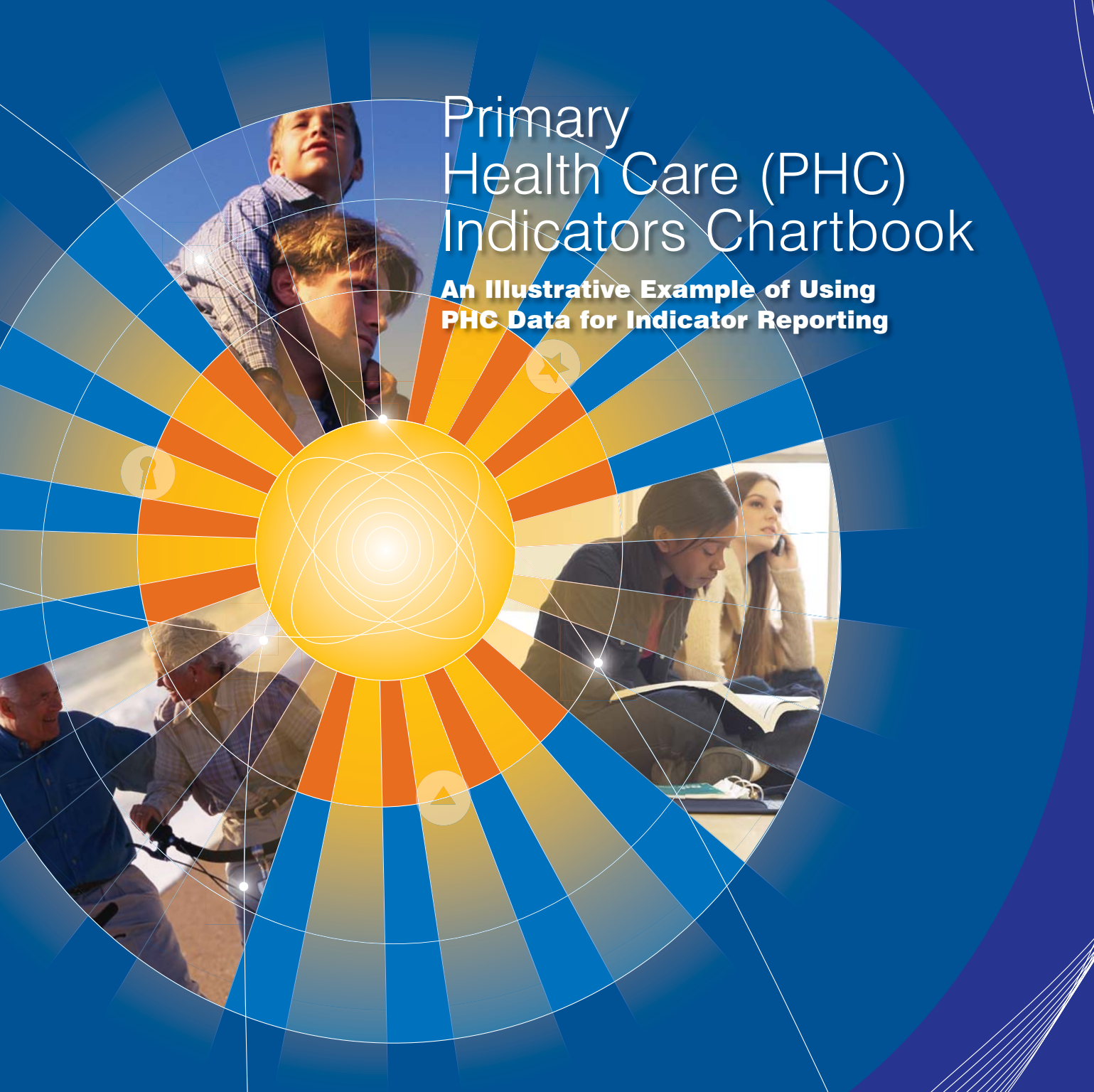
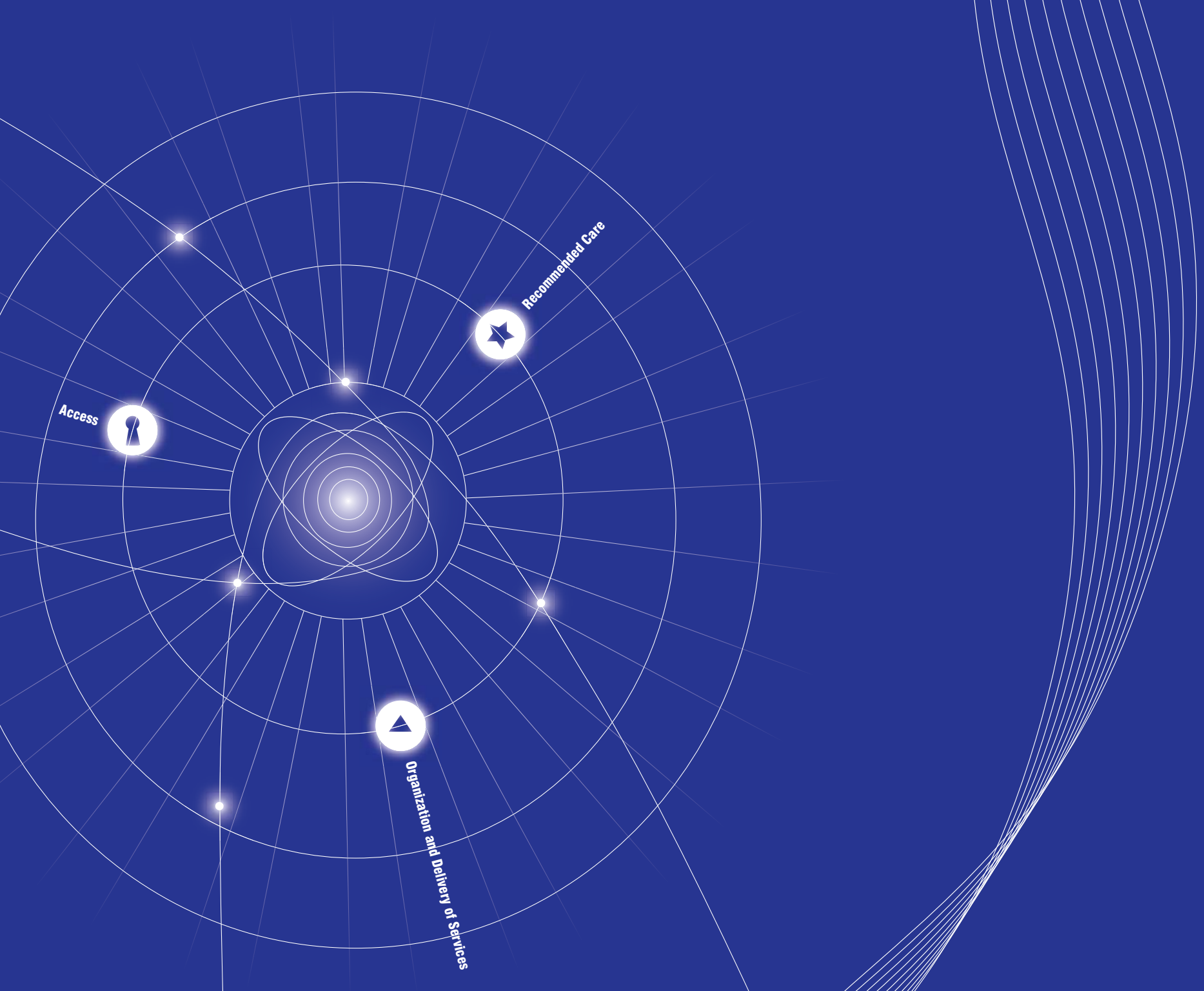


Primary Health Care (PHC) Indicators Chartbook

An Illustrative Example of Using PHC Data for Indicator Reporting

Canadian Institute for Health Information

Institut canadien d'information sur la santé


Recommended Care
Access
Organization and Delivery of Services

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About CIHI

The Canadian Institute for Health Information (CIHI) collects and analyzes information on health and health care in Canada and makes it publicly available. Canada's federal, provincial and territorial governments created CIHI as a not-for-profit, independent organization dedicated to forging a common approach to Canadian health information.

CIHI's goal: to provide timely, accurate and comparable information. CIHI's data and reports inform health policies, support the effective delivery of health services and raise awareness among Canadians of the factors that contribute to good health.

For more information, visit our website at www.cihi.ca.

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About the Chartbook

Background

CIHI's primary health care (PHC) indicator development project produced 105 PHC indicators that were deemed important by a broad range of stakeholders from across Canada. CIHI and others are taking steps to address some of the data gaps currently impeding the reporting of many of the indicators.

What It Is

This chartbook of figures with notes is intended to be an illustrative example of how PHC data can be used to populate a subset of PHC indicators on access, recommended care and organization and delivery of services. More comprehensive, reliable data sources are required to understand and report on PHC performance.

What It Is Not

This is not intended to be a report on the performance of PHC in Canada. Typically, CIHI's reports primarily use CIHI and Statistics Canada data sources, where the data limitations are fully understood. This chartbook draws on non-CIHI and non–Statistics Canada data. As such, these data should be interpreted with caution. The chartbook also uses data from smaller regional studies that may not be generalizable to other regions. Data limitations are highlighted, where required, on each figure to assist the reader in interpreting the data and understanding their usefulness.

Acknowledgements

The Canadian Institute for Health Information (CIHI) would like to acknowledge and thank the many individuals and organizations that contributed to the development of the *Primary Health Care (PHC) Indicators Chartbook: An Illustrative Example of Using PHC Data for Indicator Reporting*.

The core CIHI project team responsible for developing this report includes Kunval Chaudhery, Zenita Hirji, Judith MacPhail, Raymond Przybysz, Patricia Sullivan-Taylor, Vicky Walker and Greg Webster.

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Please note that the analyses in this document do not necessarily reflect those of the individuals or organizations mentioned above.

Introduction and Background

CIHI's PHC Information Program

2005–2006

One hundred and five PHC indicators were selected and developed through a consensus-building process with external stakeholders. Of the 105 indicators deemed to be important, many did not have an existing data source. A sample abridged list of 30 indicators was identified as a possible starting point for data collection and reporting.

2006–2007

Explored options for enhancing PHC data sources to support reporting on some of the PHC indicators.

2007–2008 and Beyond

Implemented a series of PHC initiatives to expand PHC data capture and reporting in Canada, which includes:

- Reporting on PHC in Canada, including *Primary Health Care (PHC) Indicators Chartbook*: *An Illustrative Example of Using PHC Data for Indicator Reporting*;
- Developing data standards for electronic medical records (EMRs) for a subset of 12 clinical quality PHC indicators;
- Developing a prototype for a voluntary PHC data collection and reporting system for PHC; and
- Increasing the PHC data available from patient and provider surveys, including co-funding Statistics Canada's Canadian Survey of Experiences with Primary Health Care, 2008.

Background for CIHI's PHC Indicators

The PHC indicators were developed by CIHI for the National Evaluation Strategy of the Primary Health Care Transition Fund to provide measures for a broad range of elements of primary health care in Canada.

The 105 PHC indicators were selected and developed through a consultation process with pan-Canadian representation from federal, provincial and territorial governments, regional health authorities, researchers, PHC providers and associations.

The availability of pre-existing data sources for an indicator was not a requirement for indicator selection. Development and enhancement of data sources were to be considered after identifying and selecting indicators that were deemed important.

Because of the size of the original list of 105 indicators, an abridged list of 30 indicators was developed that would address a range of issues and could be used as a starting point for data development and reporting.

Chartbook Organization

The data presented are organized into the following three sections:

Access indicators relate to the ability of patients to access and use PHC services. They include aspects of access such as ease of making appointments, ability to communicate with a PHC provider and having programs that meet the special needs of vulnerable populations.

Recommended care indicators relate to the clinical services that are offered by PHC organizations. They are based on emerging scientific opinion on best practices for provision of clinical services for selected health conditions.

Organization and delivery of services indicators relate to the range of PHC services that are provided to Canadians, the type of services being delivered, technological support, interactions between providers, interactions between patients and providers, and expenditures.

Sample List of Indicators From Abridged List*

Access

- Population with a regular PHC provider
- PHC organizations accepting new clients/patients
- Difficulties accessing routine PHC
- Difficulties obtaining urgent, non-emergent PHC on evenings and weekends
- PHC after-hours coverage
- Difficulties accessing PHC health information or advice
- Language barriers when communicating with PHC providers
- *Specialized PHC programs for vulnerable/special needs populations*

Recommended Care

- Influenza immunization, 65+
- Cervical cancer screening
- Health risk screening
- Screening for modifiable risk factors in adults with diabetes
- Glycemic control for diabetes
- Screening for modifiable risk factors in adults with coronary artery disease
- *Antidepressant medication monitoring*
- Screening for modifiable risk factors in adults with hypertension
- Blood pressure control for hypertension
- *Treatment of dyslipidemia*
- *Treatment of depression*
- Ambulatory care sensitive conditions

Organization and Delivery of Services

- Scope of PHC services
- Client/patient satisfaction with PHC providers
- PHC programs for chronic conditions
- Client/patient participation in PHC treatment planning
- Collaborative care with other health care organizations
- PHC FPs/GPs/NPs working in interdisciplinary teams/networks
- *PHC client/patient registries for chronic conditions*
- *Use of medication alerts in PHC*
- Uptake of information and communication technology in PHC organizations
- *Average per capita PHC operational expenditures*
- *PHC provider remuneration method*

Note

* For a complete list of CIHI's pan-Canadian PHC indicators, please visit www.cihi.ca/phc to obtain PDFs of the indicator development reports. Indicators listed in italics were not populated for this chartbook due to data being too old, not available or small sample sizes.

About the Data

Data Limitations

- Information on methodology was included to assist in interpreting and assessing the data.
- There is limited PHC information that is comparable at a regional level across Canada, and there are many PHC data gaps. Since the existence of a data source was purposefully not a criterion for selecting PHC indicators, there are a number of indicators for which no or limited data exist. For this report, efforts were made to obtain a range of available data at the international, provincial or regional level. Non-CIHI and non-Statistics Canada data sources should be interpreted with caution and are provided as illustrative examples only.
- Regional and/or local data have been included, where appropriate, to provide examples of local data collection efforts. These examples should not be considered a comprehensive summary of local PHC data collection processes, but rather an illustration of how local data collection can be used for indicator reporting at a variety of levels (or more broadly).
- Some of the estimates presented may be based on an approximation of the indicator that was originally selected because an exact match is not currently available.
- Results at the pan-Canadian level may be significantly different than results at the provincial or regional level. Similarly, provincial-level results may not be indicative of indicator results at the sub-provincial or local level.

Data Sources and Limitations

A variety of data sources were used for this chartbook, including data from CIHI's databases and from external organizations. These external data sources include patient surveys, physician surveys, clinical patient records and other administrative sources. The available information on data sources and their methodology is presented below to assist the reader in understanding the data and interpreting data limitations.

Additional details on methodology are available on request from CIHI's Primary Health Care Information (PHCi) program at phc@cihi.ca.

British Columbia Ministry of Health

The British Columbia Ministry of Health changed its diabetes case definition in 2006–2007, which resulted in a noticeable drop in prevalence across all years from the prevalence in previous calculations. The revised definition was used for all years for the data presented in this chartbook. The data are based on the following number of patients with diabetes in B.C.: for 2002–2003, there were 200,448; for 2003–2004, there were 215,658; for 2004–2005, there were 231,965; for 2005–2006, there were 248,699; and for 2006–2007, there were 266,750.

Canadian Institute for Health Information (CIHI)

The calculations for the ambulatory care sensitive conditions figures were calculated based on data from CIHI's Discharge Abstract Database using the following criteria:

Numerator: includes most responsible diagnosis codes of grand mal status and other epileptic convulsions, chronic obstructive pulmonary disease (COPD),* asthma, diabetes, heart failure and pulmonary edema,† hypertension† and angina.†

Exclusion Criteria: 1) Death before discharge. 2) Individuals 75 years of age and older.

Please note that it was not possible to exclude Dressler's syndrome in jurisdictions coding in ICD-9, as a unique code for this condition does not exist in the ICD-9 classification. As of 2002–2003, Quebec was the only jurisdiction in Canada using the ICD-9 classification system; therefore, Quebec rates include this condition.

Notes

* A new "combination" code for acute lower respiratory infections in patients with chronic obstructive pulmonary disease (J44) was introduced with ICD-10-CA and has no equivalents in ICD-9/ICD-9-CM. Cases coded with a primary diagnosis of an acute lower respiratory infection and a secondary diagnosis of J44 in ICD-10-CA or 496 in ICD-9/CM were included in the COPD case count. This was undertaken to ensure that COPD cases with acute lower respiratory infections are captured in ICD-9/CM jurisdictions in the same fashion as they would be in ICD-10-CA jurisdictions, and to compensate for evident erroneous non-application of the combination code in ICD-10-CA jurisdictions.

† Excluding cases with cardiac procedures.

Capital Health Region, Alberta

The data for the Capital Health Region in Alberta are based on administrative data from participating physicians within the region. The data for "received an HbA1c test" and "full fasting lipid profile screening" are based on 6,368 patients and were collected in 2007. The data for "HbA1c ≤7.0%" are based on 38,791 patients and were collected between 2004 and 2007.

The Commonwealth Fund—International Health Policy Survey of the General Public's Views of Their Health Care System's Performance in Seven Countries, 2007

The 2007 International Health Policy Survey of the General Public's Views of Their Health Care System's Performance in Seven Countries survey was fielded by Harris Interactive, Inc. for the U.S. and Canada country affiliates and the Netherlands Center for Quality of Care Research (WOK), Radboud University Nijmegen. Funding was provided by The Commonwealth Fund for the core study. It partnered with the Health Council of Canada to expand the Canadian sample. The Commonwealth Fund co-funded fieldwork in the Netherlands with the Dutch Ministry for Health, Welfare and Sport and the Center for Quality of Care Research (WOK), Radboud University Nijmegen. The German sample was funded by the German Institute for Quality and Economic Efficiency in Health Care.

A representative sample aged 18 and older in seven countries was interviewed by telephone between March 6, 2007 and May 7, 2007. The final samples were weighted to reflect the distribution of the adult population. The mean margin of sample error per country is approximately ±2% for the United States and Canada and ±3% for the other five countries at the 95% confidence level. The sample sizes used in the survey were Australia, 1,009; Canada, 3,003; Germany, 1,407; the Netherlands, 1,557; New Zealand, 1,000; U.K., 1,434; and U.S., 2,500. The response rate for this survey was less than 35%, so the results should be interpreted with caution.

The Commonwealth Fund—International Health Policy Survey of Primary Care Physicians, 2006

The *International Health Policy Survey of Primary Care Physicians, 2006* was fielded by Harris Interactive Inc. for the U.S. and Canada country affiliates and the Netherlands Center for Quality of Care Research (WOK), Radboud University Nijmegen. The Commonwealth Fund provided core funding support for the study and the U.S. and Dutch samples, and it partnered with the Health Foundation (U.K.) and the Australian Primary Health Care Research Institute for expanded samples. The German Institute for Quality and Efficiency in Health Care provided funding for the German sample.

Interviews were conducted from February 2006 to July 2006 by telephone and mail with a representative sample of primary care physicians in seven countries using a common questionnaire. In Canada, Germany and the United States, the definition of primary care doctor included general practitioners (GPs) and family physicians (FPs), as well as general internists and pediatricians in proportion to their share of primary care physicians in each country. In all countries the definition of primary care doctor included GPs and FPs. Practising physicians were selected randomly from private or government lists. The final samples were weighted to the distribution of physicians by region of the country, sex, primary care specialty (GP/FP, internist or pediatrician) and, in the United States, whether they are office- or hospital-based. For samples of 1,000 and 500 physicians, the margin of sample error ranged from ±3% to ±5%, respectively, at the 95% confidence level. The sample sizes were Australia, 1,003; Canada, 578; Germany, 1,006; the Netherlands, 931; New Zealand: 503; U.K., 1,063; and U.S., 1,004. The results should be interpreted with caution.

College of Family Physicians of Canada, Canadian Medical Association, The Royal College of Physicians and Surgeons of Canada—National Physician Survey (NPS)

Every three years, all practising physicians, second-year residents and medical students in Canada are surveyed. The 2007 NPS consisted of multiple questionnaires. One version of the core questionnaire was developed, and two versions of the detailed questionnaire were developed: one for FPs and GPs and one for all other specialists. The 2007 NPS was carried out as a self-reported survey of all physicians licensed to practise in Canada, and was completed either on paper or electronically. A total of 60,811 physicians were considered to have had the opportunity and to be eligible to respond to the 2007 NPS. Of these, 19,239 replied to the survey, for an overall study response rate of 31.64%.

On average, the response rate was 32.1% of eligible GPs/FPs for the 2007 NPS. Censuses (a census was attempted for the 2007 NPS core questions) are subject to non-response, and as a result weights to be used in estimation can be derived to reduce possible non-response biases. The analyses presented in this chartbook were limited to GPs and FPs only. The four Atlantic provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick) were aggregated into one region. Results were suppressed where un-weighted provincial/regional counts were smaller than 30. The response rate was less than 35% and should be interpreted with caution.

The results (percentages) presented from the 2007 National Physician Survey were calculated excluding non-respondents and may differ from results published elsewhere.

The Canadian Medical Association, the College of Family Physicians of Canada, the Royal College of Physicians and Surgeons of Canada, the Canadian Institute for Health Information and Health Canada make financial or other contributions to support the NPS.

Organisation for Economic Co-operation and Development (OECD)

Data are collected and submitted to the OECD by organizations in each country. Interpret inter-country comparisons with caution as methods of data collection vary from country to country.

For influenza vaccination aged 65+, most countries collected data using a survey methodology, but some data were gathered using other methods. Age groups that are captured in the data may vary from country to country (for example, Germany captures ages 69+). Canadian data are supplied by Statistics Canada using the Canadian Community Health Survey (CCHS).

