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The Public-Private Mix in the Delivery of Health-Care Services: Its Relevance for Lower-Income Canadians

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Abstract This paper reviews and analyzes the implication of the public-private mix of financing and delivery of health care in Canada for lower-income Canadians. Based on the type of government stewardship and the degree of state intervention, the Canadian health system can be separated into three distinct layers: universal hospital and physician services financed and regulated by federal and provincial governments ("Medicare"); mixed services, including prescription drugs and long-term care, subject to some provincial stewardship and subsidy; and privately funded and delivered services such as dental care. Within Medicare financial barriers to access have been removed; however, there is a growing trend toward private sector involvement in the delivery of services, and inequalities by income in the use of physician services are high in Canada relative to other high income countries. Moreover, the exclusion of prescription drugs and long-term care from universal health coverage in Canada, as well as the nearly exclusively private dental market, has created significant access issues for lower-income Canadians.

Keywords Canadian health system · Lower-income · Public-private mix

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Introduction: an Overall Health System Overview

Canada is a highly decentralized federation with a similarly decentralized system of health administration and delivery. Although the federal government plays an important role in terms of national standard-setting in some areas of health care and regulation of pharmaceuticals and health products, and for the delivery of some health services to designated populations, it is the provincial governments which are primarily responsible for how most health-care services are delivered to Canadians, including low-income and marginalized groups. By low-income, we generally refer to Canadians in lowest income quartile of the population.

As illustrated in Table 1, there are three discernable layers making up the Canadian health system when viewed through the perspective of degree of state involvement. Each layer has its own configuration of funding, administration, and delivery arrangements. As a consequence, the public-private mix in each of the three layers has quite different implications for the delivery of health services to lower-income Canadians.

Table 1 purposely separates the factors of funding, administration, and regulation from service delivery to clarify the following discussion (see Deber 2004). There are public and private components in each. Before focusing on the public and private components in health service delivery, it is worth setting out some general propositions on the public-private divide in funding, administration, and regulation.

Canada has a 70:30 split between public and private financing of healthcare. This 70:30 ratio is lower than the public-private ratio of a majority of higher-income countries (CIHI 2015b). Canada, like all high-income welfare states, devotes significant resources to health care. Table 2 compares all welfare states that spent, through their central, regional, and local governments, a minimum of US$2500 a year in 2013. These are all countries in which universal health coverage is the

Table 1 Three layers of the Canadian health system based on degree of state intervention

Degree of state involvement	Funding	Administration and regulation	Delivery
Major—universal health coverage (Medicare)	Public taxation through the general revenue funds of federal and provincial governments	Single-payer provincial systems. Private self-regulating professions under provincial legislative frameworks	Private physician services, private for-profit (very limited), not-for-profit, and arm's-length organizations delivering hospital services
Moderate (social care and prescription drugs)	Mix of public taxation, private (mainly employment-based) insurance and out-of-pocket payments	Public services that are generally welfare-based and targeted, and private services regulated to varying degrees by provincial governments	Private professional, private for-profit, not-for profit, and public arm's-length facilities and organizations
Minimal (dental and vision care, alternative and complementary medicines)	Private (mainly employment-based) insurance and out-of-pocket payments	Private ownership and control: private professionals with self-regulation. Limited state regulation	Private providers and private-for-profit facilities and organizations

Source: adapted from Marchildon (2004, p. 63)

norm (or at least moving toward universal coverage as is the case in the US) and where health care has become a more expensive policy responsibility than those relating to education or social assistance (welfare). It is generally assumed that public financing of universal health coverage (UHC) is redistributive—that UHC shifts resources from the healthy and wealthy to the poor and sick. Sherry Glied (2008) performed the calculation on Canadian Medicare and found that every $1 of tax funding would move between $0.23 and $0.26 toward the lowest income quintile of the population and roughly $0.50 into the two lowest income quintiles.

Table 2 High-income OECD member states in which total government health spending exceeded US$2500 per year in 2013

OECD country (rank based on spending)	Government spending per capita ($US PPP for 2013)
1. Norway	4981
2. Netherlands	4495
3. United States	4198
4. Switzerland	4178
5. Sweden	4126
6. Denmark	3841
7. Germany	3677
8. Austria	3469
9. Belgium	3312
10. France	3247
11. Japan	3090
12. Canada	3074
13. Iceland	2968
14. United Kingdom	2802
15. New Zealand	2656
16. Australia	2614
17. Finland	2583

Source: OECD (2015)

No different than other high-income welfare states, governments in Canada have created an intricate web of administration, law, and regulation to govern and manage universal health coverage. There are two key aspects in the governance of UHC in Canada. The first is the Canada Health Act, the federal law that sets out five national standards with which provincial governments are expected to comply in order to receive their per capita shares of a cash transfer from the federal government (Marchildon 2013).

The second key governance aspect is a set of provincial laws, regulations, and accompanying arrangements between these governments and the medical profession that determine how single-payer UHC is actually administered. The laws prohibit or discourage the sale of private health insurance for Medicare services (Flood and Archibald 2001), while the arrangements prevent or discourage doctors from working both sides of the public-private street (Flood and Haugen 2010). The end result is that doctors are expected to opt out of the UHC system entirely if they provide private services to patients who choose to pay privately.

Consistent with the three layers illustrated in Table 1, the first section of this paper will summarize the delivery of UHC services to low-income Canadians by a mix of public and private providers. The second section will examine one key dimension of social care—institutional (nursing home) long-term care, also a mixed sector in terms of public and private delivery but with the balance tilted more toward public finance but private delivery. This is followed by an analysis of the implications of the public-private mix in prescription drugs where private financing edges out public financing but where delivery involves a range of private actors from professionals (physicians and pharmacists) to pharmaceutical manufacturers and retailers. The final section deals with dental care, the most private area of Canadian health care in terms of both funding and delivery.

