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Healthy Provinces, Healthy Canadians A Provincial Benchmarking Report

HEALTH, HEALTH CARE AND WELLNESS



Healthy Provinces, Healthy Canadians: A Provincial Benchmarking Report
by *Conn Hamilton*

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Preface

This report assesses the state of provincial health-care systems and the overall health of the Canadian population. We benchmark the provinces using Health Canada's health indicator data, released in December 2004. Where available, we provide international comparisons using Organisation for Economic Co-operation and Development (OECD) data.

The intent of this report is to create awareness and generate discussion among policy-makers, decision-makers and the public on Canada's performance. Specifically, what are our strengths and where can we achieve better results? We take a pan-Canadian perspective to provide an impetus for provincial governments to analyze the reasons for their performance, act upon areas of weakness, and improve their ranking. If every province focuses on remedying problems, Canada's performance relative to other OECD countries will improve.

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Healthy Provinces, Healthy Canadians A Provincial Benchmarking Report

Most Canadians are proud to have a publicly funded health-care system. In fact, it is a hallmark of our identity. Recognizing the importance of health care to Canadians, governments—after more than a decade of fiscal restraint—are providing more funding. From 1997 to 2004, annual growth in public health-care spending averaged 7.4 per cent. In 2004, total public health-care spending was estimated to be \$91.1 billion,¹ or approximately \$2,854.60 per person.²

But are we satisfied with the level of care and service we receive? A 2005 Commonwealth Fund International Health Policy Survey shows that Canadians are dissatisfied with the overall state of the health-care system, with 78 per cent indicating that the system needs to be fundamentally changed or completely rebuilt.³

Many Canadians and policy-makers are asking questions such as: How much should we spend? How well do our health-care systems perform? Where can they improve? Are we getting full value for our money?

Governments have heard Canadians' concerns and have set out to renew the health-care system through a number of initiatives aimed at improving system performance and the overall health of our population. Two issues—accountability and access—are on every government agenda. Wait times, in particular, have become a “hot button” issue. The recent Supreme Court ruling in the Chaoulli case, which opens the door to a two-tiered health-care system in Quebec, is pushing the health policy agenda and sparking debate on the feasibility of an expanded private system that would operate parallel to the public one in Canada.⁴

This report elucidates the ongoing debate about how to improve health care and government accountability.

It is the first to compare and evaluate the performance of provincial health-care systems in Canada based on comparable health indicators released by the provinces in 2004. The report identifies the strengths and weaknesses of health-care systems in each province and compares overall Canadian performance to that of other countries.

Its findings are worthy of close examination by governments at all levels in Canada, particularly as discussions continue on the renewal of health-care systems in this country.

This paper is intended to focus attention on performance—on facts and data, not on misconceptions and rhetoric. To achieve higher performance, we need to examine the characteristics, structures and best practices of provincial and international health-care systems to see how they can be applied to our own.

Benchmarking is a starting point. It identifies our strengths and what can be improved, and points to where we can find best practices to adopt or emulate.

In the past, The Conference Board of Canada has benchmarked Canada against other Organisation for Economic Co-operation and Development (OECD) countries.⁵ We previously lacked the data required to make comparisons among provinces within Canada. But that changed with the September 2000 First Ministers' Communiqué on Health, which spurred federal, provincial and territorial health ministers to develop 67 comparable

health indicators—ones that measure health status, health outcomes and quality of health-care services. In September 2002, they reported their results, and did so again on an expanded list of indicators in September 2004.

This report is based on the most up-to-date data available, much of which appears in the December 2004 Health Canada publication *Healthy Canadians: A Federal Report on Comparable Health Indicators 2004*. For the first time, we were able to rank the provinces on their relative performance, using the most recent health indicators, which now number 70.

Our benchmarking analysis reveals that there is room for improvement in the Canadian health-care system. No province does well in all areas. British Columbia and Alberta were the top provincial performers overall. However, Alberta does not head the list in any of the three categories (health status, health-care outcomes, and health-care utilization and performance), and although British Columbia is in the number-one position overall, it had some of the lowest patient satisfaction scores. At the other end of the spectrum, Manitoba ranked 10th overall and its low scores on a large number of indicators in health status and health-care utilization and performance suggest room for improvement in these areas. It should be noted that in some cases, provincial data were not available; had they been, the rankings would have been different. (See Table 2 to see how the provinces ranked based only on the number of indicators for which they reported data.)

Although the provinces are the focus of this report, we also update the ranking of Canada's national average against 23 leading OECD countries, where data were available. We do this to provide an overall perspective on how Canada is doing internationally and also to identify particular areas that should be targeted, such as female incidence and mortality rates for lung and breast cancer. Canada is a middle-of-the-pack performer, placing 11th, tying with Iceland, Luxembourg and the Netherlands.

This report does not explore every indicator in depth. Rather, it is a tool that gives provinces a clear understand-

ing of where their systems are strong and where they most need to improve. The box, "Challenges for Future Action—A Provincial Checkup," on pages iii–iv, contains an overview of areas that require attention and action from each province.

Interestingly, our report indicates that higher government spending per capita on health care is not necessarily associated with better performance on health indicators (a finding that has also been confirmed at the international level, where a similar analysis reached the same conclusion).⁶ For example, Newfoundland and Labrador, which had the highest per capita spending on health care, was ranked only eighth overall in the provincial comparison, tied with Nova Scotia, which recorded the lowest expenditures in the country. Manitoba was the fourth highest spender, yet it ranked last in terms of overall health performance. Quebec had the second lowest per capita spending, yet still ranked fifth in overall health performance. Ontario, in fourth position, was the sixth highest spender.

The benchmarking results leave many questions unanswered. Why can males in British Columbia expect to live 2.8 years longer than males in Prince Edward Island? Why do females in Prince Edward Island have the second highest life expectancy? Why is the readmission rate for acute myocardial infarction much higher in New Brunswick and Prince Edward Island (above 5 per cent) than in Alberta (2 per cent)? Why are the mortality rates for female breast cancer lowest in New Brunswick and highest in Prince Edward Island? In giving this picture of the state of our health-care system and the health of our population, we lay these questions and ambiguities on the table.

We regard this report as the second step in a four-step process. The first was the collection of the data, which the provinces have done. The second was the task of assembling and analyzing the data, which the Conference Board has undertaken in this report. The third step is examining the "why" behind this report's results. And the fourth step is making the needed improvements, which is in the hands of the federal and provincial governments.

Challenges for Future Action—A Provincial Checkup

Overall Health Performance

1. British Columbia
 - Lowest female patient satisfaction rate for overall health-care services, second lowest male rate
 - Lowest female patient satisfaction rate for hospital care
 - Lowest female patient satisfaction rate for physician care, second lowest male rate
 - Low male patient satisfaction with community-based care
2. Alberta
 - Lowest female health-adjusted life expectancy
 - Highest proportion of low birth weight babies
 - Second highest incidence rate of prostate cancer
 - High number of potential years of life lost due to unintentional injury
 - Lowest female patient satisfaction rate for community-based care
3. Saskatchewan
 - Low male and female health-adjusted life expectancies
 - Highest male and female incidence rate for chlamydia
 - Highest male and female potential years of life lost due to unintentional injury
 - Highest proportion of households spending greater than 3 per cent of after-tax income on prescription drugs
 - Lowest male patient satisfaction rate for community-based care
4. Ontario
 - Second lowest female health-adjusted life expectancy
 - Second highest proportion of low birth weight babies
 - Second lowest patient satisfaction rates for hospital care
 - Low female satisfaction rate for community-based care
5. Quebec
 - Highest male incidence rate for lung cancer, highest female rate, tied with Manitoba
 - Highest incidence rate for female breast cancer
 - Highest male mortality rate for heart attacks, third highest female rate
 - Highest male mortality rate for lung cancer, second highest female rate
 - Highest female mortality rate for colorectal cancer, second highest male rate
 - Lowest proportion of the population with a regular family doctor
 - Highest proportion of the population waiting more than one month for non-emergency surgery
 - Lowest share of women who have had at least one Pap smear test in the past three years
6. New Brunswick
 - Second highest incidence rate for male lung cancer
 - Lowest proportion of males and females with self-reported health as good, very good or excellent
 - Highest female obesity rate
 - Second lowest proportion of males and females reporting being active or moderately active
 - Second highest female mortality rate for stroke
7. Prince Edward Island
 - Lowest male life expectancy
 - Highest female infant mortality rate, second highest male rate
 - High male and female incidence rate for lung cancer
 - Highest incidence rate for prostate cancer, second highest mortality rate
 - Lowest rate of males reporting being active or moderately active, third lowest female rate
 - Highest mortality rate for female breast cancer
 - Highest male and female mortality rate for stroke
 - Highest male and female hospitalization rate for ambulatory care sensitive conditions
 - Second lowest male patient satisfaction rate with community-based care
 - Highest proportion of the population reporting difficulty obtaining immediate care for a minor health problem any time of day
8. Nova Scotia
 - Lowest male and second lowest female health-adjusted life expectancy
 - Highest male prevalence rate of diabetes, tied with Manitoba, second highest female rate
 - High male and female incidence rate for lung cancer
 - Highest female mortality rate for lung cancer, fourth highest male rate
 - Lowest share of women aged 50 to 69 who have had a mammogram in the past two years

(cont'd on the next page)

Challenges for Future Action—A Provincial Checkup (cont'd)

Overall Health Performance

9. Newfoundland and Labrador
- Lowest female and second lowest male life expectancy
 - Highest rate of invasive meningococcal disease
 - Lowest proportion of females and third lowest proportion of males reporting being active or moderately active
 - Highest female mortality rate for heart attacks, second highest male rate
 - Highest mortality rate for prostate cancer
 - Highest male mortality rate for colorectal cancer, second highest female rate
 - Lowest male and female immunization rates for influenza for those aged 65 and older
10. Manitoba
- Highest male infant mortality rate
 - Highest female incidence rate for lung cancer, tied with Quebec
 - Second highest incidence rate for female breast cancer
 - Second highest female incidence rate for chlamydia
 - Third highest rate of potential years of life lost due to unintentional injury for males, second highest rate for females
 - Highest proportion of the population waiting more than a month for diagnostic and specialist visits
 - Highest proportion of the population reporting difficulty obtaining health information or advice any time of day

Source: The Conference Board of Canada.