For cervical cancer screening, females aged 20 to 69, some countries captured data using program data and some used survey data. There are also variations in age groups that are captured (for example, the U.K. captures data on ages 25 to 64). The frequency with which screening is conducted varies from every two years in Australia to every five years in the Netherlands. Canadian data are supplied by Statistics Canada (CCHS).

Saskatchewan Health Quality Council

The data are based on patients of physicians that participate in the Saskatchewan Chronic Disease Management Collaborative. Patients were defined as having diabetes or coronary artery disease based on information from clinical flow sheets and from patients' electronic records. The time period for baseline measures was defined as the "date of test" or "date of observation" and had to occur between January 1, 2004 and February 20, 2006. This was done to ensure that baseline data measures used the same time period for all practices to enable more meaningful comparisons across groups. Data quality checks were carried out to ensure the integrity of baseline data reports. For all measures, only patients who were aged 20 years or older on the date of baseline data entry ("report start date") were recorded. Depending on the measure, denominators may include total population or a subset of the total population (for example, for HbA1c and blood pressure, only patients who had a test result or an observation recorded were included). The figure on diabetes was based on a sample of 5,710 patients. The figure on coronary artery disease was based on a sample of 2,998 patients.

Statistics Canada—Canadian Survey of Experiences With Primary Health Care

The survey was a cross-sectional telephone survey conducted by Statistics Canada in January and February 2007 that was commissioned by the Health Council of Canada. All participants had previously responded to Statistic Canada's CCHS Cycle 3.1, which was conducted in 2005. The sample consisted of a stratified random sample of adults (n = 2,194) 18 years or older who live in private households, excluding residents of Indian Reserves and Crown land, full-time members of the Canadian Forces, inmates of institutions and residents of isolated areas. Ten provinces and three territories were represented. The results are weighted to be representative of the age and gender distribution of the population. The response rate for the survey was 58%. Data limitations include the fact respondents may have other chronic conditions not captured in these data. In addition, the survey relies on respondents' memory of their diagnosis. Lastly, people who were in hospital or other institutions at the time of the survey were excluded.

Statistics Canada—Canadian Community Health Survey (CCHS)

The survey is based on the household population age 15 and older. The rates presented are age-standardized using the direct method and the 1991 Canadian census population structure. The use of a standard population results in more meaningful comparisons because it adjusts for variations in population age distributions over time and across geographic areas. These tables exclude non-response ("don't know," "not stated" and "refusal"). Nunavut and the Northwest Territories came into existence as separate territories on April 1, 1999. To facilitate comparisons, data presented in these charts (where applicable) for the Northwest Territories reflect the current boundaries, showing the Northwest Territories and Nunavut as separate territories.

Statistics Canada—Canadian Community Health Survey (CCHS)—Diabetes Care Module

The Diabetes Care module is optional content in the CCHS; therefore, the results only represent diabetes care practices for respondents living in the participating health regions. In the 2005 CCHS, the module was selected by all health regions in Newfoundland and Labrador, Prince Edward Island, New Brunswick, Ontario, Manitoba and the Yukon. The ability to generalize these results to other non-participating provinces and territories is limited. The information provided on diabetic status and care by the CCHS is based on self-reported data and was not clinically validated.

"Weighted distributions and frequencies were produced. Partial or item non-responses accounted for less than 5% of the totals in most analyses; records with item non-responses were excluded from the calculations. The bootstrap technique was used to estimate the variance and confidence intervals to properly account for the complex survey design. This technique fully adjusts for the design effects of the survey. Confidence intervals were established at the level of $p = 0.05$ . . . CCHS does not distinguish individuals with type 1 diabetes from those with type 2 diabetes. However, it is known that the majority of diabetic individuals have type 2 diabetes. Likewise, the majority of diabetic individuals responding to the CCHS are also expected to have this type of diabetes."[1]

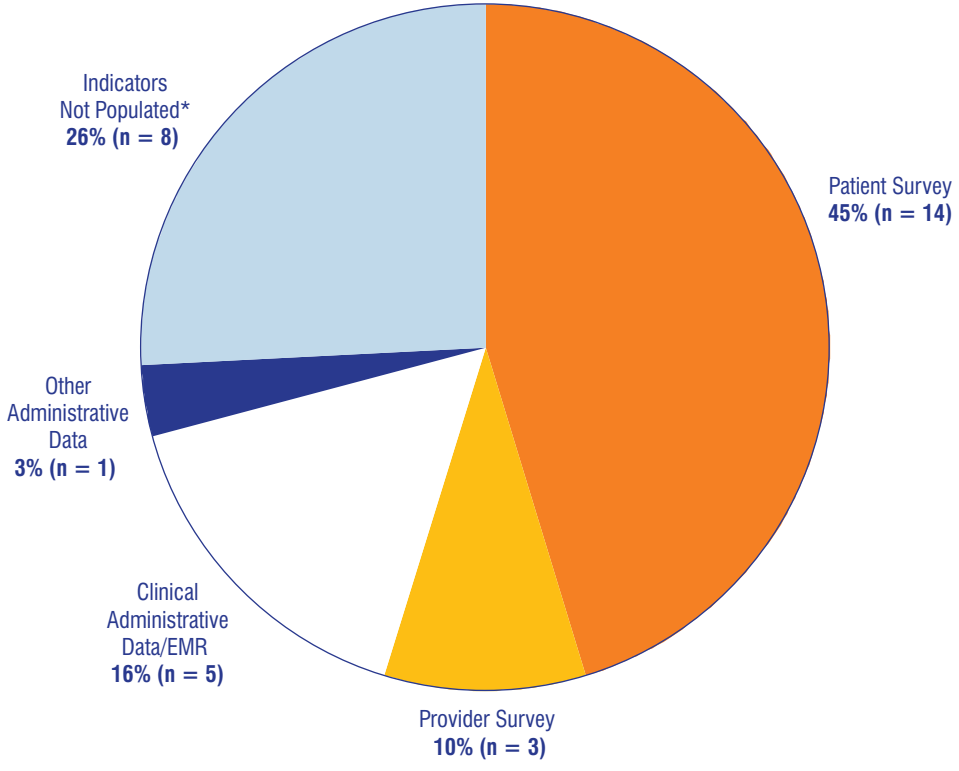
Statistics Canada information is used with the permission of Statistics Canada. Users are forbidden to copy the data and re-disseminate them, in an original or modified form, for commercial purposes without permission from Statistics Canada. Information on the availability of the wide range of data from Statistics Canada can be obtained from Statistics Canada's regional offices, its website at www.statcan.ca and its toll-free access number, 1-800-263-1136.

University of Ottawa, Ontario—Comparison of Models of Care Study

In an effort to inform primary care reform, the government of Canada established the Primary Health Care Transition Fund. The information provided here was extracted from the data collected between 2005 and 2006 within the Comparison of Models of Primary Care study sponsored from this fund. This study was performed by the C.T. Lamont Primary Health Care Research Centre within the Élisabeth Bruyère Research Institute.

The purpose of the study was to describe and compare the quality of primary health care delivered by four primary health care models in Ontario. The models studied were community health centres (CHCs), fee-for-service (FFS), family health networks (FHNs) and health service organizations (HSOs). Thirty-five practices from CHC, FFS and FHN models and 32 practices from the HSO model were recruited. At each of these practices, 30 charts were abstracted. Chart abstraction was limited to charts of regular patients of consenting PHC providers who were 18 years of age or older at their last visit and had active charts (that is, at least two years of information and at least one visit documented in the previous year). Patients were excluded based on the following criteria: if they died, transferred out of the practice in the previous two years, were seen at the practice for specialized services only (such as foot care), were known to the chart abstractor or were staff members of the practice. In the calculations, each practice was assigned a weight that was inversely proportional to the probability of being selected for the sample to accommodate for the fact that some models had many more practices than others. Similarly, each chart was assigned a weight which is inversely proportional to the probability of being selected for the sample to accommodate for the fact that some practices had many more patients than others. These two weights were combined to get the chart-specific weights. Percentages and means for Ontario overall were calculated with these weights. Data presented in this chartbook have aggregated results for the four models of care.

Type of Data Sources Used for This Chartbook



The most frequently used data sources for this chartbook are patient surveys (45%), followed by clinical administrative data/electronic medical record (EMR) data (16%). The least frequently used data sources were provider surveys (10%) and other administrative data (3%), primarily because of lack of data availability.

Note

* Indicators not populated due to data not available, small sample size of data source, data quality issues or outdated data .

Methodology

- Criteria for use of a data source to produce an indicator example:
  - Pan-Canadian data were preferred.
  - Figures had to include some data for at least one year or data point from fiscal years 2003–2004 to 2006–2007.
  - Historical comparisons were limited to fiscal years 1999–2000 to 2006–2007.
  - Most data relate to at least one of the indicators on the sample abridged list of PHC indicators shown on page 5.
- Information about statistical significance of differences is included where available and appropriate.
- CIHI verified the accuracy of the data presented in the charts and relied on data sources to conduct primary data validity verifications. Additional information on data quality is available in the data limitations section and data sources and limitations section.

CIHI's Working PHC Definition for This Chartbook

For the purposes of this report, PHC includes:

- First point of contact with the health care system, where the majority of chronic health conditions are managed;
- Direct or indirect provision of a comprehensive range of PHC services;
- Health promotion and prevention of disease; and
- Organizations as small as one family physician/general practitioner/PHC nurse practitioner or as large as an interdisciplinary community health centre.

The National Evaluation Strategy referenced the following definition of PHC:

- **Primary health care** is, for most people, the first point of contact with the health care system, often through a family physician. It is where short-term health issues are resolved and the majority of chronic health conditions are managed. It is also where health promotion and education efforts are undertaken, and where patients in need of more specialized services are connected with secondary care. Dietitians, nurses, occupational therapists, physiotherapists, pharmacists, psychologists, social workers and other health care workers also deliver PHC services.[2]

Access

Examples of Access Indicators

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Notes

* Data reported are related to the indicator.

Numbers in last column refer to the indicator number from the original list of 105 indicators developed in 2006.

Access Indicators

WHY YOU NEED TO KNOW

The indicators in this section address access to a primary health care provider (such as a general practitioner, family physician or PHC nurse practitioner). This includes providing services in a way that encourages utilization of services when needed and minimizing barriers (for example, language).

The indicators in this section reflect aspects of access to PHC services that were deemed important by a broad range of stakeholders, including the following:

Population with a regular PHC provider

The 2003 First Ministers' Accord on Healthcare Renewal identified access to a regular family doctor as a key indicator.[3] There is evidence that people who have a regular primary care provider are less likely to use emergency rooms or be hospitalized, and they receive higher levels of continuity and comprehensive care.[4] A study conducted in Canada concluded that adults who receive regular care from a family physician are more likely to receive recommended preventive services such as blood pressure measurement, mammography and Pap smears.[5]

PHC organizations accepting new clients/patients

Closed and conditionally closed practices are found across Canada. As a result, some people report difficulties finding family physicians (including general practitioners) who accept new patients. In Canada, family physicians (including general practitioners) are seen as the entry point into the health care system because they deliver primary care services and refer patients to secondary and tertiary care.[6]

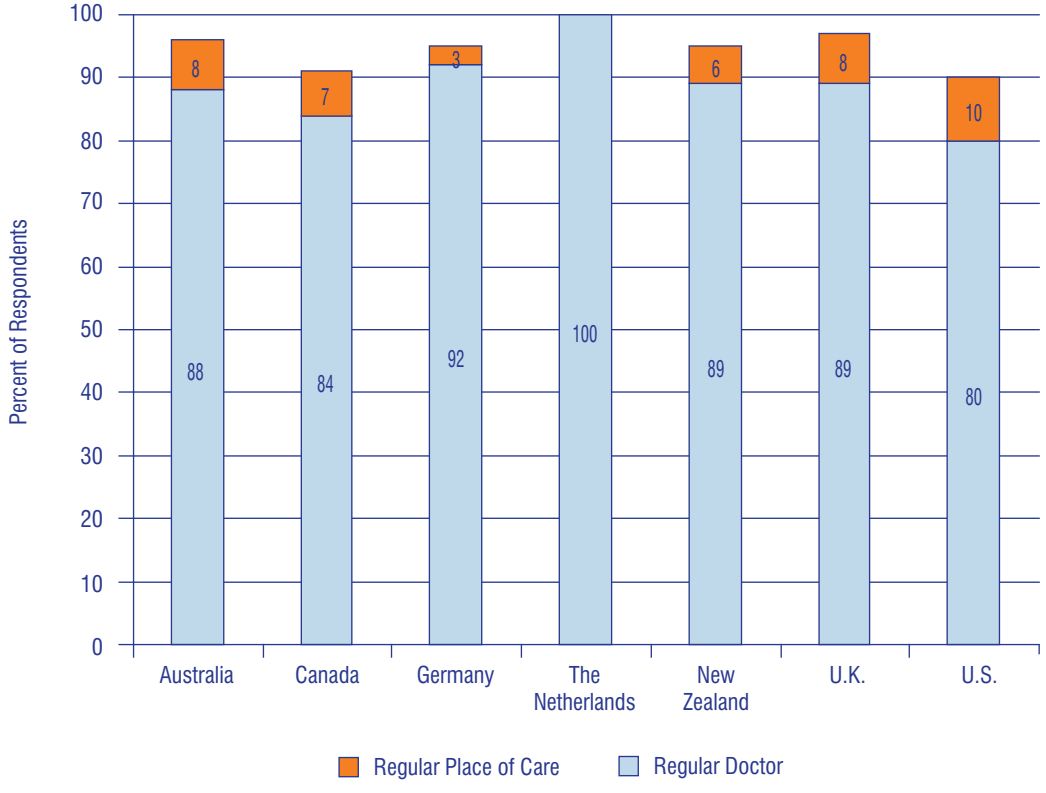
Difficulties accessing routine PHC

The ability to obtain routine PHC services when needed is believed to be important in maintaining health, preventing health emergencies and preventing the inappropriate use of services.[7–9]

Language barriers when communicating with PHC providers

Interpersonal communication is the ability of the clinician to elicit and understand patient concerns, explain health care issues and engage in shared decision-making, if desired.[10] Good communication is important for delivering patient-centred care, which has been shown to have potential to improve outcomes, safety and efficiency as well as to be more responsive to patients.[11] As a result, policy efforts have increasingly focused on communicating well with patients and engaging patients to become more actively involved.[12]

Figure 1 Population Aged 18+ With a Regular Medical Doctor or Place of Care, International Comparisons



Notes

* The response rate for this survey in Canada was low. Interpret results with caution.

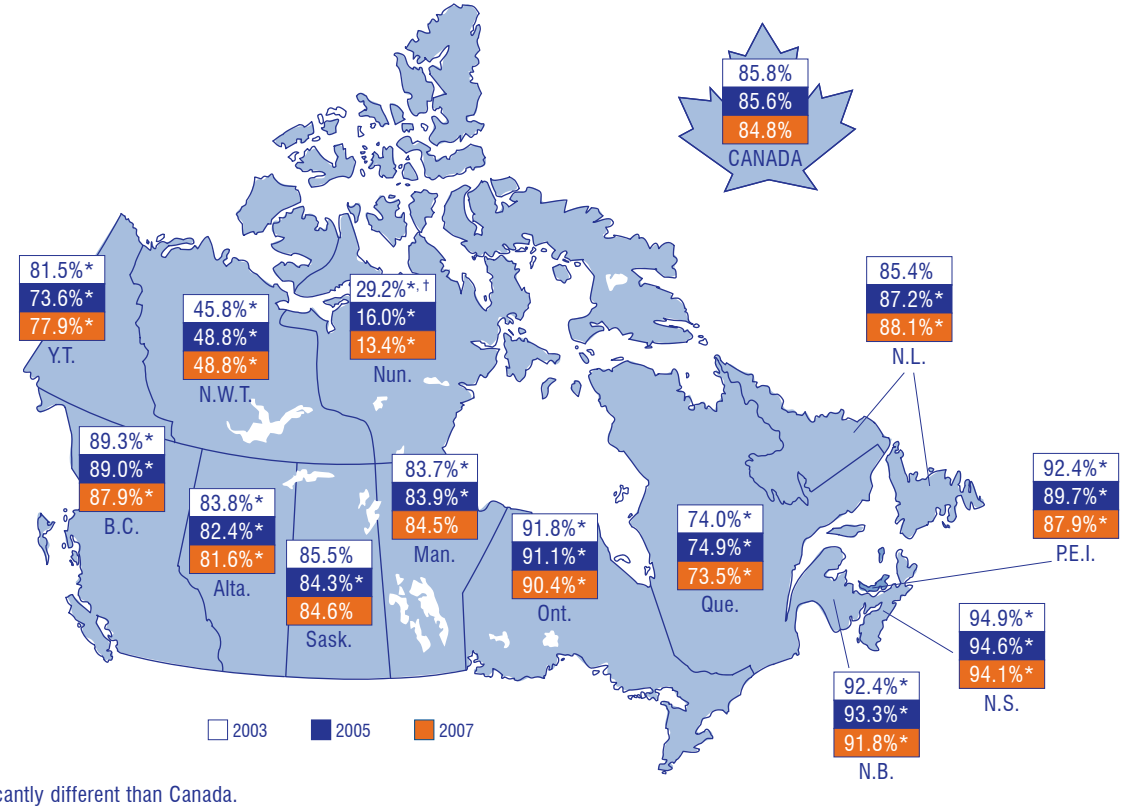
Telephone survey of a representative sample of adults aged 18 and older. The final analysis weighted the samples to reflect the distribution of the adult population. The mean sample error for Canada and the U.S. was ±2% at the 95% confidence level; for the five other countries it was ±3% at the 95% confidence level. This figure relates to the "Population with a regular PHC provider" indicator.

Source

International Health Policy Survey of the General Public's Views of Their Health Care System's Performance in Seven Countries, 2007, The Commonwealth Fund.

In the seven countries studied, the percent of the population who reported having a regular doctor or place of care ranged from 100% in the Netherlands to 90% in the U.S. Based on the results of this survey and its methodology, 91% of Canadians reported having a regular doctor or place of care.*

Figure 2 Population Aged 12+ That Report Having a Regular Medical Doctor, 2003 to 2007



Notes

* Significantly different than Canada.

† Use with caution.

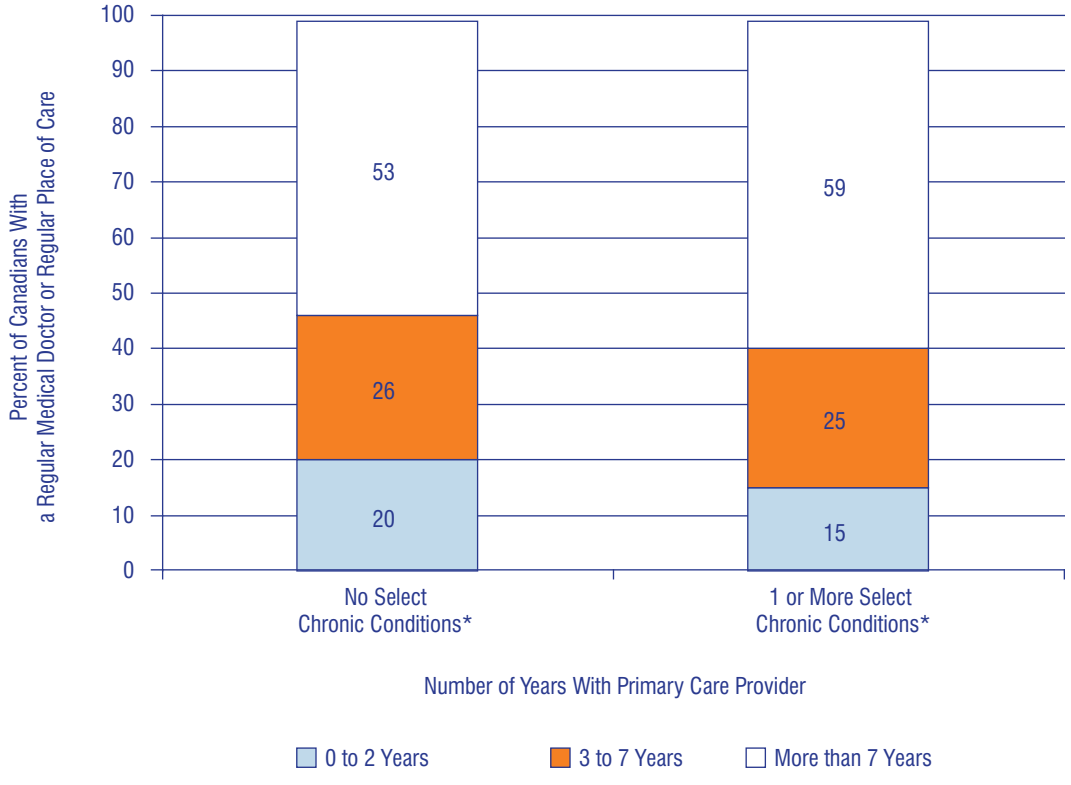
For Quebec, no data were available for Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. Population aged 12 and older were asked to report whether they had a regular medical doctor. Those who did not were asked to report why not. Respondents were considered not to have looked for a regular medical doctor if their responses included "Have not tried to contact one" or "Other reasons" and were not included in the calculations. All other respondents without a regular medical doctor were considered to have been unable to find one. Their responses included various combinations of the following: "No medical doctors available in the area"; "Medical doctors in the area are not taking new patients"; and "Had a medical doctor who left or retired." This figure relates to the "Population with a regular PHC provider" indicator.

Source

Canadian Community Health Survey, 2003, 2005, 2007, Statistics Canada.

The percent of people who reported having a regular medical doctor in 2007 ranged from 94.1% in Nova Scotia to 13.4% in Nunavut. The Canadian average was 84.8% in 2007.

Figure 3 Length of Time With Primary Care Provider



Notes

* Select chronic conditions include arthritis, cancer, chronic obstructive pulmonary disease, diabetes, heart disease, high blood pressure and mood disorders.

