder groups including regions, provincial/territorial and federal governments, national associations, academics/researchers and other groups such as consumers. The findings presented in this report represent a consensus of participant opinion but do not necessarily reflect the positions of specific individuals or organizations.

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Appendix B

Health Indicators Definitions and Data Sources

Health Indicators

Definitions and Data Sources

1.0 Health Status

1.1 Deaths

1.1.1 Infant Mortality

Definition: *Number of infants who die in the first year of life, expressed as a rate per 1,000 live births.*

Source: Canadian Vital Statistics, Statistics Canada

1.1.2 Perinatal Deaths

Definition: *Annual number of stillbirths (28 or more weeks) and early neonatal deaths (deaths in the first week of life) per 1,000 total births.*

Source: Canadian Vital Statistics, Statistics Canada

1.1.3 Life Expectancy

Definition: *An estimate of the average number of years that a person born in that year is expected to live, based on current mortality rates, males, females, and total.*

Source: Statistics Canada

1.1.4 Circulatory Deaths

Definition: *Age/sex standardized rate of deaths from circulatory diseases per 100,000 population, ischemic heart disease, stroke, other circulatory system diseases, and total.*

Source: Canadian Vital Statistics, Statistics Canada

1.1.5 Cancer Deaths

Definition: *Age/sex standardized rate of deaths from cancer per 100,000 population, for all cancers and for specific sites (lung, breast, prostate, colorectal, cervical, malignant melanoma).*

Source: Canadian Vital Statistics, Statistics Canada

1.1.6 Respiratory Deaths

Definition: *Age/sex standardized rate of deaths from respiratory disease per 100,000 population, for pneumonia and influenza, chronic respiratory disease, asthma, other respiratory diseases, and total.*

Source: Canadian Vital Statistics, Statistics Canada

1.1.7 Suicide

Definition: *Age/sex standardized rate of suicide deaths per 100,000 population.*

Source: Canadian Vital Statistics, Statistics Canada

1.1.8 Unintentional Injury Deaths

Definition: *Age/sex standardized rate of deaths from unintentional injuries per 100,000 population. The term unintentional ("accidental") injuries includes injuries due to causes such as motor vehicle collisions, falls, drowning, burns, and poisoning.*

Source: Canadian Vital Statistics, Statistics Canada

1.1.9 Pertussis Deaths

Definition: *Number of deaths due to pertussis (whooping cough).*

Source: Canadian Vital Statistics, Statistics Canada

1.1.10 AIDS Deaths

Definition: *Number of deaths due to AIDS and HIV infections and rate per 100,000 population (age/sex standardized).*

Source: Canadian Vital Statistics, Statistics Canada

1.1.11 Potential Years of Life Lost (< 75)

Definition: *Age standardized potential years of life lost for males and females, for all causes and for selected preventable causes. PYLL (under age 75) is the number of years of life "lost" when a person dies "prematurely" - before age 75. A person dying at age 25, for example, has lost 50 years of life (75 – 25 = 50 PYLL).*

Source: Canadian Vital Statistics, Statistics Canada

1.1.12 Inequalities in Life Expectancy

Definition: *Difference in average health status between the top and bottom thirds of the population ranked by household income. Health status could be measured by life expectancy, health expectancy, infant mortality, self-rated health, or other health status measures.*

Source: Canadian Vital Statistics, Statistics Canada

1.2 Health Conditions

1.2.1 Overweight

Definition: *Proportion of the population who are overweight to the point of probable health risk (a Body Mass Index of 27.0 or greater).*

Source: National Population Health Survey, Statistics Canada

1.2.2 Arthritis

Definition: *Proportion of the population who report that they have been diagnosed by a health professional as having arthritis.*

Source: National Population Health Survey, Statistics Canada

1.2.3 Diabetes

Definition: *Proportion of the population who report that they have been diagnosed by a health professional as having diabetes.*

Source: National Population Health Survey, Statistics Canada

1.2.4 Asthma

Definition: *Proportion of the population who report that they have been diagnosed by a health professional as having asthma.*

