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#### MAIN CONCLUSIONS

- Over the last 30 years, nearly all of the world's developed nations with universally accessible health-care systems have moved to at least partially having money follow patients for hospital care, and away from the global-budget approach that dominates hospital funding in Canada.
- While simpler to administer, global budgets disconnect funding from the volume and quality of services delivered to patients, leading to lower levels of activity and providing no financial incentives for improved access to care or superior quality services.
- Money following patients turns this system on its head, shifting patients from cost centres and a drain on the budget to a source of additional financial resources for the hospital, and creating powerful incentives for providers to increase throughput, improve efficiency, and improve the patient-centeredness of the services provided.
- Incentives to improve quality of care, both from a cost perspective and to attract additional patients, are also created by activity-based funding and can be strengthened by funding approaches that restrict payment for complications and poor quality or that reward higher quality.

# **Background**

Hospitals are the single largest area of health expenditure in Canada, consuming an estimated \$62.6 billion of the \$172.5 billion Canada's provincial governments are estimated to have spent on health care in 2019 (CIHI, 2021). At 36% of provincial government health spending, hospitals consume a greater proportion of governmental health expenditures in Canada than physicians (22%) and out-of-hospital drugs (7%) combined. Unfortunately for Canadians, efforts at health reform undertaken by Canada's provinces over the last several decades have largely been focused on other parts of the health-care system, leaving patients and taxpayers to endure the consequences of an outdated method of paying for universally accessible hospital care that most other developed nations have moved away from over the past 30 years.

Hospital care in Canada's provinces today is predominantly funded on a global budget or block grant basis, under which hospitals receive an allocation of funds each fiscal year to look after patients (CIHI, 2010; Sutherland, Crump, Repin, and Hellsten, 2013; Trenaman and Sutherland, 2020).<sup>2</sup> The level of funding for hospitals is largely based on historical patterns, with adjustments to reflect changes in socio-demographic factors as well as for political and economic reasons. This approach is not without its advantages. Global budgets are simple to administer and in theory provide provincial governments with a

simple and direct means to control hospital expenditures. Global budgets also provide hospitals with a level of autonomy over the allocation of resources and provide both governments and hospitals predictability and stability since they know how much money is available to be spent.

The incentives created under the relative simplicity and predictability of global budgets may, however, run counter to the goals of patients and the taxpayers who fund their care. By disconnecting funding from the volume and quality of services delivered to patients, global budgets variously encourage hospitals to reduce activity levels to avoid exceeding the budget (for example, by closing beds), especially early in the funding period, discharge higher-cost patients earlier to reduce expenditures, and engage in riskselection where lower-cost patients are preferred and not discharged as readily (Sutherland, Crump, Repin, and Hellsten, 2013; Leonard, Rauner, Schaffhauser-Linzatti, and Yap, 2003). Further, since global budgets do not provide hospitals additional funding for servicing additional patients, there is a distinct lack of incentives to function efficiently (providing a higher volume of services for a given level of expenditure), especially in the presence of flexible budgetary limits,<sup>3</sup> provide superior quality services, or function in a patient-focused manner that will include reducing wait times. Under the current regime, where historic

Note: This Fraser Research Bulletin is a pre-release extract from Nadeem Esmail's upcoming study, *Understanding Universal Health Care Reform Options—Activity-Based Funding*. Both are part of our series, Understanding Universal Health Care Reform.

- 1 Spending on physicians includes payments for services provided in hospitals when paid directly to physicians. Spending on drugs does not include payment for drugs dispensed in hospitals and other institutions.
- 2 While both British Columbia and Ontario have experimented with activity-based funding in hospital care and Quebec has announced a shift towards activity-based funding, global budgets remain the predominant method of paying for hospital services in Canada's provinces.
- 3 The ability of Canadian hospitals to run deficits, especially in instances where governments are responsible for covering excess expenditure, may reduce to some extent the incentives for risk selection and reduced activity intrinsic to global budget funding but will exacerbate the consequences of a lack of incentives for efficiency.

patterns are the primary driver of budgetary allocations, increases in rationing and reductions in patient throughput are beneficial to the hospital from a budgetary perspective.4

### Money following patients activity-based funding

For these reasons, and others, nearly all of the world's developed nations with universal-access health-care systems have moved away over the last three decades from global budgets towards at least partially having money follow patients for hospital care. Under money following patients, or activity-based funding, hospitals are paid a pre-defined amount of money for each patient cared for based on their particular condition and important factors that may add complexity or expected cost to their unique care needs at the time of admission or shortly thereafter. Paying hospitals in this manner, when coupled with appropriate initiatives to manage possible negative outcomes, creates powerful incentives to deliver a greater volume of services (with the potential to reduce wait times), and may also promote an improved quality of services and more efficient hospital operations.

