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HEALTH POLICY

## Reality Bites: How Canada's Healthcare System Compares to its International Peers

by

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- In international performance surveys, Canada's healthcare system fares poorly compared to peer countries. Since provinces are responsible for delivering most health services, they also bear the responsibility for the poor performance.
- Although some provinces' performance is buoying up Canada's national results, none of the provincial healthcare systems approach the international average, and the Atlantic provinces appear to have the most serious issues.
- Provincial healthcare and international performance comparisons help assess individual provinces against non-US nations, highlighting the magnitude of domestic shortcomings; and they show we may not have to look abroad for solutions that are available in Canada. Provinces can learn lessons from each other. The federal government should support these comparison efforts to promote more innovation within Canada.
- Progress can and should be made with improved coverage, such as for drugs and dental care, plus shorter wait times, but major improvements on these issues would be insufficient to move most Canadian provinces from the rankings' bottom, absent broader, far-reaching change. Improving medicare is a serious challenge.

Every three years, a respected US foundation, the Commonwealth Fund, ranks healthcare systems around the world. Its objective is to improve US healthcare by learning from others – and it has sparked debates around reforms in that country and others.

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Its latest ranking, based on the fund's rolling surveys of patients, doctors and the public, highlights ongoing gaps between the US healthcare system and those in the rest of the highly industrialized world. At the same time, the results also demonstrate that Canada fares poorly compared to its peer countries, an ongoing reminder of the need to look beyond the common comparison with US healthcare. The fund's ranking, based on patient and physician experiences, also enables us to go beyond Canada's countrywide results that miss important variations among the provinces. This E-Brief looks at those differences and examines how the provinces, the major healthcare deliverers in Canada, fare compared to other nations.

To preview the main findings, we see that although some provinces, like BC and Alberta, are relatively strong performers in areas like preventative care and patient engagement, their overall results fall short of the international average or that of middle-tier nations. Other provinces, particularly in Atlantic Canada, have much deeper and more widespread issues and fare more poorly, ranking near the US.

In the past, the fund's surveys have led to policy reforms such as provinces improving coverage for prescription drugs and dental care, as well as reducing long wait times – all major drags on performance. Although plugging coverage gaps and dramatically reducing wait times would help improve rankings scores across Canada, only two provinces would make the jump into the middle tier. The road to a high-performing healthcare system is a long one, and no major shift in Canada's international standing would be possible without addressing some fundamental policy and organizational issues.

There is tremendous value in maintaining and expanding detailed international surveys of patients and their experiences in healthcare systems. Arguably, there is also as much to be learned from variations in domestic results as there is from international comparisons. In healthcare, as in other areas, wide variation in provincial performance is a strong indication that there are as many lessons to be learned from each other as from our international peers.

Indeed, the federal government, supported by international surveys that enable such provincial comparisons, should take an active role in encouraging more cross-provincial innovation. Collecting and publicly reporting data are an important part of this process.