- 1 Canadian Institute for Health Information, *Health Care in Canada* (Ottawa: CIHI, 2005), p. 17.
- 2 This number was calculated using total per capita spending of \$4,078 and multiplying it by 70 per cent. This percentage represents the actual public spending on health care as a proportion of total health-care spending.
- 3 Cathy Schoen, Robin Osborn, Phuong Trang Huynh, Michelle Doty, Kinga Zapert, Jordan Peugh and Karen Davis, "Taking the Pulse of Health Care Systems: Experiences of Patients with Health Problems in Six Countries," *Health Affairs* [online]. (Nov. 3, 2005), [cited Dec. 16, 2005], <http://content.healthaffairs.org/cgi/content/abstract/hlthaff.w5.509?ijkey=10nPOyqgRXKAM&keytype=ref&siteid=healthaff>, p. 521.
- 4 At present, approximately 30 per cent of health-care spending in our country is private. Canadian Institute for Health Information, *Health Care in Canada* (Ottawa: CIHI, 2005), p. 20.
- 5 The Conference Board of Canada, *Understanding Health Care Cost Drivers and Escalators* (Ottawa: The Conference Board of Canada, 2004).
- 6 The Conference Board of Canada, *Challenging Health Care System Sustainability: Understanding Health System Performance of Leading Countries* (Ottawa: The Conference Board of Canada, 2004), p. 107.

Introduction

Health care is a priority for Canadians. As such, it has been at the forefront of both federal and provincial governments' agenda for the past several years. From 1997 to 2004, annual growth in public health-care spending averaged 7.4 per cent. In 2004, our public health-care spending per person was estimated to be \$2,854.60,¹ amounting to total public health-care spending of approximately \$91.1 billion.²

Despite the extra funds injected into the health-care system, problems remain. In terms of our health, as this report shows, Canadians overall have high rates of lung cancer and a high infant mortality rate relative to other Organisation for Economic Co-operation and Development (OECD) countries. Obesity is on the rise. Complaints about a shortage of health-care professionals and long wait times are common, particularly for non-emergency surgery, such as hip and knee replacement.³ The upshot of this situation is a high level of frustration. A 2005 Commonwealth Study found that 78 per cent of Canadians surveyed felt that the health-care system needs to be fundamentally changed or completely rebuilt.⁴

The recent and highly publicized Supreme Court decision in the Chaoulli case shows the extent of the dissatisfaction that some Canadians feel with our health-care system and their belief that the government needs to demonstrate more accountability.⁵

There are also indications—and the findings of this report support this—that Canadians themselves are not using health-care resources in an optimal way. For example, the same Commonwealth study also found that in Canada and the United States, patients were more likely than Britons, Australians, New Zealanders or Germans to go to the emergency room for a condition that could have been treated by a regular physician or other source of care, if available,⁶ thereby incurring unnecessarily high costs to the system. This is consistent with the findings of other studies.⁷

Canadians have high expectations of their health-care system. Whether or not these are achievable, changes to the current system are clearly needed.

However, to boost health and health-care performance, we need solid information about both our strengths and shortcomings. There is no point in embarking on the journey of improvement without knowing which targets we want to reach. And we also need the guidance of best practices from within our borders and beyond.

This is why this report is so crucial. It is the first to compare and evaluate the performance of provincial health-care systems in Canada based on comparable health indicators released by the provinces in 2004. It does so by benchmarking, which many countries, industries and companies have embraced as a way to improve systems and performance. Benchmarking identifies relative standing and performance gaps in a system. If benchmarking is repeated regularly, it allows us to track the movement of indicators over time and to measure progress in addressing the shortcomings that have been identified.⁸

At a recent health symposium, Dr. Ken Kizer, President and Chief Executive Officer of the National Quality Forum, pointed out that often just showing comparative performance measures is all that is required to bring about positive change.⁹ The report's findings will therefore be of interest to governments as they pursue the renewal of their health-care systems.

Up to now, Canada has been compared mainly to other leading OECD countries.¹⁰ We have not looked for best practices within our borders on a grand scale. With the availability of new data, The Conference Board of Canada is now able to do so. In this report, the Conference Board points to where these practices may be found.

This report uses provincial data on a wide range of health indicators, which the provinces have all agreed to publicly report. (See box, "Background to the Report and Its Data," on page 2.) After examining all the indicators,

we zero in on those that show wide or interesting variations, or are counterintuitive. These indicators alert us to where the poorer performing provinces have the greatest potential for improvement. We also compare Canada's national average to that of other countries, using OECD data, primarily to give a baseline for comparison on indicators.

Background to the Report and Its Data

In September 2000, the First Ministers released a Communiqué on Health, which directed health ministers to report publicly on their health-care systems. Health ministers were directed to work together to create comparable health indicators for their jurisdictions that would address health status, health outcomes and quality of service.¹

The Performance Indicators Reporting Committee (PIRC) was then established to identify areas of the Canadian health system to be measured and reported upon. This committee agreed on 67 comparable health indicators, which were first released in September 2002.²

Public reporting on health-care information was again a topic at the 2003 First Ministers' Accord on Health Care Renewal. The First Ministers asked health ministers to expand the list of indicators already created to include the themes of access and system efficiency.³ New data on 70 comparable indicators were collected and, in December 2004, Health Canada published *Healthy Canadians: A Federal Report on Comparable Health Indicators 2004*, which contains much of the data upon which this report is based.

All of the data are available from Statistics Canada and the Canadian Institute for Health Information.⁴ The Conference Board has taken this information and conducted a benchmarking analysis of the provinces on the comparable health indicators. For the international comparison, we used available data from the Organisation for Economic Co-operation and Development (OECD)⁵ for 30 of these indicators.

1 First Ministers' Communiqué on Health, Ottawa, September 11, 2000. Available from www.scics.gc.ca/cinfo00/800038004_e.html.

2 Treasury Board of Canada Secretariat, *First Ministers' Health Communiqué September 2000: Accountability and Reporting*. Available from www.tbs-sct.gc.ca/rma/epipi-ibdrp/hrs-ceh/5/FMH-PMS_e.asp.

3 Health Canada, *2003 First Ministers' Accord on Health Care Renewal*. Available from www.hc-sc.gc.ca/english/hca2003/accord.html.

4 All data with definitions, limitations and technical specifications can be found at www.cihi.ca/comparable-indicators (Canadian Institute for Health Information) and www.statcan.ca/english/freepub/82-401-XIE/2002000/index.htm (Statistics Canada).

5 OECD, *OECD Health Data 2005: Statistics and Indicators for 30 Countries*. Available from OECD.

The report's information is meant to inspire better performance and to strengthen the health-care system overall, not to chastise or point fingers. We want to give provinces a solid idea of where they should look for best practices in Canada for self-improvement. This is already happening at the international level, and now it is time for it to happen at the provincial level as well.

Provinces that wish to improve will not find step-by-step instructions simply by examining what the top performers are doing. Each province will pursue improvement in a different way, taking into account the needs and values of their respective populations.

Before providing an overview of how the provinces compare to each other and how Canada ranks internationally, this report first looks at the sources for our data and discusses benchmarking and how the Conference Board uses it.

We regard this report as the second step in a four-step process. The first was the collection of the data, which the provinces have done. The second was the task of assembling and analyzing the data, which the Conference Board has undertaken in this report. The third step is examining the "why" behind this report's results. And the fourth step is making the needed improvements, which is in the hands of the federal and provincial governments.

It is not enough to try to be the best province in a country that is a middle-of-the-pack performer. Our aim must be more far-reaching: to provide Canadians with the best health care and health status in the world. To do less is to fall short.

1 This number was calculated using total per capita spending of \$4,078 and multiplying it by 70 per cent. This percentage represents the actual public spending on health care as a proportion of total health-care spending.

2 Canadian Institute for Health Information, *Health Care in Canada* (Ottawa: CIHI, 2005), p. 17.

3 Institute for Clinical Evaluative Services, *Access to Health Services in Ontario: ICES Atlas* (April 2005), p. 92.

4 Cathy Schoen, Robin Osborn, Phuong Trang Huynh, Michelle Doty, Kinga Zapert, Jordan Peugh and Karen Davis, "Taking the Pulse of Health Care Systems: Experiences of Patients with Health Problems in Six Countries," *Health Affairs* [online]. (Nov. 3, 2005), [cited Dec. 16, 2005], <http://content.healthaffairs.org/cgi/content/abstract/hlthaff.w5.509?ijkey=10nPOyqgRXKAM&keytype=ref&siteid=healthaff>, p. 521.

5 By a 4–3 vote, the Supreme Court of Canada said that the Quebec government cannot prevent people from buying private insurance for procedures covered under medicare, thereby potentially opening the door to a two-tier system of health-care delivery.

6 Cathy Schoen et. al., "Taking the Pulse of Health Care Systems: Experiences of Patients with Health Problems in Six Countries," *Health Affairs* [online], p. 519.

7 Canadian Institute for Health Information, *Understanding Emergency Department Wait Times* (Ottawa: CIHI, 2005).

8 Dennis C. Kaldor, "Getting to the Point," *Materials Management in Health Care* 11, 2 (Feb. 2002), p. 19.

9 Kenneth W. Kizer, President and Chief Executive Officer of the National Quality Forum, "Characteristics of High-Performing Health Systems: The VA Experience" [slide show]. *Unleashing Innovation in Health Systems—Alberta's Symposium on Health*, held in Calgary, May 3, 2005.

10 The Conference Board of Canada, *Understanding Health Care Cost Drivers and Escalators* (Ottawa: The Conference Board of Canada, 2004).

How the Provinces and Canada Rank Overall

Benchmarking compares performance. We believe it can be a powerful analytical tool and impetus for change in the health policy arena. Before examining the health-care performances of the provinces and the country as a whole, we will first outline the benchmarking method used to arrive at our results.

THE CONFERENCE BOARD OF CANADA'S BENCHMARKING METHOD

Using the data from the provinces and the OECD, we ranked performances for each indicator by assigning a gold-, silver- or bronze-level grade. For each indicator, we took the difference between two scores—those of the top and bottom performers—and split this difference into thirds. A province, or country, achieved a gold-level performance if its indicator score was in the top third of all scores, a silver level if its score was in the middle third, and a bronze level if its score fell in the bottom third.

We also divided up the 70 indicators by gender (where applicable), which led to 119 indicators being included in the benchmarking of the provinces.¹ Nineteen indicators were available for the international comparison, which, when separated by gender, yielded 30 indicators for analysis. Indicators were included in this analysis only if there was general agreement that a movement on the indicator in one direction was better than in the other.

We then counted up the performances for each indicator. A gold-level performance was weighted as two points, a silver-level as one point; bronze-level performers did not receive any points. We believe the gold-, silver- and bronze-level placing is important, since it emphasizes indicator scores rather than ordinal ranking.

To illustrate, Country A may rank second in life expectancy but be far behind the first-ranked country, Country B. The fact that Country A is second in life expectancy is not as important as the fact that there is

a huge performance gap between the first- and second-ranked countries.² Appendix A has a more detailed description of this benchmarking methodology and its limitations.