Money following the patient increases the financial resources of the hospital with every additional patient treated (exactly opposite to the effect of treating more patients under global budgets) making it beneficial to the hospital to attract more patients to the facility. This approach also encourages efficiency and quality by setting the payment for each patient at the start of their hospital-care journey based on the condition to be treated and important health, personal, and social factors that may affect the expected cost of providing care. Activity-based funding creates high-powered incentives to increase access to services and the

volume of services provided, improve the efficiency with which services are delivered, and improve the quality and patient-centeredness of services to attract additional patients to the facility. Activity-based funding also increases transparency and accountability by providing greater clarity about the volume of services being purchased for a given level of funding.

The theoretical argument that activity-based funding will lead to faster discharges of more seriously ill patients in search of greater cost control does not appear to have been borne out empirically around the developed world. Evidence from Europe, the United Kingdom, and the United States has failed to show a clear association between activity-based funding and mortality or quality indicators for chronic disease. On the other hand, some studies have reported lower mortality under activity-based funding, and more recent empirical evidence suggests activity-based funding may actually encourage higher-quality care in an effort to avoid costly and unprofitable complications (and their commensurate costs and extended stays) or readmissions (Labrie, 2012; Sutherland, Crump, Repin, and Hellsten, 2013; Sutherland, Repin, and Crump, 2012). Competition to attract patients may also play an important role in mitigating this concern, as hospitals will have an incentive under activity-based funding to offer quality services and maintain a positive reputation with patients and referring practitioners.

Finally, and perhaps most importantly in any discussion of health-care policy reform in Canada: activity-based funding does not pose any threat to the universal-access health-care system and does not violate any of the explicit criteria and rules of the Canada Health Act (Esmail and Barua, 2018).

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<sup>4</sup> The exception to this from a hospital's perspective would be services that patients and visitors pay for such as parking and concession, for which an increase in patient throughput or visitors would improve the hospital's financial position.

#### **How different is Canada?**

Canada's provincial health-care systems are in a distinct minority in the developed world in not having adopted activity-based funding for hospital care in a meaningful way. The large majority of developed nations with universal-access health-care systems have moved towards prospective activity-based funding over the past few decades (table 1), leaving Canada behind along with Iceland, Ireland, Luxembourg, and New Zealand. It is noteworthy that the shift to activity-based funding is so well established across the developed world that a number of nations, including England, Germany, and Australia, are undertaking initiatives to enhance the incentives for quality within activity-based funding schemes, for example through penalties or redistribution of a portion of funds (Trenaman and Sutherland, 2020).

These lessons have perhaps not been lost on Canada's provincial and federal governments. Certainly the concept of money following patients has been discussed widely in Canada, with strong governmental calls coming as early as the 2002 report from the Standing Senate Committee on Social Affairs,

Science, and Technology, which recommended activity-based funding to improve efficiency and performance in the health system (SSC-SAST, 2002). Another prominent call for activity-based funding came from Quebec's task force on health funding, whose 2008 report recommended the introduction of activity-based funding over time to improve the state of health care in that province (Task Force on the Funding of the Health System, 2008).

These reports and discussions, however, have so far resulted in an experiment in British Columbia between 2010 and 2013 for 23 large hospitals, an attempt at activity-based funding in Ontario beginning in 2012 that has evolved into a complex blended approach with three parts, which is dominated by budgets, and a now seven-year-old commitment to reform in Quebec. Decades after reform initiatives were undertaken in other developed nations with universal-access health-care systems, and at a time when some nations are embracing even more sophisticated approaches to money following patients, no Canadian province has embraced a meaningful shift to activity-based funding.

<sup>5</sup> Ontario's approach has three parts: [1] Quality-Based Procedures (QBPs)—a made-in-Ontario approach that couples activity-based funding with best practice guidelines—making up some 15% of total hospital funding; [2] the Health Based Allocation Method, which allocates funds based on patient profiles and particular hospital characteristics, making up some 30% of hospital funding; and [3] fixed annual global budgets based on historical spending, which make up more than half of hospital funding. All of this complexity is a notable shift away from the original policy goal (Palmer et al., 2018).