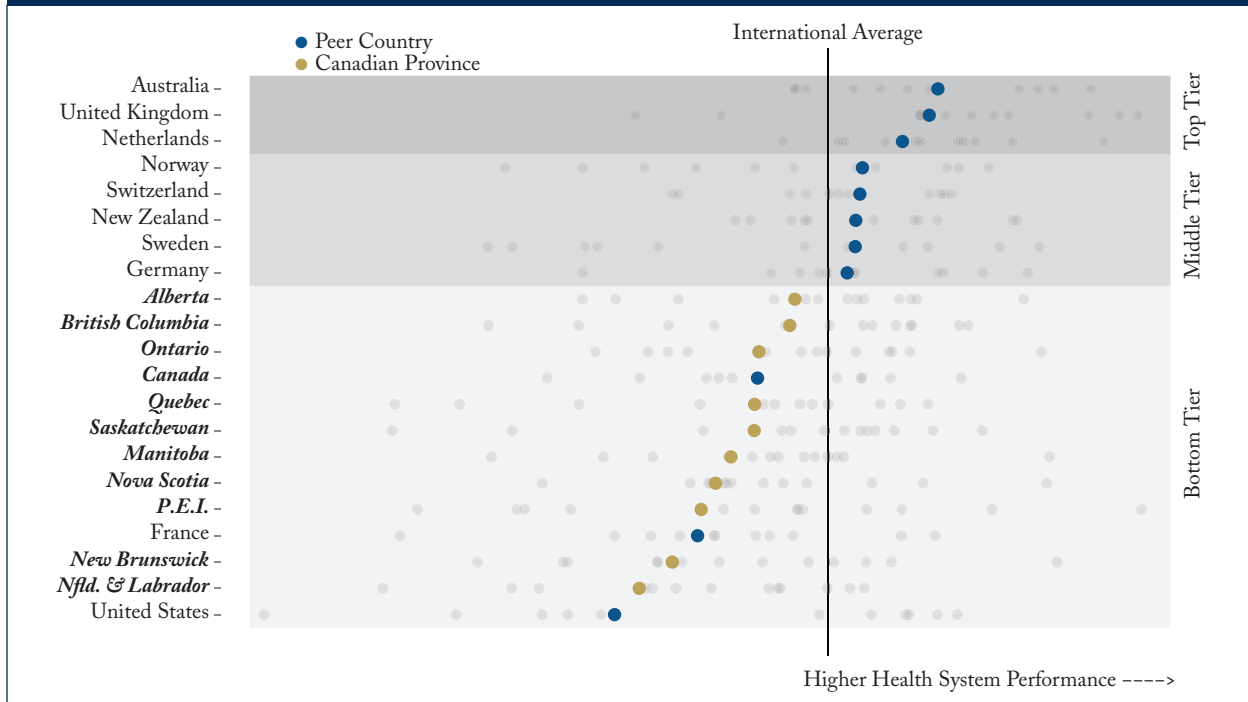
## Canadian Healthcare: Never Quite Last Place

US healthcare has long been a runaway high spender without much to show in the way of population-wide positive outcomes or reductions in large pockets of uninsured citizens. It is against this backdrop that Canadians celebrate medicare. But as its 2017 rankings and earlier Commonwealth Fund surveys have demonstrated, Canada's healthcare system is nothing to brag about in the company of most advanced nations.

The fund's rankings of 11 advanced nations are based on rolling questions about healthcare experiences from the perspectives of patients, primary-care physicians and the public. The surveys cover issues ranging from care safety to affordability and healthcare outcomes. Most of the 11 Commonwealth Fund countries fall into one of the two top tiers of healthcare systems.

Owning the podium overall are Australia, the United Kingdom and The Netherlands (Figure 1). In the second tier we see Norway, Switzerland, New Zealand, Sweden and Germany – all of which have different strengths and weaknesses but all of which perform above average. After this second tier there is a large gap followed by the three bottom-tier countries – Canada, France and the US. Canada has remained near the bottom of the rankings, just ahead of the US, since they began in the mid-2000s. Only recently has France dropped below Canada's

Figure 1: Overall Health System Performance Score



Note: Overall scores are highlighted in blue and gold. Subcategory scores are in gray, with the dotted line indicating the international 11-country average.

Some readers may notice that our scores for peer countries depart slightly from those published by the Commonwealth Fund itself, including a swap at the top of the rankings. This is largely due to our handling of rounding and the use of newer data when possible. We carry all decimal places through to the final calculation; the Commonwealth Fund truncates them at the subcategory level.

Source: Authors' calculations from Commonwealth Fund data.

position, just ahead of the US, in the bottom-tier countries (See Box A for a discussion on the differences between the rankings methodology and changes over the years).

## How Do the Provinces Stack Up?

Starting in 2012, the Commonwealth Fund expanded its questionnaire to collect province-level responses within Canada, which allow us to draw comparisons between provincial healthcare systems and international ones. When we unpack the national results and insert provincial performances for each category – with sometimes limited samples for the smallest provinces – we see a wide range of healthcare performance within Canada (Figure 1).<sup>1</sup> That said, none of the provinces reach the second tier of Commonwealth Fund countries, and some, namely the Atlantic Provinces, sit as low as the US and France. When we dig deeper and look at specific questionnaire results, such as for preventative and coordinated care along with equity, the challenges for each province and the country as a whole begin to come into focus (See Figures 2a, 2b, and 2c).

