How Canada Compares

Results From the Commonwealth Fund's 2020 International Health Policy Survey of the General Population in 11 Countries

Methodology Notes

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The Commonwealth Fund's 2020 International Health Policy Survey of the General Population reflects the experiences and perceptions of a random sample of patients age 18 and older in 11 countries: Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States.

Sampling methodology

Interviews were conducted between February and June 2020, with field periods varying from 4 to 16 weeks across countries. Probability-based overlapping landline and cellphone designs were used to generate the samples in all countries except Norway, Sweden and Switzerland, where address-based samples were randomly generated from population registries. In the United States, the sampling design also incorporated an address-based sampling frame in addition to the telephone-based sampling frame. In most countries, the survey consisted of telephone interviews using a common questionnaire that was translated and adjusted for country-specific wording as needed. Sweden, Switzerland and the United States also offered an online option that was used to complete most interviews. The Commonwealth Fund contracted with Social Science Research Solutions (SSRS) to manage data collection in partnership with country contractors.

In Canada, a random digit dial overlapping sampling frame telephone design was used to obtain all completed interviews. The overlapping frame approach allowed surveyors to reach respondents on both cellphones and landlines to produce a more nationally representative sample. Landline telephones included voice over internet protocol (VoIP) phones.

Table 1a Total number of interviews completed, by country

Country	Total interviews
Australia	2,201
Canada	**5,297**
France	3,028
Germany	1,004
Netherlands	753
New Zealand	1,003
Norway	607
Sweden	2,513
Switzerland	2,284
United Kingdom	2,090
United States	2,488

Table 1b Total number of interviews completed, by province/territory

Province/territory	Total interviews	Percentage distribution
Newfoundland and Labrador	252	4.8%
Prince Edward Island	251	4.7%
Nova Scotia	250	4.7%
New Brunswick	250	4.7%
Quebec	1,000	18.9%
Ontario	1,507	28.5%
Manitoba	250	4.7%
Saskatchewan	250	4.7%
Alberta	273	5.2%
British Columbia	261	4.9%
Yukon	253	4.8%
Northwest Territories	250	4.7%
Nunavut	250	4.7%
Total	**5,297**	**100%**

The Commonwealth Fund funded 1,000 completed interviews across Canada. The Canadian Institute for Health Information (CIHI) funded additional interviews to reach 250 completed interviews in each province and territory. Sample sizes were further increased in Quebec and Ontario with funding from the ministère de la Santé et des Services sociaux du Québec and Ontario Health (Quality), respectively. In total, 5,297 interviews were completed across Canada.

Coverage

The following subjects were covered:

- Patients' access to primary and preventive care, including promptness of attention (e.g., availability of same-day appointments)
- Patients' experiences with their regular doctor/general practitioner, including coordination of health care services
- Patients' use of and experiences with specialists
- Patients' experiences with care in the hospital and emergency department
- Health care coverage, affordability of care, experiences with administrative/financial burdens and out-of-pocket costs
- Experiences with prescription medication and medical errors
- Patients' overall health and chronic medical conditions
- Behavioural factors affecting health, and social context

- Mental health needs and experiences
- Social services needs and experiences
- Overall views of the health care system

In addition to questions on the above subjects, countries also had the opportunity to include 9 questions (comprising several sub-questions) about the COVID-19 pandemic in their survey. These additional questions aimed to understand

- How the pandemic has affected respondents' work, savings and/or emotions;
- Whether they had been tested for or diagnosed with COVID-19; and
- How they felt about how various levels of government were handling the pandemic.

All 9 questions were included in the surveys in Australia, Canada, France, the Netherlands, New Zealand, Norway, Sweden, the United Kingdom and the United States, although Norway chose to exclude some sub-questions. Germany elected to incorporate only 2 COVID-19–specific questions in its survey. Switzerland elected to not include any additional questions. The COVID-19 questions were not asked of all respondents of the core survey, except in Germany and Norway.

Data collection

The survey was conducted in Canada from March 6 to June 15, 2020, by SSRS in partnership with Léger. Bilingual interviewers made all calls for the Quebec sample and were available to complete interviews with French-speaking respondents in other provinces and territories as needed. Among the 5,297 respondents, 56% were female and 44% were male. 48% of respondents were reached by landline and 52% by cellphone.

Table 2 Response rates, by country

Country	Total
Australia	18.5%
Canada	**19.2%**
France	22.7%
Germany	24.4%
Netherlands	25.6%
New Zealand	14.0%
Norway	19.5%
Sweden	30.4%
Switzerland	48.7%
United Kingdom	14.5%
United States	13.7%

Note
Response rates are calculated using the approach of the American Association for Public Opinion Research.

The Canadian response rate of 19% is comparable to the 21% attained in the 2016 International Health Policy Survey of the General Population.

Weighting of results

Weighting of results of core survey (excluding COVID-19 questions)

Data for each country was weighted to help ensure that the final outcome is representative of adults age 18 and older. This was accomplished by using SPSSINC RAKE, an SPSS extension module that simultaneously balances the distributions of all variables to known population parameters using a GENLOG procedure. To handle missing data among some of the parameter variables, SSRS employed a technique called hot decking. Hot deck imputation randomly replaces the missing values of a respondent with the values of another similar respondent without missing data. The weighting procedures accounted for the sample design and probability of selection, as well as for systematic non-response across known population parameters.