Table 1: Approaches to hospital funding in 34 high-income countries

	Public hospitals	Private not-for-profit	Private for-profit
Australia	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Austria	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Belgium	Activity-Based Funding	Activity-Based Funding	_
Canada	Global Budget	Global Budget	Global Budget
Chile	Global Budget	Activity-Based Funding	Activity-Based Funding
Czech Republic	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Denmark	Global Budget	Activity-Based Funding	Activity-Based Funding
Estonia	_	Activity-Based Funding	Activity-Based Funding
Finland	Activity-Based Funding	_	_
France	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Germany	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Greece	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Hungary	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Iceland	Global Budget	_	_
Ireland	Global Budget	Global Budget	-
Israel	Activity-Based Funding	Per-diem payments	Activity-Based Funding
Italy	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Japan	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Korea	Activity-Based Funding	Activity-Based Funding	-
Latvia	Global Budget	_	Activity-Based Funding
Luxembourg	Global Budget	Global Budget	_
Mexico	Global Budget	Activity-Based Funding	Activity-Based Funding
Netherlands	Activity-Based Funding	Activity-Based Funding	-
New Zealand	Global Budget	_	_
Norway	Global Budget	Global Budget	Activity-Based Funding
Poland	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Portugal	Global Budget	Activity-Based Funding	Activity-Based Funding
Slovenia	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Spain	Global Budget	_	Activity-Based Funding
Sweden	Global Budget	Global Budget	Activity-Based Funding
Switzerland	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding
Turkey	Global Budget	Activity-Based Funding	Activity-Based Funding
United Kingdom	Activity-Based Funding	Activity-Based Funding	Fee for Service
United States	Activity-Based Funding	Activity-Based Funding	Activity-Based Funding

Source: OECD, n.d.

## The price of being different—high cost, poor access, mediocre outcomes

The apparent unwillingness or sluggishness of Canada's provincial governments to embrace an established, sensible, evidence-based approach to paying for universally accessible hospital care, contributes to Canadians receiving very poor value for their health care dollars. Consider that Canada's health-care system ranks among the most expensive universal-access health-care systems in the developed world on an ageadjusted basis (*figure 1*). While the Canadian health-care system is not lacking for financial resources, at least in an international context, Canadians endure one of the least accessible health-care systems in the developed world.

More specifically, of the developed nations that maintain universally accessible health-care systems, on an age-adjusted basis, Canada ranks near the bottom for the number of physicians per 1,000 population and curative or acute-care beds per 1,000 population (figure 2), and near the middle in nurses per 1,000 population. Canadians' access to diagnostic technologies also lags well behind that in other developed nations, with Canada ranking near the bottom for both MRI machines per million population (figure 3) and CT scanners per million population (figure 4).

According to the Commonwealth Fund's 2016 international survey of adult health-care experiences (CIHI, 2017), Canadians were tied with Norwegians for being the least likely among those in the 11 nations surveyed to report same-day or next-day appointments to see a doctor or nurse, and were the most likely to report a wait of 4 hours or more for

emergency care, and the most likely to report waiting 4 weeks or longer to see a specialist. Perhaps most relevant to this examination of funding hospital care, Canadians were also the most likely to report waiting 4 months or longer for elective surgery (*figure 5*).

While Canada's relative performance in access to health-care services is quite poor, Barua and Moir (2020) find a less negative and relatively mixed performance in the use of medical resources, and in quality and clinical performance. Across measures of resource use, such as consultations with physicians and acute-care discharges, Canada manages an above-average performance among universal-access developed nations for nearly 50% of the indicators studied, with average to below average rankings on the balance. Across 14 measures of quality and clinical performance (for example, disease survival rates and rates of surgical complications), Canada performs well on 7 but average to below average on the other 7.

Canada's dismal performance on measures of access to hospital and surgical care alongside a relatively high level of expenditure suggests substantial opportunity for improvement following reform of hospital funding. By fundamentally altering the incentives associated with more than one third of provincial government health-care spending, money following patients could improve the timeliness of, access to, and potentially the quality of health care. That could all be accomplished within a universal construct and possibly without further increasing expenditures.

<sup>6</sup> The international comparisons here draw from Barua and Moir (2020), using their age-adjusted international comparison data. Canada's relatively young population will be less costly to care for than the older populations found in other developed nations but will also require fewer medical resources per population for the same relative access to services. Age-adjusting both spending and availability data provides for a more meaningful comparison of spending and resource availability among nations.

