How Canada Compares

Results From the Commonwealth Fund's 2021 International Health Policy Survey of Older Adults in 11 Countries

Methodology Notes

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The Commonwealth Fund's 2021 International Health Policy Survey of Older Adults reflects the experiences and perceptions of a random sample of seniors age 65 and older in 11 countries: Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States (there was an expanded sample of U.S. adults, age 60 and older).

Sampling methodology

The Commonwealth Fund contracted with Social Science Research Solutions (SSRS) to manage data collection in partnership with country contractors. Interviews were conducted between March and June 2021 with field periods varying from 6 to 13 weeks across countries. In most countries, the survey consisted of telephone interviews using a common questionnaire that was translated and adjusted for country-specific wording as needed. Probability-based overlapping landline and cellphone designs were used to generate the samples in Australia, France, the Netherlands, New Zealand, the United Kingdom and the United States. In the United States, a callback sample from the SSRS Omnibus[i] was also used to obtain completed interviews from older adults who were more difficult to reach. Telephone interviews in Germany and Norway were completed using a sample list, which covered approximately 31% of the population age 65 and older in Germany and 75% in Norway. Address-based samples were randomly generated from population registries in Sweden and Switzerland. In these 2 countries, respondents were recruited via postal mail and invited to participate online or to call in and complete a phone version of the survey. In Sweden, 92% of interviews were completed online, while 78% were completed online in Switzerland.

In Canada, a random digit dial sampling frame landline telephone design was used to obtain all completed interviews. Landline telephones could include Voice Over Internet Protocol (VoIP) phones. Telephone numbers of residents in long-term care (LTC) facilities and of Indigenous Peoples living on reserve were included in the sampling design. However, a potential bias may exist given that the survey excludes seniors who were physically or cognitively unable to complete the survey at the time it was conducted. People in LTC homes represented less than 1% of the respondents. This caveat applies to the other countries as well.

i. The SSRS Omnibus is a national dual-frame bilingual (English and Spanish) telephone survey that reaches 1,000 adults in the United States each week.

Table 1a Total number of interviews completed, by country

Country	Total interviews
Australia	501
Canada	**4,484**
France	1,751
Germany	1,163
Netherlands	630
New Zealand	500
Norway	500
Sweden	3,018
Switzerland	2,597
United Kingdom	1,876
United States	1,969

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

Province/territory	Total interviews	Percentage distribution
Newfoundland and Labrador	252	5.6%
Prince Edward Island	257	5.7%
Nova Scotia	254	5.7%
New Brunswick	250	5.6%
Quebec	1,000	22.3%
Ontario	1,302	29.0%
Manitoba	255	5.7%
Saskatchewan	251	5.6%
Alberta	251	5.6%
British Columbia	251	5.6%
Yukon	144	3.2%
Northwest Territories	14	0.3%
Nunavut	3	0.1%
Total	**4,484**	**100%**

The Commonwealth Fund funded 750 completed interviews across Canada. The Canadian Institute for Health Information (CIHI) funded additional interviews to complete a minimum of 250 in each province and a minimum of 100 in Yukon. 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, respectively. Efforts were made to maximize completed interviews in the Northwest Territories and Nunavut given their relatively small population of adults age 65 and older. In total, 4,484 interviews were completed across Canada.

Coverage

The following subjects were covered:

- Access to primary and preventive care, including promptness of attention, such as availability of same-day appointments
- Relationships with regular providers, including experiences with coordination of health care
- Experiences with specialists
- Experiences with prescription medication
- Experiences with care in the hospital and emergency department
- Care assistance at home
- Overall health and medical conditions, including experiences of social isolation and loneliness
- Experiences with material hardship
- End-of-life care wishes
- Health care coverage, affordability of care and out-of-pocket costs
- Experiences with vaccination during the COVID-19 pandemic
- Seniors' views on health equity in their health care system

Data collection

The survey was conducted in Canada from March 13 to June 14, 2021, 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 4,484 respondents, 78% answered the survey in English and 22% in French; 65% were female and 35% were male.

Table 2a Response rates, by country

Country	Total
Australia	16.6%
Canada	**22.3%**
France	13.6%
Germany	20.8%
Netherlands	15.4%
New Zealand	24.4%
Norway	13.6%
Sweden	45.7%
Switzerland	47.7%
United Kingdom	7.2%
United States	11.2%

Note
Response rates are calculated using the approach of the American Association for Public Opinion Research (AAPOR's RR3).

