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Filling the Gaps: A Prescription for Universal Pharmacare

Gaps in prescription drug insurance coverage leave many Canadians at risk. In an already fiscally strained system, addressing coverage gaps presents a significant challenge. But, with careful expansion and revision of public programs, prescription drug insurance for all Canadians is within reach.

Rosalie Wyonch and William B.P. Robson

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THE STUDY IN BRIEF

Pharmacare is currently a much-debated issue in Canada. Drugs are an increasingly important treatment for many medical conditions. Though most Canadians have some form of pharmaceutical coverage, a substantial minority either have no coverage or incomplete coverage, leaving them exposed to substantial risk. However, healthcare costs are rising faster than GDP and governments must be cautious about further expansions. In addition, differences in existing provincial insurance programs and health systems present a significant barrier to creating a single national formulary. There are, however, ways to close the gaps in prescription drug coverage and protect households from excessive costs when in acute need through the expansion of public insurance.

This *Commentary* investigates current prescription drug insurance in Canadian provinces, evaluates options for achieving universal coverage and estimates their cost. These estimates suggest that providing prescription drug insurance coverage to the uninsured population would increase total provincial government spending across the country by about \$2.2 billion to \$5.4 billion in 2020, depending on the option chosen. The estimated cost of implementing catastrophic drug insurance ranges from about \$340 million to \$890 million, to cover drug costs above a threshold of 9 percent of income or 6 percent of income, respectively.

Extending prescription drug insurance to those currently not covered in an already fiscally strained system is a significant challenge. Policymakers should carefully consider the structure, costs and benefits of existing programs and reform them as they are expanded to the currently uninsured population. Further, premiums and copayments should remain a feature of any universal prescription drug insurance policies. One advantage of the public drug insurance model in Quebec – currently the only province with universal prescription drug insurance – is that it includes a funding mechanism: enrollees pay an annual premium. Adopting a prescription drug insurance model that includes a funding mechanism would reduce the potential for short-term strain on government budgets.

Significant progress towards improving access to prescription drugs and harmonizing coverage across provinces has already been made, and with careful expansion and revision of public programs, prescription drug insurance for all Canadians is within reach.

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Pharmacare is currently a much-debated issue in Canada. Drugs are an increasingly important treatment for many medical conditions.

Importantly, under Canada's medicare model, all costs of physician and hospital services are tax-financed and paid for through single-payer provincial plans that cover every resident. In contrast to the case of other countries with universal health insurance, however, Canada's medicare plans do not cover pharmaceuticals, which are paid for instead through a mixed system that includes government plans for specific population groups, private insurance, and patient out-of-pocket payments.

Though most Canadians have some form of pharmaceutical coverage, a substantial minority either have no coverage or incomplete coverage, leaving them exposed to substantial risk. In addition, the price tag on some existing and many new drugs is straining insurance plans and threatening uninsured people with financial catastrophe. Both the desire for better integration and the cost of prescription drugs are motivating calls for more government involvement in regulating and paying for drug treatments. Reforming the system in a way that makes coverage universal has been a long-standing objective, and creating a model that accomplishes this is a priority of the current government.

This *Commentary* investigates current prescription drug insurance in Canadian provinces, evaluates options for achieving universal coverage and estimates their cost. The provinces operate different tax-funded insurance plans that cover

different population groups, have different formularies (lists of covered drugs) and varying access restrictions. This presents a significant barrier to a single national formulary or drug plan. In addition, prescription drug insurance should be integrated and compatible with the public healthcare systems in each province. The current system does have gaps. The expansion of public plans to cover those who would otherwise be uninsured and to protect households from excessive costs when in acute need are sensible steps to address those gaps. At the same time, prescription drug expenditures have been increasing faster than other health expenditures that also outpace GDP growth. Extending comprehensive prescription drug insurance to those currently not covered in an already fiscally strained system is a significant challenge.

The federal and provincial governments currently fund about 40 percent of prescription drug expenditures and spend about \$400 per person. This leaves private expenditures of \$18 billion (as of 2016) spent by private drug insurers or directly out-of-pocket – an unrealistically large amount to suddenly shift onto governments. In addition, differences in existing provincial insurance programs and health systems present a significant barrier to creating a single national formulary. There are, however, ways to close the gaps in prescription drug coverage through the expansion of public insurance.

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The first step towards universal prescription drug insurance should be to expand insurance against catastrophic drug costs to the individuals either not insured or under-insured. The cost of implementing catastrophic drug insurance would be small if the catastrophic threshold is relatively high – ranging from about \$340 million to \$890 million, to cover drug costs above 9 percent of income or 6 percent of income, respectively.

Next, expanding general prescription drug insurance to all uninsured individuals should be done in the context of broader reforms to existing tax-funded insurance programs across the country. We provide two estimates of the cost of filling gaps in comprehensive coverage: the first scenario would expand targeted insurance programs available to seniors or low-income households to the uninsured population, and the second scenario would replicate Quebec's insurance scheme in the rest of Canada. These estimates suggest that providing prescription drug insurance coverage to the uninsured population would increase total provincial government spending across the country in 2020 by about \$5.4 billion in the first scenario and \$2.2 billion in the second.

Significant progress has already been made in expanding prescription drug insurance coverage, and with careful expansion and revision of public programs, prescription drug insurance for all Canadians is within reach.

BACKGROUND AND CONTEXT FOR 2019'S PHARMACARE DEBATE

As drugs have become more central in healthcare, integrating them better with other vehicles for treatment with varying methods of reimbursement has become a salient issue among policymakers, experts, and the public.

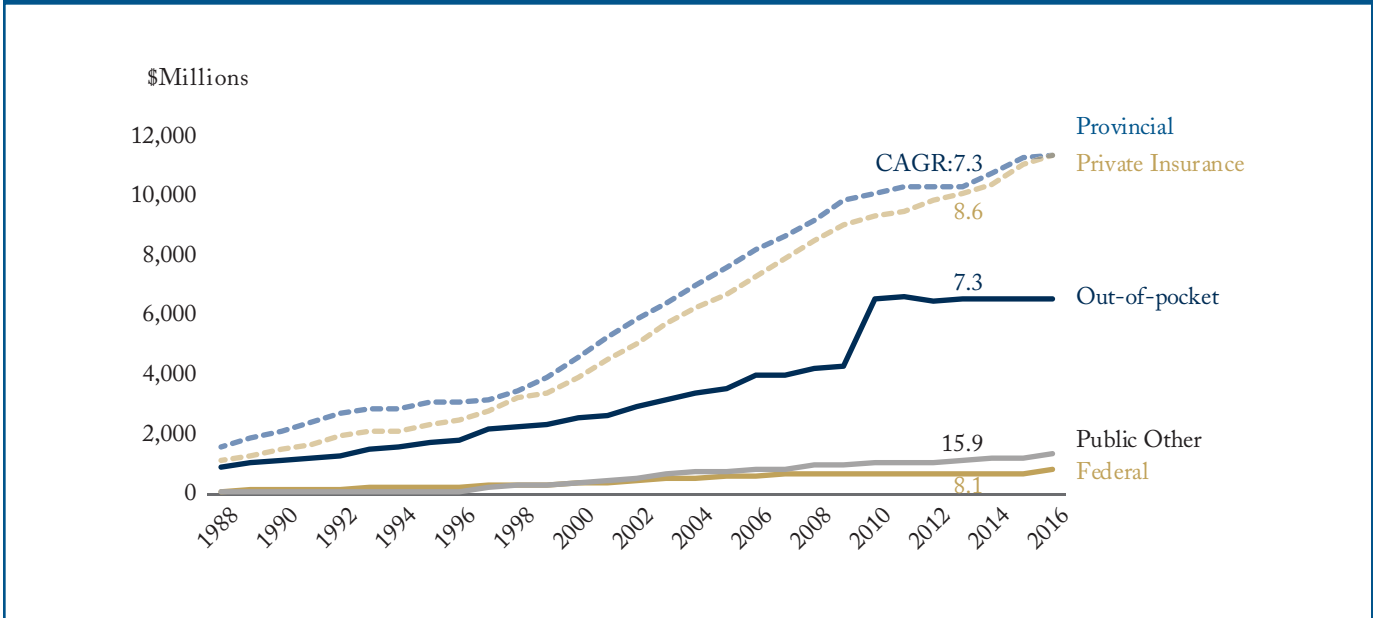
Rising Importance of Prescription Drugs

Over the last few decades prescription drugs have become more central to healthcare. Pharmaceutical innovations have changed what conditions are treatable and how they are treated. For example, direct-acting anti-virals for hepatitis C have changed this previously leading indication of the need for a liver transplant to a curable disease in more than 90 percent of patients. With the advances in pharmaceutical technology, people take more drugs, more frequently, than they did in the past. While increased pharmaceutical spending can represent good value for money in health systems, policymakers and governments face challenges in managing expenditures.