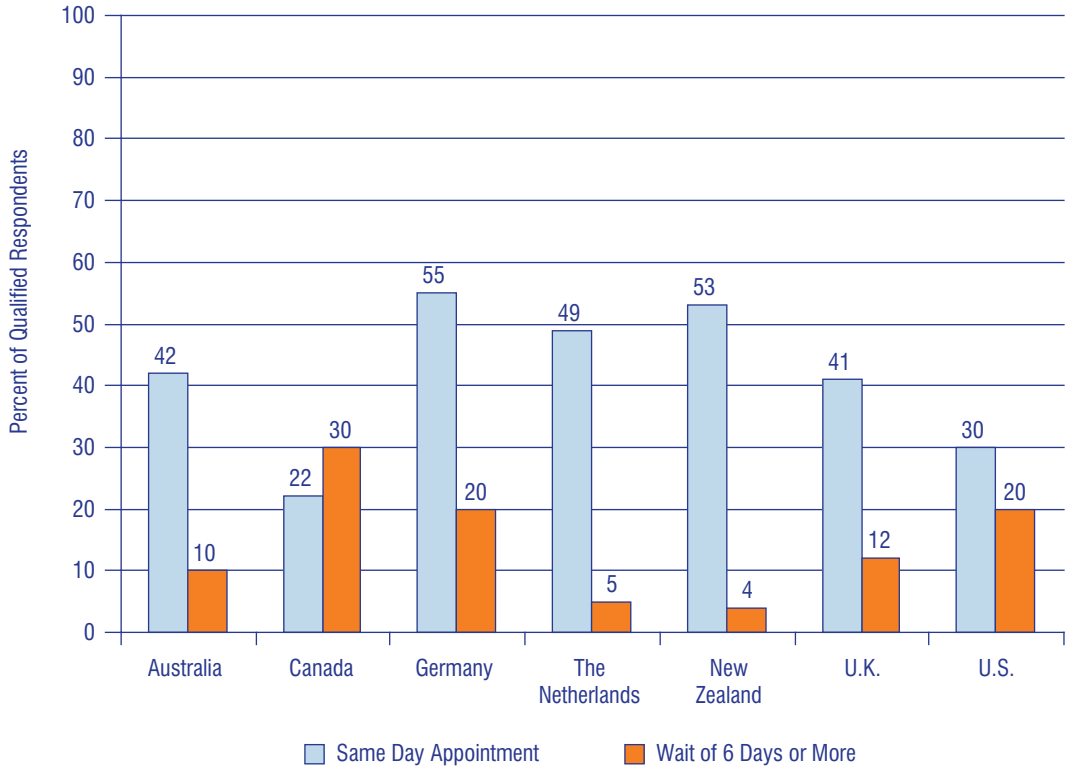
Percentages may not add up to 100% due to missing, refusal to complete and "don't know" responses. A stratified random sample of participants completed the survey (n = 2,194). The response rate was 58% and responses were weighted to represent the age and gender distribution of the population. This figure relates to the "PHC organizations accepting new clients/patients" indicator.

Source

Health Council of Canada, *Canadians' Experiences With Chronic Illness Care in 2007: A Data Supplement to Why Health Care Renewal Matters: Learning From Canadians With Chronic Illness Conditions* (Toronto, Ont.: Health Council of Canada, 2007) quoting Statistics Canada data from the Canadian Survey of Experiences With Primary Health Care 2007. Reproduced with permission.

Of those Canadians that have a regular primary care provider or place of care, the majority reported that they have been with their regular provider for more than seven years. Canadians with chronic conditions* (at least one) were more likely to report being with their provider for seven years or longer.

Figure 4 Access to Doctor When Sick or Need Medical Attention, International Comparisons



The percent of patients who reported that they were able to get a same-day appointment ranged from 55% in Germany to 22% in Canada. The percent of patients who reported that they had to wait six or more days for an appointment the last time they were sick or needed medical attention ranged from 4% in New Zealand to 30% in Canada.*

Notes

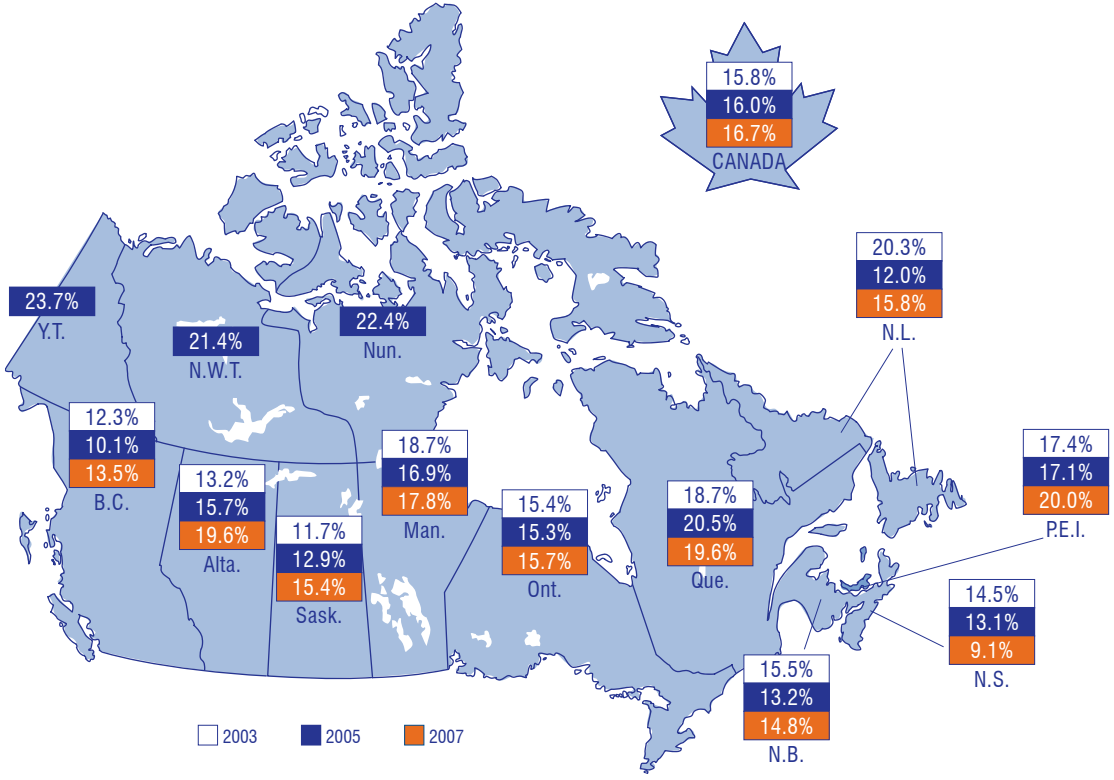
* The response rate for this survey in Canada was low. Interpret results with caution.

Telephone survey of a representative sample of adults aged 18 and older. The final analysis weighted the samples to reflect the distribution of the adult population. The mean sample error for Canada and the U.S. was ±2% at the 95% confidence level; for the five other countries it was ±3% at the 95% confidence level. This figure relates to the "Difficulties accessing routine PHC" indicator.

Source

International Health Policy Survey of the General Public's Views of Their Health Care System's Performance in Seven Countries, 2007, The Commonwealth Fund.

Figure 5 Difficulties Accessing Routine or Ongoing Care, Among Those Who Required Care at Any Time of Day, Population Aged 15+



Notes

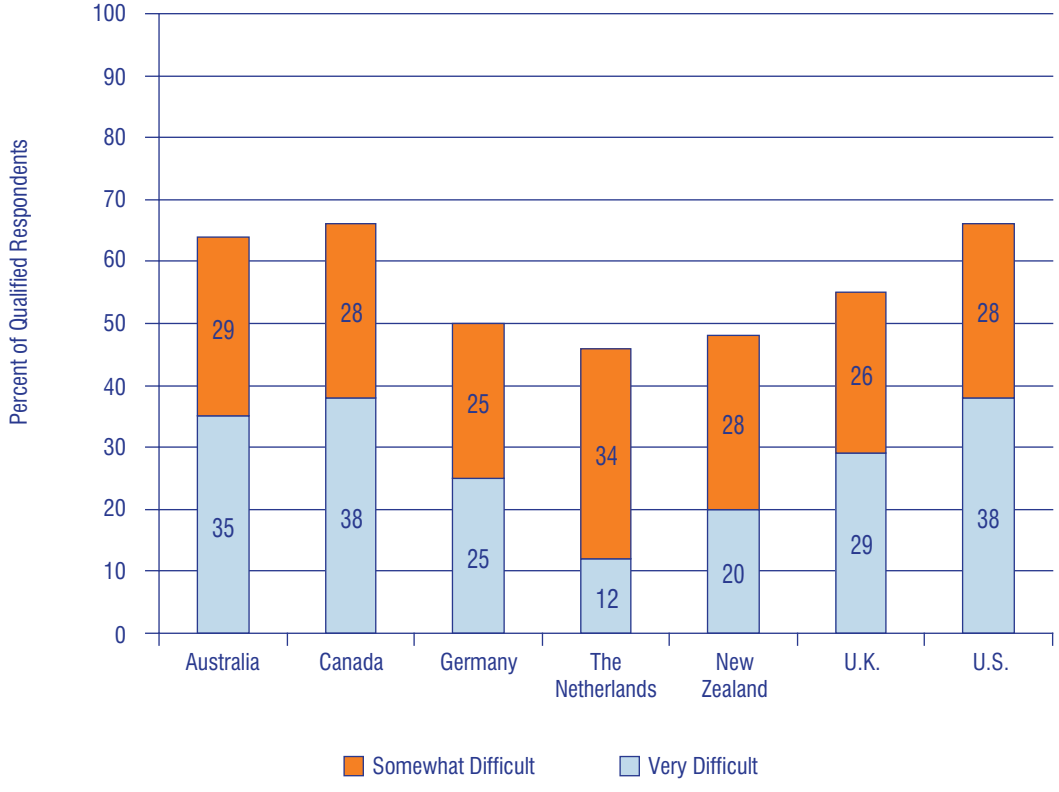
Based on household population aged 15 and older reporting difficulties accessing these services in the past 12 months for self or family member. "Routine" or "ongoing care" corresponds to health care provided by a family or general physician, including an annual check-up, blood tests or routine care for an ongoing illness. "Family member" refers to an individual living in the same dwelling as the respondent, related to the respondent and for whose care the respondent is responsible. This figure excludes non-response ("don't know," not stated and refusal). Rates are age-standardized using the direct method and the 1991 Canadian census population structure. For 2005, the Canada total includes the Yukon, the Northwest Territories and Nunavut. For 2003 and 2007 the Canada total does not include the Yukon, the Northwest Territories and Nunavut because data were not available. This figure relates to the "Difficulties accessing routine PHC" indicator.

Source

Canadian Community Health Survey, 2003, 2005, 2007, Statistics Canada.

In 2007, the percent of people in Canada who reported difficulties accessing routine or ongoing care ranged from 9.1% in Nova Scotia to 20.0% in P.E.I. For Canada, the average was 16.7%.

Figure 6 Difficulty Getting After-Hours Care Without Going to the Emergency Department, International Comparisons



Notes

* The response rate for this survey in Canada was low. Interpret results with caution.

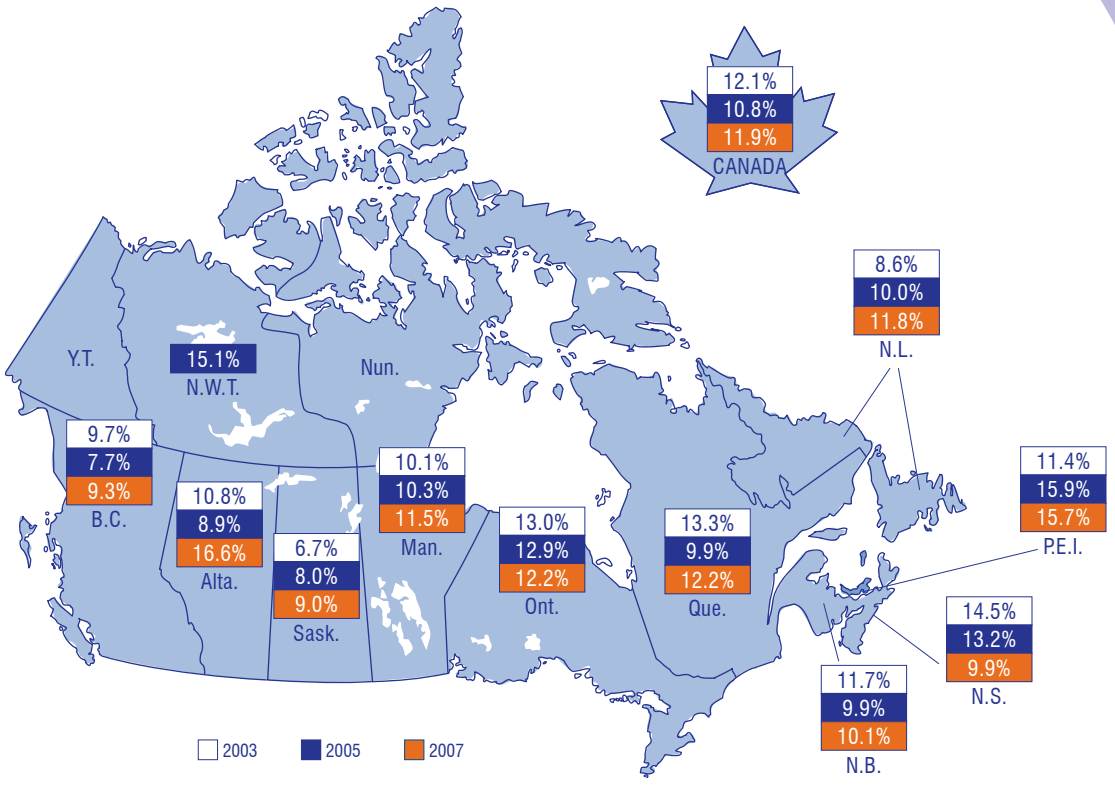
Telephone survey conducted March 6, 2007 to May 7, 2007 of a representative sample of adults aged 18 and older. The final analysis weighted the samples to reflect the distribution of the adult population. The mean sample error for Canada and the U.S. was ±2% at the 95% confidence level; for the five other countries it was ±3% at the 95% confidence level. This figure relates to the "Difficulties obtaining urgent, non-emergent PHC on evenings and weekends" indicator.

Source

International Health Policy Survey of the General Public's Views of Their Health Care System's Performance in Seven Countries, 2007, The Commonwealth Fund.

The percent of patients who reported that they believe it is "somewhat difficult/very difficult" to access primary health care on nights, weekends and holidays without going to the emergency department ranged from 46% in the Netherlands to greater than 60% in Australia, Canada and the U.S. The range for patients who reported it is "very difficult" was between 12% in the Netherlands and 38% in Canada and the U.S.*

Figure 7 Difficulties Accessing Immediate Care for a Minor Health Problem During Evenings and Weekends, Population Aged 15+



Notes

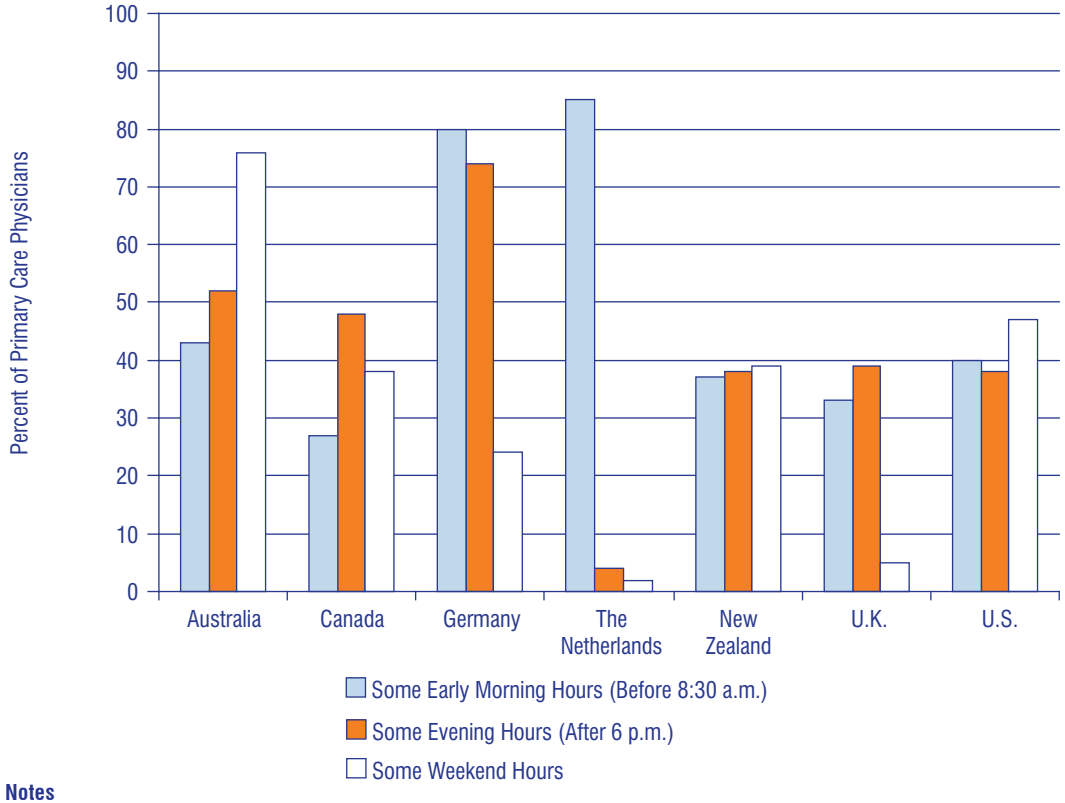
Based on household population aged 15 and older reporting difficulties accessing these services in the past 12 months for self or family member. Family member refers to an individual living in the same dwelling as the respondent, related to the respondent and for whose care the respondent is responsible. Minor health problems include fever, vomiting, major headaches, sprained ankle, minor burns, cuts, skin irritation, unexplained rash and others, and non–life threatening health problems or injuries due to a minor accident. Regular office hours are 9 a.m. to 5 p.m., Monday to Friday; evenings are 5 p.m. to 9 p.m., Monday to Friday; and weekends are Saturday and Sunday from 9 a.m. to 9 p.m. This figure excludes non-response ("don't know," not stated and refusal). Rates are age-standardized using the direct method and the 1991 Canadian census population structure. For 2005, the Canada total includes the Yukon Territories, the Northwest Territories and Nunavut. Data were too unreliable to be published for the Yukon and Nunavut for 2005. For 2003 and 2007, the Canada total does not include the Yukon, the Northwest Territories and Nunavut; data were not available for these territories for these years. This figure relates to the "Difficulties obtaining urgent, non-emergent PHC on evenings and weekends" indicator.

Source

Canadian Community Health Survey, 2003, 2005, 2007, Statistics Canada.

In 2007, the percent of the population who reported they had difficulties accessing immediate care for a minor health problem in the past 12 months ranged from 9.0% in Saskatchewan, to 16.6% in Alberta. The Canada rate was 12.1% in 2003 and 11.9% in 2007.

Figure 8 Primary Care Doctors Who Provide Extended Hours, International Comparisons



In 2006, the percent of physicians who reported that they provide early morning hours ranged from 27% in Canada to 85% in the Netherlands. Provision of some evening hours ranged from 4% in the Netherlands to 74% in Germany. Provision of some weekend hours ranged from 2% in the Netherlands to 76% in Australia.*

Notes

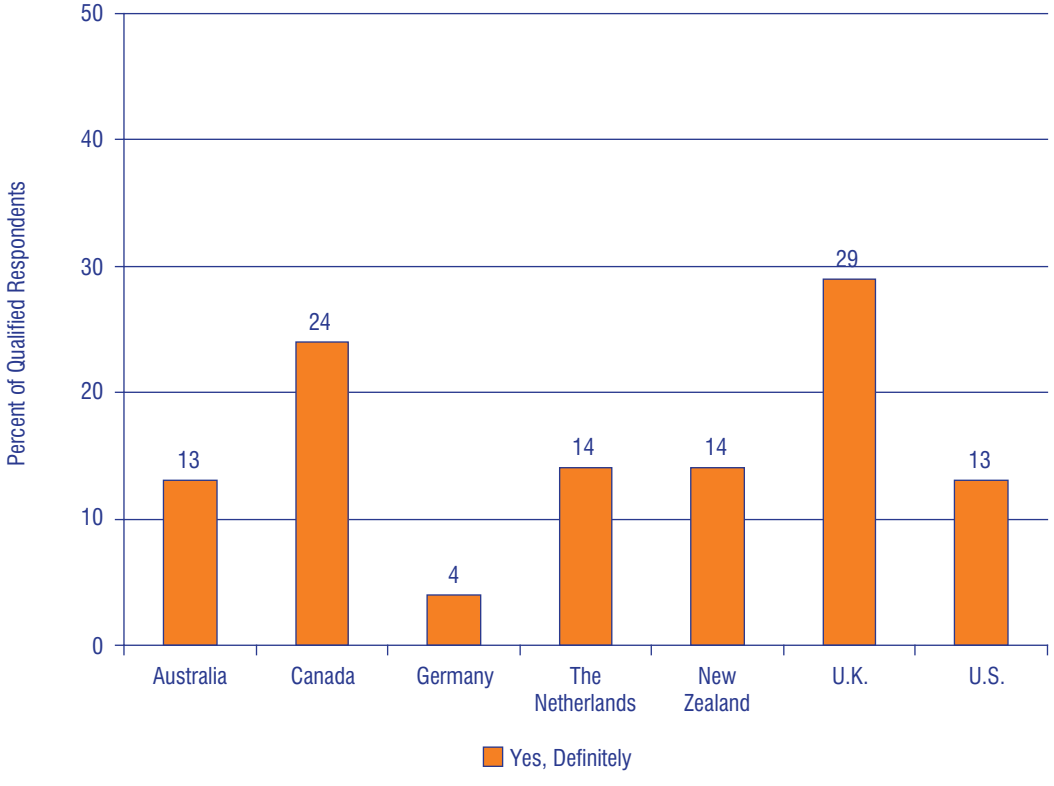
* The response rate for this survey in Canada was low. Interpret the results with caution.