Only the provinces are examined in this analysis; Nunavut, Northwest Territories and Yukon were not included due to data limitations and availability. Data were also unavailable or incomplete for many health services delivered federally, such as those to indigenous peoples, the military, veterans, the Royal Canadian Mounted Police and federal penitentiary inmates.³

Data were unavailable or incomplete for Nunavut, Northwest Territories, Yukon and the federal government.

Benchmarking in the health-care system is still in its infancy and is not without challenges. Different populations have different underlying pressures, and not everyone collects data in precisely the same way. The data are therefore not without flaws, but they represent the best and most extensive information we have at present.

PROVINCIAL PERFORMANCE

British Columbia was the top-ranked province in Canada. (See Table 1 on page 4.) It had the highest number of golds—63—followed by Quebec, which had 49. However, Quebec came fifth in the overall standings because it had more bronzes (27) than silvers (23), and also lacked data for many indicators. Alberta was second overall, with 45 golds and 43 silvers. Newfoundland and Labrador also lacked data for many indicators. This, in conjunction with its 44 bronzes, led to its eighth-place tie with Nova Scotia. Manitoba finished in the final position in overall health performance because it had the fewest golds (24) and most bronzes (46). For a visual overview of how the provinces ranked on each individual indicator used in this analysis, refer to Appendix B.

As Table 1 shows, some provinces—most notably Quebec—lack data on a large number of indicators. To control for this, we created Table 2, which provides a different perspective on how the provinces ranked. The new scores/rankings were created by taking the provinces' weighted count and dividing these by the actual number of indicators reported by the provinces. The result is an overall weighted count per reported indicator. A higher number here indicates a better average showing per indicator. For example, if a province recorded a gold-level performance on each indicator, it would receive a perfect score of 2. This alters the provinces' rankings somewhat.

British Columbia is still in the top position but is now followed by Quebec, which moved up from fifth place. Saskatchewan remains in third position, followed by Alberta in fourth (down from second place). Ontario dropped one position with this method of ranking, and New Brunswick and Prince Edward Island now tie for sixth place overall. Newfoundland and Labrador remains in eighth position but is no longer tied with Nova Scotia, which now sits in ninth place. Manitoba's position remains unchanged.

The remainder of this report uses the provincial rankings in Table 1. Using the rankings in Table 2 would be unfair to those provinces that reported on all indicators (i.e., provinces could mask their actual performance by reporting only on those indicators on which they do well).

GROUPING INDICATORS

A clear picture of how provincial health-care systems perform in specific areas cannot be gained by simply reviewing the overall weighted score. When indicators are categorized into different areas, the various strengths and areas for improvement of the provincial systems can be seen more clearly. Of the 119 provincial indicators used in this analysis, 51 are classified as health status, 27 as health-care outcomes, and 41 as health-care utilization and performance. For a complete list of specific indicators for each category, please refer to Appendix A, Table 1.

Health status indicators, such as life expectancy and level of physical activity, give an idea of the overall health of a population and are influenced by a variety of factors, such as education, socio-economic status and living conditions.⁴ These determinants of health play a large role in health status scores. *Health-care outcome indicators* track the effects of policy, program or clinical interventions on quality of life.⁵ Examples include mortality rates for various cancers, acute myocardial infarction and stroke. *Health-care utilization and performance indicators* measure the public's perception of the health system, as well as how quickly the needs of the population are being met. They also assess whether resources and processes are being used in the most efficient manner. Some examples include patient satisfaction rates and wait times.

Table 1
Provincial Comparison

Overall Ranking		Gold	Silver	Bronze	n.a.*	Weighted Count
1	British Columbia	63	27	27	2	153
2	Alberta	45	43	31	0	133
3	Saskatchewan	40	45	26	8	125
4	Ontario	37	48	28	6	122
5	Quebec	49	23	27	20	121
6	New Brunswick	38	37	38	6	113
7	Prince Edward Island	40	24	40	15	104
8	Newfoundland and Labrador	39	20	44	16	98
8	Nova Scotia	25	48	41	5	98
10	Manitoba	24	44	46	5	92

*n.a. = Data not available.

Source: The Conference Board of Canada.

Table 2
Alternative Provincial Comparison

Overall Ranking		Weighted Count	Number of Indicators Reported	Weighted Count per Reported Indicator
1	British Columbia	153	117	1.31
2	Quebec	121	99	1.22
3	Saskatchewan	125	111	1.13
4	Alberta	133	119	1.12
5	Ontario	122	113	1.08
6	New Brunswick	113	113	1.00
6	Prince Edward Island	104	104	1.00
8	Newfoundland and Labrador	98	103	0.95
9	Nova Scotia	98	114	0.86
10	Manitoba	92	114	0.81

Source: The Conference Board of Canada.

The top health status performer was British Columbia. (See Table 3.) Its weighted score of 84 stands well above that of the next top performers: Quebec, with 67, and Ontario, with 64. Nova Scotia (35) and Manitoba (33) have the lowest scores.

British Columbia was again the foremost performer in the health-care outcomes category, with a score of 35. Manitoba scored well, ranking third. Quebec dropped significantly from its second place showing in health status to last in this category, with a weighted score of 10, just below Prince Edward Island, with 13. The fact that Quebec did not report on 13 indicators in this category may explain its last-place finish.

New Brunswick ranks sixth in overall health performance yet takes the top spot for health-care utilization and performance.

Health-care utilization and performance scores were somewhat surprising. British Columbia had its poorest showing in this category: its score of 34 was the second lowest score of all the provinces, followed by Ontario and Manitoba, which tied with 29 each. New Brunswick ranked in the highest spot, with 48, followed closely by Saskatchewan, with 47.

These categories reveal that the top province overall, British Columbia, is a strong performer in those categories most affected by the broader determinants of health. However, British Columbia does have room to improve in the category of health-care utilization and performance, which captures indicators measuring patient satisfaction. Its eighth-place ranking in this category is mainly due to low patient satisfaction rates.

Interestingly, New Brunswick's profile is the opposite of British Columbia's, with low scores for health status and health-care outcomes, but a first-place finish in health-care utilization and performance. Alberta's all-round favourable position was gained through a different route. Alberta is the top performer in none of the categories, but it places second for overall health performance. The province's strong showing was garnered through a consistently positive position across all categories.

WHERE CAN THE PROVINCES MOST IMPROVE?

Bronze-level performances suggest areas where policy-makers and health-care workers should be focusing their efforts to strengthen health systems. This section highlights provincial bronze-level performances that require particular attention. Not all bronze-level performances are highlighted; we discuss only those with scores much lower than those of the gold-level performers on the same indicator and thus show the greatest potential for improvement.

Table 3
Weighted Count by Category

Health Status Ranking		Weighted Count	n.a.*
1	British Columbia	84	0
2	Quebec	67	0
3	Ontario	64	0
4	Alberta	58	0
5	Prince Edward Island	49	0
6	Saskatchewan	48	0
7	New Brunswick	43	2
8	Newfoundland and Labrador	42	2
9	Nova Scotia	35	0
10	Manitoba	33	0
Health-Care Outcomes Ranking			
1	British Columbia	35	2
2	Alberta	31	0
3	Manitoba	30	5
3	Saskatchewan	30	4
5	Ontario	29	4
6	New Brunswick	22	0
7	Nova Scotia	21	0
8	Newfoundland and Labrador	18	6
9	Prince Edward Island	13	7
10	Quebec	10	13
Health-Care Utilization and Performance Ranking			
1	New Brunswick	48	4
2	Saskatchewan	47	4
3	Quebec	44	7
3	Alberta	44	0
5	Prince Edward Island	42	8
5	Nova Scotia	42	5
7	Newfoundland and Labrador	38	8
8	British Columbia	34	0
9	Ontario	29	2
9	Manitoba	29	0

*n.a. = Data not available.
Source: The Conference Board of Canada.

Although **British Columbia** posted the best overall performance in the country, it had consistently low patient satisfaction scores. For the overall health-care services indicator, British Columbia had the lowest female patient satisfaction rate and second lowest male rate. The patient satisfaction rate for hospital care was also lowest for females, as was the satisfaction rate for physician care; the male satisfaction rate for physician care was second lowest in the country. British Columbia's males also rated their satisfaction with community-based care much lower than did men living in the top-ranked provinces on this indicator.

British Columbia was the top provincial performer overall on health indicators, yet it still had some of the lowest patient satisfaction scores in the country.

These apparently contradictory findings bring into question the relationship between satisfaction rates and overall health services. Why are British Columbia's patient satisfaction scores low when it appears to have the best overall health performance in the country? It will take considerable research and effort to answer this question.

Alberta had the lowest female health-adjusted life expectancy (HALE) of all the provinces. (HALE is a measure that indicates how many years, on average, a person is expected to live in full health.) Female patient satisfaction with community-based care here was also lowest in the country. Alberta recorded the highest proportion of low birth weight male and female babies. It also had the second highest incidence rate for prostate cancer—well above the national average. In addition, the province reported high numbers for male and female potential years of life lost due to unintentional injury.

Saskatchewan recorded low male and female health-adjusted life expectancies. The province had the highest male and female incidence rates for the sexually transmitted disease chlamydia. Saskatchewan had the highest potential years of life lost due to unintentional injury for both males and females, and reported the highest proportion of households spending more than 3 per cent of their after-tax income on prescription drugs. Study findings indicate that its males are the least satisfied with community-based care in the country.

Saskatchewan had the highest proportion of households spending more than 3 per cent of their after-tax income on prescription drugs.

Of all the provinces, **Ontario** had the second lowest health-adjusted life expectancy for females. It also reported the second highest proportion of male and female low birth weight babies. Ontario recorded the second lowest male and female patient satisfaction rates for hospital care of all the provinces and one of the lowest female patient satisfaction rates for community-based care.

Quebec recorded the highest incidence rate for lung cancer for males and the highest rate for females, on par with Manitoba, and also had the highest incidence rate for female breast cancer. Quebec reported the highest mortality rate for heart attacks and lung cancer for males and the third highest mortality rate for heart attacks and second highest lung cancer mortality rate for females. Mortality rates for colorectal cancer were also highest for females and second highest for males in this province. As well, Quebec had the lowest proportion of the population that reported having a regular family doctor and the lowest proportion of women who have had at least one Pap smear test in the past three years. Quebec also had the highest proportion of the population waiting more than one month for non-emergency surgery.

New Brunswick posted the second highest incidence rate for male lung cancer and the second highest female mortality rate for stroke. Of all the provinces, it had the lowest share of people whose self-reported health was good, very good or excellent. At the same time, the province's obesity rates for both males and females were higher than the national average. The proportion of people in New Brunswick who reported being active or moderately active was second lowest of all the provinces.