The Delivery of Canadian Medicare Services

The area of greatest state intervention involves those health services that are universally covered and free at the point of access for all Canadians. Known colloquially as Medicare (and not to be confused with similarly named programs in the USA and Australia), UHC was introduced in two major phases in the postwar decades. Originally implemented in the province of Saskatchewan in 1947, a single-payer system of universal hospital coverage was adopted in other provinces between 1958 and 1961 in response to an offer of federal cost-sharing and acceptance of national standards (Marchildon 2012; Taylor 1987).

A similar evolution occurred for universal coverage of medically necessary physician services. The government of Saskatchewan piloted the first single-payer program for coverage of medically necessary physician costs and then adopted in all other provinces between 1968 and 1971, again in response to an offer of federal cost-sharing and an acceptance of key national standards (Naylor 1986). These standards included the portability of provincial coverage and a strong version of universality that required coverage to be provided on uniform terms and conditions (Marchildon 2014). Although many policy makers assumed at the time that UHC would eventually be extended to health services beyond hospital and physicians, this did not occur. As a consequence, Canadian Medicare is generally defined as deep but narrow—a reference to the fact that there while there is no cost to the user at the point of service, this deep coverage accompanied by national standards (including portability of coverage among provinces) has remained restricted to medically necessary hospital (including in-hospital dental surgery), diagnostic and physician services.

As pointed out above, the national standards of Medicare were reinforced at the provincial government level by the passage of more detailed laws and regulations. There was some policy path dependency in that provincial governments implemented universal medical care coverage in the late 1960s and early 1970s in much the same way they had implemented universal hospital coverage a decade earlier.

At the delivery level, this meant that all Canadians, irrespective of income, were to receive the same coverage, the same quality of services on the same criteria of medical necessity rather than ability to pay. This was intended to be one-tier UHC in which all—including the very poor—would receive the same services based on need. Indeed, the main objective of Medicare as a national policy and provincial program was to ensure that all Canadians would have uniform access to medically necessary services and that no one be discriminated against on the basis of income or other factors (Romanow 2002). This one-tier system is protected by the five funding criteria of the Canada Health Act described in Table 3.

Table 3 Five Criteria of the Canada Health Act (1984)

Criteria	Each provincial single-payer Medicare plan must:
Public administration	Be administered and operated on a nonprofit basis by a public authority
Comprehensiveness	Cover all Medicare services provided by hospitals, physicians, or dentists (restricted to inpatient surgical dental services) and, where a provincial law permits, similar or additional services rendered by other health care providers
Universality	Ensure entitlement to all Medicare health services on uniform terms and conditions
Portability	Not impose a minimum period of residence (waiting period) in excess of 3 months for new residents; pay for its own residents visiting another province (or country in the case of nonurgent services) with reimbursement paid at the home rate of province; and cover the waiting period for those residents moving to another province until the new province assumes responsibility (within 3 months) for UHC
Accessibility	Not impede or preclude, either directly or indirectly, whether by charges made to insured persons or otherwise, reasonable access to Medicare services

Source: Adapted from Marchildon (2013, p. 28)

However, two major OECD studies of high-income countries, including Canada, which had similar objectives through UHC, exhibited evidence of income-related differences in the utilization of health services (Devaux 2016; van Doorslaer and Masseria 2004). Both studies found significant differences by income in the likelihood of visiting a primary care physician in a year after adjusting for need, and an even greater difference by income in the likelihood of visiting a specialist physician. However, low-income groups used hospital services significantly more than higher-income groups after adjusting for need (van Doorslaer and Masseria 2004). While the majority of OECD countries demonstrated significant income-related inequalities in physician services, inequity in the probability of visiting a GP and a specialist was among the highest in Canada (Devaux 2016). In other words, lower-income Canadians are significantly less likely to report to visit a GP or a specialist in the past year than higher-income Canadians in the same general level of health, and this difference by income is higher in Canada than in other comparable countries. In this literature, the term "pro-poor" is used to describe the greater use (or probability of use) of health care in the lower end of the income distribution, after controlling for need, whereas a finding of "pro-rich" inequality signals the reverse. Income is usually measured on a continuous scale, so the findings do not point to specific income levels, but rather to the extent that health care use is more concentrated in the lower end (pro-poor) or the upper end (pro-rich) of the income distribution of the population.

Studies within Canada help to shed some light on the reason for the income-related inequalities in physician services that are free at the point of use for all Canadians.

Allin's (2008) study of equity of access in all Canadian provinces found evidence of barriers for lower-income groups in accessing an initial visit to primary care physicians after adjusting for need, but with visits becoming pro-poor after the initial visit. Her hypothesis is that while the initial visit is patient-driven, subsequent visits are more physician-driven and this produces a result in which access is more equally distributed overall.

The pro-rich bias in the probability of the initial contact with a GP is in part related to the heavy reliance on private finance for prescription drugs, which are complementary to physician services (Allin and Hurley 2009). In other words, people with lower income are both less likely to hold private insurance for prescription drugs and less able to afford to pay out-of-pocket costs of medications; therefore, they may be deterred from visiting a physician because of the expected costs of drugs (Allin and Hurley 2009).

The pro-rich bias could also relate to the fact that many Canadians do not have a regular family doctor, though few studies have tested this explicitly. Survey data from 2014 indicate less than 10 % of the population in Ontario report not to have a family doctor, compared to 20 % of the populations in Alberta and Saskatchewan, and 25 % in Quebec (CIHI 2015a).