Survey data for Canada was weighted by age, gender, educational attainment and phone status (landline with multiple adults versus single adult in household; cellphone only versus use of both landline and cellphone) in each province and territory. Data was weighted for knowledge of official languages (English only versus French only versus both languages) in Quebec, in New Brunswick and in Canada as a whole. Additionally, at the Canada level, there was a weighting adjustment for the share of the Canadian population age 18 and older that each province or territory represents.[i] Population parameters were derived from the 2016 Census.

To address concerns about probability of selection, the following base-weight adjustments were implemented:

- Within-household correction (WHC): Respondents reached by landline and living in households with 2 or more adults received a weight of 2. Those living in single-adult households received a weight of 1. Since no selection was done in cellphone households, the probability of selection there was 1.
- Dual-usage correction (DUC): Adults answering both landlines and cellphones received a weight of 0.5. Those answering only a single mode received a weight of 1.
- A base weight was created equalling the product of WHC × DUC.

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i. As a result of the additional weighting adjustment at the Canada level, the weighted count of respondents for Canada in the data tables differs from the sum of the weighted count of respondents at the provincial/territorial level for those questions that were applicable to only a subset of the 5,297 survey respondents.

With the base weight applied, the sample underwent iterative proportional fitting (or "raking"), a procedure in which the data was repeatedly balanced to match the known population parameters for age by gender, educational attainment and knowledge of official languages (for Quebec, for New Brunswick and for Canada as a whole). This procedure was repeated until the total differences between the weighted sample and the population parameters were near 0.

Weighting procedures were, overall, consistent with the protocol for the 2016 International Health Policy Survey of the General Population.

Table 3 Unweighted and weighted distributions of respondents, by province/territory

Province/territory	Unweighted distribution	Weighted distribution
Newfoundland and Labrador	4.8%	1.5%
Prince Edward Island	4.7%	0.4%
Nova Scotia	4.7%	2.7%
New Brunswick	4.7%	2.2%
Quebec	18.9%	23.3%
Ontario	28.5%	38.5%
Manitoba	4.7%	3.5%
Saskatchewan	4.7%	3.0%
Alberta	5.2%	11.2%
British Columbia	4.9%	13.5%
Yukon	4.8%	0.1%
Northwest Territories	4.7%	0.1%
Nunavut	4.7%	0.1%

Note
Percentages may not add to 100 due to rounding.

Weighting of results of COVID-19 questions

In 8 countries (Australia, Canada, France, the Netherlands, New Zealand, Sweden, the United Kingdom and the United States), not all respondents to the core survey were asked the COVID-19 questions. A separate COVID-19–specific weighting was therefore needed to analyze the responses to these questions to ensure the data was representative of the population age 18 and older in each country. No separate COVID-19 weighting was needed for Germany and Norway because all respondents to the core survey were asked the COVID-19 questions.

The weighting process for the COVID-19 data for Canada followed the same weighting procedures as for the core survey data; however, the procedures were applied to the subset of respondents who were asked the COVID-19 questions.

Table 4 Total number of interviews completed for the COVID-19 questions, by country

Country	Total interviews
Australia	1,001
Canada	**1,173**
France	496
Germany	1,004
Netherlands	405
New Zealand	846
Norway	607
Sweden	454
Switzerland	n/d
United Kingdom	1,106
United States	1,266

Note
n/d: No data.

Trending analysis

Data from the 2016 International Health Policy Survey of the General Population is not directly comparable with data from the 2020 survey. In particular, due to changes to some questions (e.g., question text revised, response options added, question placement changed, translation changed), some trends may have been affected. Therefore, caution should be used when interpreting the trends.

Significance testing

CIHI developed statistical methods to determine whether

- Canadian results were significantly different from the average of 11 countries;
- Provincial and territorial results were significantly different from the international average; and
- Canadian results in 2020 were significantly different from Canadian results in 2016.

A colour-coded legend is used in the chartbook to show whether results are significantly different.

For the calculation of variances and 95% confidence intervals, standard methods for the variances of sums and differences of estimates from independent simple random samples were used, with the design effects provided by SSRS used to appropriately adjust the variances for the effects of the survey design and post-survey weight adjustments. Coefficients of variation were calculated by dividing the standard error by the estimate. T-tests were used to determine whether there was a significant difference between the means of 2 groups.

Relationships between different variables were analyzed using logistic regression modelling. A main response category was determined for each question, and responses were dichotomized such that the response value of interest was coded as 1 and all other values, excluding non-response categories, were coded as 0. Logistic regression was then used to fit this binary variable on explanatory variables with appropriate adjustment for survey weights and stratification variables using the SAS procedure SURVEYLOGISTIC for the analysis.

Averages

In the analysis, the Commonwealth Fund average was calculated by adding the results from the 11 countries and dividing by the number of countries. The Canadian average represents the average experience of Canadians in all provinces and territories (as opposed to the mean of provincial and territorial results).

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