The survey consisted of interviews with representative samples of primary care physicians in seven countries. The definition of primary care physician included GPs and FPs in all countries and also general internists and pediatricians in Canada, Germany and the United States in proportion to their share of primary care physicians in each country. The analysis weighted final samples. Percentages may not add up to 100% due to "don't know" or declined to answer. Multiple responses are possible (for example, physicians provide early morning and evening hours); therefore, totals do not equal 100%. For Australia, Germany, the Netherlands, the U.K. and the U.S., the margin of sample error was approximately ±3% at the 95% confidence level; for Canada and New Zealand it was ±5% at the 95% confidence level. This figure relates to the "PHC after-hours coverage" indicator.

Source

International Health Policy Survey of Primary Care Physicians, 2006, The Commonwealth Fund.

Figure 9 Use of Telephone Health Information/Advice Lines in the Past 12 Months, International Comparisons



In the seven countries studied, use of telephone health information/advice lines in the last 12 months ranged from 29% in the U.K. to 4% in Germany, with Canada at 24%. In the remaining four countries (Australia, the Netherlands, New Zealand and the U.S.) use was 13% to 14%.*

Notes

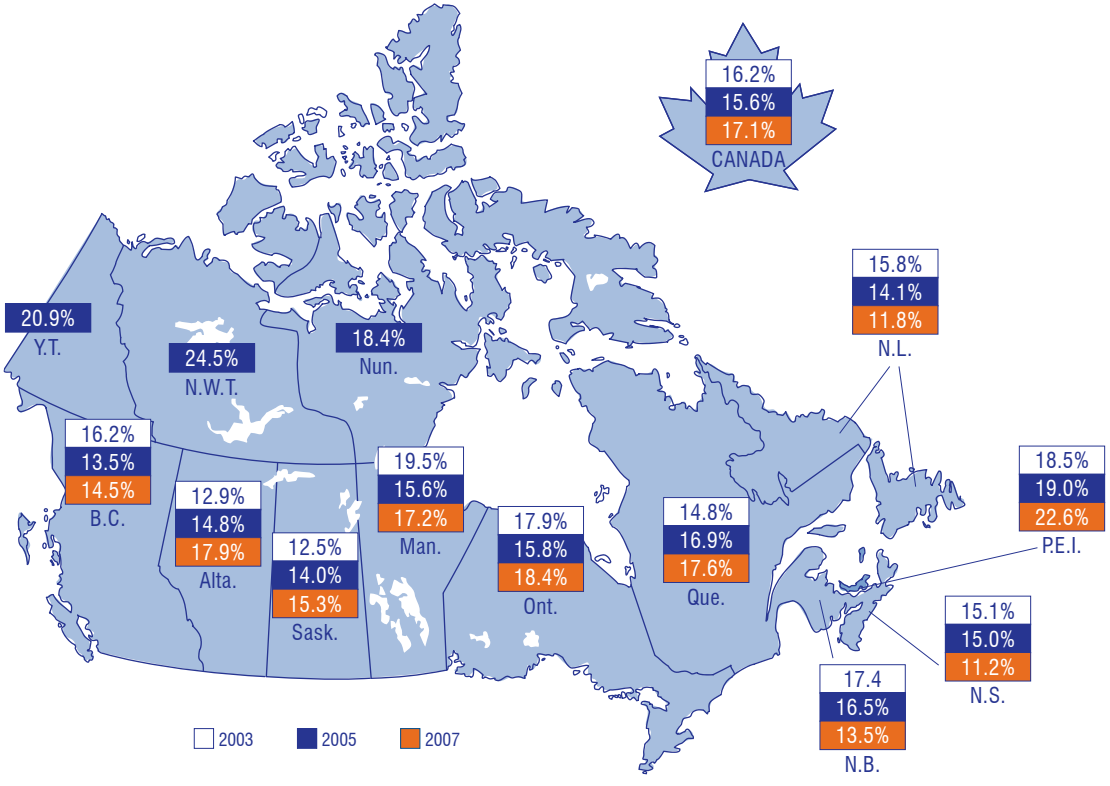
* The response rate for this survey in Canada was low. Interpret the results with caution.

Telephone survey of a representative sample of adults aged 18 and older. The final analysis weighted the samples to reflect the distribution of the adult population. The mean sample error for Canada and the U.S. was ±2% at the 95% confidence level; for the five other countries it was ±3% at the 95% confidence level. This figure relates to the "Difficulties accessing PHC information or advice" indicator.

Source

International Health Policy Survey of the General Public's Views of Their Health Care System's Performance in Seven Countries, 2007, The Commonwealth Fund.

Figure 10 Difficulties Accessing Health Information or Advice Among Those Who Required Care at Any Time of Day, Population Aged 15+



In 2007, the percent of people reporting difficulties accessing health information among those who required care at any time of day ranged from 11.2% in Nova Scotia to 22.6% in Prince Edward Island. The average for Canada was 17.1%.

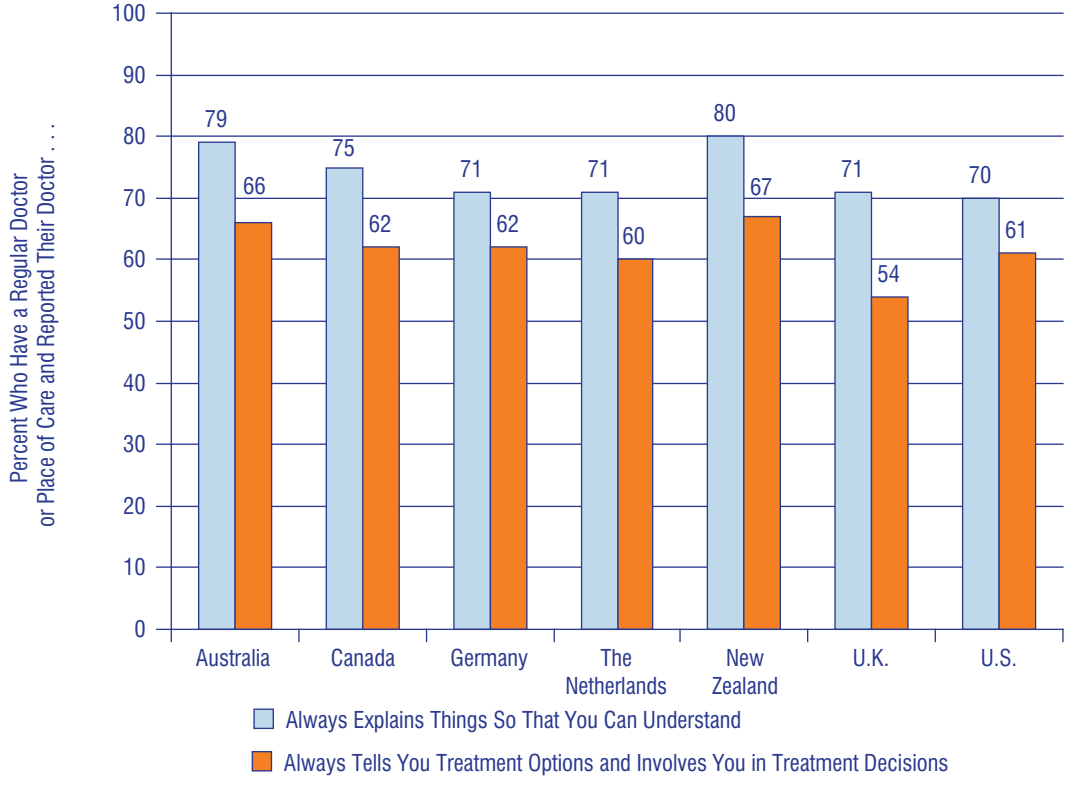
Notes

Based on household population aged 15 and older reporting difficulties accessing these services in the past 12 months for self or family member. Family member refers to an individual living in the same dwelling as the respondent, related to the respondent and for whose care the respondent is responsible. This figure excludes non-responses ("don't know," not stated and refusal). Rates are age-standardized using the direct method and the 1991 Canadian census population structure. For 2005, the Canada total includes the Yukon, the Northwest Territories and Nunavut. For 2003 and 2007 the Canada total does not include the Yukon, the Northwest Territories and Nunavut, as data were not available for these territories for these years. This figure relates to the "Difficulties accessing PHC information or advice" indicator.

Source

Canadian Community Health Survey, 2003, 2005, 2007, Statistics Canada.

Figure 11 Doctor–Patient Communication, International Comparisons



The percent of doctors who "always explain things in a way that you can understand" ranged from 80% in New Zealand to 70–71% in the U.S., Germany, the Netherlands and the U.K., with Canada at 75%. The percent of doctors who "always tell you your treatment options and involve you in treatment decisions" ranged from 67% in New Zealand to 54% in the U.K., with Canada at 62%.*

Notes

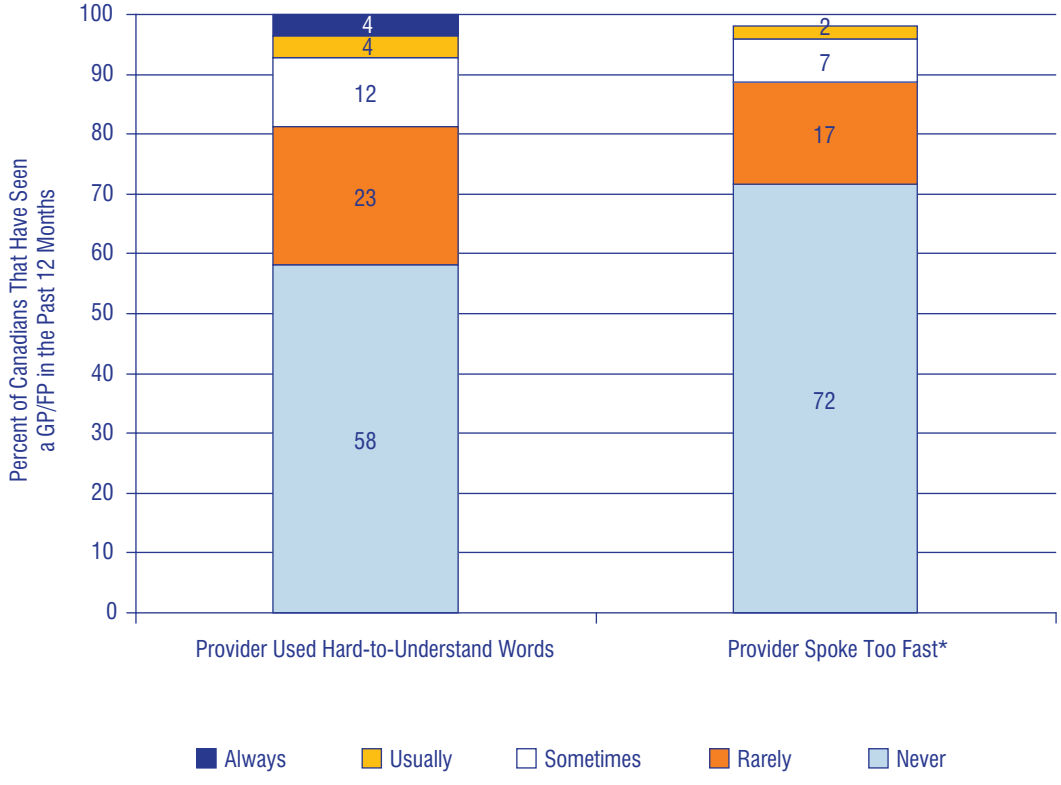
* The response rate for this survey in Canada was low. Interpret the results with caution.

Telephone survey of a representative sample of adults aged 18 and older. The final analysis weighted the samples to reflect the distribution of the adult population. The mean sample error for Canada and the U.S. was ±2% at the 95% confidence level; for the five other countries it was ±3% at the 95% confidence level. This figure relates to the "Language barriers when communicating with PHC providers" indicator.

Source

International Health Policy Survey of the General Public's Views of Their Health Care System's Performance in Seven Countries, 2007, The Commonwealth Fund.

Figure 12 Language Barriers When Communicating With Family Doctor or General Practitioner in the Past 12 Months



Most Canadians (>80%) reported that their provider rarely or never used "hard-to-understand words" or "spoke too fast." Providers "using hard-to-understand words" were identified more frequently as a problem than "speaking too fast."

Note

* Data for the "always" response category for "provider spoke too fast" question were not reliable; hence they were not included in this chartbook. This figure relates to the "Language barriers when communicating with PHC providers" indicator.

Source

The Canadian Survey of Experiences With Primary Health Care, 2007, Statistics Canada.

Recommended Care

Examples of Recommended Care Indicators

Page	Figure		CIHI Indicator Label	Number
42	**13**	Influenza Immunization, Population Aged 65+, International Comparisons	Influenza immunization, 65+	**41**
43	**14**	Influenza Immunization, Population Aged 65+		
44	**15**	Screening and Prevention—Primary Care Research Study, Ontario*		
44	**15**	Screening and Prevention—Primary Care Research Study, Ontario*	Cervical cancer screening	**50**
45	**16**	Cervical Cancer Screening, Females Aged 20 to 69, International Comparisons*		
46	**17**	Cervical Cancer Screening Reported by Females Aged 18 to 69		
47	**18**	Provision of Advice on Weight, Nutrition or Exercise, International Comparisons*	Health risk screening	**13**
48	**19**	Primary Care Providers Who Promote Disease Prevention and Healthy Living*		
49	**20**	Blood Pressure Control Among People With Diabetes, Saskatchewan Chronic Disease Management Collaborative*	Screening for modifiable risk factors in adults with diabetes	**57**
50	**21**	Canadians Diagnosed With Non-Gestational Diabetes Having Blood Sugar Control Test (HbA1c) by a Health Care Professional in the Past 12 Months*		
51	**22**	Diabetes Care, Capital Health Region, Alberta*		
52	**23**	Diabetes Patients Who Have Had Two Blood Sugar Control Tests (HbA1c) in Past 12 Months, British Columbia*		
51	**22**	Diabetes Care, Capital Health Region, Alberta*	Glycemic control for diabetes	**39**
53	**24**	Cardiovascular Disease Care—Primary Care Research Study, Ontario*	Screening for modifiable risk factors in adults with coronary artery disease	**55**
54	**25**	Blood Pressure Control Among People With Coronary Artery Disease (CAD), Saskatchewan Chronic Disease Management Collaborative*		

Notes

* Data reported in chartbook are related to the indicator.

Numbers in last column refer to the indicator number from the original list of 105 indicators developed in 2006.

Examples of Recommended Care Indicators (cont'd)

Page	Figure		CIHI Indicator Label	Number
55	**26**	Ambulatory Care Sensitive Conditions Hospitalization Rates, 2004–2005 to 2006–2007	Ambulatory care sensitive conditions	**35**
56	**27**	Ambulatory Care Sensitive Conditions Hospitalization Rates Across Health Regions, 2006–2007		
53	**24**	Cardiovascular Disease Care—Primary Care Research Study, Ontario*	Screening for modifiable risk factors in adults with hypertension	**56**
53	**24**	Cardiovascular Disease Care—Primary Care Research Study, Ontario*	Blood pressure control for hypertension	**40**
		Indicator not populated	Treatment of dyslipidemia	**61**
		Indicator not populated	Antidepressant medication monitoring	**63**
		Indicator not populated	Treatment of depression	**64**

Notes

* Data reported in chartbook are related to the indicator.

Numbers in last column refer to the indicator number from the original list of 105 indicators developed in 2006.

Recommended Care Indicators

WHY YOU NEED TO KNOW

The indicators in this section of the chartbook focus on recommended care for the treatment and primary/secondary prevention of the following disease groups: influenza, cervical cancer, cardiovascular disease and diabetes. While primary prevention strategies focus on preventing onset of disease, secondary prevention strategies emphasize adherence to commonly accepted disease management practices once the patient has a condition (for example, the need to prevent worsening or other conditions, such as developing kidney disease, heart disease or blindness in people with diabetes).

The indicators in this section reflect key conditions and recommended services, which were deemed important by a broad range of stakeholders, including the following:

Influenza immunization 65+

Immunization is an effective means to reduce the impact of influenza. Programs should focus on those at high risk of influenza-related complications (such as people ≥65 years of age), those capable of transmitting influenza to individuals at high risk of complications and those who provide essential community services.[13]

Cervical cancer screening

For many decades, cervical cancer incidence and mortality rates have been declining. These decreasing rates are chiefly due to the far-reaching regular use of Pap test screening where malignant and pre-malignant lesions can be detected early and treated. An important part of preventive health care is the continuation of Pap screening.[14]

Health risk screening

Provision of advice on weight, nutrition or exercise. Collectively, cardiovascular disease, cancer and diabetes are responsible for more than 25 million deaths in the world each year, and millions more live with one or more of these diseases. Much of this disease burden could be prevented by controlling the modifiable risk factors such as physical inactivity, overweight and obesity, and poor nutrition.[15]

Screening for diabetes

People with diabetes are at increased risk of heart disease (cardiovascular disease) and stroke (cerebrovascular disease). These types of problems may occur at a younger age in people with diabetes. Also, people with diabetes die from these events at rates much higher than people without diabetes. Therefore, the Canadian Diabetes Association 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada and others emphasize the importance of reducing the risk of heart attack and stroke.[16]

Glycemic (blood sugar) control for diabetes

Over time, high blood glucose (sugar) levels can cause complications such as blindness, heart disease, kidney problems, nerve damage and gangrene resulting in the need for amputations.

Rigorous scientific studies have provided strong evidence that long-term complications of diabetes mellitus can be reduced by consistent glycemic control. When compared to conventional treatment regimens, intensive treatment regimens aimed at lowering glycosylated hemoglobin (HbA1c) levels toward the normal range have been associated with a reduction in microvascular complications (such as damage to the nerves in the hands and feet) in people with type 1 diabetes and type 2 diabetes. HbA1c levels >7.0% are associated with a significantly increased risk of both microvascular and macrovascular (such as heart attack and stroke) complications, regardless of underlying treatment.
A U.K. study demonstrated that each 1.0% (absolute) reduction in mean HbA1c was associated with a 37% decline in the risk of microvascular complications, a 14% lower rate of myocardial infarction and fewer deaths from diabetes or any cause.[17]

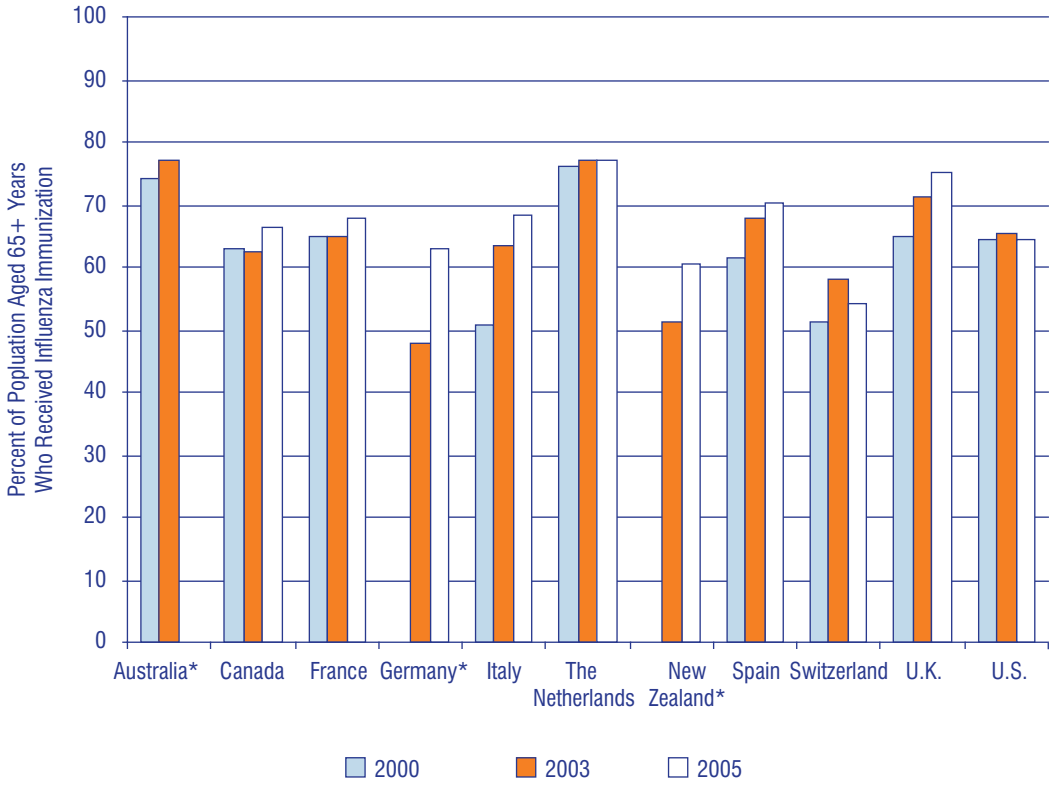
Ambulatory care sensitive conditions (ACSC)

Hospitalization rates vary across Canada for seven chronic conditions that could potentially be managed or treated in the community, known as ACSC. ACSC are conditions, including asthma, diabetes and hypertension, where appropriate primary health care in the community may prevent or reduce the need for hospital admission for these conditions.[18]

Blood pressure control for hypertension

High blood pressure is one of the leading risk factors for mortality around the world.[19, 20] Blood pressure control has been shown to reduce mortality.[21]

Figure 13 Influenza Immunization, Population Aged 65+, International Comparisons



Influenza immunization rates for Canada have increased since 2000. In 2005, Canada's immunization rate was 67%, with the range in the countries studied being 77% in the Netherlands to 54% in Switzerland.