Source: National Population Health Survey, Statistics Canada

1.2.5 Chronic Pain

Definition: *Proportion of the population who answered "no" when asked if they were usually free of pain or discomfort. Severity of pain (mild, moderate, severe) and the degree of activity limitation are also measured.*

Source: National Population Health Survey, Statistics Canada

1.2.6 Depression

Definition: *Proportion of the population who show symptoms of depression, based on their responses to a set of questions that establishes the probability of suffering a "major depressive episode".*

Source: National Population Health Survey, Statistics Canada

1.2.7 Injury Hospitalizations

Definition: *Rates of hospitalization due to injuries, by age group.*

Source: Hospital Morbidity Database, CIHI

1.2.8 Food and Waterborne Diseases

Definition: *The number of cases of enteric infections reported in a given year, expressed as a rate per 100,000 population.*

Source: National Notifiable Disease Registry, LCDC, Health Canada

1.3 Activity Limitation

1.3.1 Functional Health

Definition: *Proportion of the population reporting moderate or more severe functional problems, according to the Comprehensive Health Status Measurement System, based on 8 dimensions of functioning. (hearing, seeing, communicating, mobility, dexterity, pain, cognition and emotion).*

Source: National Population Health Survey, Statistics Canada

1.3.2 Disability-Days

Definition: *Proportion of the population who stayed in bed or cut down on normal activities because of illness or injury, on one or more days in the past two weeks.*

Source: National Population Health Survey, Statistics Canada

1.3.3 Activity Limitation

Definition: *Proportion of the population who report having a disability or handicap or being limited in certain activities on a continuing basis because of a health problem.*

Source: National Population Health Survey, Statistics Canada; may also be available from the 1996 census

1.3.4 Health Expectancy

Definition: *Life expectancy weighted at each age to account for levels of health status over the life course.*

Source: Life tables, combined with data on functional health status, Statistics Canada

1.4 Well-being

1.4.1 Self-rated Health

1.4.2 Self-rated Health 'Excellent' Health for 2 Consecutive Years

Definition: *Self-Rated Health: Percent who rate their own health status as "excellent" or "very good" at any given time. Self-Rated Health Over a Two-Year Period: Percent who rate their own health status as "excellent" or "very good" for two consecutive survey cycles.*

Source: National Population Health Survey, Statistics Canada

1.4.3 Self-esteem

Definition: *Proportion of the population who have a "high" sense of self-worth, based on a standard scale for this measure.*

Source: National Population Health Survey, Statistics Canada

1.4.4 Mastery

Definition: *Proportion of the population who have a "high" sense of mastery, based on a standard scale for this measure.*

Source: National Population Health Survey, Statistics Canada

2.0 Non-Medical Determinants of Health

2.1 Health Behaviours

2.1.1 Smoking Rate

2.1.2 Youth Smoking Rate

Definition: *Proportion of the population who are current smokers, all persons age 12 and older and youth ages 12-19. Current smokers are those who smoke on either a daily or an occasional basis.*

Source: National Population Health Survey, Statistics Canada

2.1.3 Smoking Initiation (average age)

Definition: *The average age at which smokers begin smoking.*

Source: National Population Health Survey, Statistics Canada

2.1.4 Regular Heavy Drinking

Definition: *Proportion of current alcohol drinkers age 12 and over who report having had five or more drinks on one occasion, 12 or more times in the previous year.*

Source: National Population Health Survey, Statistics Canada

2.1.5 Physical Activity

Definition: *Proportion of the population age 12 and older who are physically active, based on their responses to questions about the frequency, duration, and intensity of their participation in leisure-time physical activity.*

Source: National Population Health Survey, Statistics Canada

2.1.6 Breastfeeding

Definition: *Proportion of infants aged 3 months to 3 years who are currently breastfed or who were breastfed for at least three months.*

Source: National Longitudinal Survey of Children and Youth (NLSCY), Human Resources Development Canada and Statistics Canada