As for specialist visits, an earlier study examined how specialist care favored higher-income—correlated with better educated—Canadians (Dunlop et al. 2000). Both McGrail's (2008) British Columbia study and two pan-Canadian studies confirmed a pro-rich bias in the utilization of specialist services (Allin 2008; Asada and Kephart 2007). However, since Canadians can only obtain specialist services via a referral from a primary care physician, this barrier may be associated with the pro-rich bias in getting a first visit with the physician who can then refer to a specialist for the first time. In fact, Allin (2008) found that the pro-rich specialist inequity was rendered nonsignificant after the first specialist visit, except in two provinces—Prince Edward Island and Alberta.

Even after adjusting for need, lower-income groups utilize hospital services more than other income groups although Allin's pan-Canadian results by province show that this inequity is difficult to establish statistically based on admissions, the number of nights spent in hospital, or the probability of spending one night in hospital (Allin 2008). It is likely that more extensive use of hospitals does not translate to better care, and the higher concentration of hospital use in the lower end of the income distribution may signal a lack of effective primary care (Allin 2008). It is clear that more research is required before it is even possible to speculate on the reasons for any pro-poor inequity in the use of hospital care and in particular to distinguish from potentially avoidable hospitalizations from needed hospital services.

While the literature on inequity in utilization of physician services is quite large in Canada and, internationally, there has been growing interest in examining inequalities by income in other publicly funded services, such as preventive care, the recent OECD study on inequalities by income included measures of cervical and breast cancer screening, and found significant inequity by income in all OECD countries, with the magnitude of inequity in Canada falling in the middle of the pack (Devaux 2016). In Canada, a literature review on access to cancer care found that income had the most consistent effect on cancer screening rates, while age and geographical inequalities were evident in end-of-life care (Maddison et al. 2011). These patterns suggest that higher-income individuals are more likely to take advantage of the provinces' universal cancer screening programs.

Trends in Terms of the Public or Private Delivery of Medicare

There has been a long-term shift from private nonprofit and local government ownership to more provincial government ownership and management of hospitals. This has been done through the introduction of regional health authorities (RHAs) in most provinces. These arm's-length administrative bodies were created under provincial statute in the early to mid-1990s. RHAs were mandated to administer and organize the delivery of a broad continuum of health services within specified geographic regions. Recent years have seen a trend toward centralization as provincial governments reduced the number of RHAs, increasing the size of the populations served by each RHA. In three provinces, single health delivery organizations covering the entire provincial population have replaced the geographic-based RHAs.

However, whether decentralized or centralized, RHAs own and manage most of the hospitals located within their respective borders. A few religious-based hospitals continue to have independent ownership and management, but these organizations operate under contract with RHAs and are coordinated as part of a larger health system. Before the 1990s, almost all hospitals in Canada were owned and managed by private (mainly nonprofit) organizations. Ontario is the only province in which this structure continues. This ownership and management structure was not altered with the introduction of Local Health Integration Networks (LHINs), which were then made responsible for funding hospitals.

At the same time that hospitals have tended to become more public in Canada, there has been a shift to more private for-profit ownership of the facilities that conduct laboratory and diagnostic testing to the point that the vast majority are now owned and operated by private corporations. In addition, there has been a trend toward private day surgery facilities for simpler, nonurgent types of surgeries. These private facilities mainly provide services under the terms of Medicare.

Physicians provide referrals for laboratory tests, X-ray, advanced diagnostics, and day surgery procedures. Patients then obtain these services at a private clinic without a fee. The private facilities are reimbursed directly by provincial authorities (in most provinces, by RHAs) for the tests.

The few exceptions are a handful of private non-Medicare facilities or clinics concentrated mainly in Montreal, Calgary, and Vancouver. These private clinics serve mainly non-Medicare patients although there has been some controversy when Medicare patients have used these facilities to avoid public queues for elective (nonurgent) services and then have attempted to be reimbursed through the public system.

In 1993–1994, for example, there was a major clash between the federal government and the provincial government of Alberta over facility fees. Seven private eye surgery clinics, two private abortion clinics, and two magnetic resonance imaging (MRI) centers began charging patients facility fees in clear contravention of the Canada Health Act. Federal Minister of Health Diane Marleau warned the government of Alberta that the provincial government that Alberta would be deducted the amount of these facility fees from its share of the federal health transfer if the practice continued. Marleau stated the basis of her concerns to the media: "... I'm deeply concerned...with trends that are developing toward a two-tier health system. Private clinics appear to run contrary to the spirit of the *Canada Health Act*. They do create a two-tier system, more accessible to the rich than to the poor" (quoted in Bhatia and Coleman 2003, p. 733).

Marleau was supported in her view by the provincial governments supporting the policy intent of the Canada Health Act. The most vocal of these was Saskatchewan's social democratic premier, Roy Romanow who stated that the government members in Alberta were "…turning the clock as fast they can [on Canadian Medicare]. Their solutions are simplistic and they amount to one: punish the poor" (quoted in Bhatia and Coleman 2003, p. 733–4). The government of Alberta refused to change its position and was subjected to a deduction of $420,000 a month, a relatively small amount but one that gained public attention and opposition in the province. Two years later, the government backed down in the face of domestic opposition and negotiated with the private clinics to drop its user charges to patients (Bhatia and Coleman 2003).

In recent years, the debate concerning user charges by private clinics has become part of a larger legal debate concerning the Charter of Rights and Freedoms. In 2005, the Supreme Court of Canada decided that provincial governments would not be permitted to uphold legal prohibitions on private insurance for nonurgent Medicare services if waiting times were excessive (Flood 2007). Currently, there is a case before the courts in British Columbia where a private surgical clinic has argued that patients have a constitutional right of access to private surgical services because of what it considers excessive Medicare wait times for elective procedures.