Prince Edward Island had the lowest male life expectancy of all the provinces, and its male and female infant mortality rates were quite high compared to those of the rest of the provinces. Males had the second highest rate and females the highest. Not only was its incidence rate of lung cancer quite high for both males and females, but its incidence rate for prostate cancer was highest of all the provinces and its mortality rate second highest. Prince Edward Island had the lowest proportion of males and third-lowest proportion of females reporting being active

or moderately active. The province also reported the highest mortality rate for female breast cancer. Prince Edward Island's male and female mortality rates for stroke were highest of all the provinces, with rates well above the Canadian national average. It also surpassed the other provinces in its double-the-national-average hospitalization rate for ambulatory care sensitive conditions, which are conditions that could be treated in the community, and reported the second lowest male patient satisfaction rate with community-based care. Also, the province had the highest proportion of the population reporting difficulty obtaining immediate care for a minor health problem any time of day.

Prince Edward Island's hospitalization rate for ambulatory care sensitive conditions—conditions that can be treated in the community—was highest in the country and more than double the Canadian average.

Nova Scotia reported the lowest male and second lowest female health-adjusted life expectancy. Males in Nova Scotia had the highest prevalence of diabetes, while females had the second highest prevalence rates. Nova Scotia had high rates of lung cancer for both males and females, leading to the highest female mortality rate from lung cancer and the fourth highest male rate. Nova Scotia also had the lowest proportion of women aged 50 to 69 who have had a mammogram in the past two years.

Newfoundland and Labrador not only had the second lowest male life expectancy and the lowest female life expectancy of all the provinces, it also had the highest rate of invasive meningococcal disease. In fact, it was the only province at the bronze level on this indicator. And its citizens appear to be more sedentary. Newfoundland and Labrador had the third lowest proportion of males and lowest proportion of females who reported being active or moderately active. Perhaps not surprisingly, then, the province also recorded the highest mortality rate for females who suffer a heart attack, and the second highest mortality rate for males. The mortality rate for prostate cancer was also highest of all the provinces, as it was for the male colorectal mortality rate. The rate among females proved to be second highest. Newfoundland and Labrador also had the lowest male and female immunization rates for influenza for people aged 65 and older.

Manitoba (with 46 bronzes) recorded the highest male infant mortality rate of all the provinces. Its female infant mortality rates were on par with the rest of Canada, however. The province recorded the highest rate for lung cancer in females and the second highest incidence rates of both breast cancer and chlamydia. Manitoba reported the third highest rate of potential years of life lost due to unintentional injury among males and the second highest rate among females. And patients must truly be patient in Manitoba: the proportion of them who had to wait more than a month for diagnostic services and specialist visits was higher than in any other province. Manitoba also had the highest proportion of the population reporting difficulty obtaining health information or advice any time of day.

Manitoba had the highest male infant mortality rate of all the provinces.

PROVINCIAL SPENDING COMPARISONS

Table 4 shows total provincial government health spending per capita. Since the provinces have different age and sex profiles, standardized rates are shown because they adjust for the differences in utilization patterns by age and sex.⁶ It would appear from these data that spending more on health care does not always translate into better performance on comparable health indicators. This is not surprising, given that a similar analysis at the international level reached the same conclusion.⁷

Table 4
Standardized Government Health Expenditures Per Capita, 2002
(dollars, standardized for age and sex)

Per Capita Expenditure (from highest to lowest)	Province	Overall Health Performance
2,321	Canada	—
2,823	Newfoundland and Labrador	8
2,687	Alberta	2
2,545	British Columbia	1
2,438	Manitoba	10
2,422	Prince Edward Island	7
2,264	Ontario	4
2,242	Saskatchewan	3
2,157	New Brunswick	6
2,109	Quebec	5
2,096	Nova Scotia	8

Sources: The Conference Board of Canada; Canadian Institute for Health Information; Statistics Canada.

Newfoundland and Labrador ranked eighth overall for health performance yet had the highest government health expenditures per capita. Nova Scotia obtained the same rather low ranking but recorded the lowest expenditures per capita.

Alberta placed second overall for health performance and came second in health expenditures per capita. However, British Columbia was able to spend less per capita and still earn the top ranking for overall health performance in Canada. At the other end of the scale, Manitoba, in 10th place, was not able to translate its high-range government health expenditures per capita (fourth highest) into high health performance.

INTERNATIONAL PERFORMANCE

Although the main aim of this report is to compare the provinces' performances, we are also comparing Canada as a whole with other OECD countries. We believe that a baseline indication of how Canada is faring internationally will help to focus provincial efforts to improve. If indeed the goal of the Canadian health-care systems is to be the best in the world, we must know where we stand and, by extension, where we can and must improve.

We chose to compare Canada to 23 other OECD countries, as they are leading industrialized countries and serve as a worthy peer group. Similar to the provincial analysis (which was based on comparable health indicators agreed upon and compiled by the provinces), the international comparison uses as many health status, health-care outcome, and health-care utilization and performance indicators with international data as possible. We were able to collect data on 30 of them. (See Table 1 in Appendix A. Health indicators marked with an asterisk are also used in the international comparison.)

Canada ranked in the middle of the pack. We placed 11th,⁸ tying with Iceland, Luxembourg and the Netherlands in overall health performance. (See Table 5.) Canada had the fourth lowest number of gold-level performances, with 8; the second highest number of silver-level performances, with 16; and 6 bronze-level performances. This is consistent with the findings of other Conference Board reports.⁹

Japan is the top gold-level performer, with 21; Korea is second, with 18 gold-level performances. Those countries with few gold-level performances include Poland, with only 3; Germany, with 5; Belgium, Denmark, Ireland and the United States, all tied with 7; and Canada, the United Kingdom, and Portugal tied, with 8. When comparing weighted counts, Canada is a middle-of-the-pack performer, with a score of 32. Japan places first, with 45, and Poland places last, with 16. For a visual overview of country rankings on each individual indicator, refer to Appendix C.

GROUPING INTERNATIONAL INDICATORS

We separated the international performances into different categories to determine areas of strength and weakness. Table 6 shows how countries performed when health-care indicators were grouped into health status (17 indicators benchmarked) and health-care outcomes (12 indicators benchmarked). Since immunization for influenza was the only indicator available for health-care utilization and performance, a table was not created for this category; it would be inappropriate to rank countries on the basis of one indicator.

Regrettably, Canada's performance by category remains unremarkable: we come 14th in health status, with a weighted score of 17, and tied with Germany, the Netherlands and Sweden for 15th place in health-care outcomes, with a weighted score of 13.

It is notable that although Sweden's ranking matched Canada's on health-care outcomes, it ranked second in health status. Japan was the top performer for health status,¹⁰ with a weighted score of 25, followed closely by Sweden in second place, with 24, and Korea, Norway, France and Switzerland, which all tied for third place with a weighted score of 23. Poland and the United States showed the greatest room for improvement, with scores of 10 and 5, respectively. Italy and Spain tied for the top spot in health-care outcomes with a score of 20. At the other end of the scale, Denmark (9), Ireland (8) and Poland (6) were the weakest performers in that category.

HIGHLIGHTS FROM INTERNATIONAL COMPARISON

WHERE IS CANADA PERFORMING WELL?

Overall, Canada achieved eight gold-level performances.

- *Male life expectancy.* Iceland leads the OECD with the highest male life expectancy; Canada is sixth highest internationally. The highest life expectancies within Canada were found in British Columbia and Ontario.
- *Female mortality rates for colorectal cancer.* Internationally, Greece had the lowest mortality rate in females for this disease, while Canada tied for 12th place. Prince Edward Island led the provinces on this indicator.
- *Male and female mortality rates for stroke.* Canadian males are second internationally, behind Switzerland, while Canadian females are third, behind Switzerland and France. Alberta and Quebec have the lowest male and female rates of all the provinces.
- *Incidence of acquired immunodeficiency syndrome (AIDS).* As with the majority of OECD countries, Canada was a gold-level performer for having a low incidence rate of AIDS. This indicator had only one silver-level performer, Portugal, and one bronze-level performer, the United States.

Table 5
International Health Performance

Overall Ranking	Gold	Silver	Bronze	n.a.*	Weighted Count	
1	Japan	21	3	6	0	45
2	Italy	15	14	1	0	44
3	France	15	12	3	0	42
3	Spain	14	14	2	0	42
5	Korea	18	5	7	0	41
6	Switzerland	14	10	4	2	38
7	Sweden	12	13	4	1	37
8	Finland	13	10	5	2	36
9	Austria	10	15	5	0	35
10	Norway	12	9	8	1	33
11	Iceland	11	10	8	1	32
11	Luxembourg	9	14	7	0	32
11	Netherlands	9	14	7	0	32
11	Canada	8	16	6	0	32
15	Australia	9	13	4	4	31
16	Greece	10	10	7	3	30
16	Belgium	7	16	7	0	30
18	United Kingdom	8	13	5	4	29
18	Germany	5	19	6	0	29
20	Portugal	8	12	9	1	28
21	Denmark	7	13	10	0	27
21	Ireland	7	13	9	1	27
23	United States	7	8	11	4	22
24	Poland	3	10	12	5	16

*n.a. = Data not available.
Source: The Conference Board of Canada.

Table 6
International Weighted Count by Category

Health Status Ranking	Weighted Count	Health-Care Outcomes Ranking	Weighted Count	
1	Japan	1	Italy	20
2	Sweden	1	Spain	20
3	Korea	3	Japan	19
3	Norway	4	France	17
3	France	5	Korea	16
3	Switzerland	6	Greece	15
7	Italy	6	Luxembourg	15
8	Finland	6	United States	15
8	Austria	9	Finland	14
8	Spain	9	Switzerland	14
11	Iceland	9	Portugal	14
12	Ireland	9	Austria	14
12	Belgium	9	United Kingdom	14
14	Denmark	9	Australia	14
14	Netherlands	15	Canada	13
14	Canada	15	Germany	13
17	Luxembourg	15	Netherlands	13
18	Australia	15	Sweden	13
18	Greece	19	Iceland	12
18	Germany	20	Belgium	10
21	Portugal	20	Norway	10
22	United Kingdom	22	Denmark	9
23	Poland	23	Ireland	8
24	United States	24	Poland	6

Source: The Conference Board of Canada.

- *Self-reported health status for both males and females.* Canadian males and females came third on this indicator, with each trailing only Luxembourg and the United States.
- *Flu immunization rate of those 65 and older.* The Netherlands had the highest rate, while Canada landed eighth. Austria was the only bronze-level performer on this indicator.