1 Not all provinces, in particular the smaller Atlantic ones, have a large enough sample size for each question of the survey to be considered statistically robust. We group the Atlantic provinces together in the text, in part, to overcome such reliability challenges. In practice, the survey results for smaller provinces are highly consistent with each other, and so we suspect that the gaps they reveal are largely accurate.

### Box A: Understanding Changes between the 2014 and 2017 Commonwealth Fund Rankings

The 2017 Commonwealth Fund rankings are not easily comparable to the 2014 version due to the inclusion of new survey questions and health outcome statistics from the OECD and others (See Davis et al. 2014, Schneider et al. 2017). For example, Australia's rise from middle-tier in 2014 to the ranking's top tier in 2017 is partly due to the addition of disease-specific outcomes for in-hospital mortality rates of patients with acute myocardial infarctions and the five-year survival rate for colon cancer, which were not part of the 2014 analysis.

Many observers, including Canada's former health minister, Dr. Jane Philpott, remarked that Canada's jump from 10th to ninth place, over France, suggests an improvement in performance. The major reason for the jump is because France has seen a major decline in administrative efficiency following a sharp increase in the amount of time doctors report spending on such issues. Additional OECD measures on health outcomes further dragged down France's results relative to the other countries in the rankings.

Needless to say, tracking the rankings over time and movements in them cannot be easily understood unless one takes a close look at changes in the questionnaire and results included in the rankings.

### Preventative Care and Safe Care: Some Strengths, Some Weaknesses

Most of the provinces perform strongly on preventative care measures, with Alberta, Ontario and Manitoba leading the way (Figure 2a). Regular conversations with one's healthcare provider about diet, exercise or smoking risks, and a low number of avoidable hospital admissions for asthma patients boosted provincial scores to match the best performing countries. Among the provinces, there is, for example, wide variation in the share of older adults receiving an influenza vaccine and in avoidable hospital admissions, which suggests much room to learn from one another. Some of the larger provinces also gained points for regular reviews of medications for people with multiple prescriptions.

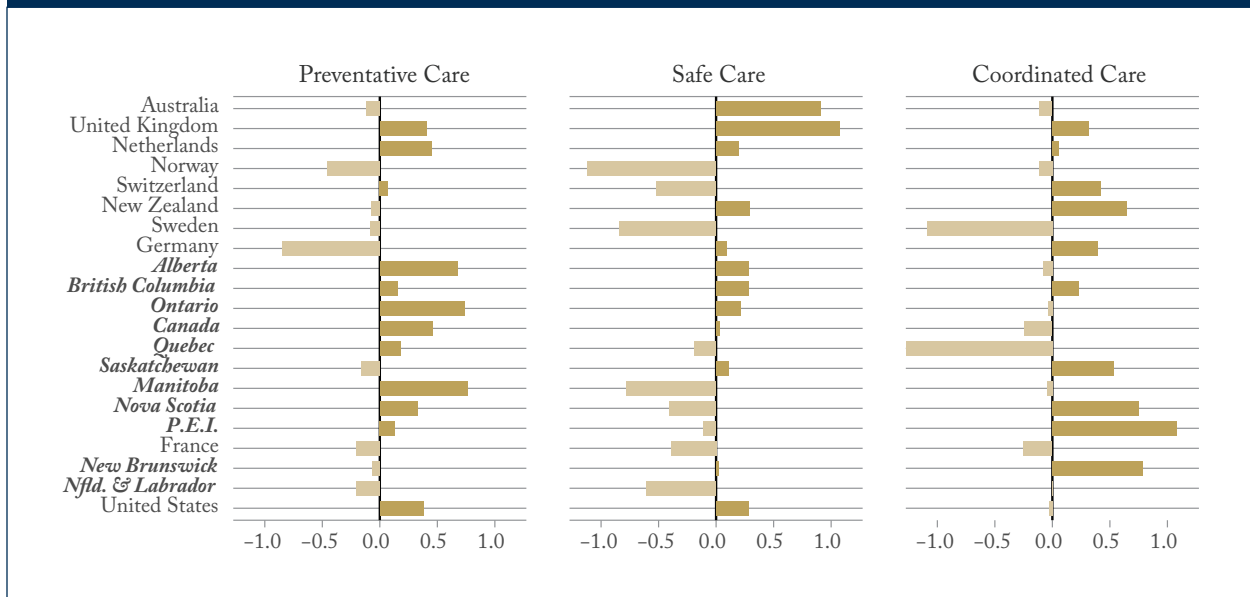
### Coordinated Care: A Major Performance Drag in Quebec