The Canadian response rate of 22.3% is comparable to the 23.2% attained in the 2017 International Health Policy Survey of Older Adults. Response rates varied across provinces and territories, ranging from 16% to 33%.

Table 2b Response rates, by province/territory

Province/territory	Total
Newfoundland and Labrador	19%
Prince Edward Island	17%
Nova Scotia	20%
New Brunswick	23%
Quebec	28%
Ontario	25%
Manitoba	19%
Saskatchewan	19%
Alberta	17%
British Columbia	16%
Yukon	33%
Northwest Territories	22%

Note
Response rates are calculated using the approach of the American Association for Public Opinion Research (AAPOR's RR3).

Weighting of results

Data was weighted to help ensure that the final outcome is representative of adults age 65 and older in each country (age 60 and older in the United States). This was accomplished by using SPSSINC RAKE, an SPSS extension module that simultaneously balances the distribution 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-deck imputation." Hot-decking randomly replaces the missing values for a respondent with the values of a similar respondent who is not missing this 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 and educational attainment within each province and territory. Data was weighted for knowledge of official languages (English-only, French-only or both languages) for New Brunswick, Quebec and Canada as a whole. Additionally, at the Canada level, there was a weighting adjustment for the share of the Canadian population age 65 and older that each province or territory represents.[ii] 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: Respondents reached by landline phone and living in households with 2 or more adults age 65 and older received a weight of 2. Those living with no other adults age 65 and older received a weight of 1.
- A base weight was created, equal to the within-household correction.

With the base weight applied, the sample underwent iterative proportional fitting (or "raking"), a procedure that repeatedly balances the data to match the known population parameters for age by gender, educational attainment and knowledge of official languages (for New Brunswick, Quebec and 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 consistent with the protocol for the 2017 International Health Policy Survey of Older Adults.

ii. 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 4,484 survey respondents.

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

Province/territory	Unweighted distribution	Weighted distribution
Newfoundland and Labrador	5.6%	1.7%
Prince Edward Island	5.7%	0.5%
Nova Scotia	5.7%	3.1%
New Brunswick	5.6%	2.5%
Quebec	22.3%	25.0%
Ontario	29.0%	37.5%
Manitoba	5.7%	3.4%
Saskatchewan	5.6%	2.9%
Alberta	5.6%	8.3%
British Columbia	5.6%	14.2%
Territories (Yukon, Northwest Territories, Nunavut)	3.6%	1.1%

Note
Percentages may not add to 100 due to rounding.

Trending analysis

Some data from the 2014 and 2017 editions of the International Health Policy Survey of Older Adults is not directly comparable with data from the 2021 survey. In particular, due to changes to some questions (e.g., question wording revised, response options added or retracted, question placement changed, translation changed), some trends may have been affected. Therefore, caution should be used when interpreting the trends. The 2014 survey included respondents age 55 and older, but for the purpose of trending analyses, only respondents age 65 and older were considered.

Significance testing

CIHI developed statistical methods to determine whether

- Canadian results were significantly different from the average of 11 countries (Commonwealth Fund average);
- Provincial and territorial results were significantly different from the Commonwealth Fund average; and
- Canadian results in 2021 were significantly different from those in 2017 or 2014.

A colour-coded legend is used in the chartbook to show whether results are significantly different from the Commonwealth Fund average. The dagger symbol (†) is used in the chartbook to show whether results are significantly different from the 2017 or 2014 data.

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. Design effects provided by SSRS were 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, stratification variables and baseline risk factors (age, gender and number of chronic conditions) 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).

Household income imputations

There is typically a higher non-response to the income question among the senior population. The hot-deck imputation procedure was applied to impute missing income data using education, number of adults in the household, age and gender for all countries.

In Canada, when the income categories were updated in 2021 from those used in the 2017 survey, only the English survey was updated; the changes were not applied to the French survey. As a result, English-speaking respondents were offered income categories that differed from those offered to French-speaking respondents. For the purpose of analysis, 3 income groups were created in the chartbook: less than $30,000; $30,000 to less than $80,000; and $80,000 or more.

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