For a visual overview of provincial gold-level rankings on indicators where Canada scores gold internationally, see Appendix D.

WHERE IS CANADA'S PERFORMANCE MIDDLING?

Canada recorded 16 silver-level performances in the international comparison. However, some of these were very close to being bronze-level performances and are in particular need of our attention:

- *Canadian male and female obesity rates.* Canadian males have the third highest obesity rate in our analysis, lower than those of Luxembourg and Greece (whose rates are far higher). Canadian females place ahead of Spain, Portugal, Greece and Luxembourg.
- *Incidence rate of prostate cancer.* Canada is ahead of only Iceland, Norway and Finland in the silver-level group, and Sweden and the United States in the bronze-level group.
- *Infant mortality rate.* Ours is above the OECD average and is in the final silver-level position in the international comparison. Of the 24 OECD countries examined, Canada ranked 21st, ahead of Korea, Poland and the United States.

WHERE DOES CANADA NEED TO DEVOTE ITS IMMEDIATE ATTENTION?

Canada recorded six bronze-level performances in the international comparison, signalling the need for remediation.

- *Female lung cancer rate.* Of particular concern is the fact that Canadian females have the second highest incidence rate for lung cancer among the comparator countries, just ahead of the United States and just behind Denmark and Iceland. Spain and Portugal have the lowest incidence rates for female lung cancer.
- *Female mortality rate from lung cancer.* Canadian females do not have the highest mortality rate—the United States and Denmark have the dubious honour of outstripping us on this indicator.
- *Incidence and mortality rate from female breast cancer.* Canada's incidence rate is very similar to the rates of the other 16 bronze-level performers on this indicator. Canada's mortality rate for female breast cancer is just above that of France (the silver-level performer with the lowest ranking), and a bit below those of the seven other bronze-level performers on this indicator.
- *Male and female incidence rates of colorectal cancer.* Although our mortality rate for colorectal cancer in females is low, our incidence rates for both sexes are high. Males fall closer to the middle of the bronze-level group, while females head the bronze-level pack.

These comparisons show the need for action in many areas. We believe that acting upon them is perhaps the best way to improve both the health status of Canadians and the overall performance of our system.

1 Indicators from the Health Canada report were used only if at least 80 per cent of the data available were reliable. However, there were two indicators excluded from analysis : 1) Proportion of population reporting contact with telephone health line. This indicator reported only usage of the health line, but not its effectiveness. 2) Readmission rate for pneumonia. Data were not available for this indicator.

2 The Conference Board of Canada, *Challenging Health Care System Sustainability: Understanding Health System Performance of Leading Countries* (Ottawa: The Conference Board of Canada, 2004), p. 118.

3 Government of Canada, *Healthy Canadians: A Federal Report on Comparable Health Indicators 2004* (Ottawa: Health Canada, 2004). www.hc-sc.gc.ca/iacb-dgiac/arad-draa/english/datadevelop/health_indicators_e.pdf, p. 7.

4 *Ibid.*, p. 11.

5 Government of Canada, *Healthy Canadians: A Federal Report on Comparable Health Indicators 2002* (Ottawa: Health Canada, 2002). www.hc-sc.gc.ca/iacb-dgiac/arad-draa/english/accountability/indicators.html#high2.

6 Canadian Institute for Health Information, *National Health Expenditure Trends 1975–2004* (Ottawa: CIHI, 2004), p. 30.

7 The Conference Board of Canada, *Challenging Health Care System Sustainability: Understanding Health System Performance of Leading Countries*, p. 107.

8 In the Conference Board's *Performance and Potential 2005–06, The World and Canada: Trends Reshaping Our Future*, Canada ranked 10th in the health-care benchmarking exercise. This ranking is different than the 11th place position garnered in this report due to variation in indicators and countries selected for analysis.

9 The Conference Board of Canada, *Understanding Health Care Cost Drivers and Escalators and Performance and Potential 2005–06*.

10 It is interesting to note that although Japan is ranked as having the highest health status performance and overall health performance, its citizens still consider their health status to be one of the lowest in the world.

Conclusion

The ultimate aim of this report is to provide information on the health of Canadians and the performance of our health systems. We hope that the federal and provincial governments will use this report to address their weak points and learn from each other, as well as from leading countries. As Don Berwick, President and CEO of the Institute for Healthcare Improvement, points out, “measurement should be used for learning, not judgment.”¹

This report confirms that no province or nation has it all. Each one stands to improve in certain areas. The disparities among the provinces, and Canada’s lacklustre ranking internationally, indicate that there is indeed room to improve our health system and better the health of our citizens.

The federal and provincial governments recognize this. They have stated their intention to improve the health of Canadians through investment in health care over the coming years and have committed to publicly reporting on health indicators every two years.

In looking ahead, money is not the panacea to providing better health care. Spending larger sums of money does not necessarily translate into high performance. It is *how* the money is spent, rather than *how much*, that appears to make the difference. And before governments make decisions about how to spend their health-care budgets, they would do well to look at where the greatest needs are and where best practices can be found, both nationally and internationally.

Now that we have benchmarked provincial indicators, it is time for deeper analysis and action. It is imperative that we use this information to guide our health system policies. Alan Maynard, professor of health economics at the University of York, said, “We leave patients in pain and discomfort because we simply cannot take the evidence base and translate it into policy.”² That is something that only the provinces and federal government can do.

1 Richard Smith, “Need Good Results? Fiddle Them,” *British Medical Journal* 326 [online]. (May 17, 2003), [cited June 8, 2005]. bmj.bmjournals.com/cgi/content/full/326/7398/0-e.

2 Alan Maynard, Professor, Department of Health, University of York (U.K.) “Developing Human Resources” [slide show]. *Unleashing Innovation in Health Systems—Alberta’s Symposium on Health*, held in Calgary, May 3, 2005.

Benchmarking Methodology

INDICATOR SELECTION

For this benchmarking analysis, we examine only comparable health indicators that have been agreed upon by the provinces and compiled by Health Canada, Statistics Canada and the Canadian Institute for Health Information (CIHI). Health Canada released a complete list of these indicators in *Healthy Canadians—A Federal Report on Comparable Health Indicators 2004*. Where they were available, we used available Organisation for Economic Co-operation and Development (OECD) data on these indicators for the international comparison.

The indicators are divided into three categories: health status, health outcomes, and health-care utilization and performance. Table 1 shows the specific health indicators in each category.

Where appropriate, we divided the 70 indicators by gender, which yielded a total of 119 indicators being included in the benchmarking of the provinces. In some instances, the provincial data were subject to high sampling variability. We excluded indicators when more than 20 per cent of the data contained a warning that it should be used with caution due to high sampling variability.

Table 1
The 70 Provincial Health Indicators

Health Status

- Life expectancy*
 - for overall population
 - by income
- Health-adjusted life expectancy (HALE)
 - for overall population
 - by income
- Infant mortality*
- Low birth weight*
- Incidence rate for lung cancer*
- Incidence rate for prostate cancer*
- Incidence rate for breast cancer*
- Incidence rate for colorectal cancer*
- Incidence rate for invasive meningococcal disease
- Incidence rate for measles
- Incidence rate for *Haemophilus influenzae b* (invasive) (Hib) disease
- Incidence rate for tuberculosis
- Self-reported health*
- Teenage smoking rates
 - Proportion current teenage smokers
 - Proportion daily smokers
- Physical activity
- Body mass index*
- Prevalence of depression
- Incidence rate for Verotoxigenic *E. coli*
- Incidence rate for chlamydia
- Rate of newly reported HIV cases
- AIDS incidence per million population (international data only)*
- Prevalence of diabetes
- Exposure to environmental tobacco smoke

Health-Care Outcomes

- Readmission rate for acute myocardial infarction (AMI)
- 30-day in-hospital AMI mortality rate
- 30-day in-hospital stroke mortality rate
- 365-day net survival rate for AMI
- Mortality rate for stroke*
- Five-year survival rate for lung cancer
- 180-day net survival rate for stroke
- Mortality rate for lung cancer*
- Mortality rate for prostate cancer*
- Mortality rate for breast cancer*
- Mortality rate for colorectal cancer*
- Mortality rate for AMI*
- Five-year survival rate for prostate cancer
- Five-year survival rate for breast cancer
- Five-year survival rate for colorectal cancer
- Potential years of life lost (PYLL) due to suicide*
- PYLL due to unintentional injury

*Indicators for which international data exist.

(cont'd on next page)

Table 1 (cont'd)

The 70 Provincial Health Indicators

Health-Care Utilization and Performance

- Difficulty obtaining routine or ongoing health services
- Difficulty obtaining health information or advice
- Difficulty obtaining immediate care
- Proportion of population that reports having a regular family doctor
- Patient satisfaction with overall health-care services
- Patient-perceived quality with overall health-care services
- Patient satisfaction with community-based care
- Patient-perceived quality with community-based care
- Patient satisfaction with telephone health line or tele-health services
- Patient-perceived quality with telephone health line or tele-health services
- Hospitalization rate for ambulatory care sensitive conditions
- Proportion of female population aged 18 to 69 with at least one Pap smear test in the past three years
- Proportion of women aged 50 to 69 obtaining mammography in the past two years
- Home care clients per 100,000 population
- Home care clients per 100,000 population, aged 75 plus
- Wait times for cardiac bypass surgery
 - Median wait time
 - Distribution of wait times
- Wait times for hip replacement surgery
 - Median wait time
 - Distribution of wait times
- Wait times for knee replacement surgery
 - Median wait time
 - Distribution of wait times
- Self-reported wait times for surgery
 - Median wait time
 - Distribution of wait times
- Self-reported wait times for specialist physician visits
 - Median wait time
 - Distribution of wait times
- Patient satisfaction with hospital care
- Patient-perceived quality of hospital care
- Prescription drug spending as a percentage of income
- Wait times for radiation therapy for prostate cancer
 - Median wait time
 - Distribution of wait times
- Wait times for radiation therapy for breast cancer
 - Median wait time
 - Distribution of wait times
- Self-reported wait times for diagnostic services
 - Median wait time
 - Distribution of wait times
- Patient satisfaction with physician care
- Patient-perceived quality of physician care
- Immunization for influenza ("flu shot"), aged 65 plus*

*Indicators for which international data exist.

Sources: The Conference Board of Canada; Health Canada.

OECD data were available for an international comparison on 19 indicators; this led to 30 specific indicators, once they were separated by gender.

COMPARATIVE JURISDICTIONS

For this analysis, we chose to compare the 10 provinces with the national average. We could not include Nunavut, Northwest Territories and Yukon due to data limitations and/or the lack of data availability. As well, data were not available for many services delivered by the federal government.