Spending trends give a sense of the increasing importance of drugs in treating many medical conditions, and of the financial pressure on the insurance plans and individuals that pay for them. Data from the Canadian Institute of Health Information (CIHI) show that spending on prescription drugs rose 8.4 percent annually from the mid-1980s to 2016, handily outpacing the 5.9 percent average annual increase in overall health spending over that period. That rapid growth raised the share of health spending accounted for by prescription drugs from about 6 percent – well down on the list of major expenditure categories – to more than 13 percent – behind only hospitals and physician compensation. In absolute terms, spending on prescription drugs has increased faster than GDP and total health expenditures, regardless of the source of funds. In 2016, public expenditures on prescription drugs were \$13.5 billion and private expenditures totaled \$17.9 billion (Figure 1).¹

1 As a result of pharmaceutical expenditures outpacing GDP growth, pharmaceutical expenditures have increased from 0.8 percent of GDP in 1985 to 1.9 percent of GDP in 2016 (OECD 2019).

Figure 1: Expenditures on Prescription Drugs, by Source of Funds



Note: CAGR is compound annual growth rate.
Source: CIHI NHEX 2018.

Rising Importance of Premium-Based Insurance Schemes

Over that same period, there have been changes in the sources of both public and private expenditures on prescription drugs (Figure 2). From 1988 to 2016, the share of prescription drug costs funded by private insurance premiums increased from 30 to 36 percent, while the share of costs funded through public insurance premiums increased from zero to about 4 percent as a result of Quebec’s public drug insurance program.² Canadians’ out-of-pocket expenditures declined from 24 percent in 1988 to a low of 17 percent in 2007 before rising to 21 percent in 2016. Meanwhile, the share of prescription drug expenditures mainly tax-financed by provinces declined from a high of 44 percent in 1991 to 36 percent in 2016.

Pharmacare Coverage in Canada

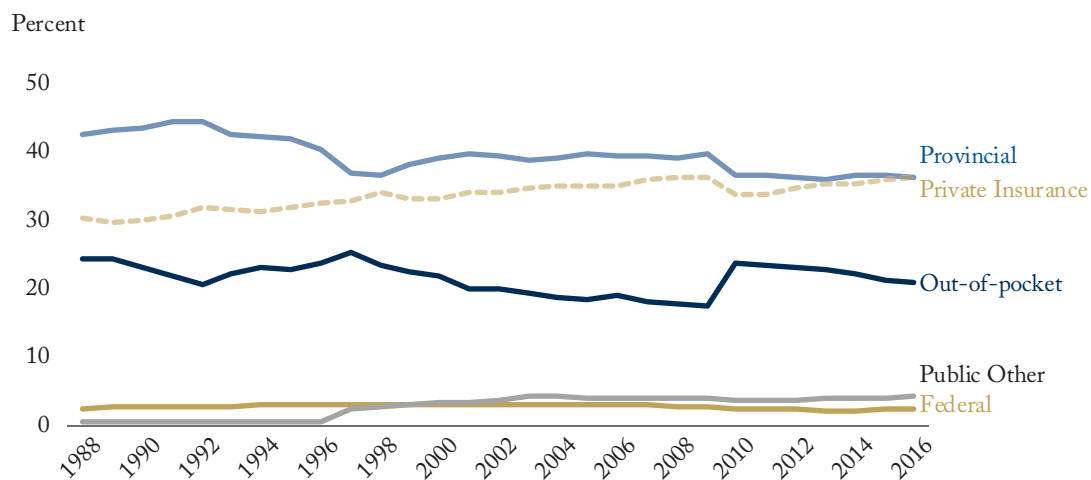
The increasing importance of drugs in healthcare spending is a reasonable proxy for their growing role in treating many conditions better than was previously possible. This success creates challenges, however, since all healthcare systems have roots in an earlier era when these treatments were less important.

In Canada’s case, most hospital and doctor services became part of the social insurance system we now call medicare in the 1960s – which in its current form involves provincially administered healthcare programs, typically financed out of the general revenues of provincial governments supplemented by annual grants from the federal government (see Box 1 for a history of federal support).

Although drug coverage also draws distinctions on the basis of treatment – covering some drugs

2 Quebec’s public drug insurance premiums are in the “Public Other” category of spending.

Figure 2: Share of Total Prescription Drug Spending, by Source of Funds



Source: CIHI NHEX 2018, authors' calculations.

but not others – its salient difference from hospital and doctor services is that prescription drugs have entered Canadian social-insurance systems as coverage extended to particular population groups distinguished by income, age, and other characteristics.

Social assistance recipients and seniors were the first groups to receive widespread coverage in the 1960s and 1970s. Coverage of families with children or young people has more recently become common, with Ontario's extension in 2018 to all residents under age 25 being a salient example.³ Several provinces extended coverage to people with specific diseases requiring high-cost drug treatments in the 1970s and 1980s. Geared-to-income drug coverage has become a common

feature of provincial tax-financed drug programs. British Columbia was a pioneer in extending coverage for catastrophic costs to its entire population.⁴ All provinces now offer drug coverage to anyone not covered by private insurance, although the forms and costs vary tremendously (Table 1) – in Quebec, coverage by either private or public insurance is mandatory. To round out the national picture, federally funded plans cover many Indigenous peoples, current and former members of the Canadian Forces, inmates of federal prisons and some refugees.

Most Canadians are eligible for some kind of public coverage of prescription drugs – about 84 percent, though only about 36 percent are enrolled (Sutherland and Dinh 2017, author's

3 The policy has since been revised to cover all residents under age 25 without private insurance coverage for their medications.

4 Initially, 70 percent of costs exceeding \$1,000 and 100 percent of costs exceeding \$4,333. Updated to an out-of-pocket expense limit of 1.3 percent to 3.2 percent of net family income (Hartmann et al. 2018).

calculation).⁵ However, eligibility and the scope of coverage available vary considerably by province: only about 28 percent of the population in Newfoundland and Labrador is eligible for public drug insurance, about 43 percent are eligible in New Brunswick and PEI, and about 65 percent of Ontario residents are eligible (Figure 3). British Columbia, Saskatchewan, Manitoba, Ontario, Nova Scotia, Newfoundland and Labrador have programs that cover the entire population against catastrophic medical expenses (Table 1). Quebec, Alberta and New Brunswick offer prescription drug coverage to those not insured or under-insured with private coverage. In addition, there are federal and provincial non-refundable tax credits for medical expenses exceeding 3 percent of net income.⁶

Coverage terms vary considerably between provinces. To use insurance against catastrophic costs as an example, an individual making \$55,000 annually would pay no more than \$2,150 out-of-pocket in British Columbia. In PEI, the same individual would have to spend \$4,400 before being eligible for coverage (Hartman et al. 2018). Consistent with social-insurance principles – and as used to be the case with doctor and hospital services – prescription drug coverage often involves deductibles and co-payments to mitigate the second problem that inhibits private health insurance: the moral hazard that insured people will behave in ways that increase the payouts.