Quebec stands out negatively for reports of poor communication between specialists and primary-care providers after specialist visits, in contrast to the other provinces that scored similar to the international average in this area. Similar poor results in Quebec for communication between hospitals and primary-care doctors upon discharge, or between primary-care practices and homecare providers, means communication is a major drag on that province's overall results. In contrast, the Atlantic provinces generally perform quite well in regard to care coordination and communication between professionals and institutions.

### Engagement and Patient Preferences: Around the International Average

Although the fund's survey finds that nursing-care complaints during a hospital stay are more common in Canada than in other countries, some provincial performances were still quite positive in this area compared to our international peers (Figure 2b). There are other aspects of healthcare where provinces, individually, fared

Figure 2a: Health System Performance in Preventative, Safe and Coordinated Care



0.0 = international average

Note: We follow the Commonwealth Fund and normalize the difference between the 11-country average and a country's result, for each measure, to produce a score (along the x-axis). This implies that the international average for all measures is precisely zero. Not all subcategories are weighted equally in the overall score.

Source: Authors' calculations from Commonwealth Fund data.

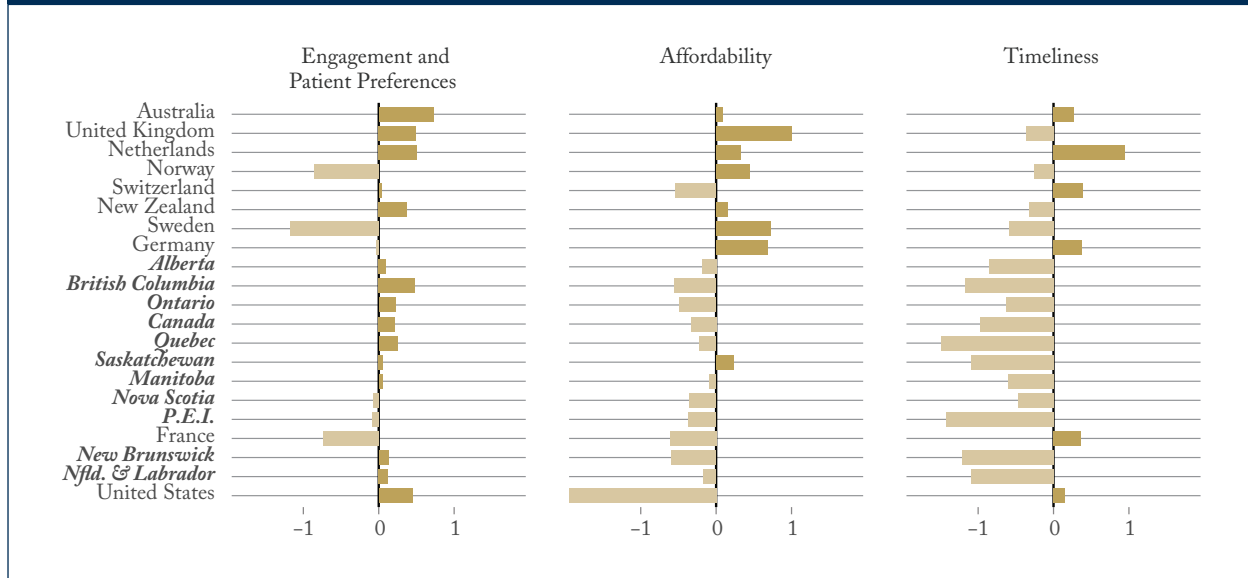
well despite Canada's poor overall performance. For example, Ontario led the way within Canada on primary-care doctor continuity over the last five years and was among the top performers internationally. In the larger provinces, generally, chronically ill patients reported good communication with health professionals in regard to health goals and treatment options and there were very high numbers of elderly with end-of-life care plans.