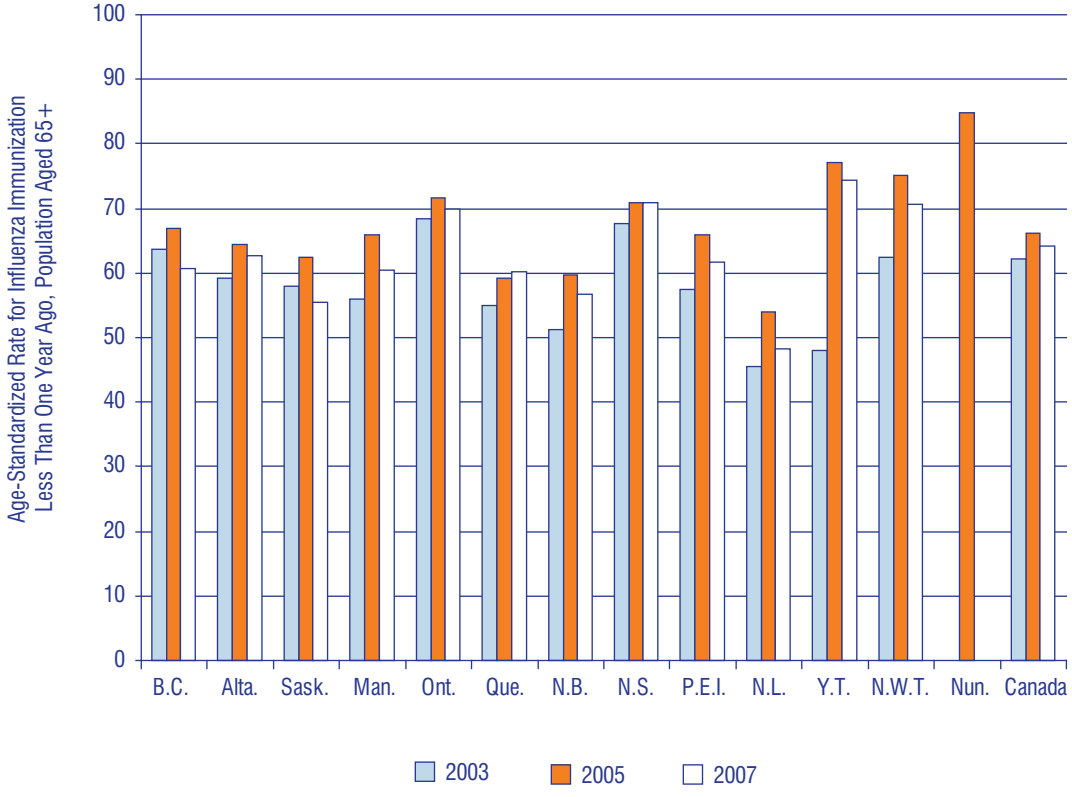
Notes

* Data were not available for Australia for 2005 and for Germany and New Zealand for the year 2000.
Interpret inter-country comparisons with caution as methods of data collection vary from country to country.
This figure relates to the "Influenza immunization, 65+" indicator.

Source

Organisation for Economic Co-operation and Development, 2007.

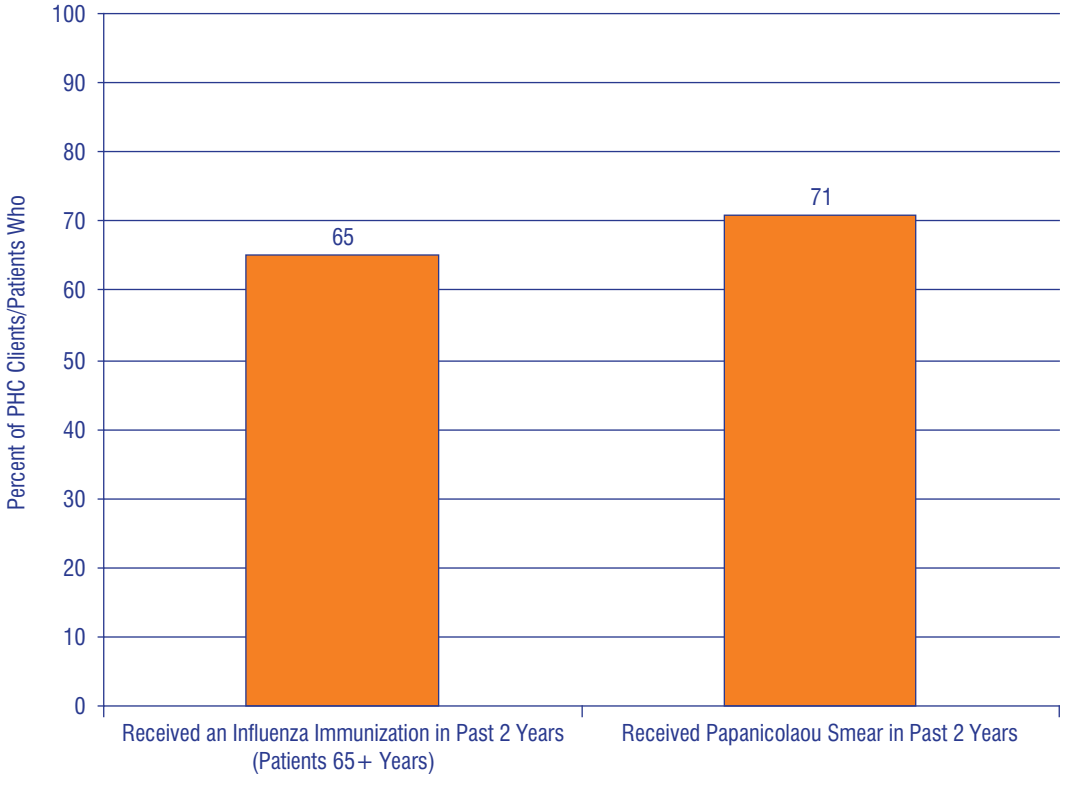
Figure 14 Influenza Immunization, Population Aged 65+



In 2007, influenza immunization rates ranged from 74% in the Yukon to 48% in Newfoundland and Labrador. In 2005, influenza immunization rates ranged from 85% in Nunavut to 54% in Newfoundland and Labrador. In 2003, rates ranged from 69% in Ontario to 46% in Newfoundland and Labrador.

Notes
Rates are age-standardized using the direct method and the 1991 Canadian census population structure. Nunavut and the Northwest Territories (excluding Nunavut) came into existence on April 1, 1999. To facilitate comparisons, data presented in this figure for the Northwest Territories reflect the current boundaries. Data for Nunavut for 2003 and 2007 were too unreliable to be published.
Source
Canadian Community Health Survey, 2003, 2005, 2007 Statistics Canada.

Figure 15 Screening and Prevention—Primary Care Research Study, Ontario



Patients (females) received a Pap smear in the past two years 71% of the time. Patients 65+ years received influenza immunizations 65% of the time. Data are not intended for use as population-based estimates.

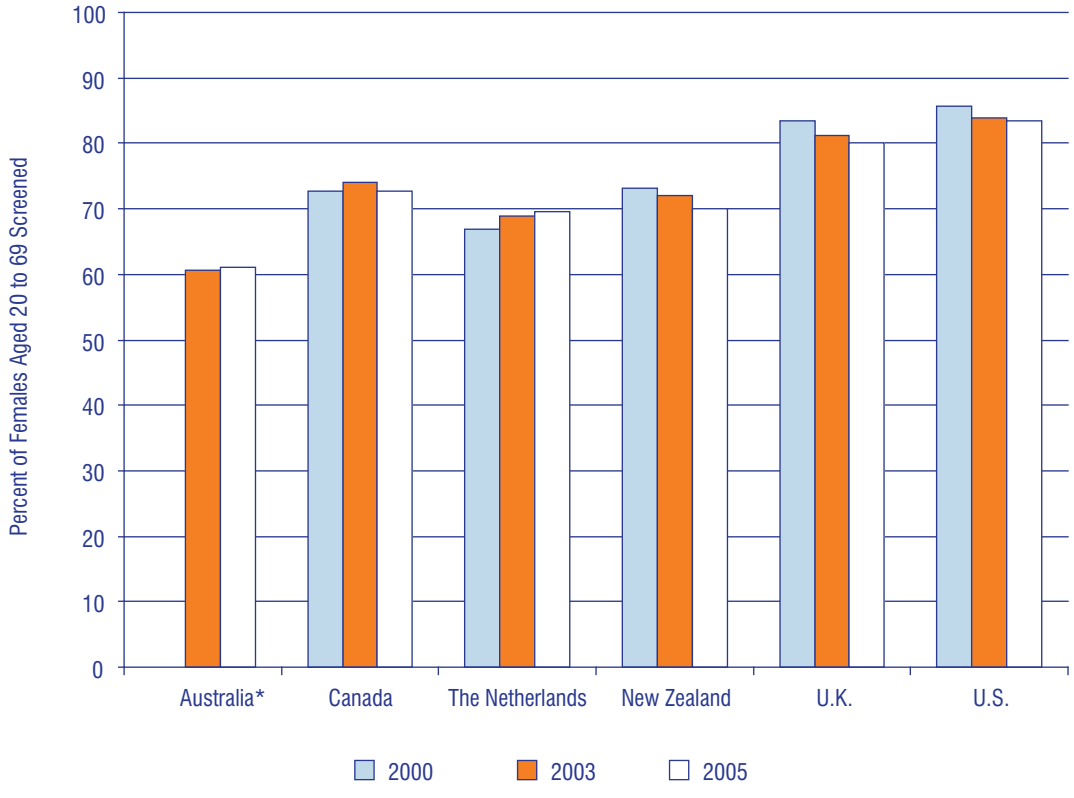
Notes

Based on chart abstraction from 137 primary health care practices in Ontario, 30 charts per practice including four different models of care. Chart abstraction was limited to the charts of regular patients of consenting care providers who were 18 years of age or older at the time of their last visit and who had active charts (defined as a chart with at least two years of information and at least one visit documented in the prior year). Patients were excluded if they died, transferred out of the practice in the previous two years, were seen at the practice for specialized services only (for example, foot care), were known to the chart abstractor or were staff members of the practice. This figure relates to the "Influenza immunization, 65+" and "Cervical cancer screening" indicators.

Source

Comparison of Models of Primary Care Study, 2005–2006, courtesy of University of Ottawa, Ontario.

Figure 16 Cervical Cancer Screening, Females Aged 20 to 69, International Comparisons



In 2005, the percent of women screened for cervical cancer ranged from 84% in the U.S. to 61% in Australia. Canada had a cervical cancer screening rate of 73% in 2005.

Notes

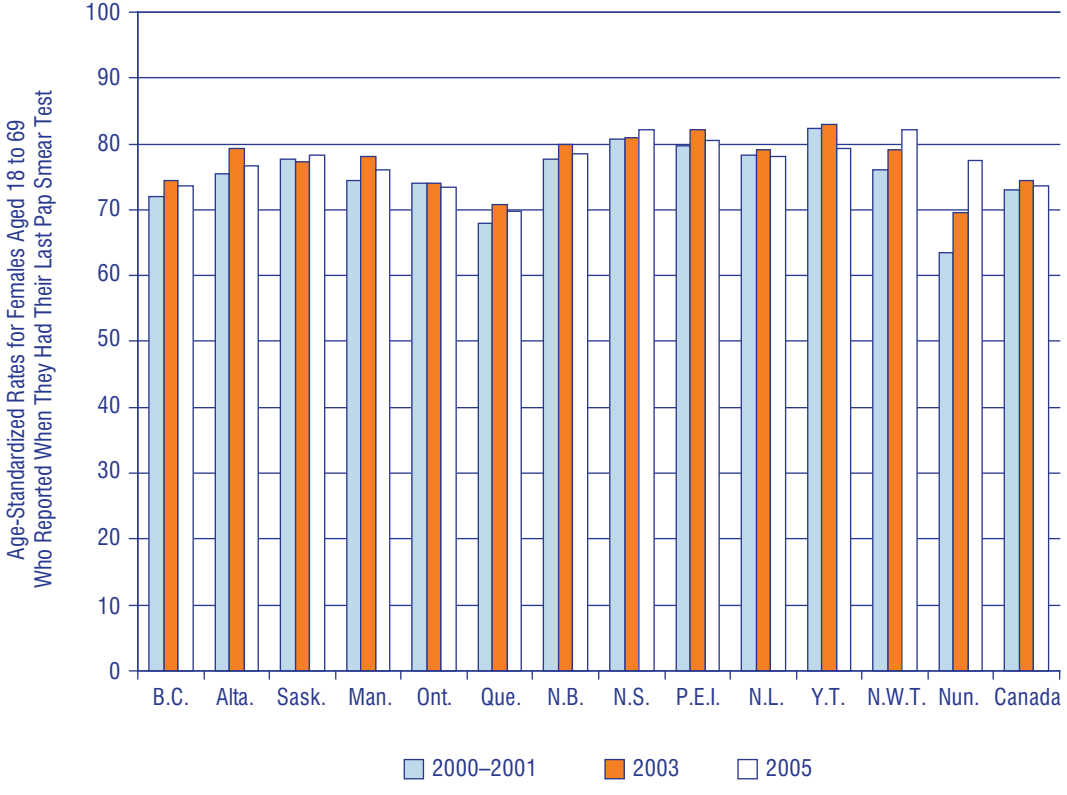
* Data not available for Australia for 2000.

Interpret inter-country comparisons with caution as methods of data collection vary from country to country. Data collection for Canada and the U.S. is based on survey data; all other countries listed are based on program data.

Source

Organisation for Economic Co-operation and Development, 2008.

Figure 17 Cervical Cancer Screening Reported by Females Aged 18 to 69

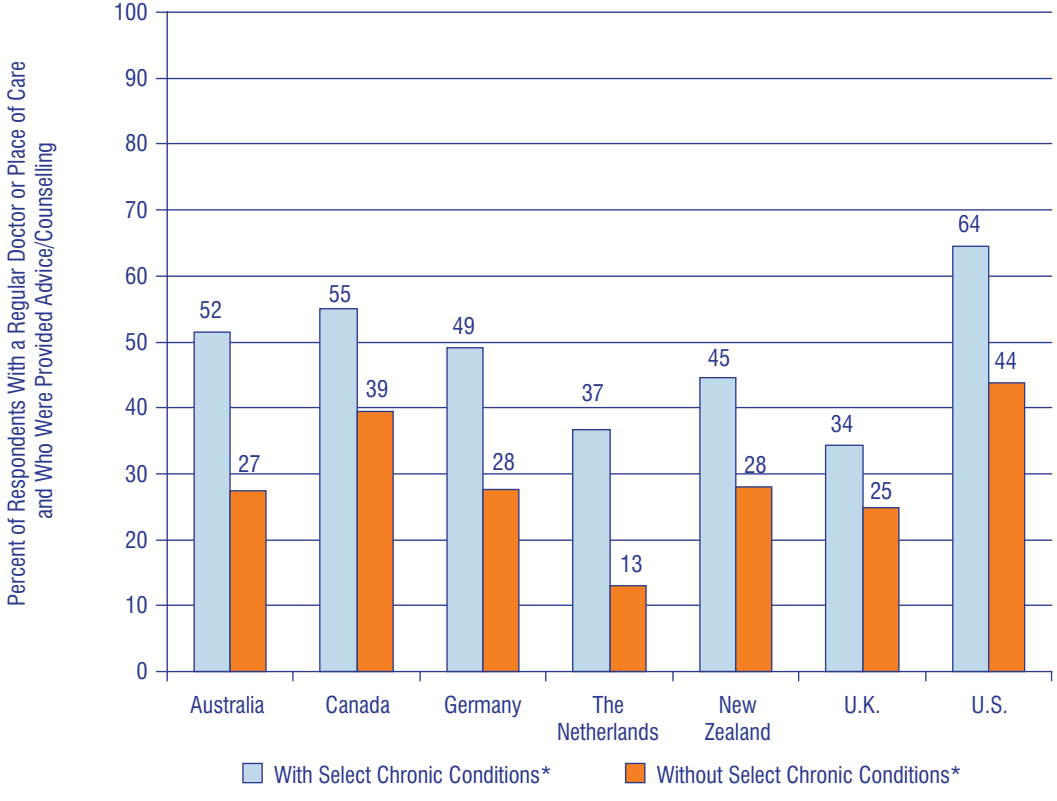


The percent of females who self-reported receiving cervical cancer screening in 2005 ranged from 82% in Nova Scotia and the Northwest Territories to 70% in Quebec. In 2003, the percent ranged from 83% in the Yukon to 70% in Nunavut. In 2000–2001, the percent ranged from 82% in the Yukon to 63% in Nunavut.

Notes
Rates are age-standardized using the direct method and the 1991 census population structure. This figure relates to the "Cervical cancer screening" indicator.

Source
Canadian Community Health Survey, 2000–2001, 2003, 2005, Statistics Canada.

Figure 18 Provision of Advice on Weight, Nutrition or Exercise, International Comparisons



In the seven countries studied, the percent of people with select chronic conditions* who received advice on weight, nutrition or exercise ranged from 64% in the U.S. to 34% in the U.K.; Canada reported 55%. For people without chronic conditions, the range was 44% in the U.S. to 13% in the Netherlands; Canada reported 39%.†

Notes

* Select chronic conditions include arthritis, asthma, depression, diabetes, cancer, chronic obstructive pulmonary disease, heart disease (including heart attack) and high blood pressure.

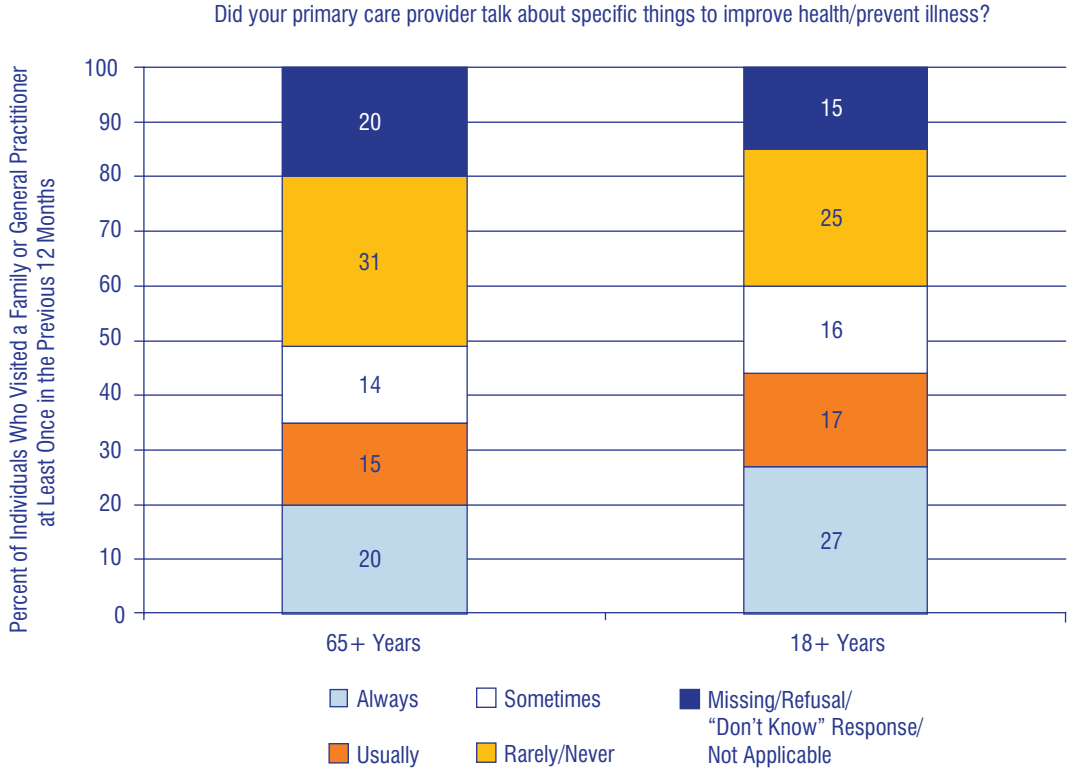
† The response rate for this survey in Canada was low. Interpret the results with caution.

Telephone survey of a representative sample of adults aged 18 and older. The final analysis weighted the samples to reflect the distribution of the adult population. The mean sample error for Canada and the U.S. was ±2% at the 95% confidence level; for the five other countries it was ±3% at the 95% confidence level. This figure relates to the "Health risk screening" indicator.

Sources

Health Council of Canada, 2007, custom analysis of The Commonwealth Fund data from the International Health Policy Survey of the General Public's Views of Their Health Care System's Performance in Seven Countries, 2007.

Figure 19 Primary Care Providers Who Promote Disease Prevention and Healthy Living

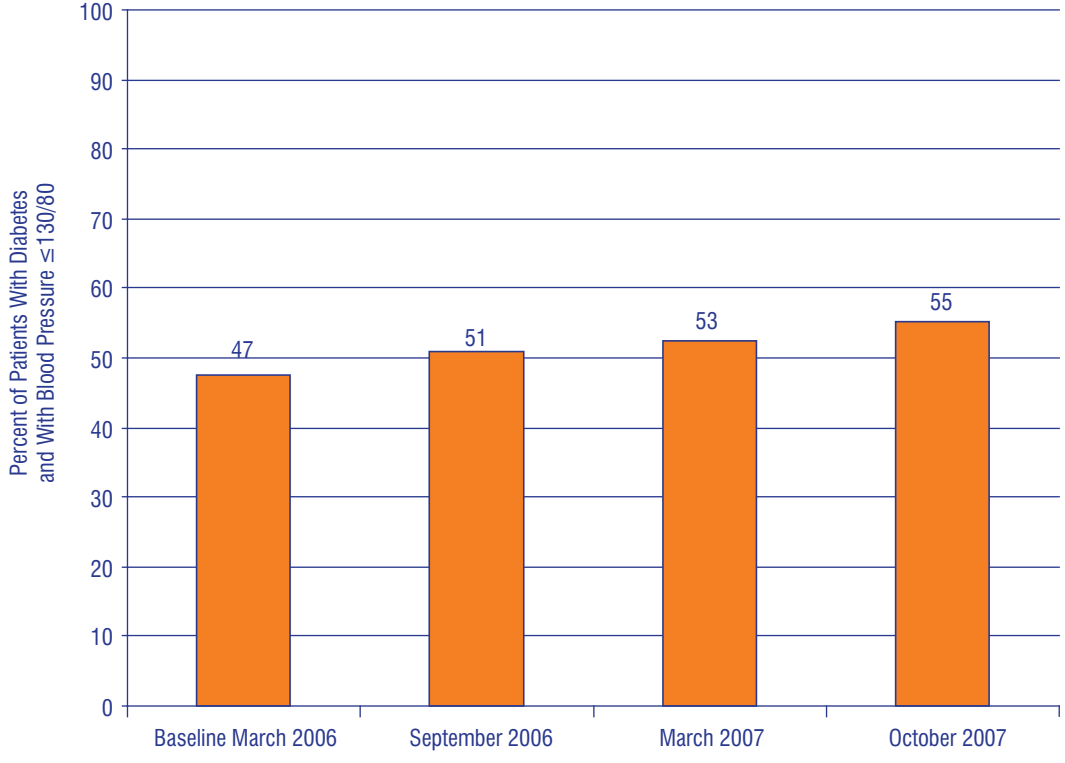


Less than half of Canadian PHC patients report that their provider "always" or "usually" talks to them about specific things to improve their health; only 35% of patients 65 years and older reported this. Thirty-one percent of patients 65+ reported providers "rarely/never" talked about specific things to improve.