Internationally, we chose to compare Canada's national average to that of other OECD countries, since they are leading industrialized countries and serve as a worthy peer group. We collected data for all OECD countries on 30 indicators. Indicator scores for the countries were standardized and used to calculate an overall mean score for every country, which we then ranked from highest to lowest.

Standardized scores for each indicator were calculated using the following formula:

$$\text{Standard score} = (\text{actual value} - \text{mean}) \div (\text{standard deviation}) + 100$$

Where a lower number was desirable for an indicator, the inverse of the above formula was applied:

$$\text{Standard score} = (\text{mean} - \text{actual value}) \div (\text{standard deviation}) + 100$$

The top 24 performers (including Canada) that had available data on at least 80 per cent of indicators were then used in the benchmarking exercise.¹ These countries are:

- Australia
- Austria
- Belgium
- Canada
- Denmark
- Finland
- France
- Germany
- Greece
- Iceland
- Ireland
- Italy

- Japan
- Korea
- Luxembourg
- Netherlands
- Norway
- Poland
- Portugal
- Spain
- Sweden
- Switzerland
- United Kingdom
- United States

For many indicators, such as incidence and mortality rates for prostate cancer, there are variations in Canada’s national averages provided by both Statistics Canada and the Canadian Institute for Health Information (CIHI) and those of the OECD. There are two reasons for this. First, Canada has dynamic databases that update information regularly. OECD data are not updated as often, which may lead to slightly different numbers. Second and more importantly, differences in numbers can also be attributed to the way data are age-standardized. The indicators provided by Statistics Canada and CIHI were age-standardized to the 1991 Canadian population. The OECD, however, age-standardizes incidence rates of conditions to the 1960 world population, while mortality statistics are age-standardized to the total OECD population for 1980. Even though OECD data do not match Canadian data, we can still use them to gauge Canada’s health position on the world stage. At no time in this report have we compared data from the OECD with those from Statistics Canada or CIHI.

GOLD–SILVER–BRONZE RANKING

Once we had input data for the provinces and countries, we ranked performances for each indicator by assigning a gold-, silver- or bronze-level grade, based on scores. For each indicator, we took the difference between two scores—those of the top and bottom performers—and split this difference into thirds. A province, or country, achieves a gold-level performance if its indicator score is in the top third of all scores, a silver level if its score is in the middle third, and a bronze level if its score falls in the bottom third. For example, the top province for female life expectancy is British Columbia, at 82.9 years. The bottom performer is Newfoundland and Labrador, at 80.8 years. Using our method, the ranges for gold-, silver- and bronze-level performances are as follows:

- Gold: 82.3 to 82.9
- Silver: 81.6 to 82.2
- Bronze: 80.8 to 81.5

We then counted the performances for each of the three categories (health status, health outcomes, and health system utilization and performance). A gold-level performance is weighted as two points, while a silver-level performance is weighted as one point. Bronze-level performers did not receive any points, by virtue of finishing in the bottom group. We believe that ranking the performances this way is important, as it places emphasis on indicator scores, rather than on a simple ordinal ranking.

To illustrate, Country A may rank second in life expectancy but be far behind the first-ranked country, Country B. Referring to Country A as number two in life expectancy would therefore overlook the more important issue—that there is a huge performance gap between the first- and second-ranked countries.

LIMITATIONS OF THE METHODOLOGY

Comparing average indicators, as we have done in this report, can mask disparities within jurisdictions, such as differences between urban and rural populations. While the mean of two jurisdictions may be similar, there could in fact be a very wide distribution of health conditions at play in one jurisdiction, and little variance in another. Thus, a major disadvantage of the mean is that it is sensitive to outlying points.

We acknowledge that there are limitations in our methodology, but despite these challenges, we consider our approach to be groundbreaking. We believe benchmarking can be a powerful mechanism to bring about change.

Those interested in the variance of provincial data can find confidence intervals reported by Canadian Institute for Health Information at www.cihi.ca/comparable-indicators and Statistics Canada at www.statcan.ca/english/freepub/82-401-XIE/2002000/index.htm. These confidence intervals may be used to determine if there is a statistically significant difference in the means reported on in this benchmarking analysis.

1 There are 30 OECD countries in total. The six countries excluded from this analysis are: Czech Republic, Hungary, Mexico, New Zealand, Slovak Republic and Turkey.

Provincial Health Indicators

The following table highlights the provincial performances on each indicator included in this benchmarking analysis. It is intended to be used as a learning tool. A bronze-level performer on

one indicator should look to a gold-level performer for best practices. This comparative use of indicator data is becoming more prevalent in guiding health policy.

Table 1
Health Status

Overall Ranking		Life Expectancy						
		Males			Females			
		Males	Females	By lowest income	By middle income	By highest income	By lowest income	By middle income
1	British Columbia	G	G	G	G	G	G	G
2	Alberta	S	G	S	G	G	S	G
3	Saskatchewan	S	S	S	S	S	S	G
4	Ontario	G	S	G	G	G	G	G
5	Quebec	S	S	S	S	S	G	G
6	New Brunswick	B	S	G	B	B	S	S
7	Prince Edward Island	B	G	S	B	B	G	S
8	Newfoundland and Labrador	B	B	S	B	B	B	B
8	Nova Scotia	S	S	S	B	S	S	B
10	Manitoba	B	S	B	S	S	B	G

Overall Ranking		Life Expectancy	Health Adjusted Life Expectancy (HALE)					
		Females	Males			Females		
		By highest income	Males	Females	By lowest income	By middle income	By highest income	By lowest income
1	British Columbia	G	G	S	G	G	G	S
2	Alberta	S	S	B	S	S	S	B
3	Saskatchewan	S	B	B	B	S	S	B
4	Ontario	S	G	B	S	S	G	B
5	Quebec	S	G	G	G	G	G	G
6	New Brunswick	S	S	S	G	B	B	S
7	Prince Edward Island	B	B	G	S	B	S	G
8	Newfoundland and Labrador	B	G	B	G	G	B	B
8	Nova Scotia	S	B	B	B	B	B	B
10	Manitoba	B	B	B	B	S	B	B

Note: Gold = G; Silver = S; Bronze = B.

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Table 1 (cont'd)
Health Status

Overall Ranking	HALE						Incidence Rate	
	Females		Infant mortality		Low birth weight		Lung cancer	
	By middle income	By highest income	Males	Females	Males	Females	Males	
1	British Columbia	S	G	G	G	S	S	G
2	Alberta	B	B	S	G	B	B	G
3	Saskatchewan	S	B	S	G	B	S	G
4	Ontario	B	S	S	S	B	B	G
5	Quebec	G	G	G	G	B	B	B
6	New Brunswick	B	G	G	G	B	S	B
7	Prince Edward Island	S	S	B	B	G	G	B
8	Newfoundland and Labrador	B	B	G	S	B	S	G
8	Nova Scotia	S	S	S	S	B	B	B
10	Manitoba	G	B	B	S	B	B	S

Overall Ranking	Incidence Rate							
	Lung cancer	Prostate cancer	Breast cancer	Colorectal cancer		Invasive meningococcal disease	Measles	
	Females			Males	Females			
1	British Columbia	S	S	G	G	G	G	G
2	Alberta	S	B	S	G	G	G	B
3	Saskatchewan	S	S	G	G	G	G	G
4	Ontario	S	S	S	G	S	G	G
5	Quebec	B	G	B	S	G	S	G
6	New Brunswick	S	S	S	G	B	S	G
7	Prince Edward Island	B	B	B	G	B	G	G
8	Newfoundland and Labrador	G	G	G	B	B	B	G
8	Nova Scotia	B	S	B	S	B	S	G
10	Manitoba	B	S	B	S	S	S	B

Note: Gold = G; Silver = S; Bronze = B.

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Table 1 (cont'd)
Health Status

Overall Ranking	Incidence Rate						Rate of newly reported HIV cases	Prevalence of diabetes Males
	Haemophilus influenza b (invasive) (Hib) disease	Tuberculosis	Verotoxigenic E. coli	Chlamydia		Rate of newly reported HIV cases		
				Males	Females			
1	British Columbia	B	B	G	S	S	B	G
2	Alberta	S	S	S	S	S	S	G
3	Saskatchewan	B	B	G	B	B	G	S
4	Ontario	G	S	G	G	G	B	B
5	Quebec	G	S	G	G	G	B	S
6	New Brunswick	G	G	G	G	G	G	n.a.
7	Prince Edward Island	G	G	B	G	G	G	S
8	Newfoundland and Labrador	G	G	G	G	G	G	n.a.
8	Nova Scotia	B	G	G	G	S	G	B
10	Manitoba	S	B	G	S	B	B	B

Overall Ranking	Prevalence of diabetes Females	Rate of exposure to second-hand tobacco smoke			Self-reported health		Teenage smoking rates
		At home	In public	In cars	Males	Females	Females
1	British Columbia	G	G	G	G	S	G
2	Alberta	G	S	S	S	G	G
3	Saskatchewan	G	S	B	S	G	S
4	Ontario	S	S	S	S	G	S
5	Quebec	G	B	B	S	G	G
6	New Brunswick	n.a.	B	S	B	B	B
7	Prince Edward Island	G	S	G	B	G	G
8	Newfoundland and Labrador	n.a.	B	G	B	G	G
8	Nova Scotia	B	B	G	B	S	S
10	Manitoba	B	S	S	S	G	G

*n.a. = Data not available.
Note: Gold = G; Silver = S; Bronze = B.

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Table 1 (cont'd)
Health Status

Overall Ranking	Body Mass Index						
	Physical activity		Physical inactivity		Overweight		
	Males	Females	Males	Females	Males	Females	
1	British Columbia	G	G	G	G	G	G
2	Alberta	S	G	S	G	S	S
3	Saskatchewan	S	S	B	S	G	B
4	Ontario	S	S	S	S	G	S
5	Quebec	S	S	B	B	G	G
6	New Brunswick	B	B	B	B	S	B
7	Prince Edward Island	B	B	B	B	B	S
8	Newfoundland and Labrador	B	B	B	B	B	B
8	Nova Scotia	S	S	S	S	S	S
10	Manitoba	S	S	S	S	S	S

Overall Ranking	Body Mass Index			
	Obese		Prevalence of depression	
	Males	Females	Females	
1	British Columbia	G	G	B
2	Alberta	S	S	S
3	Saskatchewan	B	B	B
4	Ontario	G	S	S
5	Quebec	G	G	G
6	New Brunswick	B	B	G
7	Prince Edward Island	B	B	G
8	Newfoundland and Labrador	B	B	G
8	Nova Scotia	B	B	B
10	Manitoba	B	B	S

*n.a. = Data not available.

Note: Gold = G; Silver = S; Bronze = B.