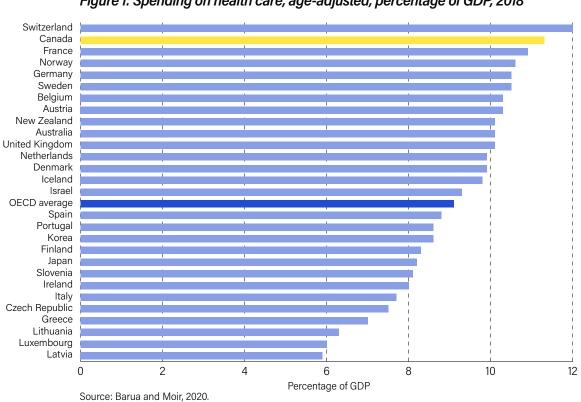
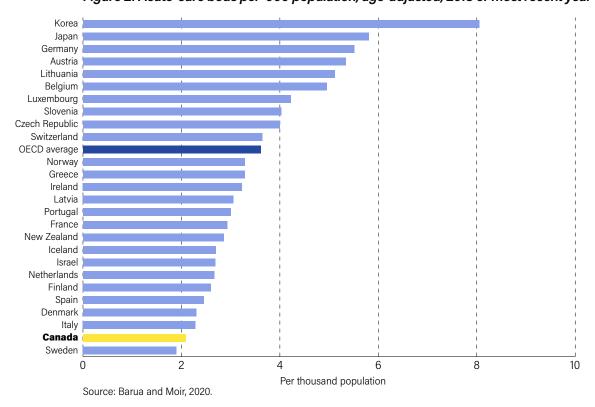


Figure 1: Spending on health care, age-adjusted, percentage of GDP, 2018





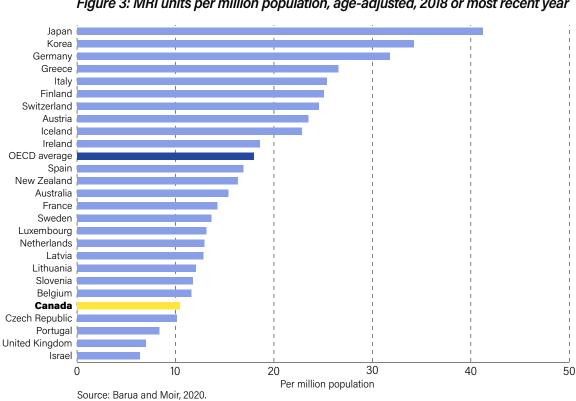
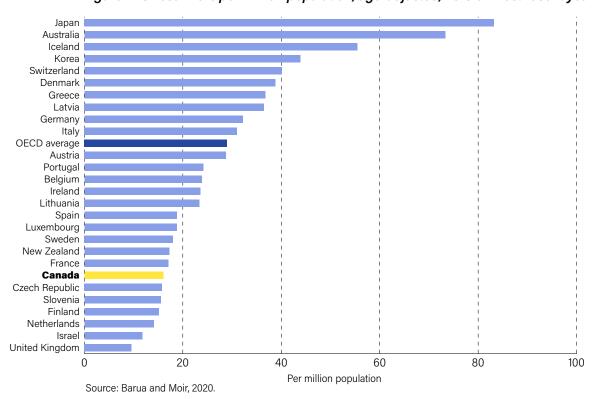


Figure 3: MRI units per million population, age-adjusted, 2018 or most recent year





10% Australia 35% Same- or next-day 8% appointment with doctor or nurse 43% 29% Canada Waited 4 hours or 56% more in emergency 18% department 56% Waited 4 weeks or 1% longer to see specialist France 36% Waited 4 months or 2% longer for elective surgery 53% 3% Germany 25% 0% 4% Netherlands 23% 4% 76% 10% New Zealand 44% 15% 43% 13% Norway 52% 15% 49% 20% Sweden 42% 12% 57% 7% Switzerland 22% 6% 57% 8% United Kingdom 37% 12% 51% 11% **United States** 24% 3% 11% Average 36% 9% 0 10 20 50 60 70 80 Percentage of population 18 years and older Source: CHIH, 2017.

Figure 5: Wait times (% of population 18 years and older) from the Commonwealth Fund's 2016 International Health Policy Survey of Adults in 11 Countries

## Conclusion—aligning health policy with international norms

The advantages of money following patients compared to the use of global budgets are abundant and clear. By changing providers' perception of patients as cost centres and a drain on the budget to a source of additional financial resources, activity-based funding creates powerful incentives for providers to increase throughput, improve efficiency, and improve the patient-centeredness of the services provided. Incentives to improve quality of care, both from a cost perspective and to attract additional patients, are also created by activity-based funding and can be strengthened by funding approaches that restrict payment for complications and poor quality or that reward higher quality.