While there have been important changes in the delivery of hospital, laboratory, diagnostic, and day surgery Medicare services, the one constant has been the private and independent position of physicians. As pointed out decades ago by R. David Naylor, universal medical care coverage was established as a public payment but private practice system in the 1960s, and it has remained the same ever since. Doctors have the status of independent contractors that the vast majority of physicians working in these public facilities remain private professionals. While RHAs (and LHINs in Ontario) are ostensibly responsible for ensuring the coordination and continuity of health care and therefore in charge of organizing services, provincial ministries of health remain responsible for paying the physicians who deliver those services, creating major challenges for the alignment of incentives (Grant and Hurley 2013; Romanow 2002).

Indeed, the simple fact that the remuneration physicians receive for diagnosing and treating patients in RHA or private hospital facilities comes from provincial ministries of health means that they remain highly independent of the organizations in which they conduct at least some of their work. While this private arrangement for hospital-based physicians is not unique to Canada, it is a rare arrangement. In the UK, for example, almost all hospital-based consultants (i.e., specialists) are salaried and work for the government-owned hospitals called NHS trusts (Boyle 2011).

While there have been no major comparative studies of the governance and payment of specialists in higher-income OECD countries, one recent study of six European countries found pronounced differences among the countries in terms of the percent of specialists exclusively self-employed, the percent exclusively salaried and the percent working as both contractors and employees. However, the spectrum ranged from 72 % exclusively self-employed (Belgium) to 82 % exclusively salaried (Denmark) as of 2010 (Kok et al. 2015). In England where most specialists became salaried employees of a national hospital system that was created with the introduction of the National Health Service (NHS) in 1948, only 4 % of specialists are exclusively self-employed. In The Netherlands, a country that has had a long tradition of medical self-employment, the figure is only 43 % (Kok et al. 2015).

Although there is no definitive study on this subject in Canada, the limited evidence indicates that the vast majority of specialists are exclusively self-employed, well above the 72 % mark in Belgium. This means that Canadian specialists are likely at the very extreme end of the spectrum in terms of managing their affairs as private businesses. The one parallel may be Australia where there is a long history of physician independence and the majority of specialists are also self-employed. However, it is important to note that independent specialists in Australia and most European countries contract with the hospital organizations with which they work thereby establishing some direct accountability that is missing in the

Canadian case (Grant and Hurley 2013; Healey et al. 2006; Schäfer et al. 2010).

Moreover, there is no sustained movement or trend in Canada for RHAs or independent hospitals to hire specialists either through contract or salary. Instead, the vast majority of specialists receive remuneration directly from provincial ministries through agreed-upon fee schedules or alternative payment contracts and have little direct accountability relationship with the hospitals or RHAs within which they provide inpatient and outpatient care.

The way in which federal and provincial governments have defined "medical care" has meant that primary care and specialist doctors have "secured a virtual monopoly over public sector payments for medical services and associated tests," a description of Medicare in Australia (Healey et al. 2006, p. 57), but one which applies equally well to Canada. Tuohy (1999) has described this arrangement as a duopoly between the provincial governments as the sole payers of Medicare and doctors as privileged provider of Medicare services. As a consequence, the vast majority Canadian doctors remain private practitioners to a greater proportion than most other OECD countries.

In the Canadian case, this duopoly has resulted in long-standing compromises between provincial policy-makers and organized medicine on the rules of the game. On the one hand (in most provinces), physicians have the right to opt out of Medicare. The historic quid pro quo is that opted out physicians must truly opt out and must rely exclusively on non-Medicare patients who are prepared to pay directly or those patients referred for treatment through a separate social insurance stream of provincial workers' compensation board (WCB) clients. At the same time, it is not the provincial government but the doctors themselves, through their own provincial self-regulatory organizations (the various provincial colleges of physicians and surgeons), who administer this arrangement by providing provincial Medicare billing numbers to those doctors working within the Medicare payment system and denying them to opted-out doctors.

Holding everything else constant, any judicial decision altering these long-standing arrangements by creating new forms of access to private services for those who have the ability to pay or access private insurance is likely to have two results in the short run. The first likely consequence would be to reduce access to Medicare services for those less able to pay or access private insurance (due to risk factors such as age or preexisting conditions) by providing an incentive to physicians to focus on privately funded patients, a phenomenon common in countries such as Australia with dual practice (Duckett 2005).

Institutional Long-Term Care

There is a very limited literature on the policy evolution of institutional long-term care (LTC) in Canada. In particular, although it appears that provincial governments began to subsidize LTC in the 1970s for those in need, there has been no systematic comparison of provincial policies in this area. The means test applied by most provincial governments is that the provincial government provides for the clinical needs of high-needs patients including 24-h nursing care and supervision. However, LTC residents above a certain wealth or income threshold must pay for their own accommodation and living expenses in provincially approved LTC facilities.

Due to data limitations, it is almost impossible to calculate in any precise way the public-private ratios for the financing of institutional LTC. Moreover, it has been complicated in recent years by the growth of private sector assisted living. With the growth in public waiting lists for approved (i.e., provincially subsidized) LTC facilities, the private sector has increasingly been providing high-needs care to residents able to pay the full cost of both accommodation and clinical care. Based on CIHI's calculation for "other institutions"—a category largely made up of facility-based long-term care (LTC) institutions—we know that the public-private ratio was roughly 70:30 based on CIHI's forecast for 2015 (CIHI 2015b). This means that provincial government programs and subsidies for LTC are substantial in all provinces.