### Affordability and Timeliness: A Universal Challenge

On these two measures, the results across Canadian provinces were universally poor. In terms of affordability, patients across the country cited cost as a major reason for skipping dental appointments. The affordability of medications was also flagged as a major issue, although this barrier was especially prominent in the Atlantic provinces and British Columbia. Those provinces with more expansive public drug-coverage programs than elsewhere in Canada, such as Alberta and Quebec, performed at, or above, the international average on questions related to drug coverage.

In terms of timeliness, be it same-day or next-day access to family physicians, after-hours care, emergency-room wait times or wait times for specialist appointments, the results in every province were far below the international average. Reports of difficulty accessing MRIs and CTs, however, were much higher in western provinces than in Ontario.

**Figure 2b: Health System Performance in Engagement, Patient Preferences, Affordability and Timeliness**



0.0 = international average

Note: We follow the Commonwealth Fund and normalize the difference between the 11-country average and a country's result, for each measure, to produce a score (along the x-axis). This implies that the international average for all measures is precisely zero. Not all subcategories are weighted equally in the overall score.

Source: Authors' calculations from Commonwealth Fund data.

### Administrative Efficiency: Mixed Results

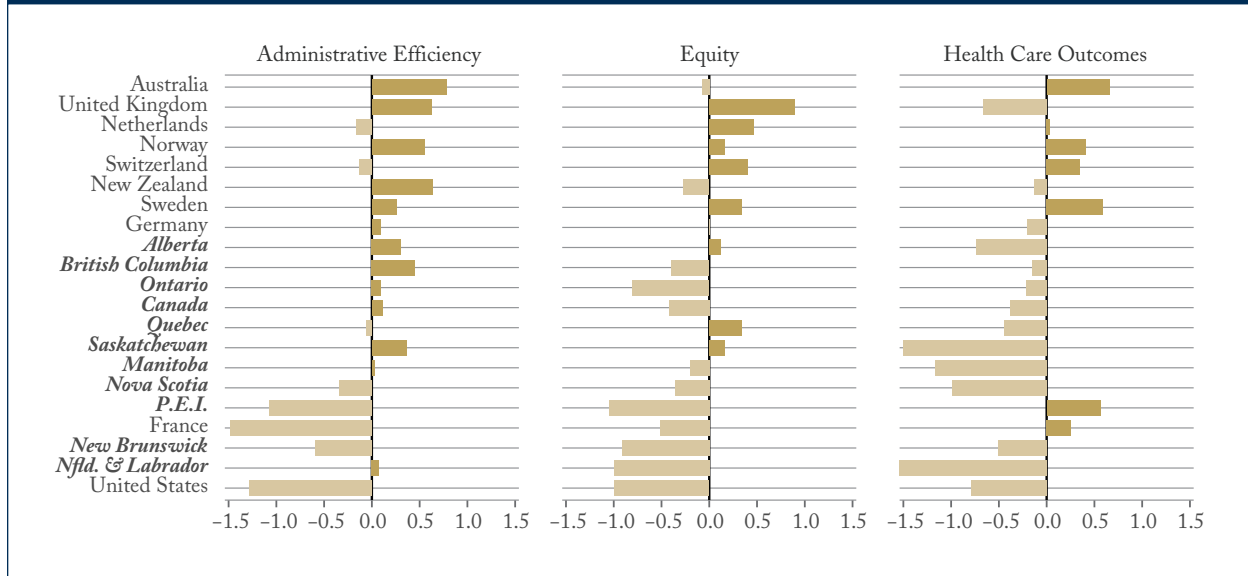
In the Atlantic provinces, a much higher proportion of doctors, relative to the international average, reported spending time helping patients overcome difficulties in obtaining needed medications because of coverage restrictions (Figure 2c). But the biggest drag on Canadian administrative efficiency results was the very high number of people—in each province—that visit an emergency department when the condition could have been treated by a regular family doctor.