The number of Canadians not covered by any drug plan is small – about 11 percent do not have coverage (Figure 3). But if prescription drugs had

Table 1: Catastrophic Drug Coverage – Upper Limit on Out-of-pocket Expenses

British Columbia	1.3% – 3.2% of net family income
Alberta	\$25 per prescription*
Saskatchewan	3.4% of total adjusted family income
Manitoba	2.97% – 6.73% of total adjusted family income
Ontario	4% of net family income, plus \$2 per prescription
Quebec	\$1087 annually**
New Brunswick	No limit***
Nova Scotia	Varying percentage of total adjusted family income
Prince Edward Island	3%, 5%, 8% or 12% of net family income
Newfoundland and Labrador	5%, 7.5% or 10% of net family income

*In addition to a per prescription cost, individuals and families enrolled also pay a premium, which may be subsidized depending on income.

**maximum contribution for 2018. In addition, enrollees pay a premium of \$0 to \$616 per year, depending on income.

***The New Brunswick Drug Plan enrollees pay a premium based on income and a co-payment on each prescription. Copayments are limited, but there is no specified upper limit on out-of-pocket expenditures.

Source: Phillips (2016).

- 5 People that are eligible for a provincial drug insurance program may choose not to enroll. Individuals may opt for alternative private coverage, premiums and copayments may be high relative to uninsured medical expenses, or individuals may not know they are eligible for public insurance and do not enroll as a result.
- 6 One important distinction between insurance against catastrophic drug costs and tax credits for medical expenses is when individuals receive benefits. While the medical expense tax credit lessens an individual's tax burden, it does not provide payment assistance when a prescription is filled. In contrast, most insurance will either cover a portion of the cost at the time the prescription is filled or rebate a portion of the cost shortly after. Both insurance and tax credits provide financial assistance to cover non-discretionary medical expenses, but tax credits do not provide immediate relief.

Box 1: History of Federal Support for Provincial Healthcare

Federal government transfers to provincial governments generally, and transfers related to provincial healthcare in particular, have also shaped current discussions of pharmacare in Canada. The major expansions of social insurance into doctor and hospital services occurred during a period when federal support for national social programs had strong political appeal, and a robust economy was boosting federal revenues, making relatively open-ended support of provincial programs seem affordable (Robson and Laurin 2015). Originally, the federal government underwrote half of aggregate provincial spending on doctor and hospital services, exposing Ottawa in a big way to fiscal pressures resulting from provincial decisions.

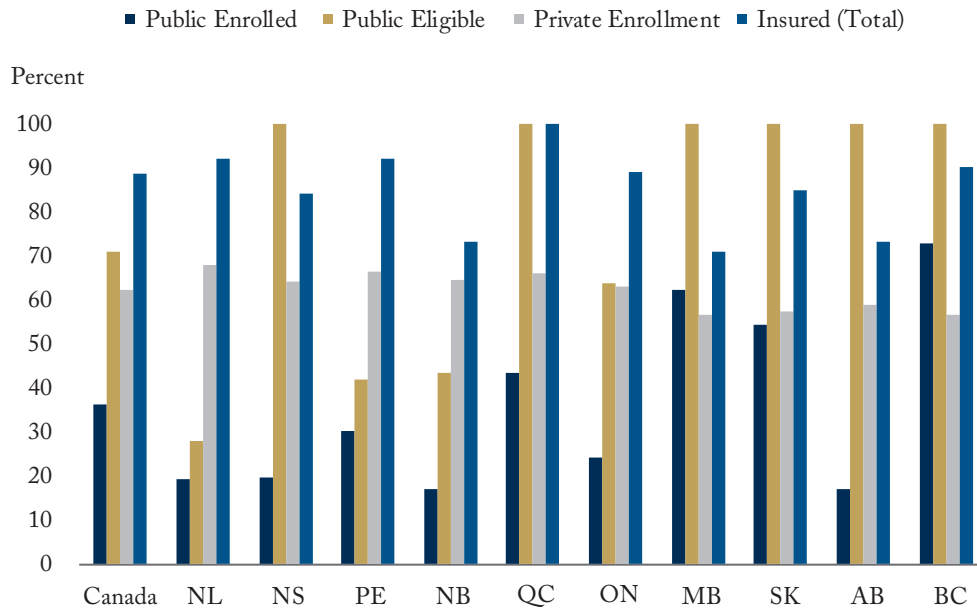
Several times during the 1960s and 1970s, the federal government offered to withdraw from certain cost-shared programs and transfer tax room to the provinces instead. Only Quebec took Ottawa up: since 1965, Quebec taxpayers have received a special “tax abatement” instead of the cash transfers Ottawa would otherwise have made. Slower growth in the economy and federal revenue after the early 1970s created fiscal pressures in Ottawa that prompted changes to federal grants, including those in support of healthcare. New Established Program Financing (EPF) arrangements replaced the 50 percent cost-sharing arrangements. Under the EPF, the federal government transferred tax room to all the provinces and made up the difference with an unconditional cash transfer calculated on a per-capita basis. The 1984 *Canada Health Act* responded to potential loss of federal leverage over provincial healthcare in this new era of unconditional grants by establishing financial penalties for provinces that violated its conditions.

Ottawa’s fiscal problems intensified during the 1980s – and by the mid-1990s, set the stage for a major retrenchment. Transfers to the provinces were a major target, with EPF spending and previous subsidies to provincial welfare programs rolled up into a single Canada Health and Social Transfer (CHST) that was smaller than its predecessors. By the early 2000s, the share of spending of provincial, territorial and local governments financed by federal transfers had fallen significantly, as had the share of federal revenues transferred to other levels of government.

This reduction in support caused widespread unhappiness, and once Ottawa had its debt under control in the early 2000s, intergovernmental transfers rose rapidly again. The federal government split the CHST into a Canada Social Transfer (CST), geared to grow with the economy, and a Canada Health Transfer (CHT), geared to grow at 6 percent annually until 2016/17 fiscal year, and at the rate of GDP growth or 3 percent annually, whichever is greater, after that.

The combination of Ottawa’s historic role in subsidizing provincial health programs, and current federal enthusiasm for deficit spending contrasting with provincial restraint, makes it natural for pharmacare advocates to call for a significant federal role. This history also contains some warnings, however: past eras of robust federal support for provincial spending and program initiatives gave way to periods of retrenchment and provincial budget squeezes. Those, too, are relevant for deciding among various pharmacare financing options now under discussion.

Figure 3: Insurance Coverage in Canada



Sources: Sutherland and Dinh (2017); authors' calculations.

been as central to healthcare in the 1960s as they are now, they would almost certainly have been part of the original medicare initiatives that covered hospital and doctor services.⁷

All Insurance Provides Coverage, But Some Covers More than Others

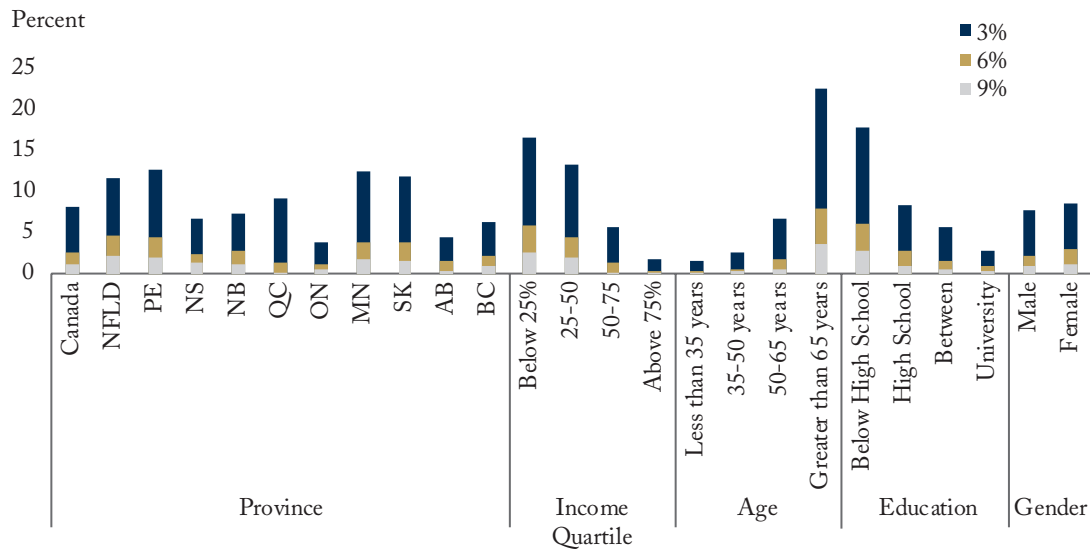
Prescription drug insurance coverage varies across the country in terms of the population groups that are insured and by whom. The patchwork of public and private plans results in consumers paying

different amounts to access the same medication (for reasons other than ability to pay) as well as some people not having access to medications they could obtain if they lived in a different province. Despite high levels of eligibility for public insurance and the use of private health insurance by a majority of Canadians, gaps in coverage remain. About 1.1 percent of households spend more than 9 percent of their income on medication and 8.2 percent spend more than 3 percent of income on medication (Figure 4).⁸ In particular, low-income households and people over the age of 65