Within the provincially regulated and subsidized LTC sector, there is a variation in ownership across the country, but there has been a significant growth in the private for-profit sector since 2000 (McGregor and Ronald 2011). The largest private-for-profit market of provincially approved facilities is in Ontario, where over half of LTC beds are in for-profit facilities, compared to 31 % in BC and only 8 % in Saskatchewan (in 2008) (McGregor and Ronald 2011). The implication of this shift in ownership over time for lower-income Canadians requires further investigation; although given the evidence suggesting poorer quality of care among for-profit compared to public or not-for-profit facilities, this trend has raised concerns about the overall quality of facility-based care in Canada (McGregor and Ronald 2011).

A recent analysis of long-term care policies in three Canadian provinces also documented increasing private sector involvement in long-term care in two of the provinces (Alberta and Ontario) in part in response to health care budget constraints (in particular in the 1990s) and to address shortages of long-term care facilities by partnering with the private sector (Palley 2013). These shortages persist and are evidenced by lengthy wait lists to enter facilities. For example, in Ontario, the median wait to enter a LTC facility among nonurgent community-dwelling individuals was 68 days in 2004/05 compared to 109 days in 2014/15 (Health Quality Ontario 2016). At the same time, the publicly subsidized home and community care services are limited; there is a heavily reliance on both informal caregivers and private sector providers that are paid out of pocket (Palley 2013; Williams et al. 2016). Therefore, lower-income Canadians face financial

barriers to home and community services beyond the limited publicly funded services for which they are deemed to be entitled. Moreover, they may also face high costs of institutional care in some provinces, like Alberta, where accommodation and nonmedical expenses are not regulated (Palley 2013). In Ontario, the limited supply of personal care within publicly funded facilities has led to an increasing reliance on private caregivers to fill the gap for only those able to pay (Daly et al. 2015).

To our knowledge, only one study to date has measured income-related inequalities in access to long-term care facilities in Canada (Um 2016). This study reviewed publicly available wait list information for each publicly funded long-term care facility in Toronto, Canada's largest city, and found wait times for basic accommodation (rooms with two to four beds) were about 3 months longer on average than those for private accommodation. The implication of this discrepancy is that people who can afford to pay the higher cost of private accommodation ($2535.23 vs. $1774.81 CAD monthly) face much shorter waits than those with lower income (Um 2016).

Prescription Drugs

One of the most criticized dimensions of Medicare is that, unlike most other high-income industrialized countries, UHC in Canada excludes pharmaceuticals unless provided as part of inpatient care within a hospital. Historically, this lack of public coverage posed a major financial barrier to access to needed outpatient prescription drug therapies. Private health insurance covering prescription drugs, dental care, and vision care has long been part of employment-based benefit packages in Canada, so a significant number of Canadians in corporate, unionized, and professional environments are covered. However, this created a gap in coverage for those in low-paid employment, temporary or seasonal work, retired persons, and the unemployed.

In the 1970s, provincial governments began addressing this gap by creating provincial drug plans that targeted the very poor—generally defined as those individuals receiving social assistance—and older adults above retirement age (defined as 65 and older) and therefore no longer receiving employment benefits. The current design of most provincial drug plans continues to reflect this original policy purpose. For its part, the federal government filled a similar gap for Indigenous people living on reserves and Inuit living in the far north through a program known as Non-Insured Health Benefits (NIHB). Among the poorest and most marginalized citizens of Canada, most NIHB beneficiaries were not part of the formal economy and therefore unable to benefit from drug (or dental) coverage under employment-based private health insurance plans.

Of the forecasted $29.2 billion spent on prescription drugs in Canada in 2015, governments in Canada were responsible for financing $12.6 billion (43 %) of prescription drug therapies through public drug coverage and drug subsidy plans. The remaining amount (57 %) is financed through private health insurance (35 %), most often through employment benefit plans, and 22 % out of pocket payment (CIHI 2015b).

However, in part, a consequence of these governments having limited regulatory control of prescription drug pricing and the power of pharmaceutical companies and interest groups in influencing the drugs included in provincial formularies in a fragmented policy environment, the current programs have grown rapidly in cost since at least the mid-1970s (CIHI 2015b; Morgan et al. 2013). To address this inefficiency as well as improve access, the evidence points away from the status quo of public and private insurance arrangements to a single-payer public system administered in ways that parallel Medicare in Canada. However, difficult changes in governance and administration are required to achieve lower cost and universal coverage, and despite the fiscal and equity arguments in favor of major reform, government initiative at federal or provincial levels has remained limited (Morgan et al. 2015a, b).

The impact of the exclusion of prescription drugs outside from UHC on low-income Canadians is apparent. Among Canadians who receive a prescription, 1 in 10 report cost-related nonadherence, the odds of which significantly increase for lower-income Canadians and those without prescription drug insurance (Law et al. 2012). In the 2008 Commonwealth Fund survey of people with chronic conditions, 22 % of Canadians with below-average income reported not to fill a prescription or to skip doses because of costs in the past 2 years, compared to less than 15 % of people with below average income in France (14 %), the UK (10 %), and the Netherlands (4 %) (Schoen et al. 2008).

The impact of not holding prescription coverage, which disproportionately affects lower-income Canadians, is not only to use less needed medications for chronic conditions (e.g., in a study from Ontario; Kratzer et al. 2015) but also to reduce the likelihood of seeking primary physician care when needed (Allin and Hurley 2009). Moreover, even among those with public coverage through a provincial prescription drug program, the user charges and deductibles that are in place have the effect of deterring use among people with lower income (as evidenced in Quebec for example, Tamblyn et al. 2001, and Ontario, Allin et al. 2013).

Dental Care

Canada has among the most private systems of dental care relative to the high-income welfare states listed in Table 2. Approximately 95 % of dental services are financed privately,

either through employment-based private health insurance or out-of-pocket payments. Private dental practitioners are responsible for the delivery of almost all dental services in Canada. Low-income Canadians have consistently faced considerable financial barriers to access to both preventive and curative dental care.