Note
This figure relates to the "Health risk screening" indicator.

Source
Health Council of Canada, *Canadian Survey of Experiences With Primary Health Care in 2007: A Data Supplement to Fixing the Foundation: An Update on Primary Health Care and Home Care Renewal in Canada* (Toronto, Ont.: Health Council of Canada, 2008) quoting Statistics Canada data from the Canadian Survey of Experiences With Primary Health Care 2007. Reproduced with permission.

Figure 20 Blood Pressure Control Among People With Diabetes, Saskatchewan Chronic Disease Management Collaborative

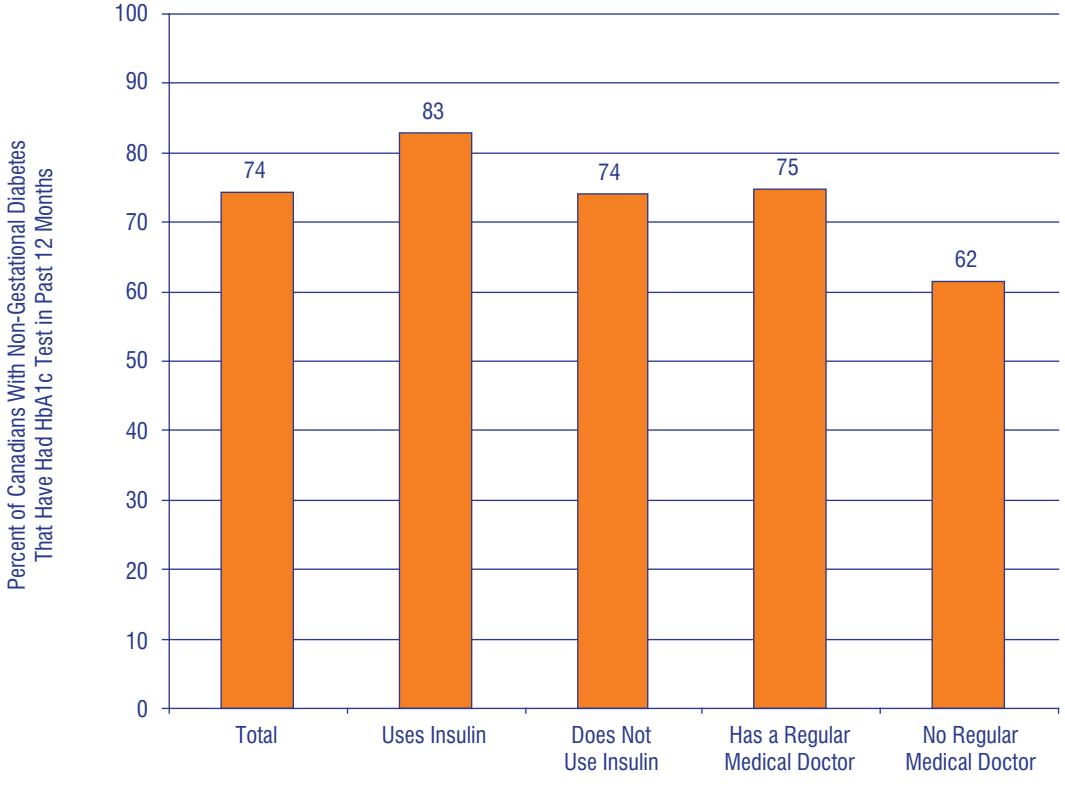


In March 2006, 47% of diabetes patients (n = 5,710) whose primary health care providers participated in the Saskatchewan Chronic Disease Management Collaborative had blood pressure control (≤130/80 mmHg); this increased to 55% in October 2007. Data are not intended for use as population-based estimates.

Notes
Numerator: Number of people in the denominator with a most recent blood pressure ≤130/80.
Denominator: Number of patients with diabetes in the disease registry who have a recorded blood pressure value that occurred between December 31, 2003 and October 2007. This figure relates to the "Screening for modifiable risk factors in adults with diabetes" indicator.

Source
Chronic Disease Management Collaborative, 2006–2007, Health Quality Council, Saskatchewan.

Figure 21 Canadians Diagnosed With Non-Gestational Diabetes Having Blood Sugar Control Test (HbA1c) by a Health Care Professional in the Past 12 Months

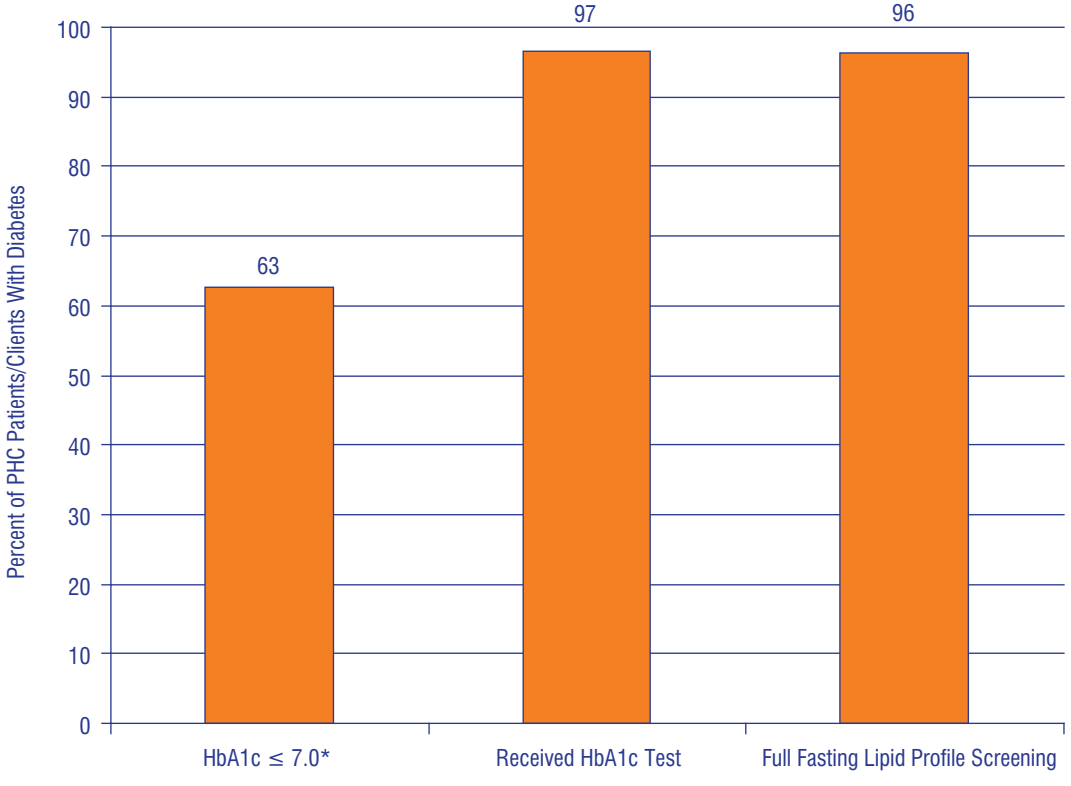


Notes
Uses insulin and does not use insulin are significantly different ($p < 0.05$). Has regular medical doctor and no regular medical doctor are significantly different ($p < 0.05$). Data include the following provinces: Manitoba, Ontario, New Brunswick, Prince Edward Island and Newfoundland and Labrador. Household population aged 18 or older. Excludes gestational diabetes, does not distinguish between type 1 and type 2 diabetes. This figure relates to the "Screening for modifiable risk factors in adults with diabetes" indicator.

Source
Canadian Community Health Survey, 2005, Statistics Canada.

The percent of Canadians with diabetes (excluding gestational diabetes) who have had an HbA1c test in the past 12 months and who use insulin is 83%; for those who do not use insulin it is 74%. The percent of patients with diabetes who have had an HbA1c test in the past 12 months and have a regular medical doctor is 75%, compared to 62% for those who do not have a regular medical doctor. The average for all Canadians with diabetes is 74%.

Figure 22 Diabetes Care, Capital Health Region, Alberta



Ninety-six percent or more of patients with diabetes in this sample from the Capital Health Region were tested/screened within the past 12 months for blood sugar control and lipid profile screening. Sixty-three percent of patients with diabetes have also achieved blood sugar control (HbA1c ≤7.0%). Data are not intended for use in population-based estimates.

Notes

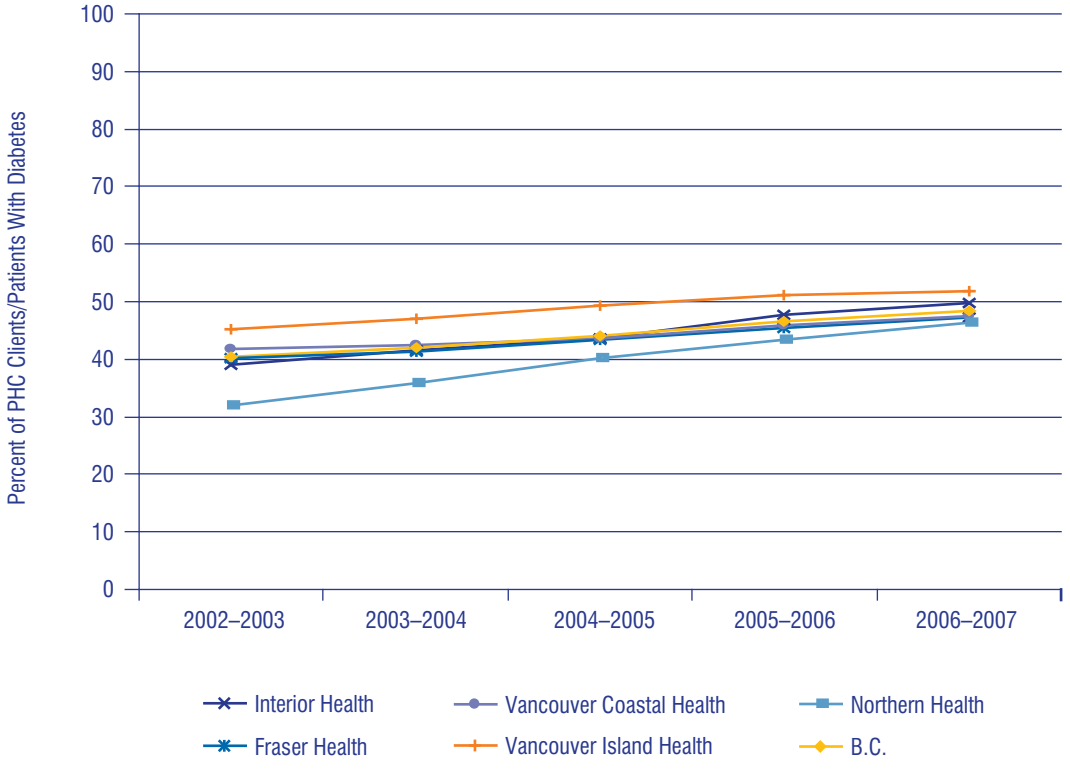
* Capital Health, 2004–2007, Alberta.

Based on administrative data from participating physicians within the Capital Health Region. The data for "received an HbA1c test" and "full fasting lipid profile screening" is based on 6,368 patients. The data for "HbA1c ≤7.0%" is based on 38,791 patients (data were collected for a longer period of time). This figure relates to the "Screening for modifiable risk factors in adults with diabetes" and the "Glycemic control for diabetes" indicators.

Source

Capital Health, 2007, Alberta.

Figure 23 Diabetes Patients Who Have Had Two Blood Sugar Control Tests (HbA1c) in Past 12 Months, British Columbia



In 2006–2007, the percent of B.C. patients with diabetes who have had at least two blood sugar control tests in the past 12 months ranged from 52% in Vancouver Island Health to 46% in Northern Health. The percent increased in all regions since 2002–2003.

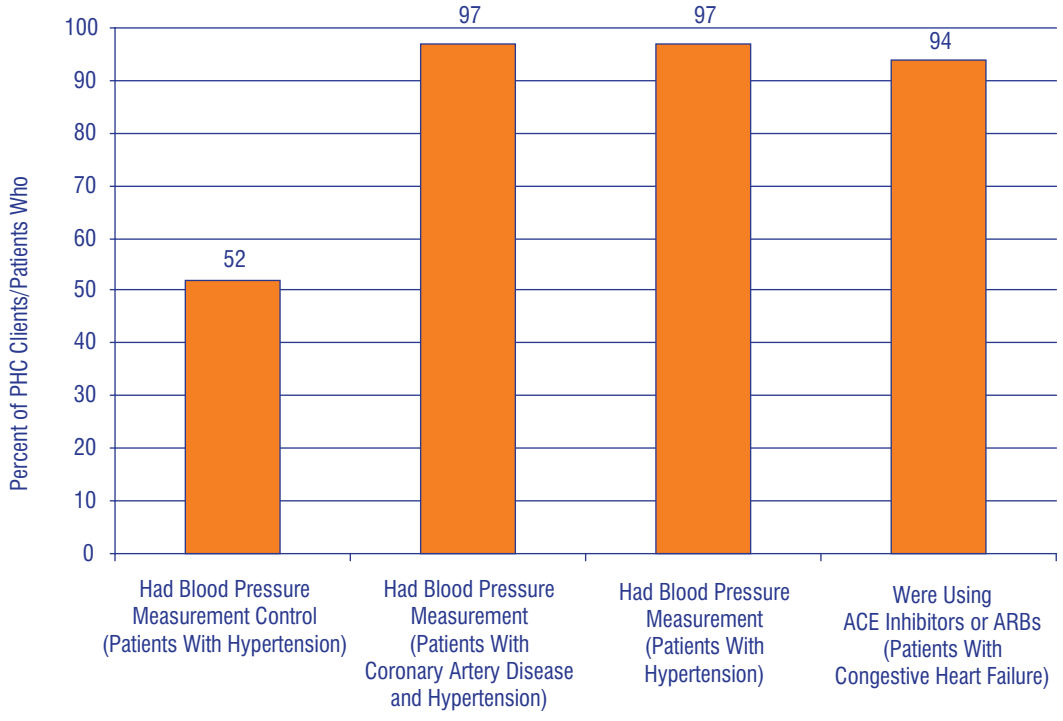
Notes

The diabetes case definition changed in 2006–2007, resulting in a noticeable drop in prevalence across all years. The data are based on the following numbers of patients in B.C.: for 2002–2003, there were 200,448; for 2003–2004, there were 215,658; for 2004–2005, there were 231,965; for 2005–2006, there were 248,699; and for 2006–2007, there were 266,750. This figure relates to the "Screening for modifiable risk factors in adults with diabetes" indicator.

Source

Government of British Columbia, 2007.

Figure 24 Cardiovascular Disease Care—Primary Care Research Study, Ontario



Most patients (97%) with hypertension had their blood pressure measured; 52% also had blood pressure control (<140/90 mmHg). Ninety-four percent of patients with congestive heart failure were using ACE inhibitors or ARBs. Data are not intended for use as population-based estimates.

Notes

Based on chart abstraction from 137 primary health care practices in Ontario, 30 charts per practice including four different models of care. Chart abstraction was limited to the charts of regular patients of consenting care providers who were 18 years of age or older at the time of their last visit and who had active charts (defined as a chart with at least two years of information and at least one visit documented in the prior year). Patients were excluded if they died, transferred out of the practice in the previous two years, were seen at the practice for specialized services only (for example, foot care), were known to the chart abstractor or were staff members of the practice.

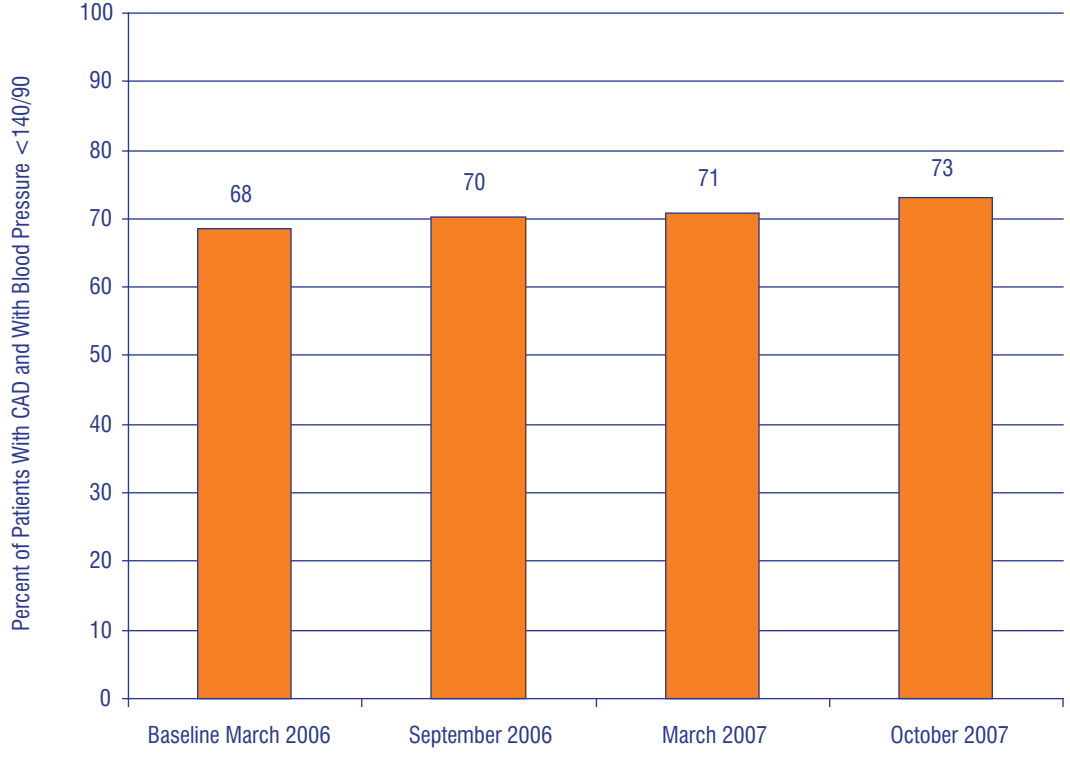
ACE inhibitors (angiotensin-converting enzyme inhibitors): pharmacological treatment for congestive heart failure.

ARBs (angiotensin receptor blockers): pharmacological treatment for congestive heart failure for people who experience side effects on ACE inhibitors. This figure relates to the "Screening for modifiable risk factors in adults with coronary artery disease," "Blood pressure control for hypertension" and "Screening for modifiable risk factors in adults with hypertension" indicators.

Source

Comparison of Models of Primary Care Study, 2005–2006, courtesy of University of Ottawa, Ontario.

Figure 25 Blood Pressure Control Among People With Coronary Artery Disease (CAD), Saskatchewan Chronic Disease Management Collaborative



Approximately 73% of 2,998 patients whose primary health care providers participated in the Saskatchewan Chronic Disease Management Collaborative achieved blood pressure control (<140/90 mg) as of October 2007. The percent increased from 68% in March 2006. Data are not intended for use as population-based estimates.

Notes

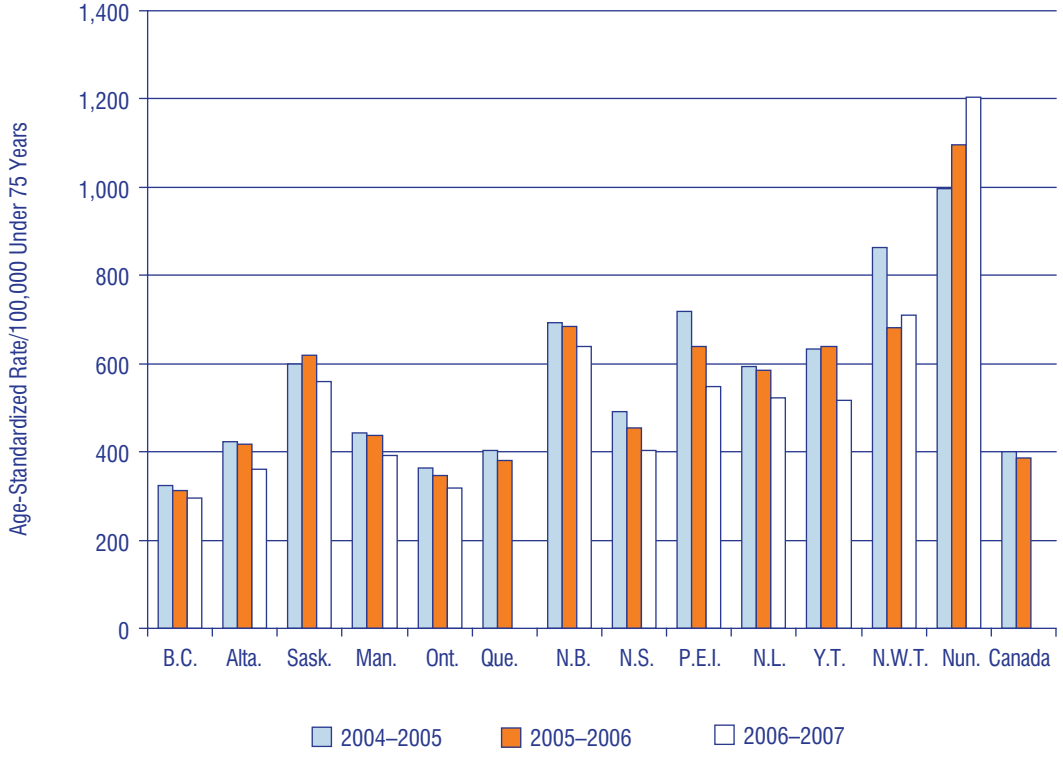
Numerator: Number of people in the denominator with a most recent blood pressure <140/90.