7 The Hall Commission report recommended including drugs.

8 It is important to distinguish between out-of-pocket drug expenses that can be viewed as acceptable and those that may contribute to non-adherence to prescriptions or adverse health outcomes. For example, the National Pharmaceuticals Strategy Progress Report (2006) proposed two options for ‘catastrophic’ drug spending thresholds: a flat rate of 4.3 percent, or a variable scale depending on income (0 percent for households with income <\$20,000, up to 9 percent for households with income >\$90,000).

Figure 4: Share of Households Exceeding “Catastrophic” Spending Thresholds for Prescription Drugs



Source: Caldbick et al. (2015), data source is Survey of Household Spending 2009, Statistics Canada.

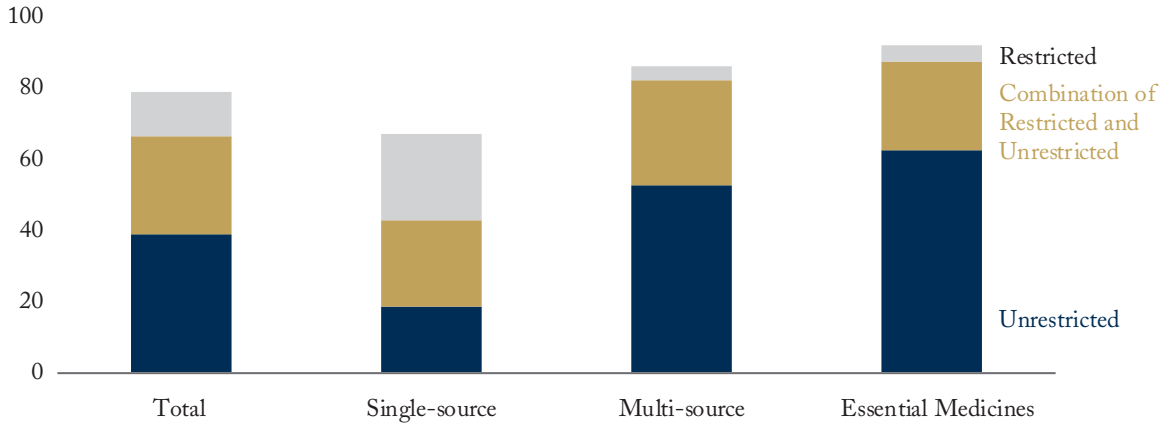
are more likely to spend significant portions of their household budgets on medication (Caldick 2015). These gaps are puzzling because tax-funded insurance plans cover seniors and social assistance recipients. There are a few possible explanations:

- Households that experience catastrophic drug costs may be eligible for tax-funded insurance, but may not be enrolled.
- Households may have insurance, but it does not cover the medications they need, or requires high out-of-pocket expenses before being covered.
- A vulnerable population of ‘working poor’ are likely to be experiencing a disproportionate financial burden because they are not eligible for public assistance programs but also do not have access to private insurance provided by their employer.

Another key issue in current discussions about pharmacare concerns the formulary – the list of drugs that are covered. Social insurance plans and private insurers must decide what treatments to cover. Although some non-prescription, over-the-counter products are eligible for tax funding, the principal focus – and the largest expenditures – are on prescription drugs.

Although each province maintains its own formulary of covered drugs, similar decision processes and intergovernmental communication have resulted in mostly similar coverage. Provincial plans offer coverage for between 2,000 and 8,000 drugs (including all chemical entities by strength and format), with the majority offering around 4,000. In comparison, employer sponsored plans typically cover 10,000 to 12,000 drugs (CLHIA

Figure 5: Public Drug Plan Formularies: Listing Alignment and Access Restrictions



Source: PMPRB 2018, authors' calculation.

2018).⁹ In general, private drug insurance formularies vary in coverage depending on the premiums charged. A recent study comparing formularies for Canada's public drug plans found an average listing rate of 79 percent and 91 percent when weighted by national sales (PMPRB 2017).¹⁰ None of the plans contained all 125 essential medicines for primary care, but all provincial plans listed 90 percent or more. Similarly, 86 percent of medicines available from more than one source are listed in public formularies (Figure 5). There is less alignment between public drug plans on listing decisions for single-source (patented) medicines.

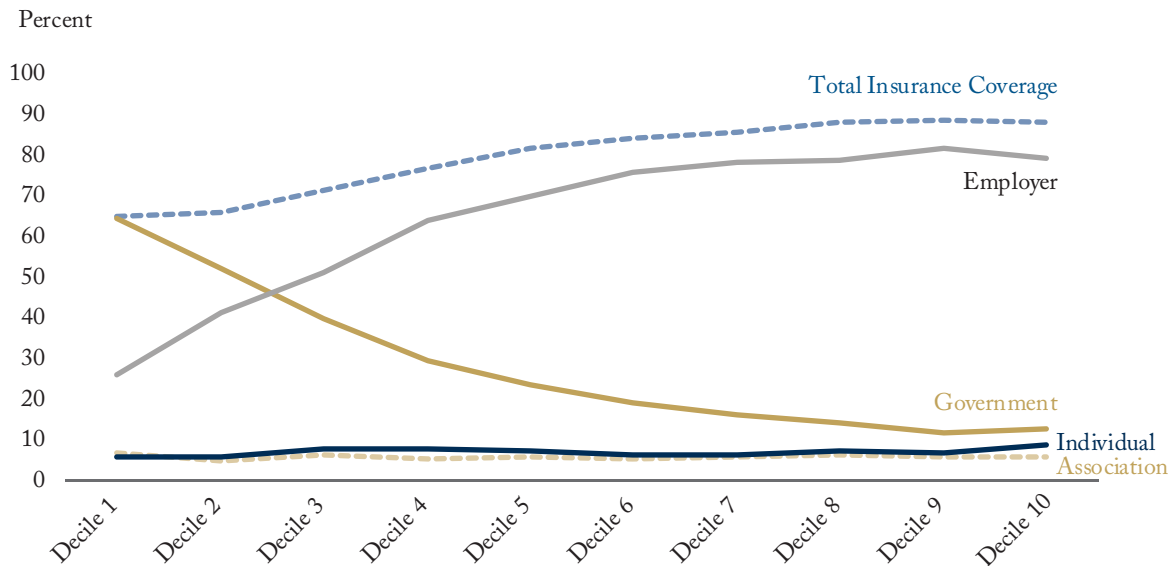
An average of only 67 percent of single-source medicines were included in formularies and there is significant variability across the country – 80 percent in Quebec, and only 51 percent in PEI.

The general alignment of public drug plan formularies shows the progress that has already been made in harmonizing coverage and access across the country. An earlier analysis of newly available medicines (generic and patented) found 20 to 80 percent included by provincial formularies but only 20 percent alignment across all provinces (Aslam et al. 2001). There are, however, remaining discrepancies in the current public drug plans in

9 The difference in the number of drugs covered is largely due to private plans covering more formats and strengths of the same molecule. A particular molecule may be offered in different strengths and formats (oral tablet or capsule, injectable, inhalable). Public drug insurance plans tend to limit the number of formats and strengths covered, relative to private insurance plans.