The policy response to this challenge has been twofold. The first and most pronounced response has been to extend coverage to those receiving provincial social assistance (welfare). However, in most provinces, it is up to private dental practitioners to decide whether to accept social assistance clients at reimbursement rates set by provincial governments. Such interventions did not, and still do not, include the working poor. The federal government in turn has provided coverage for eligible First Nation individuals and Inuit under the NIHB program discussed earlier. Originally, this was a response to a situation where most NIHB beneficiaries did not have access to employment-based private health insurance.

The second policy approach was to target school-aged children in prevention and treatment programs directly delivered by provincial governments through paraprofessionals. However, the dental profession and governments with more conservative and market ideologies have consistently opposed this bolder policy approach (Mathu-Muju et al. 2013). As a consequence, only two provincial governments have attempted to establish such programs. In the 1970s, the Saskatchewan government implemented a program covering the entire population while the Manitoba government established a smaller program targeting rural residents. Both programs were implemented by social democratic governments and were subsequently terminated by more conservative-leaning governments in the 1980s.

From its implementation in 1974 until its dismantlement in 1987, the Saskatchewan Dental Plan (SDP) provided a range of dental prevention and treatment services to hundreds of thousands of school children throughout the province of Saskatchewan in Canada. Dental therapists served a total provincial population of just slightly less than 1 million residents distributed in a vast geographical area (651,036 km^2) considerably larger than the state of California. At its peak, the SDP had 150 dental therapists providing preventive and curative dental therapy to 90 % of enrolled school children in Saskatchewan (Nash et al. 2008). Although a universal program, the SDP provided access to a generation of children from low-income families and changed the trajectory of oral health outcomes in the province.

In Canada, there have been smaller-scale initiatives in other provinces and the northern territories, but these programs have not been universal in nature and were generally based on a fee-for-service (FFS) private practice model (Wolfson 1997). These programs targeted subpopulations based upon income, location, or beneficiary status as "registered Indians" and eligible Inuit under the NIHB as discussed above. The only policy intervention similar to the SDP was in Manitoba where the provincial government established the school-based Manitoba Children's Dental Program, the range of which was limited to targeted rural areas. This program operated from 1976 to 1993 when it too was eliminated after years of opposition by organized dentistry in the province (Nash et al. 2008). Indeed, the Canadian Dental Association and provincial dental associations consistently opposed this public policy alternative to the private practice model in all provinces.

Given the exclusion of dental care from UHC, it is not surprising that there is consistent evidence of inequity by income in the use of dental services. The 2007 Commonwealth Fund international survey found 33 % of Canadians with below-average income who needed dental care did not see a dentist because of cost which was lower than in Australia, New Zealand, and the USA but significantly higher than in Germany, the Netherlands, and the UK (Schoen et al. 2007). A significant pro-rich bias in dental care is evident across the 18 OECD countries studied, and the magnitude of inequity was higher in Canada than all other countries except the USA (Devaux 2016). In Canada, inequity by income appears to be highest for preventive dental care (Grignon et al. 2010). Given private insurance for dental care is mostly held by higher-income Canadians (Bhatti et al. 2007), the variations in coverage across provinces in part explain the variations in the extent of income-related inequalities in dental care that is observed (Allin 2008).

Conclusion

To better understand the nature of the public-private modes of service delivery, the highly decentralized Canadian health system is subdivided into three layers based on the nature of government stewardship in the federation and the degree of state of intervention. First, there is Medicare, which embraces universally accessible hospital and physician services financed and regulated by federal and provincial orders of government. Second, there are the mixed services—prescription drugs and long-term care—subject to some state intervention through targeted coverage policies which address gaps not filled by the private sector. Finally, there are the private services (e.g., dental care), which are almost entirely financing and delivered privately. Each of these three layers was examined separately in order to minimize confusion and gain greater analytical clarity.

Although Medicare is the most public layer of the Canadian health system, universal health coverage nonetheless presents some equity conundrums. In spite of physician services being free at the point of use, income-related inequalities favoring the rich appear to be significant in Canada, and inequalities are actually larger in Canada than in other high-income countries with universal health coverage. In part, the

inequalities in access to a GP relate to prescription drug therapies (excluded from UHC) that often result from a physician visit. In addition, pro-rich specialist access could be due to inequitable referral patterns by GPs favoring higher-income and higher-educated individuals who are better able to advocate for themselves.

Illness prevention programs also present some challenges. For example, there is a strong pro-rich bias in cancer screening due to the tendency for higher-income individuals to take advantage of such policies and programs.

There is also a growing trend toward private sector involvement in Medicare in terms of the delivery laboratory, advanced diagnostic and ambulatory surgical services. When forced to comply with the standards set by the Canada Health Act as well as provincial rules and regulations protecting Medicare, these private services have not posed a major challenge to equity. However, when coupled with the ability to jump public queues and user fees, these private services can create a two tier system which ultimately delivers less timely and lower quality services to low-income Canadians.

When it comes to long-term care and prescription drugs, Canadians live in a two tier world. Supply constraints for publicly financed and delivered facility-based LTC mean that Canadians with significant income can bypass the public system by paying privately for private sector facilities which have increasingly moved into higher needs care. Moreover, there seems to be little planning or effort by provincial governments to address the growing shortages of publicly subsidized LTC facilities. In systems where the sector is heavily regulated (e.g., in Quebec and Ontario), the publicly funded system is accessible, but the supply remains very constrained. As a result, individuals who can afford to do so pay privately for additional needed services, or to opt out of the public system in order to bypass wait lists.