Denominator: Number of patients with coronary artery disease in the disease registry who have a recorded blood pressure value that occurred after December 31, 2003. This figure relates to the "Screening for modifiable risk factors in adults with coronary artery disease" indicator.

Source

Chronic Disease Management Collaborative, 2006–2007, Health Quality Council, Saskatchewan.

Figure 26 Ambulatory Care Sensitive Conditions Hospitalization Rates, 2004–2005 to 2006–2007

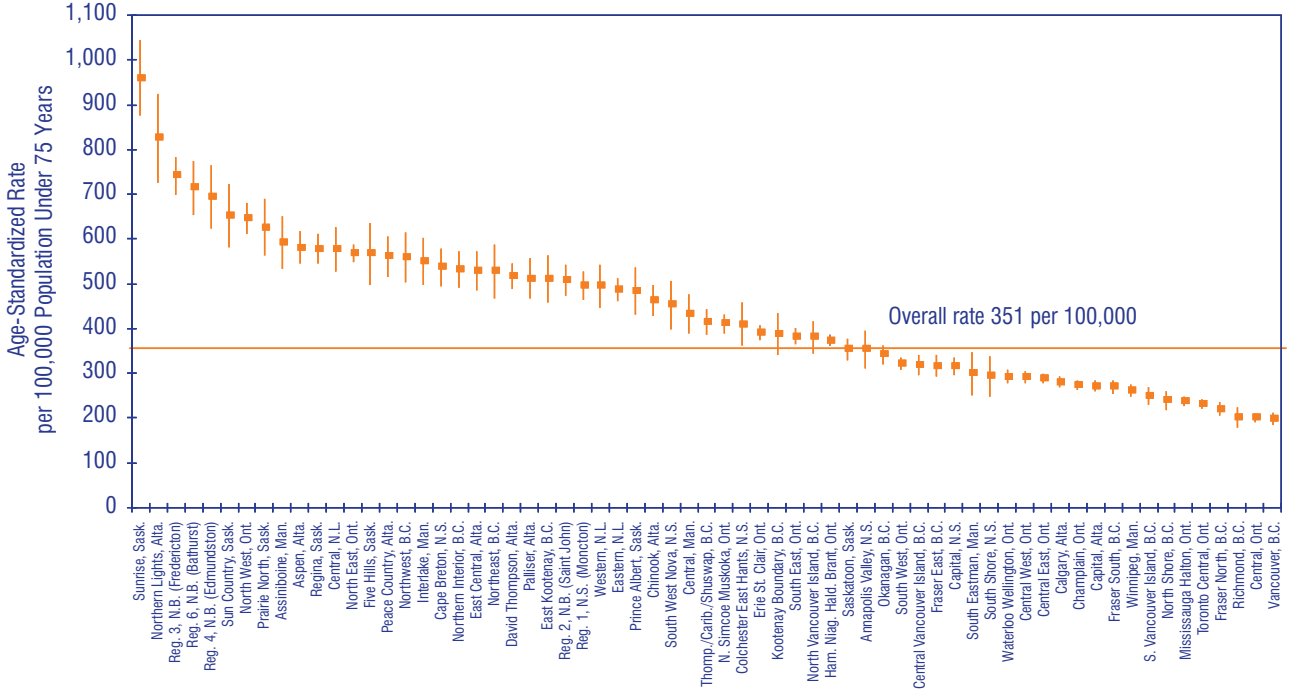


Hospitalization rates vary across the country for seven chronic conditions that could potentially be managed or treated in the community, known as ambulatory care sensitive conditions.[18] The ACSC rate in 2006–2007 ranged from 1,204/100,000 population younger than 75 years in Nunavut to 294/100,000 in British Columbia. The rate for all of Canada in 2005–2006 was 385.

Note
The Canada rate for 2006–2007 was not published because data are not available for Quebec. All rates for 2004–2005 and 2005–2006 are significantly different from Canada, except for Quebec for 2004–2005.
Sources
Hospital Morbidity Database, 2004–2005 and 2005–2006; Discharge Abstract Database, 2006–2007, Canadian Institute for Health Information.

Ambulatory Care Sensitive Conditions

Figure 27 Hospitalization Rates Across Health Regions, 2006–2007



Rates vary from a low of 198 per 100,000 population in Vancouver, B.C. to a high of 960 in Sunrise, Saskatchewan.

Notes

Regions not shown were excluded due to small numbers. Data for Quebec for 2006–2007 were not available at the time of publication. The vertical lines for each region indicate 95% confidence intervals. Data are based on where patients lived, rather than where they were treated.

Source

Discharge Abstract Database, 2006–2007, Canadian Institute for Health Information.

Organization and Delivery of Services

Examples of Organization and Delivery of Services Indicators

Page	Figure		CIHI Indicator Label	Number
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64	**29**	GPs/FPs Whose Practice Provides More Comprehensive Care (Eight or More Listed PHC Services), 2007*		
65	**30**	Rating of Community-Based Services*	Client/patient satisfaction with PHC providers	**73**
66	**31**	Patient Ratings of PHC Services From Their Primary Care Provider in the Past 12 Months, 2007*		
67	**32**	Care Management and Coordination for Chronic Conditions, International Comparisons*	PHC programs for chronic conditions	**7**
68	**33**	Client/Patient Participation in Chronic Condition Treatment Planning	Client/patient participation in PHC treatment planning	**28**
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Notes

* Data are related to this indicator.

Numbers in last column refer to the indicator number from the original list of 105 indicators developed in 2006.

Organization and Delivery of Services Indicators

WHY YOU NEED TO KNOW

Organization and delivery of services indicators provide data on the scope of PHC services delivered, technological support, provider and patient interactions and expenditures. These types of data contribute to the understanding of the most efficient and effective ways to organize and deliver services that support the provision of high-quality care and better patient outcomes. Many primary health care organizations are moving toward a model with an enhanced focus on chronic disease prevention, engaging patients in the care management process, increased use of information technology and increased collaboration with other health care providers.

The indicators in this section reflect key aspects of the organization and delivery of PHC services that were deemed important by a broad range of stakeholders, including the following:

Scope of PHC services

Comprehensive service provision and continuity of care by PHC organizations are important factors in comprehensive care and patient outcomes, particularly for chronic illnesses.[22–24]

Client/patient satisfaction

Patient satisfaction is affected by many factors, including continuity of care. Continuity of care is a key building block of family practice.[25] One indicator of the quality of behavioural health services are evaluations by consumers.[26] Survey data about the quality of care can be used along with other information to inform quality improvement initiatives.[27]

PHC programs for chronic conditions

Provision of special programs for PHC clients/patients with chronic conditions has the potential to improve the management of these conditions.[28, 29] There has been an increase in the extent of comorbidity, that is, the co-occurrence of diseases. Comorbidity provides new challenges to health care services that have traditionally been focused on individual diseases with little substantial collaboration between primary care physicians and other specialist physicians.[30]

Client/patient participation in PHC treatment planning

The active involvement of a PHC patient has been associated with better understanding on the part of patients, more compliance and improved outcomes as perceived by patients.[31] Patients' participation may help to ensure the treatment plan is developed within the context of their family, workplace and community and facilitates their ability to follow clinical advice.[32]

Collaborative care

Collaborative care may improve the coordination and continuity across primary health care professionals and organizations. Many PHC renewal initiatives include multidisciplinary teams as a key element, which are intended to provide services that better meet the need of patients and their communities.[23, 33]

Interdisciplinary teams/networks

Teams that work as a cohesive unit may improve patient outcomes and improve patient satisfaction. Some interdisciplinary teams may achieve better patient outcomes.[34]

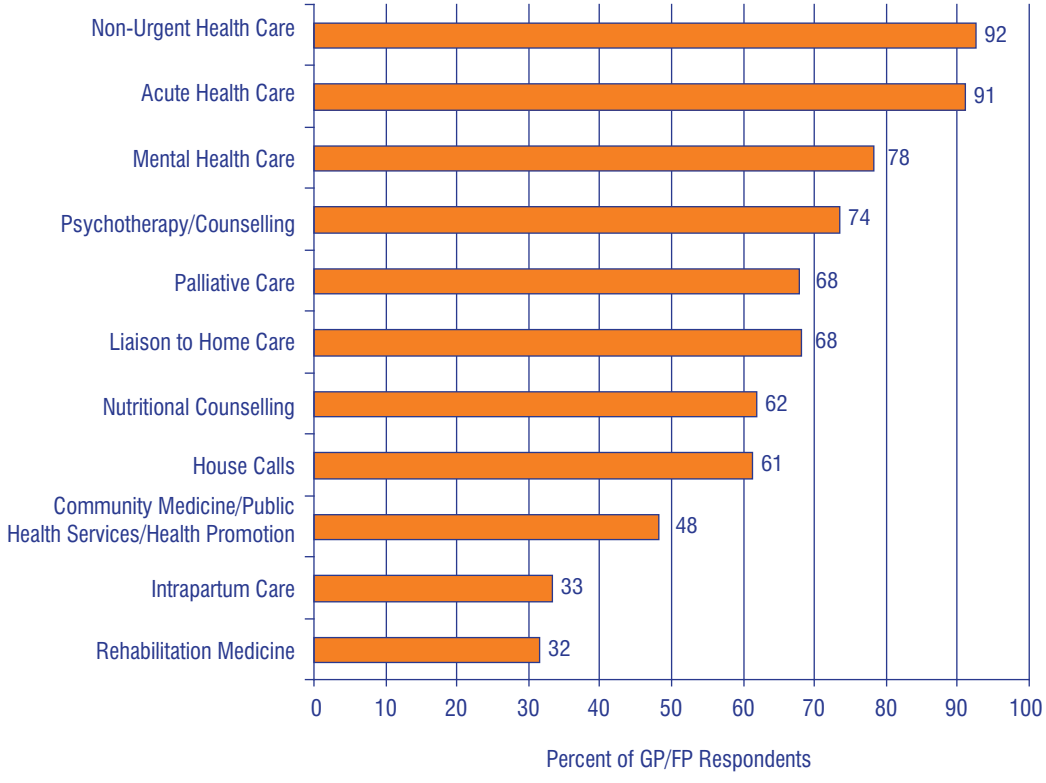
Registries for chronic conditions

Chronic care registries are considered an important first step toward the active care management of chronic conditions for patients within practices.[22] Registries can be used to take preventive action to manage chronic conditions (for example, send out reminders) and are associated with improvements in process measures.[28]

Uptake of information technology

Information technology has the potential to increase adherence to clinical practice guidelines, enhance surveillance and monitoring, and decrease medication errors.[35] Some studies have also demonstrated that electronic health records can improve the quality of care in ambulatory care settings.[36]

Figure 28 Scope of Services Provided by GPs/FPs or Their Practice

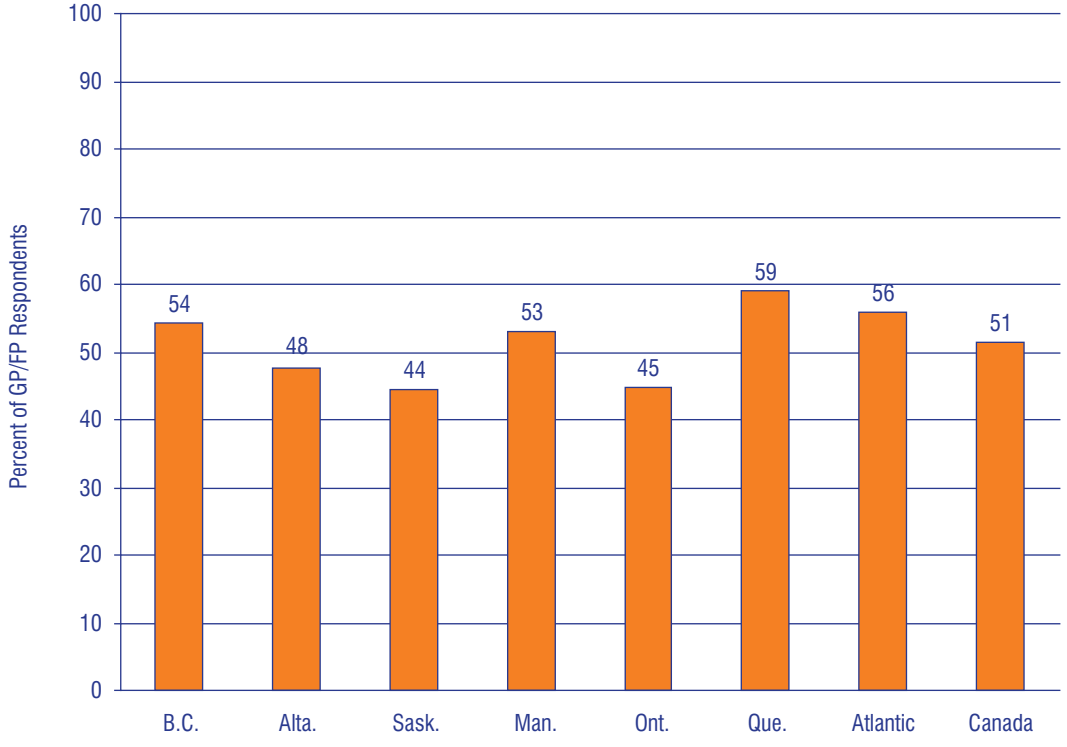


Of the 11 services listed that are considered to be elements of comprehensive care, the four most common services provided by GPs/FPs or someone in their practice were non-urgent health care, acute health care, mental health care and psychotherapy/counselling. The services that the fewest GPs/FPs (or someone in their practice) provided were rehabilitation medicine and intrapartum care (care during labour and delivery).

Notes
On average, the response rate was 32.1% of eligible GPs/FPs for the 2007 NPS, so results should be interpreted with caution. This figure relates to the "Scope of PHC services" indicator.

Source
National Physician Survey (NPS), 2007, College of Family Physicians of Canada, Canadian Medical Association and Royal College of Physicians and Surgeons of Canada.

Figure 29 GPs/FPs Whose Practice Provides More Comprehensive Care (Eight or More Listed PHC Services), 2007



The percent of PHC practices that provide 8 or more of the 11 listed services (considered necessary for comprehensive care) ranged from 59% in Quebec to 44% in Saskatchewan. The Canadian average is 51%.*

Notes

* On average, the response rate was 32.1% of eligible GPs/FPs for the 2007 NPS, so results should be interpreted with caution. This figure relates to the "Scope of PHC services" indicator.

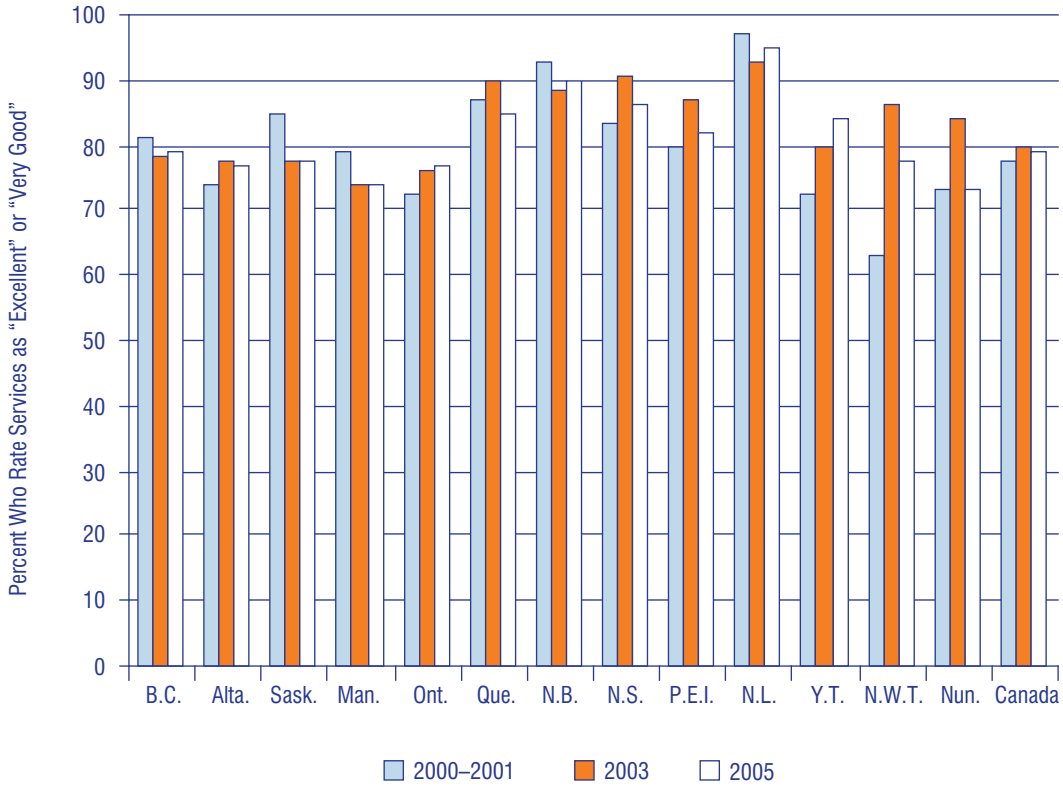
Includes non-urgent health care, acute health care, housecalls, intrapartum care, mental health counselling, palliative care, psychotherapy/counselling, community medicine/public health services/health promotion, liaison to home care, nutritional care and rehabilitation medicine.

Results for the Yukon, the Northwest Territories and Nunavut were suppressed due to small sample sizes.

Source

National Physician Survey, 2007, College of Family Physicians of Canada, Canadian Medical Association and Royal College of Physicians and Surgeons of Canada.

Figure 30 Rating of Community-Based Services



In Canada, the percent of the population who rate community-based services received in the last 12 months as "excellent" or "very good" was 78% in 2000–2001 and 79% in 2005. The percentages ranged from 95% in Newfoundland and Labrador to 73% in Nunavut in 2005.

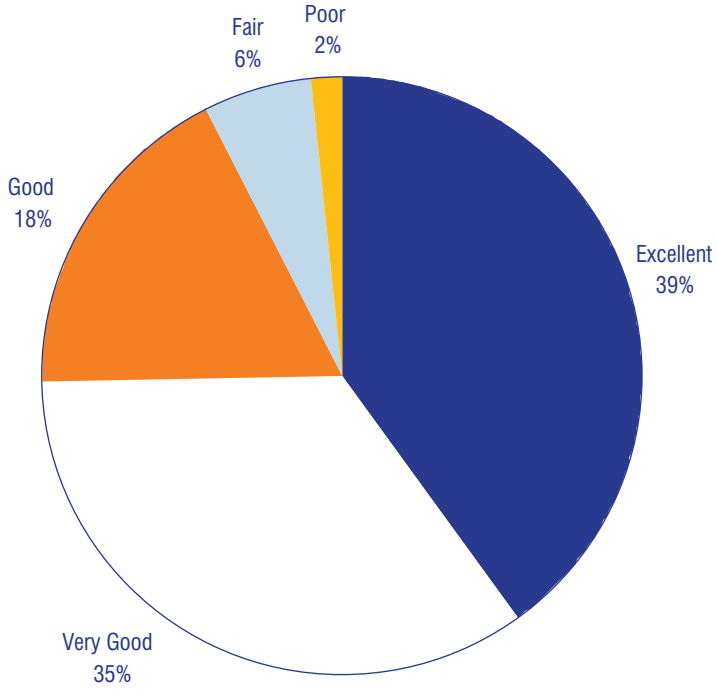
Notes

Population aged 15 and older who reported receiving community-based health care in the past 12 months, excluding care received through a hospital or doctor's office. Examples of community-based health care include home nursing care, home-based counselling or therapy, personal care and community walk-in clinics. Canada and provincial estimates are based on sub-sample weights. Population who report being very or somewhat satisfied with health care services received based on the response to the following question: "Overall, how would you rate the quality of the community-based care you received?" This figure relates to the "Client/patient satisfaction with PHC providers" indicator.

Source

Canadian Community Health Survey, 2000–2001, 2003, 2005, Statistics Canada.

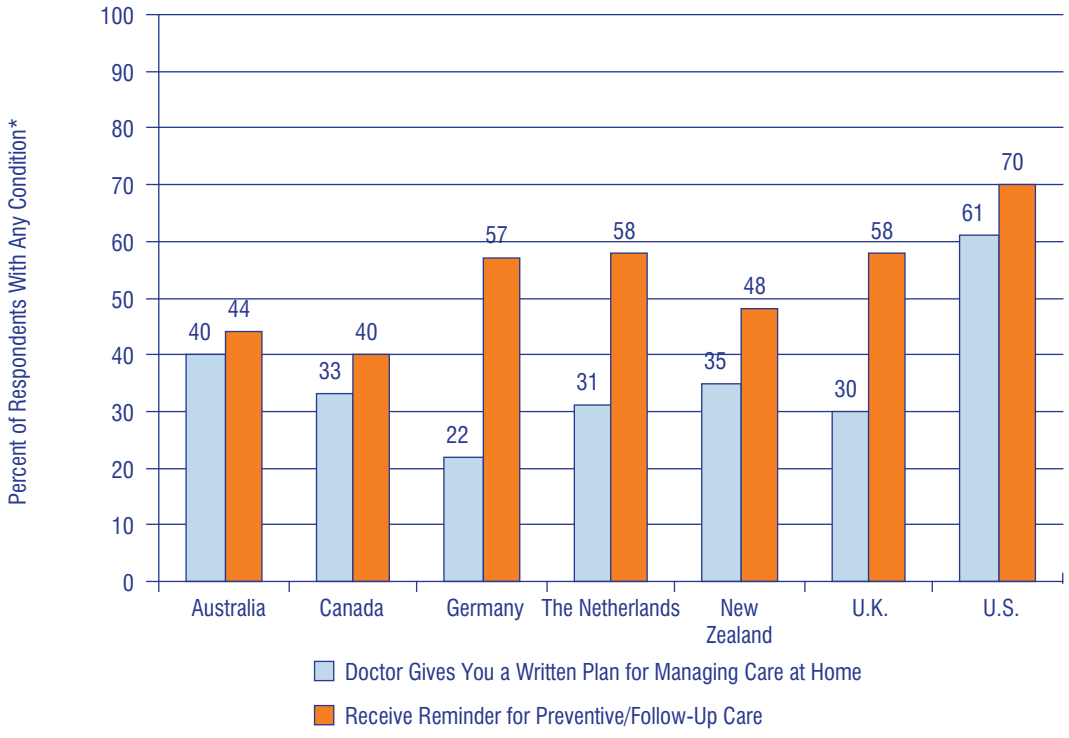
Figure 31 Patient Ratings of PHC Services From Their Primary Care Provider in the Past 12 Months, 2007



Nearly three out of four people in Canada rated the services of the primary care provider that they rely on most as "excellent" or "very good." Only 8% rated services as "fair" or "poor."