10 It is worth noting that this analysis includes a selection of 729 drugs, not all prescription drugs approved for sale in Canada. The selection does not include: age-related macular degeneration drugs, cancer drugs, HIV drugs, Epoetins, drugs for rare diseases and some others. Treatments in these therapeutic categories account for a significant share of public spending on drugs.

Figure 6: Insurance Coverage by Income



Source: Canadian Community Health Survey, 2015/16, authors' calculations.

Canada that will need to be overcome if the goal of a harmonized national formulary is going to be met.

Even when a particular medicine is listed across all formularies, the ability to access it may vary. Almost half of medicines covered by public formularies in Canada are available without restrictions, a further 16 percent are restricted across the country (Figure 5). For the remaining 35 percent of drugs, whether access is restricted or not varies by province. Some restrictions on the uses of prescription medicines are needed – those that restrict use to particular circumstances that align with clinical guidelines, for example. Differing restrictions across provinces are unlikely to be of medical value. In addition to the challenge of

harmonizing provincial formularies, there is also the challenge of harmonizing restrictions to ensure more standardized practice and access across the country.

Who's Covered by Whom? Pharmacare Coverage in Canada

The majority of prescription drug coverage in Canada is provided by private insurers, which cover 62 percent to 68 percent of the population.¹¹ Public drug insurance covers 26 percent to 36 percent of the population, though about 84 percent of the population may be eligible. A large portion of the population that is eligible to enroll in a public plan may not, simply because they have alternative

11 Coverage rates vary depending on the data source used for each figure. For a comparison of the coverage rates reported by or calculated with different data sources, see the Appendix.

private coverage. About 12.7 million Canadians that are eligible for coverage under a public insurance plan have some form of private insurance. In total, about 80 to 90 percent of Canadians are enrolled in public or private drug insurance.

Tax-funded prescription drug insurance has an important role in Canada's social policy. It is evident in coverage rates by household income and employment status. Tax-funded drug insurance provides coverage to 65 percent of households in the first 10 percent of the income distribution (Figure 6). Conversely, about 80 percent of households in the highest 30 percent of the income distribution have employer-provided health insurance and 88 percent have coverage.

Working Canadians are covered at a rate of 82 percent, while those that are looking for work are covered at a rate of only 54 percent (Statistics Canada 2015/16, author's calculation). Both employer- and government-sponsored plans account for large shares of coverage for unemployed Canadians. The majority of the retired population – 60 percent – have public prescription drug insurance and about a third have employer-provided coverage. In total, about 81 percent of retired Canadians have at least some coverage.¹² Looking at the aggregate coverage rates does not, however, provide a full picture of prescription drug coverage in Canada. Public and private plans have different copayments, deductibles and may cover different medicines, meaning that some people may still have difficulty accessing required medication even with insurance coverage.

THE NEW CANADIAN DRUG AGENCY

The 2019 federal budget outlined the next steps towards implementing national pharmacare

and allocated money to two specific pharmacare initiatives: (i) creating a national strategy for high-cost drugs for rare diseases, and (ii) establishing a Canadian Drug Agency with a mandate that includes assessing the effectiveness of new prescription drugs and negotiating prices on behalf of Canada's drug plans. The former allocated \$500 million annually starting in 2022/23 and may help provinces and territories create a coordinated response to a very controversial and intractable problem. The latter may indirectly create the conditions for reaching an agreement between the federal and provincial/territorial governments to finally implement some form of universal pharmacare.

The federal budget echoes some of the foundational elements recommended by the Advisory Council on the Implementation of National Pharmacare for a new system. Among the recommendations: create a national drug agency; develop a comprehensive, evidence-based national formulary; and invest in drug data and information technology systems. These are all quite sensible, if a little lacking in detail.

The proposed Canadian Drug Agency would conduct health technology assessments, negotiate prices and listing terms, monitor the real-world effectiveness of prescription drugs and develop and manage a national formulary. Some of these elements already occur, but in separate agencies: the Canadian Agency for Drugs and Technologies in Health (CADTH) conducts cost-effectiveness analysis and the pan-Canadian Pharmaceutical Alliance (pCPA) already conducts price negotiations for all the public drug insurance plans in Canada. The Patented Medicines Pricing Review Board regulates the maximum price of patented pharmaceuticals in Canada.

12 Some individuals may be enrolled in more than one insurance program. As a result, the percentage of people covered by insurance may be less than the sum of the percentage covered by public and private insurance, considered individually.

Consolidating these activities under one agency would be an effective way to reduce duplication of work and allow for parallel evaluations and negotiations, which should reduce the time between Health Canada's approval of a new medicine and its availability to Canadians. Indeed, proposed changes to PMPRB regulations suggest an increasing role for evaluating cost-effectiveness in the regulation of prices. Currently, maximum prices are determined by comparing prices to those of drugs in the same therapeutic class and the prices of the same drug in other countries – internal and external reference pricing.

What remains unclear from the budget and the Advisory Council's interim recommendations is what, exactly, is meant by “a comprehensive, evidence-based national formulary.” The interim report suggests that the national formulary would “serve as a baseline for harmonizing coverage across Canada.” Whether the formulary will be a list of essential medicines, truly “comprehensive” and all-inclusive, or something in between remains unclear. It is also unclear whether provincial health insurance plans would be required to list all drugs in the formulary.

Currently, the pCPA negotiations for new brand-name drugs are non-binding and provinces can choose whether or not to list individual drugs on their formularies. If the formulary were binding on provincial plans, it would harmonize access across the country, but would severely limit provincial abilities to manage pharmaceutical budgets with listing decisions. It would, however, increase the negotiating power of the pCPA or the new national drug agency, since the potential market size for a drug would be more certain during negotiations. For generics, the prices negotiated by pCPA are transparent and available to all Canadian payers whether they are public or private plans, or individuals paying for their prescriptions out of

pocket. Therefore, in the case of generic prescription medicines, pCPA is, in effect, already a national price negotiator with all of the negotiating power of a single national purchaser.

The lack of clarity in the scope of a national formulary and associated listing requirements for public insurance also leaves the future role for private insurance companies uncertain. If public plans become first payers, with a comprehensive formulary and binding listing agreements, then there may be only a minor role for private drug insurance. If, however, the formulary covers only essential medicines and provinces retain autonomy in listing decisions, the role of private insurance would remain largely unchanged. In countries with universal drug insurance, private insurance coverage ranges from none to all citizens (Blomqvist and Wyonch 2019). Language in the federal budget hints that the new Canadian Drug Agency will negotiate prices for patented medicines on behalf of all insurance plans, not just public ones.

It is also unclear what role the federal government intends to take in the administration and funding of a new national agency and drug formulary. Those who support the establishment of a single-payer government pharmacare plan have argued that as the only buyer in Canada of the drugs it would cover, a single-payer plan would be able to negotiate prices that would be considerably lower than they are now. But if the new Canadian Drug Agency is given authority to negotiate prices on behalf of all Canadian buyers, public or private, its bargaining power would be as strong as that of a single-payer plan, meaning that it could create similar savings in nation-wide drug costs. That is, the new agency could substantially lower the national drug budget even if the federal and provincial/territorial governments are not able to agree on a single-payer government plan.

The Canadian Drug Agency’s mandate would also include “identifying which drugs could form the basis of a future national formulary.” An evidence-based common formulary that sets out what drugs are recommended for different patients, and takes into account their likely effectiveness and cost, would be a useful tool even if there is no single national pharmacare plan.

CHOOSING A PHARMACARE TEMPLATE: OPTIONS

In thinking about how to extend social insurance coverage to more Canadians and more of the expenditures they incur for drug treatments, it helps to think about two poles – classic social insurance versus *Canada-Health-Act*-style medicare – in the context of ensuring universal coverage in a system with both private and public insurance.