2.2 Living and Working Conditions

2.2.1 High School Graduation

Definition: *Proportion of the population age 25-29 who have a high school graduation certificate or higher, based on the Census questions about educational attainment.*

Source: Census, Statistics Canada

2.2.2 Post-secondary Graduation

Definition: *Proportion of the population age 25-54 who have a post-secondary certificate, diploma, or degree of some type, based on the Census questions about educational attainment.*

Source: Census, Statistics Canada

2.2.3 Unemployment Rate

Definition: *Proportion of the labour force age 15 and older who did not have a job during the reference period.*

Source: Census, Statistics Canada

2.2.4 Long-term Unemployment

Definition: *Proportion of the labour force age 15 and older who did not have a job during the current or preceding year.*

Source: Census, Statistics Canada

2.2.5 Youth Unemployment

Definition: *Proportion of the labour force age 15-24 who did not have a job during the reference period.*

Source: Census, Statistics Canada

2.2.6 Low Income Rate

Definition: *Proportion of persons in economic families and unattached individuals with incomes below the Statistics Canada low-income cut-off (LICO) point. The cut-offs represent levels of income where people spend disproportionate amounts of money for food, shelter, and clothing. LICOs are set at income levels differentiated by family size and degree of urbanization; cut-offs are updated to compensate for changes in the consumer price index.*

Source: Census, Statistics Canada

2.2.7 Children in Low Income Families

Definition: *Proportion of children under age 18 living in economic families with incomes below the Statistics Canada low-income cut-off (LICO) point.*

Source: Census, Statistics Canada

2.2.8 Income Inequality

Definition: *The income share of the bottom half (poorest) families.*

Source: Census, Statistics Canada

2.2.9 Housing Affordability

Definition: *Proportion of households spending more than 30 per cent of total household income on shelter costs, renter households, homeowners, and total.*

Source: Census, Statistics Canada

2.2.10 Crime Rate

Definition: *The number of Criminal Code offences expressed as a rate per 100,000 population, for violent crimes, property and other crimes, and total. Violent crimes are "person offences", which include homicide, attempted murder, sexual and non-sexual assault, abduction, and robbery. The crime rate is based on the number of incidents reported to or by the police.*

Source: Uniform Crime Reporting System, Canadian Centre for Justice Statistics

2.2.11 Youth Crime Rate

Definition: *The number of youth age 12 to 17 years charged with Criminal Code offences against a person, expressed as a rate per 100,000 youth, for violent crimes, property and other crimes, and total.*

Source: Uniform Crime Reporting System, Canadian Centre for Justice Statistics

2.2.12 Decision-Latitude at Work

Definition: *Proportion of workers who say they have a high degree of control over their work circumstances (who agree or strongly agree with the statement “I have a lot to say about what happens at my work”).*

Source: National Population Health Survey, Statistics Canada

2.3 Personal Resources

2.3.1 School Readiness

Definition: *Proportion of children who are "ready for school", based on the Peabody Picture Vocabulary Test, which measures verbal ability of four and five-year olds.*

Source: National Longitudinal Survey of Children and Youth (NLSCY), Human Resources Development Canada and Statistics Canada

2.3.2 Social Support

Definition: *Proportion of the population age 12 and older who report a high level of social support, based on their responses to four questions about having someone to confide in, someone they can count on in a crisis, someone they can count on for advice, and someone who makes them feel loved and cared for.*

Source: National Population Health Survey, Statistics Canada

2.3.3 Life Stress

Definition: *Proportion of the population age 18 and older who report a high level of chronic stress, based on their responses to a series of 18 questions about daily life.*

Source: National Population Health Survey, Statistics Canada

2.4 Environmental Factors

Indicators to measure environmental factors are under development.