### Equity: Compounding Affordability Challenges

In spite of the Canadian healthcare system's egalitarian principles, provinces have among the lowest equity scores across all Commonwealth Fund countries. Drug and dental care access is linked to income levels. After-hours access to a regular doctor and time spent with a physician also differ by income level, especially in the Atlantic provinces.



**Figure 2c: Health System Performance Score in Administrative Efficiency, Equity and Outcomes**



0.0 = international average

Note: We follow the Commonwealth Fund and normalize the difference between the 11-country average and a country's result, for each measure, to produce a score (along the x-axis). This implies that the international average for all measures is precisely zero. Not all subcategories are weighted equally in the overall score.

Source: Authors' calculations from Commonwealth Fund data.

## Healthcare Outcomes: Below Average

There is tremendous provincial variation in infant mortality rates. In preventable adult mortality, however, 30-day, in-hospital mortality rates following strokes are high among all provinces,<sup>2</sup> and life expectancy at age 60 is well below the international average in the Atlantic provinces.

## Becoming a Rankings Star: The Fixes, Gains and the Long Road Ahead

A close examination of the Commonwealth Fund data raises the following issues:

- Troubling results in the Atlantic provinces on a number of metrics;
- Poor performance on coordinating care and wait times in Quebec, which could be reversed by learning from better provincial performers in these areas;

<sup>2</sup> One reviewer pointed out, rightly, that this comparison is highly influenced by how rates are measured and across OECD countries.

- A universal challenge in wait times, with no province reporting average waits anywhere near the international average; and
- Shortcomings regarding access to dental services and drugs in most provinces.

These healthcare gaps are intertwined with commonly mentioned concerns regarding the fragmentation of Canadian healthcare, particularly the need for improving chronic disease management and addressing the limited access and quality of, primary care.

Were Quebec, for instance, to improve care-coordination results and wait times by encouraging greater integration and communication between hospitals and family practice clinics – its score would move up considerably. If all provinces improved drug and dental access – a major priority for a number of provinces – to approach the top three overall international performers, they would still not reach the levels of middle-tier countries in overall rankings. The impact of these changes is found in Figure 3 – all provinces advance in their total ranking, but none reaches the international average. If, however, all provinces were to reach the top level on wait times, in addition to improving drug and dental access, that would propel only BC and Alberta into the middle tier of performers. The same gains for the other provinces would move Ontario, Quebec and Saskatchewan to the international average, but still leave others far behind (See Figure 3).<sup>3</sup>

## Creating an Environment for Provincial Innovation in Health Policy

Although the Commonwealth Fund's survey results can bolster the willingness to learn from other countries, this approach is open to criticism – any international ranking risks misinterpretation if the underlying causes of successes and failures are not well understood or explained (Papanicolas and Jha 2017). As a result, we have focused in this E-Brief on the underlying questions and components. Furthermore, we acknowledge that some important health issues are missing from the Commonwealth Fund survey, such as questions on access to mental-health services, which makes for an incomplete analysis.

Others caution about the limits of ranking exercises because, for example, they do not specifically adjust for different demographic and socioeconomic circumstances in each province (Hewitt and Wolfson 2015). Still, in the case of the fund's surveys, patient and provider experiences with healthcare systems matter, and adjusting them based on demographic characteristics is likely unwarranted: expectations of care should be high, regardless of individual circumstances such as age.<sup>4</sup>

Despite minor shortcomings, the Commonwealth Fund rankings help demonstrate how current Canadian health-policy debates are somewhat misguided. Despite much vitriol about the public and private spending mix, it is possible to be a high-performing country, like Australia, with a similar overall mix but a more even distribution of public funds across health areas – rather than an overemphasis on hospitals and doctors. And although the