Classic Social Insurance against Catastrophe

The original social-insurance motivation for government involvement in healthcare centers on protecting people from catastrophic health events. Some low-income people need universal access to healthcare in general, but most need insurance against the cost of normal, predictable annual consultations or over-the-counter drugs less than they need it against major health events with serious financial consequences – which, absent some pooling mechanism to mitigate adverse selection, is hard for private insurers to provide. This conception of the goals of pharmacare points toward covering the entire population with a plan that would reimburse drug costs above thresholds that could be dollar amounts, percentages of income, or a mixture.

Many provinces already have such programs and, as such, a new national program might involve some federal inducement for those provinces to maintain and improve them, and for provinces that do not have them to create them, while specifying

some kind of standard to qualify for federal support (Blomqvist and Busby 2015). The discussion paper for the Hoskins Advisory Council (Canada 2018) canvasses this option.

Alternatively, or as a backstop, the federal government could provide catastrophic coverage through its own tax-transfer system. The federal government already treats many health-related incomes differently for tax purposes, recognizing that payments such as workers’ compensation benefits and veterans’ disability awards are related to nondiscretionary health costs. It exempts employer-paid health premiums from personal income tax. And it provides a medical expense credit for expenses above 3 percent of net income or a dollar threshold. The federal government could build on – and preferably also expand – its existing tax-transfer provisions to reimburse households for medical expenses exceeding a dollar and/or share-of-income threshold.

Universal *CHA*-Style Coverage

For advocates more motivated by the redistributive power of current medicare, extending drug coverage on the same basis as hospital and doctor services – delivered free at the point of consumption without limit – is a more compelling model. Tax-financed drug plans would displace private plans and cover all Canadians.

The most expansive suggestions for tax financing of prescription drugs in Canada have envisioned a pharmacare program run by the federal government. Ottawa would have exclusive responsibility for deciding what drugs to cover, and on what terms, as well as for paying the cost (Morgan et al. 2013, Gagnon 2010). The fiscal implications of governments becoming the sole insurers would be daunting: 57 percent of prescription drug costs – almost \$18 billion in 2016 – are currently paid by private sources.

Proposals involving federal support for expanded provincial drug coverage are more practicable. Such an expansion could involve tax-financed drug coverage as described above – akin to the provisions for hospital and doctors services under the *Canada Health Act*. The House of Commons Standing Committee has recommended something along those lines, and it is an option canvassed – albeit with a modest deductible per prescription – in the discussion paper for the Hoskins Advisory Council (Canada 2018).

Filling Current Gaps in Drug Coverage

A third category of proposals focuses on expanding insurance, whether public or private, to people who are currently not covered, or not covered enough. Focusing on people not covered would require the provinces that do not backstop private plans with public ones to do so, and ensure that all provinces mandated their citizens to enroll in one or the other type of plan. Measures to expand private health coverage are also possible – such as mandating it for all employers over a certain size. As Hartmann et al. (2018) comment, Ottawa does not have clear constitutional authority to mandate coverage in this way: a national program would presumably provide funding to provinces that met certain standards related to enrollment, dollar amounts and formulary.

CHOOSING A PHARMACARE TEMPLATE: KEY ISSUES

Canada's current discussions about pharmacare are often based on questionable assumptions. In this section, we look at three assumptions in particular: (i) that the federal government has some kind of advantage over the provinces in financing and delivering pharmacare, (ii) that pharmacare is a critical route to lower drug prices, and (iii) that first-payer, first-dollar *CHA*-style coverage

is optimal. These assumptions may be biasing Canadians toward pharmacare options that, if realized, they could later regret.

The Fallacy of a Federal Advantage in Delivering Pharmacare

Prominent voices have advocated for a federal pharmacare program – a tax-funded system similar to what the provinces have for hospital and doctor services, but with Ottawa deciding what drugs to cover and paying for them (Morgan et al. 2013, Gagnon 2010). A fundamental problem with that idea is that it does not improve integration of healthcare and would likely have long-term consequences for the sustainability and efficiency of Canada's healthcare system as a whole. As Blomqvist and Busby (2015) point out, for example, the federal government cannot directly influence doctors' prescribing behavior – and thus cannot manage for cost-effective combinations of drugs and other inputs. The same is true with respect to hospitals and other institutions under provincial jurisdiction. In addition, provinces would have less incentive for cost-effective choices between drugs and other inputs to healthcare (Blomqvist and Busby 2015).

A related challenge is that a federal social insurance program for all prescription drugs would impose one system coast-to-coast in place of a variety of currently existing systems. Despite the frequent use of terms such as “patchwork” to disparage interprovincial variations, provincial populations do differ in their needs and preferences: Canada is a federation, not a unitary state. While Quebec's motives for opting out of federal programs are complicated and extend beyond considerations relevant to pharmacare, it has signaled its unwillingness to be part of a national program (Hartmann et al. 2018, p. 41). Perhaps the reason

is that Quebec is currently the only province with universal insurance coverage and protection from catastrophic drug costs.¹³ Current interprovincial variations are facts to deal with, rather than inconveniences to dismiss or try to override. Especially given the innovations in drugs and drug treatments, and their possible implications for changes in hospital and doctor services, the virtues of federalism in permitting different approaches and innovation at different paces seem particularly important in this area.

A similar caveat applies to proposals that would leave the provinces on the front line when it comes to service delivery, but give Ottawa major powers – enforceable through conditional transfers – to determine what drugs or people are covered and on what terms. The discussion paper for the Hoskins Advisory Council (Canada 2018) canvasses different levels of coverage of a potential national formulary based on expert designation of essential medicines or most frequently prescribed medicines, and provinces could presumably choose what to cover directly or through mandated private insurance, beyond that list. Even so, that initially less comprehensive role for the federal government would create multiple frictions across the country, and hamper innovations and efforts to integrate drug and other services in new ways.

Whatever the coverage and conditions of a program in which Ottawa plays a major role, moreover, its differences with existing provincial programs would create frictions, including over financial arrangements. Perceived fairness or unfairness across provinces would be a critical determinant of the acceptability of any particular proposal. If imposing one template across the country resulted in dramatically different per capita transfers or other changes from one province to another, people will object.

Drug Prices and Insurance Coverage are Different Issues

Another frequently heard argument in favour of a national approach is that a strong federal role could lower total expenditures on drugs in Canada (see in particular Morgan et al. 2015, PBO 2017). The savings would occur through two channels. First, the national plan would displace all other drug insurance, and in particular employment-related insurance. Second, the national formulary would create purchasing power that would make the drugs it covered – which would be the only drugs Canadians would buy – cheaper.

As previously mentioned, however, if the new Canadian Drug Agency proposed in the 2019 budget were to negotiate drug prices on behalf of all drug plans – public and private – it would have the same buying power as a national federal plan and could therefore negotiate similar prices. Moreover, the likelihood that participants in employment-related drug plans – many of whom are in the public sector – would trade their current coverage for a narrow government plan with no compensation, is vanishingly small (Robson 2018).

The federal government already has important powers to affect drug prices. The Patented Medicine Prices Review Board regulates maximum prices of the drugs it covers. Proposed changes to PMPRB regulations indicate increased use of value-based price regulation. The fact that it has not already mandated lower prices reflects concerns about adverse consequences, notably the possibility that the use of external reference pricing by other countries would result in pharmaceutical companies strategically delaying the launch of new medications in Canada to maximize total global profits (Blomqvist and Wyonch 2019). Ottawa also already collaborates with the provinces and territories

13 Other provinces may have universal availability/eligibility of prescription drug insurance, but only Quebec mandates enrollment in either a public or private plan.

through the pan-Canadian Pharmaceutical Alliance to leverage their joint purchasing power. As noted above, the pCPA already negotiates prices for generic medications on behalf of all payers in Canada, effectively leveraging the negotiating power of a single buyer.

Fundamentally, the functions that will be under the mandate of the Canadian Drug Agency – negotiating pricing on behalf of Canadian drug plans, monitoring the effectiveness of drugs and conducting technology assessments – will likely be sufficient to decrease prices to levels similar to a single national pharmacare plan.