3.0 Health System Performance

3.1 Acceptability

3.2 Accessibility

3.2.1 Influenza Immunization, 65+

Definition: *Proportion of the population age 65 and older who report that they received a dose of influenza vaccine in the past year.*

Source: National Population Health Survey, Statistics Canada

3.2.2 Screening Mammography, Women Age 50-69

Definition: *Proportion of women age 50-69 who report receiving screening mammograms within the last two years.*

Source: National Population Health Survey, Statistics Canada

3.2.3 Pap Smears, Women Age 18-69

Definition: *Proportion of women age 18-69 who report having had a Pap test within the last three year.*

Source: National Population Health Survey, Statistics Canada

3.2.4 Childhood Immunizations

Definition: *Proportion of children who, by their second birthday, have been fully immunized against diphtheria, pertussis, tetanus, Haemophilus influenzae type b (Hib), measles, mumps, and rubella.*

Source: Provincial/territorial departments of health and regional health authorities. The availability and comparability of data for this indicator varies significantly across the country.

3.3 Appropriateness

3.3.1 Vaginal Birth After Cesarean

Definition: *Proportion of women who have previously received a cesarean section who give birth via a vaginal delivery in an acute care hospital.*

Source: Hospital Morbidity Database, CIHI

3.3.2 Breast Conserving Surgery

Definition: *Proportion of female breast cancer surgery inpatients in acute care hospitals who received breast conserving surgery.*

Source: Hospital Morbidity Database, CIHI

3.3.3 Cesarean Sections

Definition: *Proportion of women delivering babies in an acute care hospital who received cesarean sections.*

Source: Hospital Morbidity Database, CIHI

3.4 Competence

3.5 Continuity

3.6 Effectiveness

3.6.1 Quitting Smoking

Definition: *Proportion of smokers who quit smoking in the past two years (those who reported being "current smokers" in 1994-95 and "former smokers" in 1996-97).*

Source: National Population Health Survey, Statistics Canada

3.6.2 Low Birthweight

Definition: *Proportion of live births with a birthweight less than 2500 grams.*

Source: Canadian Vital Statistics, Statistics Canada

3.6.3 Pertussis

Definition: *Number of cases of pertussis reported in a given year, expressed as a rate per 100,000 population.*

Source: National Notifiable Disease Registry, LCDC, Health Canada

3.6.4 Measles

Definition: *Number of cases of measles reported in a given year, expressed as a rate per 100,000 population.*

Source: National Notifiable Disease Registry, LCDC, Health Canada

3.6.5 Tuberculosis

Definition: *Number of new cases of tuberculosis reported in a given time period, expressed as a rate per 100,000 population.*

Source: Canadian Tuberculosis Reporting System, LCDC, Health Canada

3.6.6 HIV

Definition: *Number of new positive HIV cases in a given year, expressed as a rate per 100,000 population. Information is based on those who are tested for HIV.*

Source: Division of HIV/AIDS Surveillance, LCDC, Health Canada

3.6.7 Chlamydia

Definition: *Number of new cases of chlamydia reported in a given year, expressed as a rate per 100,000 population.*

Source: Division of STD Prevention and Control, LCDC, Health Canada

3.6.8 Pneumonia and Influenza Hospitalizations

Definition: *Age/sex standardized acute care hospitalization rates for pneumonia and influenza, per 100,000 population age 65 and older.*

Source: Hospital Morbidity Database, CIHI

3.6.9 Deaths due to Medically-Treatable Diseases

Definition: *Deaths due to medically-treatable diseases according to Charlton's definition, which is based on mortality, in specific age groups, that could potentially be avoided through appropriate medical attention.*

Source: Canadian Vital Statistics, Statistics Canada

3.6.10 Ambulatory Care Sensitive Conditions

Definition: *Age/sex standardized inpatient acute care hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for hospitalization.*

Source: Hospital Morbidity Database, CIHI

3.7 Efficiency

3.7.1 Surgical Day Case Rates

Definition: *Day surgery cases as a percent of total surgery cases (inpatient or outpatient) that could potentially have been treated in an outpatient setting. Inpatient cases that are not generally considered candidates for day surgery, such as obstetrics patients who delivered and patients with a length of stay longer than 3 days are excluded.*

Source: Discharge Abstract Database, CIHI.