Note
This figure relates to the "Client/patient satisfaction with PHC providers" indicator.
Source
The Canadian Survey of Experiences With Primary Health Care, 2007, Statistics Canada.

Figure 32 Care Management and Coordination for Chronic Conditions, International Comparisons



The percent of adults with a condition* who reported that the doctor gave them a written plan for managing care at home ranged from 61% in the U.S. to 22% in Germany. The percent who reported that they received a reminder for preventive/follow-up care ranged from 70% in the U.S. to 40% in Canada.†

Notes

* Conditions include arthritis; heart disease, including heart attack; diabetes; asthma; chronic obstructive pulmonary disease; high blood pressure or hypertension; depression; cancer; chronic pain diagnosed by doctor; and a mood disorder other than depression.

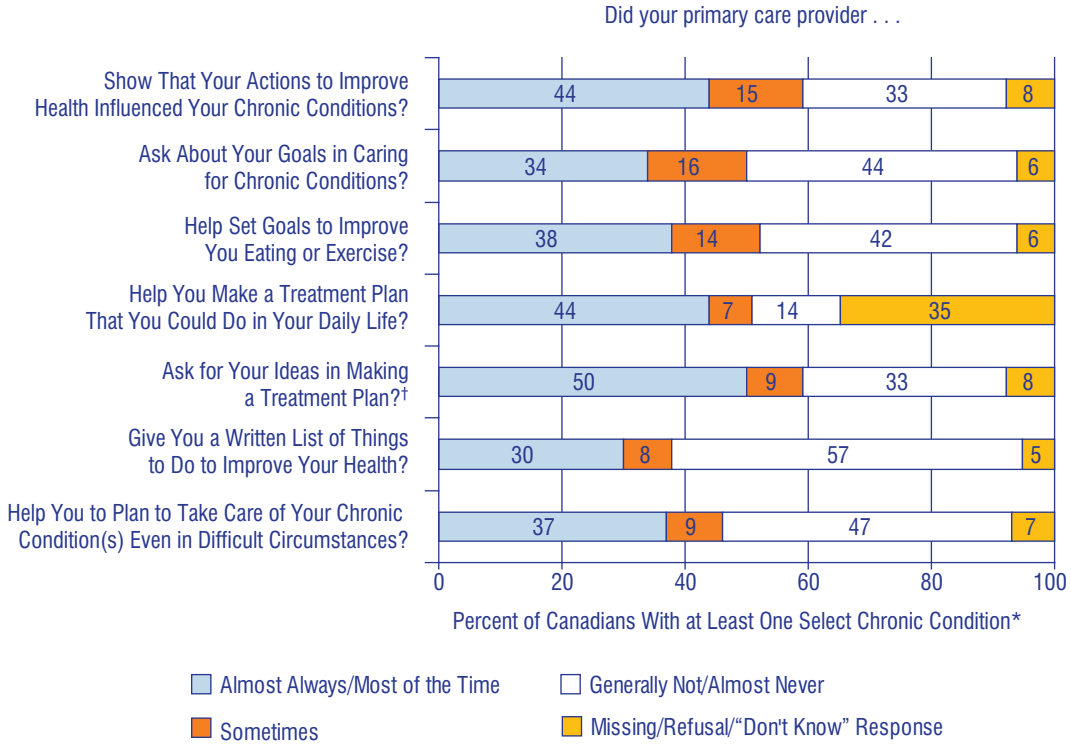
† The response rate for this survey in Canada was low. Interpret the results with caution.

Telephone survey of a representative sample of adults aged 18 and older. The final analysis weighted the samples to reflect the distribution of the adult population. The mean sample error for Canada and the U.S. was ±2% at the 95% confidence level; for the five other countries it was ±3% at the 95% confidence level. This figure relates to the "PHC programs for chronic conditions" indicator.

Source

International Health Policy Survey of the General Public's Views of Their Health Care System's Performance in Seven Countries, 2007, The Commonwealth Fund.

Figure 33 Client/Patient Participation in Chronic Condition Treatment Planning



Fifty percent of Canadians with at least one select chronic condition* reported that "almost always/most of the time" their primary care provider asked for their ideas in making a treatment plan. Thirty percent of Canadians with at least one chronic condition reported being given a written list of things to do to improve their health "almost always/most of the time."

Notes

* Select conditions include arthritis, cancer, chronic obstructive pulmonary disease, diabetes, heart disease, high blood pressure and mood disorders.

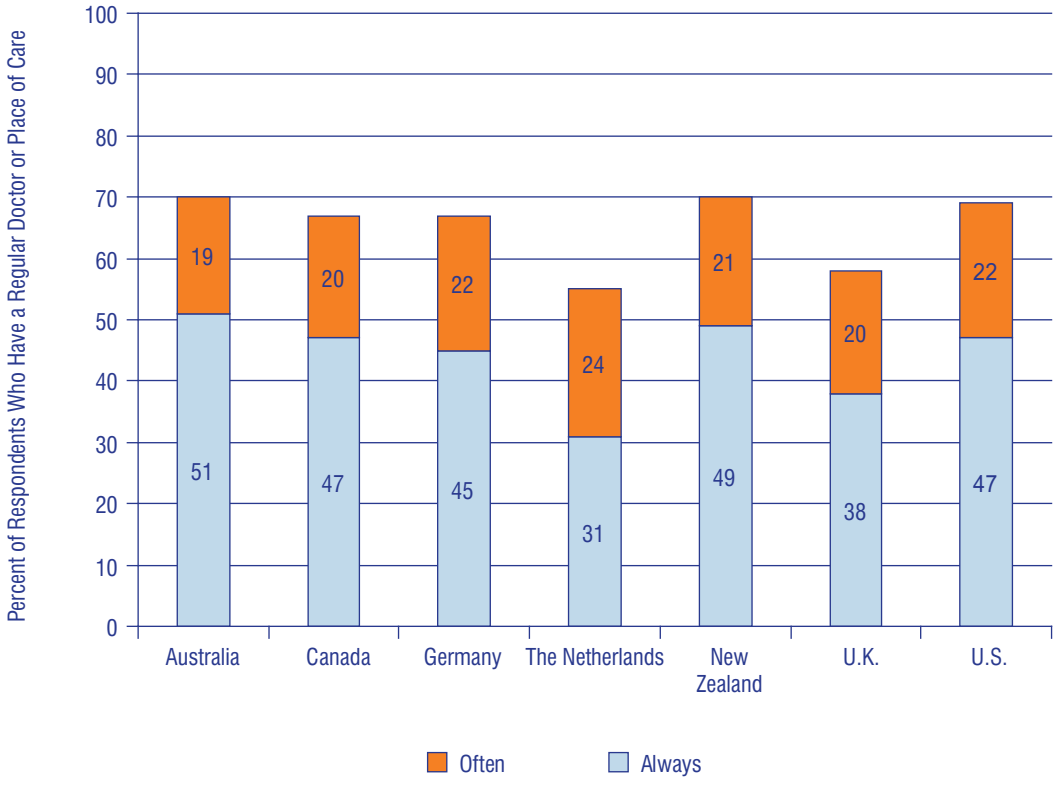
† Asked of people who had a treatment plan.

This figure relates to the "Client/patient participation in PHC treatment planning" indicator.

Source

Health Council of Canada, *Canadians' Experiences With Chronic Illness Care 2007: A Data Supplement to Why Health Care Renewal Matters: Learning From Canadians With Chronic Health Conditions* (Toronto, Ont.: Health Council of Canada, 2007) quoting Statistics Canada data from the Canadian Survey of Experiences With Primary Health Care 2007. Reproduced with permission.

Figure 34 Regular Doctor Coordinates Care From Other Providers, International Comparisons



The percent of adults who have a regular doctor or place of care and report that their doctor coordinates care "always" or "often" ranged from 70% in Australia and New Zealand to 55% in the Netherlands, with Canada at 67%.*

Notes

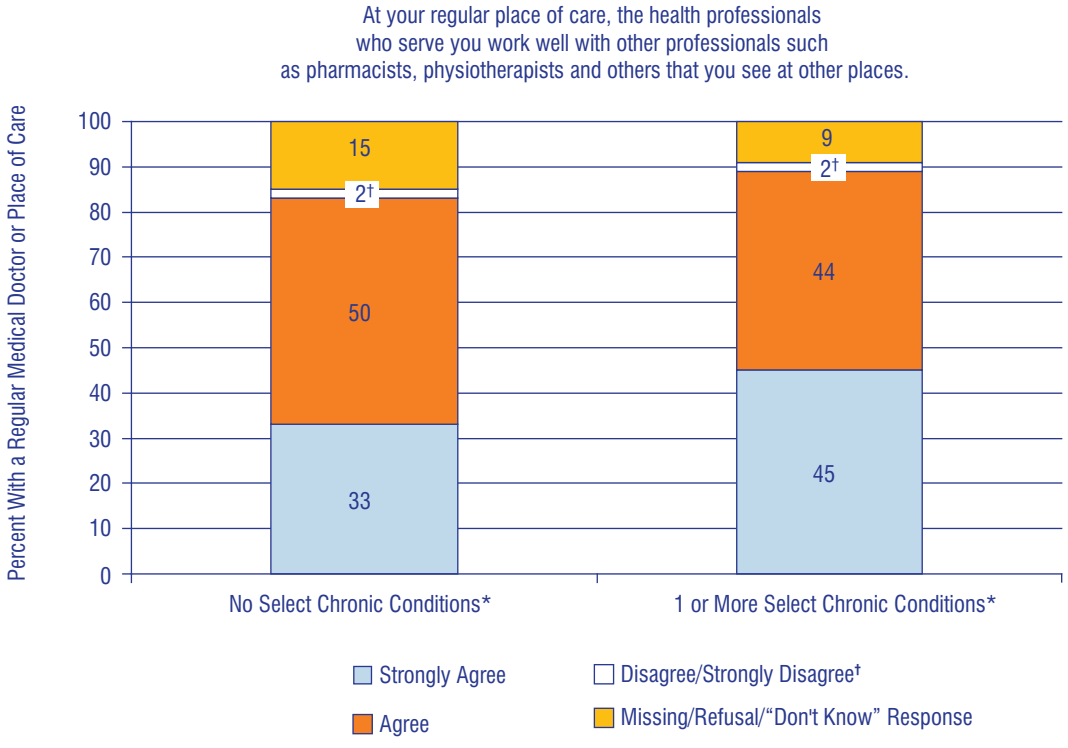
* The response rate for this survey in Canada was low. Interpret the results with caution.

Telephone survey of a representative sample of adults aged 18 and older. The final analysis weighted the samples to reflect the distribution of the adult population. The mean sample error for Canada and the U.S. was ±2% at the 95% confidence level; for the five other countries it was ±3% at the 95% confidence level. This figure relates to the "Collaborative care with other health care organizations" indicator.

Source

International Health Policy Survey of the General Public's Views of Their Health Care System's Performance in Seven Countries, 2007, The Commonwealth Fund.

Figure 35 Health Care Provider Interactions



The percent of Canadians who "agreed" or "strongly agreed" that their health professionals work well with other health professionals (for example, pharmacists, physiotherapists) that are seen at other places was 89% for those with one or more select chronic conditions* and 83% for those without chronic conditions.

Notes

* Select conditions include arthritis, cancer, chronic obstructive pulmonary disease, diabetes, heart disease, high blood pressure and mood disorders.

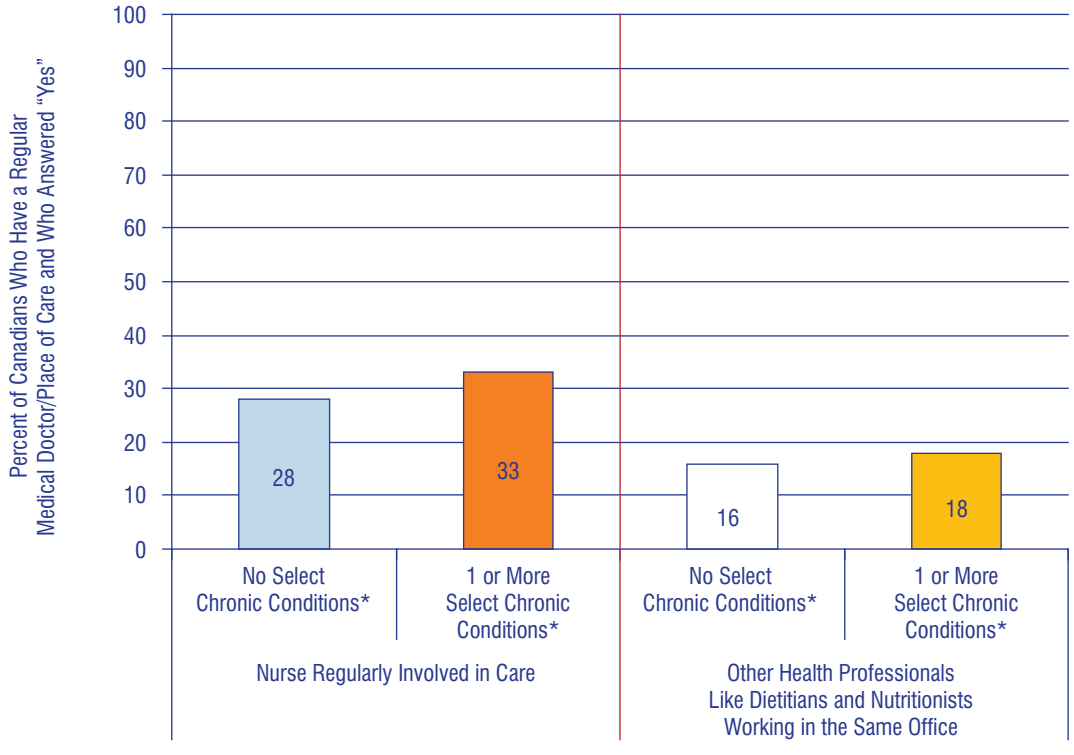
† Interpret with caution. Data are less reliable due to high sampling variability.

This figure relates to the "Collaborative care with other health care organizations" indicator.

Source

Health Council of Canada, *Canadians' Experiences With Chronic Illness Care 2007: A Data Supplement to Why Health Care Renewal Matters: Learning From Canadians With Chronic Health Conditions* (Toronto, Ont.: Health Council of Canada, 2007) quoting Statistics Canada data from the Canadian Survey of Experiences With Primary Health Care 2007. Reproduced with permission.

Figure 36 Involvement of Other Health Professionals in Care Provision



One-third of the time or less, Canadians reported that "yes," nurses are regularly involved with their care. Eighteen percent of the time or less, Canadians reported that "yes," there are other health professionals in the same office where they get their regular care.

Notes

* Select chronic conditions include arthritis, cancer, chronic obstructive pulmonary disease, diabetes, heart disease, high blood pressure and mood disorders.

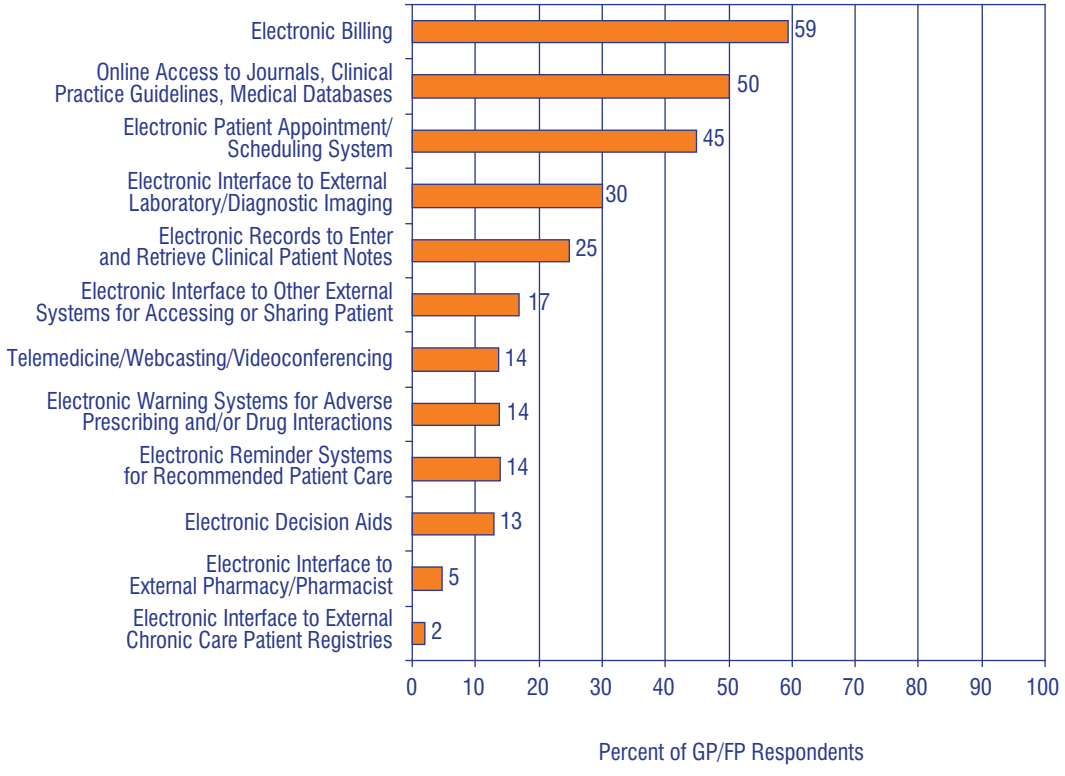
Percentages do not add up to 100% due to missing, refusal to complete and "don't know" responses. Interpret with caution.

This figure relates to the "PHC FPs/GPs/NPs working in interdisciplinary teams/networks" indicator.

Source

Health Council of Canada, *Canadians' Experiences With Chronic Illness Care 2007: A Data Supplement to Why Health Care Renewal Matters: Learning From Canadians With Chronic Health Conditions* (Toronto, Ont.: Health Council of Canada, 2007) quoting Statistics Canada data from the Canadian Survey of Experiences With Primary Health Care 2007. Reproduced with permission.

Figure 37 Type of Information Technology Used by FPs/GPs



The type of information technology most frequently used by GPs/FPs was electronic billing (59%), followed by access to medical information (50%) and scheduling (45%). The least frequently used type of information technology was an electronic interface to external pharmacy/ pharmacist (5%) and patient registries (2%).*

Note

* On average, the response rate was 32.1% of eligible GPs/FPs for the 2007 NPS, so results should be interpreted with caution. Percentages are calculated based on respondents only and results may differ from other published results that include non-respondents in their calculations. Responses to the item "email" were not included due to inconsistencies with responses with another question on the survey. This figure relates to the "Uptake of information and communication technology in PHC organizations" indicator.

Source

National Physician Survey, 2007, College of Family Physicians of Canada, Canadian Medical Association and Royal College of Physicians and Surgeons of Canada.

Summary and Areas for Action

Summary

- There are limited data with which to understand the associations between different aspects of PHC (such as access, coordination, quality and outcomes).
- There are large gaps in the PHC information that would be useful for managing and measuring PHC in Canada. These gaps include a lack of:
  - Data for some indicators;
  - High-quality, comprehensive data sources (for example, need larger samples);
  - Data at a granular (regional) level; and
  - Data to measure changes over time.
- There are significant gaps in the information about the provision of recommended care.
- The available data show variations in the indicators at the provincial and international levels, yet there is little information available to provide comparisons. Comparable data would be useful to assist planning and policy development that is being done locally.

Areas for Action

- A pan-Canadian commitment to standardize, collect and report on a subset of PHC indicators periodically to measure and monitor changes in access, coordination, quality of recommended care and service delivery.
- Explore existing regional and provincial data sources and opportunities to standardize data definitions and collection in order to support comparative pan-Canadian reporting using existing data sources.
- CIHI already increased the availability of PHC survey data in Canada and is exploring options to further enhance PHC data sources in Canada.

Additional Resources

As of September 2008, the following resources are available.

CIHI—*Average Payment Per Physician Report, Canada*
http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_82_E&cw_topic=82

CIHI—*Health Care In Canada*
http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_43_E&cw_topic=43

CIHI—*Health Indicators*
http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=indicators_e

CIHI—Canadian Population Health Initiative
http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=cphi_e

The Commonwealth Fund—International Health Policy Surveys
http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318&sort=date

Health Council of Canada
http://www.healthcouncilcanada.ca/splash.htm

National Physician Survey
http://www.nationalphysiciansurvey.ca/nps/

Organisation for Economic Co-operation and Development
http://www.oecd.org/topic/0,3373,en_2649_37407_1_1_1_1_37407,00.html

Statistics Canada, Canadian Community Health Survey
http://cansim2.statcan.ca/cgi-win/cnsmcgi.pgm?LANG=E&RegTkt=&C2Sub=&C2DB=PRD&ROOTDIR=CII/&ResultTemplate=CII/CII_Subj&SrchVer=2&ChunkSize=50&CIISubj=2966

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