Deductibles and Co-payments: A Core Feature of True Insurance

A third assumption that should be confronted stems from the interpretation of one of the principles outlined in the Interim Report of the Advisory Council on the Implementation of National Pharmacare – that national pharmacare should “Ensure that all Canadian residents have access to prescription drugs based on medical need, without financial or other barriers to access” (Hoskins 2019, p.5). Despite a common interpretation of the *Canada Health Act* that deductibles and copayments infringe on the principle of universality, charges to discourage over-use are a standard feature of all insurance programs – including social-insurance programs, and healthcare programs in other developed countries. Deductibles and copayments were part of public insurance for hospital and doctor services at their inception, and the recommendations for drug coverage in the Hall Commission report included a per-prescription deductible. In addition, analysis of the potential

costs of a national federal pharmacare program by the Parliamentary Budget Office assumed a \$5 copayment for all biologic and patented medicine prescriptions (PBO 2017).

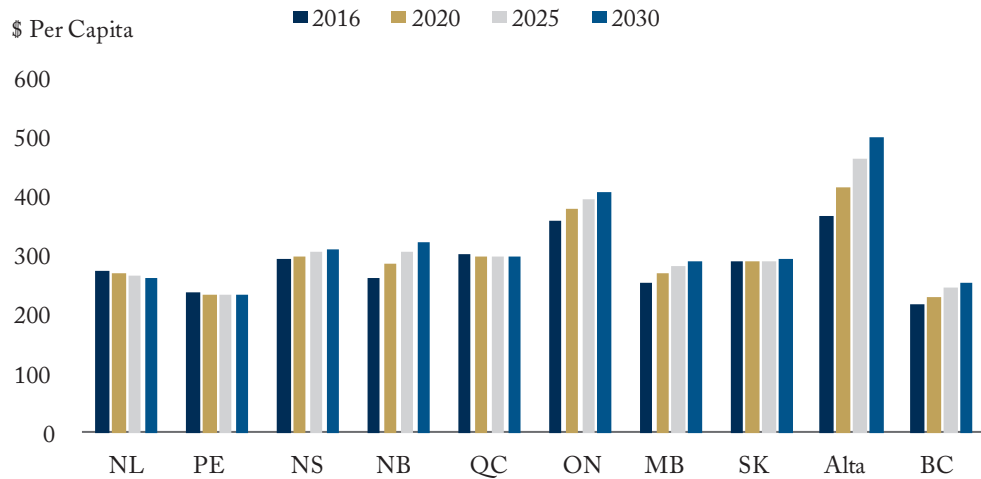
Deductibles are common in current provincial drug programs. They may be lower or eliminated for low-income people, and catastrophic coverage will cap their impact on people with very high costs. But they are not objectionable in principle, and experiments to eliminate them, as Saskatchewan did in the 1970s, did not last.¹⁴ Adjusting per-prescription charges is a logical way for provinces to respond to evidence of over-use and to fiscal pressures that might otherwise cause them to limit coverage in other ways, and in particular through rationing.¹⁵ To resort to a familiar analogy, making healthcare free at the point of consumption and rationing acute care as a result is like auto “insurance” that covers routine maintenance but not collision damage – not what people need.

A cogent case exists for deductibles for many hospital and most doctor services and they feature in the design of pharmaceutical insurance in many developed nations with universal coverage (Blomqvist and Wyonch 2019). Optimally, deductibles should be designed to put an income-dependent ceiling on out-of-pocket expenses depending on the individual’s state of health. More generally, out-of-pocket payments should be linked in a straightforward way to demand elasticity (Drèze and Schokkaert 2013). Evidence suggests that consumers respond to deductibles by reducing both potentially valuable and potentially wasteful health services and that almost all savings were due to this reduction, not price shopping or substituting other services (Brot-Goldberg et al. 2017). This signals that there may be a role for

14 In 1987, the Saskatchewan drug plan was changed from fixed copayment coverage to a basic deductible and percentage copayment. The deductible was \$125 for families and \$50 or \$75 for seniors and the percentage copayment was 20 percent (Saskatchewan 2017).

15 In other jurisdictions with universal prescription drug insurance coverage, differential co-payments are used to encourage the prescribing of lower-cost generic equivalents to patented pharmaceuticals as a method of containing costs.

Figure 7: Provincial Expenditures on Prescription Drugs, Baseline Scenario



Source: CIHI NHEX 2018 Series G, authors' calculations.

some insurance below the deductible if it prevents a patient's health condition from worsening to a state that would require more expensive treatments or hospitalization. Copayments could also be used to discourage low-value care by increasing patients' cost share for low-value treatments and lowering copayments for alternative high-value treatments (Volpp et al. 2012). These payments are not a bug in social insurance programs; they are a key feature.

Summary: Catastrophic and Gap-Filling Approach

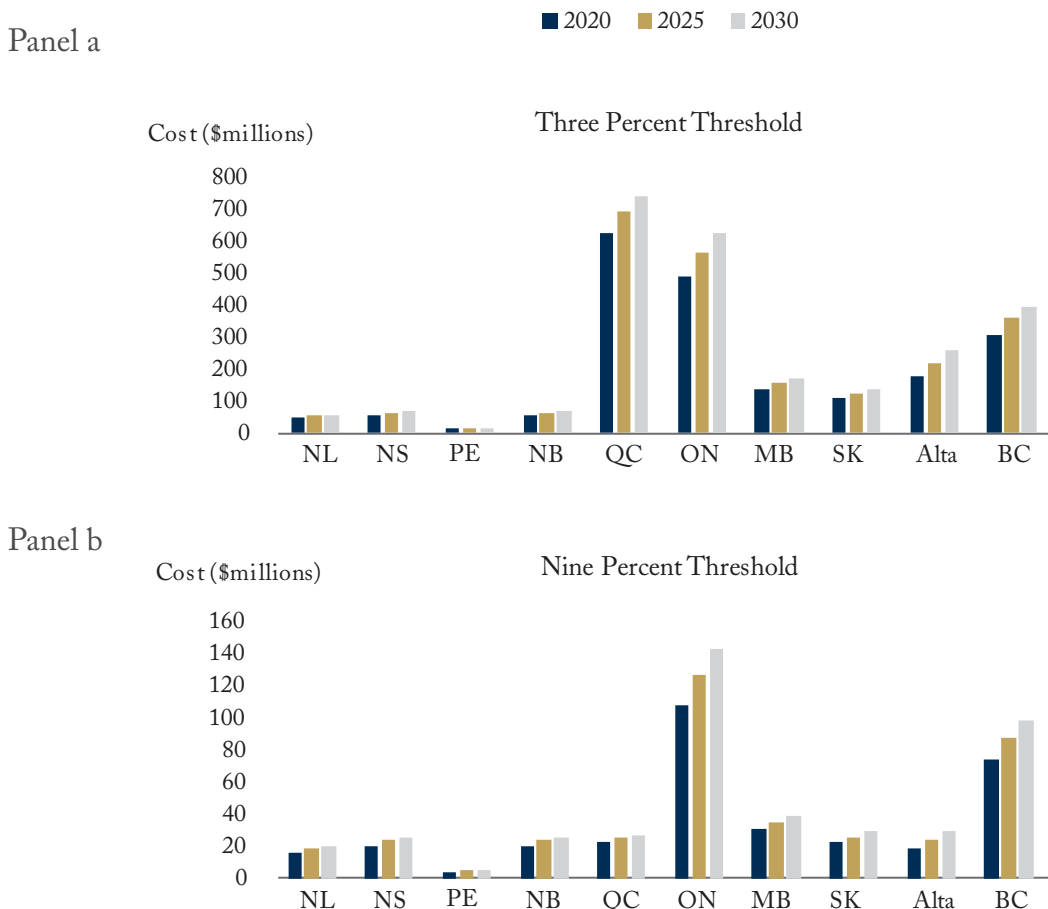
For these reasons, the focus in the next section of this paper will be, not on a federal program designed to displace all other drug insurance with first-dollar coverage, but on the costs of covering catastrophic household expenses, and limited – and therefore more fiscally sustainable – federal support for provincial efforts to fill in gaps in their own drug programs.