3.7.2 May Not Require Hospitalization

Definition: *Percentage of acute care inpatient hospitalizations classified as May Not Require Hospitalization (MNRH). These Case Mix Groups identify groups of patients whose characteristics often allow ambulatory treatment not requiring admission.*

Source: Discharge Abstract Database, CIHI

3.7.3 % Alternate Level of Care Days

Definition: *Percentage of inpatient days where a physician (or designated other) has indicated that a patient occupying an acute care hospital bed was well enough to have been cared for elsewhere.*

Source: Discharge Abstract Database, CIHI

3.7.4 Expected Compared to Actual Stay

Definition: *Average days for “typical” acute care inpatients over/under the Expected Length of Stay (ELOS). Patients’ ELOS depend on their Case Mix Group assignment, as well as complexity levels and age where appropriate. Typical cases exclude deaths, transfers, voluntary sign-outs, and cases where the actual length of stay is greater than the “trim point” established by CIHI.*

Source: Discharge Abstract Database, CIHI

3.8 Safety

3.8.1 Hip Fractures

Definition: *Age/sex standardized acute care hospitalization rates for fracture of the hip, per 100,000 population age 65 and older.*

Source: Hospital Morbidity Database, CIHI

4.0 Community and Health System Characteristics

4.1 Population Count

Definition: *The number of people living in a geographic area, by age and sex.*

Source: Statistics Canada. Data are derived from the Census and data from administrative sources on births, deaths, and migration.

4.1.2 Teen Pregnancy/Teen Births

Definition: *The estimated number of pregnancies(or births) per 1,000 women age 15-19. The estimate is based on the number of pregnancies resulting in live births, stillbirths, or induced (therapeutic) abortions.*

Source: Therapeutic Abortions Database, CIHI and Canadian Vital Statistics, Statistics Canada

4.1.3 Expenditures Per Capita

Definition: *Health expenditures per capita, for expenditures in the public sector, private sector, and total.*

Source: National Health Expenditure Database, CIHI

4.1.4 Doctors and Nurses per Capita

Definition: *Active civilian general practitioners or family practitioners per 100,000 population; Active civilian medical specialists per 100,000 population; Registered nurses working in nursing per 100,000 population.*

Source: Southam Medical Database, CIHI for physicians; Registered Nurses Database, CIHI for nurses

4.1.5 Hospital Days per Capita

Definition: *Total number of patient-days spent in acute care hospitals, expressed as a rate per 1,000 population (age/sex standardized).*

Source: Hospital Morbidity Database, CIHI

4.1.6 CABG Rates

Definition: *Age/sex standardized rate of coronary artery bypass graft surgery performed on inpatients in acute care hospitals per 100,000 population.*

Source: Hospital Morbidity Database, CIHI

4.1.7 Hip Replacement

4.1.8 Knee Replacement

Definition: *Age/sex standardized rate of total hip or knee replacement surgery (unilateral or bilateral) performed on inpatients in acute care hospitals per 100,000 population.*

Source: Hospital Morbidity Database, CIHI

4.1.9 Hysterectomy

Definition: *Age standardized rate for hysterectomies provided to inpatients in acute care hospitals, per 100,000 women age 20 and older.*

Source: Hospital Morbidity Database, CIHI

4.1.10 Myringotomy

Definition: *Fee-for-service billings for myringotomies performed by physicians in a given area, per 100,000 population.*

Source: National Physician Database, CIHI

Appendix C

Indicator Proposal Form

Indicator Proposal Form

The focus of the *National Consensus Conference on Population Health Indicators* was on defining a core set of indicators that could be compiled from current, comparable data sources. Over time, the initial set of indicators will be refined and expanded. We welcome your suggestions for priority indicators that should be considered for future development.

Indicator: _____

Data Source: _____

Rationale: _____

(Optional)
Name: _____

Contact info: _____

Please submit this form to Valérie Émond at the Canadian Institute for Health Information by fax (416-481-2950) or e-mail (indicators@cihi.ca).