The case of prescription drugs is similar. Provincial drug plans are meant to fill in the gaps left by employment-based private health insurance, but the public plans impose financial barriers through user charges. This policy negatively affects access for the working poor and retirees. Fortunately, the poorest of the poor—individuals receiving social assistance—are generally exempt from such user fees. There has been a pronounced trend in all provinces to provide catastrophic drug coverage. However, these policies leave in place financial barriers to access that disproportionately affect poorer Canadians, which in turn lead to nonadherence and related adverse health outcomes.

Dental care is an almost exclusively private. As a consequence, inequalities in use of dental care services are larger in Canada than in all other high-income countries except the USA. Most dental insurance is employment-based and concentrated in higher salaried occupational groups. Since there is little government intervention to provide services and almost no subsidization of dental insurance (except for targeted groups such as eligible First Nation individuals and Inuit), the result is much poorer oral health results for poorer Canadians.

Even Medicare, the most public layer of Canadian health care based on stewardship, financing, and administration, has always had a large component of private delivery. However, the introduction of private delivery for medically necessary services operating outside the regulatory framework of Medicare—such as what has occurred with advanced diagnostics and ambulatory surgical services—could "stretch" the availability of scarce human resources and create inequities in terms of access. However, this still poses less of an issue than the longstanding inequities found in the mixed and private layers of health care in Canada. The lack of pharmaceutical coverage and dental care coverage, as well as the costs and availability of institutional (and noninstitutional) long-term care, present major equity and access issues for many lower-income Canadians. Such issues occur in areas where the presence of a fee-for-service clinical practice and the high degree of private sector "marketization" are significant factors with regard to the delivery of healthcare services.

References

Allin, S. (2008). Does equity in healthcare use vary across Canadian provinces? *Healthcare Policy, 3*(4), 83–99.

Allin, S., & Hurley, J. (2009). Inequity in publicly funded physician care: what is the role of private prescription drug insurance? *Health Economics, 18*(10), 1218–1232.

Allin, S., Law, M., & Laporte, A. (2013). How does complementary private prescription drug insurance coverage affect seniors' use of publicly funded medication? *Health Policy, 110*(2–3), 147–155.

Asada, Y., & Kephart, G. (2007). Equity in health services use and intensity of use in Canada. *BMC Health Services Research, 7*, 41.

Bhatia, V., & Coleman, W. D. (2003). Ideas and discourse: reform and resistance in the Canadian and German health systems. *Canadian Journal of Political Science, 36*(4), 715–739.

Bhatti, T., Rana, Z., & Grootendorst, P. (2007). Dental insurance, income and the use of dental care in Canada. *Journal of the Canadian Dental Association, 73*(1), 57a–57h.

Boyle, S. (2011). United Kingdom (England): Health system review. *Health Systems in Transition, 13*(1):1–486.

CIHI (2015a). *Your Health System*. Canadian Institute for Health Information. Retrieved from www.yourhealthsystem.cihi.ca

CIHI (2015b). *National Health Expenditure Trends, 1975 to 2015*. Ottawa: Canadian Institute for Health Information.

Daly, T., Armstrong, P., & Lowndes, R. (2015). Liminality in Ontario's long-term care facilities: private companions' care work in the space 'betwixt and between'. *Competition & Change, 19*(3), 246–264.

Deber, R. B. (2004). Delivering health care services: public, not-for-profit, or private? In G. P. Marchildon, T. McIntosh, & P.-G. Forest (Eds.), *The fiscal sustainability of health care in Canada: Romanow papers* (Vol. 1, pp. 233–296). Toronto: University of Toronto Press.

Devaux, M. (2016). Income-related inequalities and inequities in health care services utilisation in 18 selected OECD countries. *European Journal of Health Economics, 16*, 21–23.

Duckett, S. (2005). Living in the parallel universe in Australia: public medicare and private hospitals. *CMAJ, 173*, 745–747.

Dunlop, P. C., Coyte, P. C., & McIsaac, W. (2000). Socio-economic status and the utilization of physicians' services: results from the Canadian National Population Health Survey. *Social Science and Medicine, 51*(1), 123–133.

Flood, C. (2007) Chaoulli's legacy for the future of Canadian health care policy. In B. Campbell & G. Marchildon (Eds.), Medicare: Facts, myths, problems, promise (pp.156–191). Toronto: James Lorimer & Company.

Flood, C., & Archibald, T. (2001). The illegality of private health care in Canada. *CMAJ, 164*(4), 825–830.

Flood, C., & Haugen, A. (2010). Is Canada odd? A comparison of European and Canadian approaches to choices and regulation of the public/private divide in health care. *Health Economics, Policy and Law, 5*(3), 319–341.

Grant, H.M., & Hurley, J. (2013). *Unhealthy pressure: how physician pay demands put the squeeze on provincial health-care budgets*. Calgary: SPP Research Papers, University of Calgary School of Public Policy.

Grignon, M., Hurley, J., Wang, L., & Allin, S. (2010). Inequity in a market-based health system: evidence from Canada's dental sector. *Health Policy, 98*(1), 81–90.

Glied, S. (2008). *Health care financing, efficiency and equity*. NBER Working Paper No. 13881. Boston: National Bureau of Economic Research.

Healey, J., Sharman, E., & Lokuge, B. (2006). Australia: health system review. *Health Systems in Transition, 8*(5), 1–158.

Health Quality Ontario (2016). System performance: waiting for placement. Retrieved from http://www.hqontario.ca/System-Performance/Long-Term-Care-Sector-Performance/Quality-Indicators/Waiting-for-Placement

Kok, L., Boyle, S., Lammers, M., & Tempelman, C. (2015). Remuneration of medical specialists: drivers of the differences between six European countries. *Health Policy, 119*(9), 1188–1196.