Source: The Conference Board of Canada.

Table 2
Health-Care Outcomes

Overall Ranking	Readmission rate for acute myocardial infarction	Mortality rate for 30-day in-hospital		365-day survival rate for acute myocardial infarction		180-day Survival Rate		
		Acute myocardial infarction	Stroke	Males	Females	Stroke		
				Males	Females	Males	Females	
1	British Columbia	S	n.a.	n.a.	G	G	B	S
2	Alberta	G	G	G	B	B	G	G
3	Saskatchewan	S	S	G	n.a.	n.a.	n.a.	n.a.
4	Ontario	S	S	G	n.a.	n.a.	n.a.	n.a.
5	Quebec	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	New Brunswick	B	B	G	G	G	B	G
7	Prince Edward Island	B	B	S	n.a.	n.a.	n.a.	n.a.
8	Newfoundland and Labrador	n.a.	n.a.	B	n.a.	n.a.	n.a.	n.a.
8	Nova Scotia	S	B	B	B	B	S	B
10	Manitoba	n.a.	B	S	n.a.	n.a.	n.a.	n.a.

Mortality Rate

Overall Ranking	Lung cancer		Prostate cancer	Breast cancer	Colorectal cancer		Acute myocardial infarction	
	Males	Females			Males	Females	Males	
1	British Columbia	G	S	G	G	G	S	G
2	Alberta	G	G	G	S	G	S	G
3	Saskatchewan	G	G	S	G	G	B	G
4	Ontario	G	S	G	S	S	B	S
5	Quebec	B	B	G	B	B	B	B
6	New Brunswick	B	B	S	G	G	B	B
7	Prince Edward Island	B	S	B	B	S	G	G
8	Newfoundland and Labrador	B	G	B	S	B	B	B
8	Nova Scotia	B	B	G	S	G	S	S
10	Manitoba	G	S	G	G	S	S	G

*n.a. = Data not available.
Note: Gold = G; Silver = S; Bronze = B.

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Table 2 (cont'd)
Health-Care Outcomes

Overall Ranking	Mortality Rate			Five-year Relative Survival Rate				
	Acute myocardial infarction	Stroke		Lung cancer		Prostate cancer	Breast cancer	
	Females	Males	Females	Males	Females			
1	British Columbia	G	G	S	S	B	G	G
2	Alberta	G	G	G	B	B	B	G
3	Saskatchewan	G	G	G	B	S	S	G
4	Ontario	S	G	G	G	S	S	S
5	Quebec	B	G	G	n.a.	n.a.	n.a.	n.a.
6	New Brunswick	S	G	B	S	S	G	B
7	Prince Edward Island	B	B	B	n.a.	B	S	B
8	Newfoundland and Labrador	B	S	S	G	G	B	B
8	Nova Scotia	S	G	S	S	S	S	B
10	Manitoba	G	G	S	G	G	G	S

Overall Ranking	Five-year Relative Survival Rate		Potential Years of Life Lost Due to . . .				
	Colorectal cancer		Suicide		Unintentional injury		
	Males	Females	Males	Females	Males	Females	
1	British Columbia	G	S	G	S	S	B
2	Alberta	B	S	B	B	B	B
3	Saskatchewan	S	G	S	S	B	B
4	Ontario	B	B	G	S	G	G
5	Quebec	n.a.	n.a.	B	B	G	G
6	New Brunswick	B	B	S	B	B	S
7	Prince Edward Island	n.a.	n.a.	G	G	B	S
8	Newfoundland and Labrador	G	B	G	G	G	S
8	Nova Scotia	B	B	S	S	S	G
10	Manitoba	G	G	G	B	B	B

*n.a. = Data not available.

Note: Gold = G; Silver = S; Bronze = B.

Source: The Conference Board of Canada.

Table 3
Health-Care Utilization and Performance

Overall Ranking		Difficulty obtaining . . .			Proportion of population that reports having a regular family doctor	Patient satisfaction with overall health-care services	
		Routine or ongoing health services	Health information or advice	Immediate care for a minor health problem		Males	Females
1	British Columbia	G	B	G	S	B	B
2	Alberta	G	G	S	S	S	B
3	Saskatchewan	G	G	G	S	G	G
4	Ontario	S	B	B	G	G	S
5	Quebec	B	S	B	B	G	G
6	New Brunswick	S	B	S	G	G	G
7	Prince Edward Island	B	B	B	G	G	G
8	Newfoundland and Labrador	B	S	S	S	B	G
8	Nova Scotia	G	S	B	G	S	G
10	Manitoba	B	B	B	S	S	B

Overall Ranking		Patient-perceived quality of overall health-care services		Patient satisfaction with community-based care		Patient-perceived quality of community-based care	
		Males	Females	Males	Females	Males	Females
1	British Columbia	B	B	B	S	S	S
2	Alberta	S	S	B	B	S	B
3	Saskatchewan	G	G	B	S	B	S
4	Ontario	G	S	S	B	S	B
5	Quebec	G	G	G	S	G	G
6	New Brunswick	S	S	G	G	S	G
7	Prince Edward Island	G	G	B	S	S	S
8	Newfoundland and Labrador	S	S	G	S	G	G
8	Nova Scotia	S	G	S	B	S	G
10	Manitoba	S	B	S	B	S	B

Note: Gold = G; Silver = S; Bronze = B.

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Table 3 (cont'd)
Health-Care Utilization and Performance

Overall Ranking	Patient satisfaction with telephone health line or tele-health services		Patient-perceived quality of telephone health line or tele-health services		Hospitalization rate for ambulatory care sensitive conditions		
	Males	Females	Males	Females	Males	Females	
1	British Columbia	G	B	G	B	G	G
2	Alberta	B	B	B	B	G	G
3	Saskatchewan	n.a.	B	n.a.	S	S	S
4	Ontario	B	S	B	B	G	G
5	Quebec	G	B	G	B	G	G
6	New Brunswick	G	S	S	B	S	S
7	Prince Edward Island	n.a.	n.a.	n.a.	n.a.	B	B
8	Newfoundland and Labrador	n.a.	S	n.a.	S	G	G
8	Nova Scotia	n.a.	G	n.a.	G	G	G
10	Manitoba	B	B	B	B	G	G

Overall Ranking	Proportion of female population aged 18–69 having had at least 1 Pap smear test in the past 3 years		Proportion of women aged 50–69 obtaining mammogram in the past 2 years		Home-care clients per 100,000 population	
	All ages	Aged 75+	All ages	Aged 75+	All ages	Aged 75+
1	British Columbia	B	S	B	B	B
2	Alberta	G	G	S	S	G
3	Saskatchewan	S	G	S	S	S
4	Ontario	B	S	S	S	S
5	Quebec	B	G	n.a.	n.a.	n.a.
6	New Brunswick	G	G	G	G	G
7	Prince Edward Island	G	S	n.a.	n.a.	n.a.
8	Newfoundland and Labrador	G	B	n.a.	n.a.	n.a.
8	Nova Scotia	G	B	B	B	B
10	Manitoba	S	G	S	S	G

*n.a. = Data not available.
Note: Gold = G; Silver = S; Bronze = B.

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Table 3 (cont'd)
Health-Care Utilization and Performance

Overall Ranking	Wait times for . . .			Self-reported wait times for . . .	
	Cardiac bypass surgery	Hip replacement surgery	Knee replacement surgery	Surgery, non-emergency, less than 1 month	Specialist physician visits, less than 1 month
1 British Columbia	B	S	S	G	G
2 Alberta	G	S	G	G	G
3 Saskatchewan	S	B	B	S	S
4 Ontario	B	n.a.	n.a.	S	B
5 Quebec	n.a.	n.a.	n.a.	B	G
6 New Brunswick	G	n.a.	n.a.	S	B
7 Prince Edward Island	n.a.	G	G	G	G
8 Newfoundland and Labrador	G	n.a.	n.a.	G	B
8 Nova Scotia	n.a.	n.a.	n.a.	B	S
10 Manitoba	G	S	S	S	B

Overall Ranking	Patient satisfaction with hospital care		Patient-perceived quality of hospital care		Prescription drug spending greater than 3% of after-tax income
	Males	Females	Males	Females	
1 British Columbia	B	B	B	B	G
2 Alberta	B	S	B	B	G
3 Saskatchewan	G	G	G	G	B
4 Ontario	B	B	B	B	G
5 Quebec	S	S	S	S	S
6 New Brunswick	G	S	G	S	S
7 Prince Edward Island	S	G	G	G	S
8 Newfoundland and Labrador	B	G	B	G	S
8 Nova Scotia	B	S	S	G	S
10 Manitoba	G	S	S	B	S

*n.a. = Data not available.
Note: Gold = G; Silver = S; Bronze = B.

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Table 3 (cont'd)
Health-Care Utilization and Performance

Overall Ranking		Wait times for radiation therapy for . . .		Self-reported wait times for diagnostic services, waiting less than 1 month	Patient satisfaction with physician care	
		Prostate cancer	Breast cancer		Males	Females
1	British Columbia	G	G	G	B	B
2	Alberta	G	G	G	B	B
3	Saskatchewan	n.a.	n.a.	G	G	G
4	Ontario	B	S	S	S	B
5	Quebec	n.a.	n.a.	G	G	S
6	New Brunswick	n.a.	n.a.	S	G	S
7	Prince Edward Island	n.a.	G	S	B	G
8	Newfoundland and Labrador	n.a.	n.a.	G	S	S
8	Nova Scotia	B	B	G	G	S
10	Manitoba	B	B	B	B	G

Overall Ranking		Patient-perceived quality of physician care		Immunization for influenza for those aged 65+	
		Males	Females	Males	Females
1	British Columbia	B	B	S	G
2	Alberta	S	S	S	G
3	Saskatchewan	S	G	S	S
4	Ontario	B	B	G	G
5	Quebec	G	G	S	S
6	New Brunswick	S	G	B	B
7	Prince Edward Island	S	G	S	S
8	Newfoundland and Labrador	G	S	B	B
8	Nova Scotia	S	S	G	G
10	Manitoba	B	S	B	S

*n.a. = Data not available.

Note: Gold = G; Silver = S; Bronze = B.

Source: The Conference Board of Canada.

Table 4
Overall Ranking

Overall Ranking		Gold	Silver	Bronze	Weighted Count	n.a.*	Weighted Count per Reported Indicator
1	British Columbia	63	27	27	153	2	1.31
2	Alberta	45	43	31	133	0	1.12
3	Saskatchewan	40	45	26	125	8	1.13
4	Ontario	37	48	28	122	6	1.08
5	Quebec	49	23	27	121	20	1.22
6	New Brunswick	38	37	38	113	6	1.00
7	Prince Edward Island	40	24	40	104	15	1.00
8	Newfoundland and Labrador	39	20	44	98	16	0.95
8	Nova Scotia	25	48	41	98	5	0.86
10	Manitoba	24	44	46	92	5	0.81

*n.a. = Data not available.