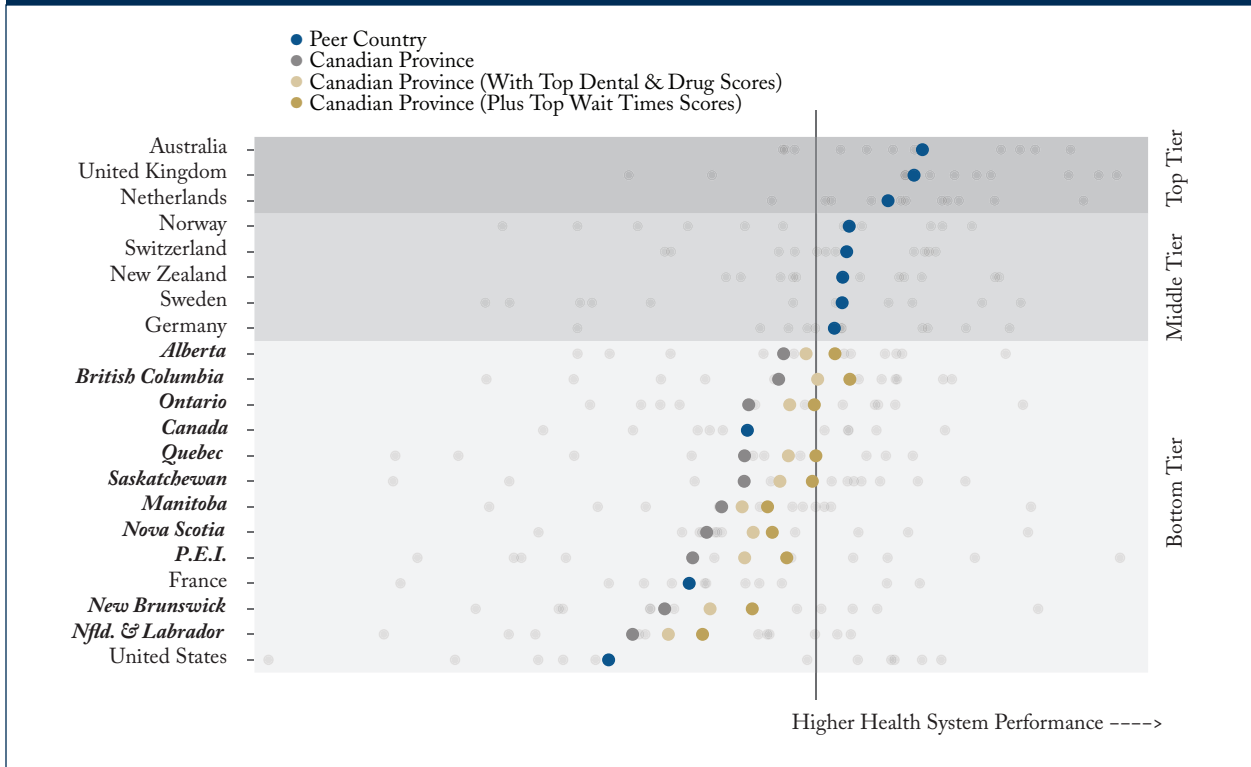
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3 The gaps between Canadian provinces and the highest-tier countries are large: relative to the highest-tier countries, skipped dental appointments in Canada are almost twice as numerous and waits for specialists are more than twice as long.

4 Furthermore, given the already common use of the Commonwealth Fund rankings in healthcare-policy discourse, we think the application of this methodology to the provinces is a straightforward way to build on reasonably well understood comparisons.



Figure 3: Simulating Improvements in Canadian Provinces



Note: Overall scores are highlighted in blue, grey and gold (for simulations). Subcategory scores are in light gray, with the dotted line indicating the international 11-country average.

In the first simulation, Canadian provinces' performance on drug- and dental-related questions is brought up to the average of the top tier countries, and Quebec's performance on coordinated care is brought to the level of Ontario. In the second simulation, provinces perform at the average of the top-tier countries on wait times as well.