Kratzer, J., Cheng, L., Allin, S., & Law, M. R. (2015). The impact of private insurance coverage on prescription drug use in Ontario, Canada. *Healthcare Policy, 10*(4), 62–74.

Law, M.R., Cheng, L,, Dhalla, I.A., Heard, D., Morgan, S. (2012). The effect of cost on adherence to prescription medications in Canada. *CMAJ, 184*(3), 297–302.

Maddison, A.R., Asada, Y., and Urquhart, R. (2011). Inequity in access to cancer care: a review of the Canadian literature. *Cancer Causes & Control, 22*(3) 359–366.

Marchildon, G. P. (2004). The public/private debate in the funding, administration and delivery of healthcare in Canada. *Healthcare Papers, 4*(4), 61–68.

Marchildon, G. P. (2012). Canadian Medicare: why history matters. In G. P. Marchildon (Ed.), *Making Medicare: new perspectives on the history of Medicare in Canada* (pp. 3–18). Toronto: University of Toronto Press.

Marchildon, G. P. (2013). *Health systems in transition: Canada* (2nd ed.). Toronto: University of Toronto Press.

Marchildon, G. P. (2014). The three dimensions of universal Medicare in Canada. *Canadian Public Administration, 57*(3), 363–382.

Mathu-Muju, K. R., Friedman, J. W., & Nash, D. A. (2013). Oral health care for children in countries using dental therapists in public, school-based programs, contrasted with that of the United States, using dentists in a private practice model. *American Journal of Public Health, 103*(9), e7–e13.

McGrail, K. (2008). Income-related inequities: cross-sectional analyses of the use of medicare services in British Columbia in 1992 and 2002. *Open Medicine, 2*(4), e91–e98.

McGregor, M. J., and Ronald, L. A. (2011). *Residential long-term care for Canadian seniors: nonprofit, for-profit or does it matter?* IRPP Study No. 14. Montreal: Institute for Research on Public Policy.

Morgan, S.G., Daw, J. & Law, M. (2013). *Rethinking Pharmacare in Canada.* C.D. Howe Institute Commentary 384, Toronto: C.D. Howe Institute.

Morgan, S.G., Law, M., Daw, J., Abraham, L. & Martin, D. (2015a). Estimated cost of universal public coverage of prescription drugs in Canada CMAJ online March 16, 2015, doi 10.1503/cmaj.141564

Morgan, S.G., Martin, D., Gagnon, M.-A., Mintzes, B. & Daw, J. (2015b). *The future of drug coverage in Canada*. Vancouver: Pharmaceutical Policy Research Collaborative, University of British Columbia.

Nash, D. A., Friedman, J. W., Kardos, T. B., Kardos, R. L., Schwarz, E., et al. (2008). Dental therapists: a global perspective. *International Dental Journal, 58*(2), 61–70.

Naylor, C. D. (1986). *Private practice, public payment: Canadian medicine and the politics of health insurance, 1911–1966*. Montreal: McGill-Queen's University Press.

OECD (2015). *OECD Health Statistics 2015*. Paris: Organisation for Economic Co-operation and Development. Online database retrieved from: http://stats.oecd.org

Palley, H. (2013). Long-term care service policies in three Canadian provinces: Alberta, Quebec and Ontario–examining the national and subnational contexts. *International Journal of Canadian Studies, 47*, 57–85.

Romanow, R.J. (2002). *Building on values: the future of health care in Canada*. Ottawa: Commission on the Future of Health Care in Canada.

Schäfer, W., Kroneman, M., Boerma, W., van den Berg, M., Westert, G., Devillé, W., et al. (2010). The Netherlands: health system review. *Health Systems in Transition, 12*(1), 1–229.

Schoen, C., Osborn, R., Doty, M. M., Bishop, M., Peugh, J., & Murukutla, N. (2007). Toward higher-performance health systems: adults' health care experiences in seven countries, 2007. *Health Affairs, 26*(6), w717–w734.

Schoen, C., Osborn, R., How, S. K. H., Doty, M. M., & Peugh, J. (2008). In chronic condition: experiences of patients with complex health care needs, in eight countries, 2008. *Health Affairs, 28*(1), w1–w16.

Tamblyn, R., Laprise, R., Hanley, J. A., Abrahamowicz, M., Scott, S., Mayo, N., et al. (2001). Adverse events associated with prescription drug cost-sharing among poor and elderly persons. *Journal of the American Medical Association, 285*(4), 421–429.

Taylor, M. G. (1987). *Health insurance and Canadian public policy: the seven decisions that created the Canadian health insurance system and their outcomes*. Montreal: McGill-Queen's University Press.

Tuohy, C. H. (1999). *Accidental logics: the dynamics of change in the health care arena in the United States, Britain and Canada*. New York: Oxford University Press.

Um, S. (2016). *The cost of waiting for care: delivering equitable long-term care for Toronto's diverse population*. Toronto: Wellesley Institute.

van Doorslaer, E., & Masseria, C. (2004). *Income-related inequality in the use of medical care in 21 OECD countries*. Paris: Organisation for Economic Co-operation and Development.

Williams, P., Lum, J., Morton-Chang, F., Kuluski, K., Peckham, A., Warrick, N. & Ying, A. (2016) *Integrating long-term care into a community-based continuum: shifting from "beds" to "places"*. IRPP study no. 59, Montreal: Institute for Research on Public Policy.

Wolfson, S. (1997). Use of paraprofessionals: the Saskatchewan dental plan. In E. D. Glor (Ed.), *Policy innovation in the Saskatchewan public service, 1971–82* (pp. 126–139). Toronto: Captus Press.