It is perhaps not surprising then that activity-based funding has increasingly become the international norm, leaving Canada in a distinct minority of countries that rely primarily on global budgets for hospital care. And, while no policy is without possible drawbacks, the pitfalls of money following patients have been well studied over the past few decades in nations that have undertaken funding reform, providing many effective approaches that could be readily adopted in Canada to protect against possible downsides to such a reform. While global budgets might be preferred by governments for their predictability and administrative simplicity, the current approach in Canada's provinces runs counter to the international norm and serves neither the interests of patients nor the interests of taxpayers who fund their care.

#### References

Barua, Bacchus, and Mackenzie Moir (2020). Comparing Performance of Universal Health Care Countries, 2020. <a href="https://www.fraserinstitute.org/studies/comparing-performance-of-universal-health-care-countries-2019">https://www.fraserinstitute.org/studies/comparing-performance-of-universal-health-care-countries-2019</a>, as of March 11, 2021.

Canadian Institute for Health Information [CIHI] (2010). A Primer on Activity-Based Funding. <a href="https://www. groupes.finances.gouv.qc.ca/santefinancementactivite/wp-content/uploads/2013/02/CIHI\_primer\_activity\_based\_fund\_ en1.pdf>, as of August 30, 2020

Canadian Institute for Health Information [CIHI] (2017). How Canada Compares: Results from the Commonwealth Fund's 2016 International Health Policy Survey of Adults in 11 Countries. Chartbook. <a href="https://">https://</a> www.cihi.ca/en/commonwealth-fund-survey-2016>, as of March 10, 2021.

Canadian Institute for Health Information [CIHI] (2021). National Health Expenditure Trends: 2020. <a href="https://">https://</a> www.cihi.ca/en/national-health-expenditure-trends>, as of March 10, 2021.

Esmail, Nadeem, and Bacchus Barua (2018). Is the Canada Health Act a Barrier to Reform? <a href="https://www. fraserinstitute.org/studies/is-the-canada-health-act-a-barrier-to-reform>, as of March 11, 2021.

Labrie, Yanick (2012). Activity-Based Hospital Funding: We've Waited Long Enough. Montreal Economic Institute. <a href="https://www.iedm.org/38810-activity-based-hospital-funding-weve-waited-long-enough/">https://www.iedm.org/38810-activity-based-hospital-funding-weve-waited-long-enough/</a>, as of April 23, 2021.

Leonard, Kevin J., Marion S. Rauner, Michaela-Maria Schaffhauser-Linzatti, and Richard Yap (2003). The Effect of Funding Policy on Day of Week Admissions and Discharges in Hospitals: The Cases of Austria and Canada. Health Policy 63: 239-257.

Organisation for Economic Cooperation and Development [OECD] (n.d.). Online database providing results from the 2012 and 2016 OECD Health System Characteristics Surveys. <a href="https://www.oecd.org/els/">https://www.oecd.org/els/</a> health-systems/characteristics.htm>, as of April 20, 2021.

Standing Senate Committee on Social Affairs, Science, and Technology [SSC-SAST] (2002). The Health of Canadians - The Federal Role. "The Kirby Report". The [Canadian] Senate.

Sutherland, Jason M., R. Trafford Crump, Nadya Repin, and Erik Hellsten (2013). *Paying for Hospital* Services: A Hard Look at the Options. Commentary No. 378. C.D. Howe Institute. <a href="https://www.cdhowe.org/">https://www.cdhowe.org/</a> sites/default/files/attachments/research\_papers/mixed/Commentary\_378\_0.pdf>, as of March 15, 2021.

Sutherland, Jason M., Nadya Repin, and R. Trafford Crump (2012). Reviewing the Potential Roles of Financial Incentives for Funding Healthcare in Canada. Canadian Foundation for Healthcare Improvement.

Task Force on the Funding of the Health System (2008). Getting Our Money's Worth: Accessible Patient Services, Sustainable Funding, A Productive System, Shared Responsibility. Government of Quebec. <a href="https://www.groupes.">https://www.groupes.</a> finances.gouv.qc.ca/financementsante/en/rapport/pdf/RapportENG\_FinancementSante.pdf>, as of April 20, 2021.

Trenaman, Logan, and Jason M. Sutherland (2020). Moving from Volume to Value with Hospital Funding Policies in Canada. *Healthcare Papers* 19, 2: 24–35.

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