Source: Authors' calculations from Commonwealth Fund data.

national results in the Commonwealth Fund surveys underscore common gaps in Canadian healthcare, such as the need to improve drug and dental coverage and to reduce wait times, Canadian medicare has many other flaws and much unfinished business.

The value in having provincial healthcare international performance comparisons is twofold: 1) it helps assess individual provinces against non-US nations, highlighting the magnitude of domestic shortcomings; and 2) it shows we may not have to look abroad for answers available at home. Still, the limited sample sizes and scope of the fund's survey questions at the provincial level restrict the ability to dig deeper into the results. This is especially true given variations in how much provinces spend on healthcare and, hence, in determining value for money spent. In future surveys, the federal government could pay the Commonwealth Fund to conduct more robust provincial, and perhaps territorial, results to improve comparisons.<sup>5</sup>

5 Currently, organizations like the Canadian Institute for Health Information, Health Quality Ontario, Commissaire à la Santé et au Bien-Être du Québec, the Canadian Institutes of Health Research, Health Quality Council of Alberta and Canada Health Infoway have supported provincial comparisons.

The intention would be to create an environment in which provinces could more readily experiment with new approaches to policy and then compare reform outcomes from the patient perspective.<sup>6</sup> Cross-province results could further enable best-practice identification, which might then allow more targeted involvement from pan-Canadian health organizations. As well, international comparisons would help inform the Canadian public of healthcare performance issues relative to the top international performers, which would help create a political environment receptive to further reform.

## Conclusion

Acknowledging the size and scope of the challenges facing healthcare delivery in Canadian provinces is necessary to galvanize public opinion to support tough political choices. Although some provinces' performances are buoying up Canada's national results, the Atlantic provinces appear to have serious issues. Progress can and should be made with improved coverage and shorter wait times, but that would still be insufficient to move most Canadian provinces from the rankings' bottom, absent broader, far-reaching change. Improving medicare is a serious challenge.

There is as much for the provinces to learn from each other as from abroad, and the federal government could play an expanded role in creating an environment where provinces – and the general public – can more readily identify top performers and laggards in health service delivery. Data collection and reporting of health performance results must be designed to create an environment with more innovation and unique provincial approaches to improving overall healthcare.

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6 The OECD, the Canadian Institute for Health Information and other provincial healthcare-quality organizations are actively expanding the collection and reporting on patient-recorded outcome and experience measures. Furthermore, Statistics Canada's 2015 community health survey has added questions on patient experiences. We support these initiatives and think they will add further context to inform policymakers.

## References

- Blomqvist, Åke, and Colin Busby. 2015. *Rethinking Canada's Unbalanced Mix of Public and Private Healthcare: Insights from Abroad*. Commentary 420. Toronto: C.D. Howe Institute. February.
- Busby, Colin, and Jonathan Pedde. 2014. *Should Public Drug Plans be Based on Age or Income?* Commentary 417. Toronto: C.D. Howe Institute. December.
- Davis, Karen, et al. 2014. "Mirror, Mirror on the Wall: How the Performance of the U.S. Health Care System Compares Internationally." The Commonwealth Fund. Washington: The Commonwealth Fund. June.
- Hewitt, Maria, and Michael C. Wolfson. 2013. "Making Sense of Health Rankings." *Healthcare Quarterly*. 16 (1). January
- Morgan, Steven, Jamie Daw, and Michael Law. 2013. *Rethinking Pharmacare in Canada*. Commentary 384. Toronto: C.D. Howe Institute. June.
- Papanicolas, Irene, and Ashish Jha. 2017. "Challenges in International Comparison of Health Systems." *JAMA*. 318(6): 515-516.
- Schneider, Eric, et al. 2017. "Mirror, Mirror 2017: International Comparison Reflects Flaws and Opportunities for Better U.S. Healthcare." The Commonwealth Fund. Washington: The Commonwealth Fund. July.
- Woolley, Frances, and Åke Blomqvist. Forthcoming Commentary. *Economics, Equity and Efficiency in Canadian Dental Care*. Toronto: C.D. Howe Institute.

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