Note: Gold = G; Silver = S; Bronze = B.

Source: The Conference Board of Canada.

International Health Indicators

How does Canada's average compare with those of other leading OECD countries on each indicator included in this benchmarking exercise? The table below provides an overview of our

rankings. Like Appendix B, it is intended to be used as a learning tool. Gold-level countries could well be a source of ideas for improvement.

Overall Ranking	Life expectancy				Incidence Rate	
	Lung cancer		Infant mortality	Low birth weight	Lung cancer	
	Males	Females			Males	Females
1 Japan	G	G	G	B	G	G
2 Italy	G	S	S	S	S	G
3 France	S	S	G	S	S	G
3 Spain	G	G	S	S	S	G
5 Korea	S	B	B	G	S	G
6 Switzerland	G	S	S	S	S	G
7 Sweden	G	S	G	G	G	G
8 Finland	S	S	G	G	G	G
9 Austria	S	S	S	S	S	G
10 Norway	G	S	G	G	G	S
11 Iceland	G	S	G	G	G	B
11 Luxembourg	S	S	S	S	S	G
11 Netherlands	G	B	S	S	S	S
11 Canada	G	S	S	S	S	B
15 Australia	G	S	S	S	G	S
16 Greece	S	B	S	B	S	G
16 Belgium	S	S	S	S	B	G
18 United Kingdom	G	B	S	B	S	S
18 Germany	S	S	S	S	S	G
20 Portugal	S	B	S	B	G	G
21 Denmark	S	B	S	S	S	B
21 Ireland	S	B	S	G	G	S
23 United States	S	B	B	B	B	B
24 Poland	B	B	B	S	B	G

Note: Gold = G; Silver = S; Bronze = B. (cont'd on next page)

Table 1 (cont'd)
Health Status

Overall Ranking	Incidence Rate					Self-reported health	
	Prostate cancer	Breast cancer	Colorectal cancer		AIDS		
			Males	Females		Males	
1	Japan	G	G	B	S	G	B
2	Italy	G	B	S	S	G	S
3	France	S	B	B	S	G	G
3	Spain	G	S	S	G	G	S
5	Korea	G	G	G	G	G	B
6	Switzerland	S	B	B	S	G	G
7	Sweden	B	B	S	S	G	G
8	Finland	S	B	G	G	G	S
9	Austria	S	S	B	S	G	G
10	Norway	S	B	B	B	G	G
11	Iceland	S	B	S	S	G	G
11	Luxembourg	S	B	B	B	G	G
11	Netherlands	S	B	B	B	G	G
11	Canada	S	B	B	B	G	G
15	Australia	S	B	B	B	G	G
16	Greece	G	S	G	G	G	n.a.
16	Belgium	S	B	S	S	G	G
18	United Kingdom	S	B	S	S	G	S
18	Germany	S	B	B	B	G	S
20	Portugal	S	S	S	G	S	B
21	Denmark	G	B	B	B	G	G
21	Ireland	S	B	B	S	G	G
23	United States	B	B	B	B	B	G
24	Poland	G	S	S	S	G	B

*n.a. = Data not available.

Note: Gold = G; Silver = S; Bronze = B.

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Table 1 (cont'd)
Health Status

Overall Ranking	Self-reported health	Overweight		Obese		
	Females	Males	Females	Males	Females	
1	Japan	B	G	G	G	G
2	Italy	S	S	S	G	G
3	France	G	G	G	G	S
3	Spain	S	S	B	S	B
5	Korea	B	G	S	G	G
6	Switzerland	G	S	G	G	G
7	Sweden	G	S	S	G	S
8	Finland	S	n.a.	n.a.	S	S
9	Austria	G	B	G	G	S
10	Norway	G	S	S	G	G
11	Iceland	G	B	B	S	S
11	Luxembourg	G	S	S	B	B
11	Netherlands	G	S	B	G	S
11	Canada	G	S	S	S	S
15	Australia	G	n.a.	n.a.	n.a.	n.a.
16	Greece	n.a.	S	B	B	B
16	Belgium	G	S	S	S	S
18	United Kingdom	G	n.a.	n.a.	n.a.	n.a.
18	Germany	S	S	B	S	S
20	Portugal	B	S	B	S	B
21	Denmark	G	S	S	G	S
21	Ireland	G	S	S	S	S
23	United States	G	n.a.	n.a.	n.a.	n.a.
24	Poland	B	n.a.	n.a.	n.a.	n.a.

*n.a. = Data not available.

Note: Gold = G; Silver = S; Bronze = B.

Source: The Conference Board of Canada.

Table 2
Health-Care Outcomes

Overall Ranking	Mortality Rate					
	Lung cancer		Prostate cancer	Breast cancer	Colorectal cancer	
	Males	Females			Males	Females
1 Japan	G	G	G	G	S	G
2 Italy	S	G	S	S	S	G
3 France	S	G	S	S	S	G
3 Spain	S	G	S	S	S	G
5 Korea	S	G	G	G	G	G
6 Switzerland	G	G	B	S	G	G
7 Sweden	G	S	B	S	S	S
8 Finland	G	G	S	S	G	G
9 Austria	G	G	S	S	B	S
10 Norway	G	S	B	S	B	B
11 Iceland	G	B	B	S	B	G
11 Luxembourg	S	S	S	B	B	G
11 Netherlands	S	S	B	B	S	S
11 Canada	S	B	S	B	S	G
15 Australia	G	S	S	S	S	S
16 Greece	S	G	S	S	G	G
16 Belgium	B	G	B	B	S	S
18 United Kingdom	S	B	S	B	S	G
18 Germany	S	G	S	B	B	S
20 Portugal	G	G	S	S	B	S
21 Denmark	S	B	B	B	B	B
21 Ireland	S	S	B	B	B	S
23 United States	S	B	S	S	G	G
24 Poland	B	S	S	S	B	S

Note: Gold = G; Silver = S; Bronze = B.

(cont'd on next page)

Table 2 (cont'd)
Health-Care Outcomes

Overall Ranking	Mortality Rate				Potential years of life lost due to suicide		
	Acute myocardial infarction		Stroke		Males	Females	
	Males	Females	Males	Females			
1	Japan	G	G	G	G	B	B
2	Italy	G	G	G	G	G	G
3	France	G	G	G	G	S	B
3	Spain	G	G	G	G	G	G
5	Korea	G	G	B	B	S	B
6	Switzerland	n.a.	n.a.	G	G	S	B
7	Sweden	B	S	G	G	S	S
8	Finland	B	B	G	G	B	B
9	Austria	S	S	G	G	S	B
10	Norway	B	B	G	G	S	S
11	Iceland	S	S	G	G	B	S
11	Luxembourg	G	G	G	G	S	S
11	Netherlands	S	S	G	G	G	S
11	Canada	S	S	G	G	S	S
15	Australia	S	S	G	G	B	S
16	Greece	S	S	B	B	G	G
16	Belgium	S	S	G	G	B	B
18	United Kingdom	S	S	G	S	G	G
18	Germany	S	S	G	G	S	S
20	Portugal	S	G	B	B	G	G
21	Denmark	S	S	G	G	S	S
21	Ireland	B	B	G	G	B	S
23	United States	S	S	G	G	S	S
24	Poland	B	S	B	B	B	S

*n.a. = Data not available.

Note: Gold = G; Silver = S; Bronze = B.

Source: The Conference Board of Canada.

Table 3
Health-Care Utilization and Performance

Overall Ranking	Immunization 65+	Overall Ranking	Immunization 65+	
1	Japan	S		
2	Italy	G		
3	France	G		
3	Spain	S		
5	Korea	G		
6	Switzerland	S		
7	Sweden	n.a.		
8	Finland	S		
9	Austria	B		
10	Norway	n.a.		
11	Iceland	n.a.		
11	Luxembourg	S		
		11	Netherlands	G
		11	Canada	G
		15	Australia	G
		16	Greece	n.a.
		16	Belgium	S
		18	United Kingdom	G
		18	Germany	S
		20	Portugal	n.a.
		21	Denmark	S
		21	Ireland	n.a.
		23	United States	G
		24	Poland	n.a.

*n.a. = Data not available.
 Note: Gold = G; Silver = S; Bronze = B.
 Source: The Conference Board of Canada.

Table 4
Overall Ranking

Overall Ranking	Gold	Silver	Bronze	Weighted Count
1 Japan	21	3	6	45
2 Italy	15	14	1	44
3 France	15	12	3	42
3 Spain	14	14	2	42
5 Korea	18	5	7	41
6 Switzerland	14	10	4	38
7 Sweden	12	13	4	37
8 Finland	13	10	5	36
9 Austria	10	15	5	35
10 Norway	12	9	8	33
11 Iceland	11	10	8	32
11 Luxembourg	9	14	7	32
11 Netherlands	9	14	7	32
11 Canada	8	16	6	32
15 Australia	9	13	4	31
16 Greece	10	10	7	30
16 Belgium	7	16	7	30
18 United Kingdom	8	13	5	29
18 Germany	5	19	6	29
20 Portugal	8	12	9	28
21 Denmark	7	13	10	27
21 Ireland	7	13	9	27
23 United States	7	8	11	22
24 Poland	3	10	12	16

Source: The Conference Board of Canada.

Provincial and International Gold-Level Performance

Table 1
Provincial Gold-Level Performance in Areas Where Canada Scores Gold Internationally*

Province	Male life expectancy	Female mortality rate for colorectal cancer	Mortality rate for stroke	
			Male	Female
British Columbia	●		●	
Alberta			●	●
Saskatchewan			●	●
Ontario	●		●	●
Quebec			●	●
New Brunswick			●	
Prince Edward Island		●		
Newfoundland and Labrador				
Nova Scotia			●	
Manitoba			●	

Province	Self-reported health status		Flu immunization rate of those 65 and older**	
	Male	Female	Male	Female
British Columbia	●			●
Alberta	●	●		●
Saskatchewan	●			
Ontario	●		●	●
Quebec	●	●		
New Brunswick				
Prince Edward Island	●	●		
Newfoundland and Labrador	●	●		
Nova Scotia			●	●
Manitoba	●	●		

*Although Canada ranks gold on incidence rates for AIDS, we do not include this indicator here because data for it is not available at the provincial level.

**OECD reports on combined male and female rates for this indicator. Therefore, in the overall rankings, Canada was awarded only one gold-level performance.

Source: The Conference Board of Canada.

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