FEASIBLE OPTIONS AND COSTS

Different options for an initial approach to universal pharmacare have different fiscal implications for provinces. To compare the options for filling gaps in current coverage and providing a safety net for catastrophic health costs, provinces need to be aware of the potential cost of each option. Accordingly, in this section we estimate the cost of providing protection from catastrophic drug costs at different income thresholds and provide two estimates of the cost of expanding general prescription drug insurance to currently uninsured people.

Baseline (status quo) prescription drug expenditures for each province and territory are calculated by projecting per capita provincial government expenditures on prescription drugs (CIHI NHEX 2018, series G) using a three-year compound average growth rate (Figure 7). Per capita expenditures are aggregated to total spending using population estimates from the

Figure 8: Provincial and Territorial Government Spending and Catastrophic Drug Insurance



Source: Statistics Canada, Caldbick et al. (2015), Robson Busby and Jacobs (2018), authors' calculations. For detailed results see the Appendix.

C.D. Howe Institute demographic projection model (Robson, Busby and Jacobs 2018). The baseline projections show provincial spending on prescription drugs will increase from about \$12.6 billion in 2019 to about \$15.3 billion in 2025 and will exceed \$17 billion by 2030.

Catastrophic Coverage

To estimate the cost of providing insurance against ‘catastrophic’ prescription drug costs we use

results from Caldbick et al. (2015) that estimate the percentage of households that face expenses greater than 3 percent, 6 percent and 9 percent of household income by province and age group (Figure 4). Individual income is projected using a three-year compound annual growth rate and the percentage of people with income is assumed to remain constant at 2016 levels (Statistics Canada). Using projected population estimates and individual income, we calculate an aggregate and median income for Canadian households by age group.

To approximate the fiscal cost of providing coverage against excessive prescription drug spending, we estimate the percentage of households in each age group and province that would pass the thresholds for catastrophic spending and assume that provincial governments would cover the entirety of the expense above the threshold. Obviously, the threshold of spending that is used to determine ‘catastrophic’ has significant implications for the cost of the coverage. At 3 percent of household spending, the increase in provincial expenditures on prescription drugs would be about \$2 billion in 2020, an increase of about 15 percent above current spending levels (Figure 8, panel a). If, however, the threshold were set at 9 percent of household budgets, then the increase in spending would only be about 2.5 percent more than current spending levels – about \$340 million in 2020 (Figure 8, panel b).

Filling the Gaps in Comprehensive Coverage

One option for achieving universal prescription drug insurance coverage would be to create new public programs, similar to those currently available to seniors, children and low-income households, so that everyone in the province without private insurance is enrolled – as is currently the case in Quebec. To estimate the cost of such an expansion, we use estimates from the Conference Board of Canada (Sutherland and Dinh 2017) for the number of people that are without any insurance, who may be eligible but are not enrolled, and the proportion of the population enrolled in public insurance (Figure 3). Assuming that per enrollee expenditure would be the same for the

new enrollees, we estimate the additional cost of providing insurance to the population that would otherwise be uninsured under either a public or private plan.¹⁶ Across provinces, expanding existing programs to cover the uninsured population would increase prescription drug expenditures by about 40 percent or about \$5.4 billion in 2020, though there is significant variation between provinces (Figure 9).¹⁷

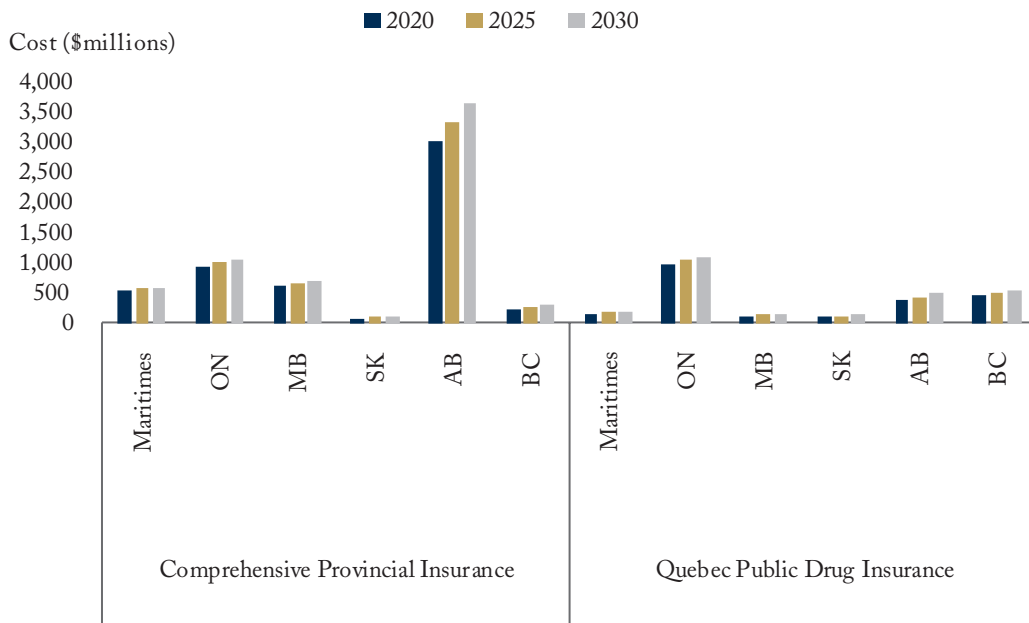
The expense of expanding existing tax-financed prescription drug insurance to cover people who do not currently have any insurance depends on the scope of current coverage. Provinces with larger populations of uninsured people would need to increase expenditures more than others to close gaps in existing insurance coverage. Similarly, if a province has an expansive formulary, extending coverage to the uninsured population is relatively more expensive on a per beneficiary basis than in provinces with less inclusive coverage. Quebec, which has universal insurance, would face no cost. Alberta and Ontario would face the highest absolute increase in prescription drug expenditures, \$3 billion and \$900 million in 2020, respectively.

Another option for filling the current gaps in prescription drug insurance would be for provinces to institute a pharmacare program similar to the universal insurance model in Quebec – where enrollment in either public or private prescription drug insurance has been mandatory since 1997. Quebec’s Public Prescription Drug Insurance Plan includes a monthly deductible of \$19.90 per month and a copayment of 34.9 percent (\$0 deductible and no copayment for low-income seniors and children). In addition, people covered by public insurance in Quebec pay an annual premium as

16 This should be interpreted as expanding insurance coverage at a level equal to average spending per person enrolled in a public drug insurance program in each province. Calculations consider the age of enrollees to ensure that a high proportion of senior enrollees does not upwardly bias estimates of the cost of providing prescription drug insurance for younger uninsured individuals.

17 This estimate does not consider the cost implications of a reduction in private insurance coverage in response to expanded public prescription drug insurance.

Figure 9: Filling in the Gaps In Prescription Drug Insurance



Source: Statistics Canada, CIHI NHEX, Sutherland and Dinh 2017, Robson Busby and Jacobs (2018), authors’ calculations. For detailed results, see the Appendix.

part of their annual income tax filing. In 2018, the maximum premium was \$641.50. Protection against catastrophic costs is provided by an upper ceiling on monthly copayments of \$90.58 per month or \$1,087 per year. About 40 to 45 percent of Quebec residents are covered under the public plan with the remaining 55 percent receiving insurance through their employer.

To estimate the cost of filling gaps in current insurance coverage with such a mandatory public drug insurance program, we project the amount in insurance premiums collected per enrollee in Quebec and apply it to the population not currently covered by employer-provided insurance in other

provinces.¹⁸ Premiums collected to fund the public drug insurance program cover about 30 percent of total public prescription drug expenditures in Quebec. This alternative provides another estimate of the potential costs of filling gaps in prescription drug insurance in Canada.

The estimated cost of implementing comprehensive prescription drug insurance similar to that available to select population groups in each province is higher than Quebec’s experience. Across provinces, implementing Quebec’s mandatory prescription drug insurance plan would cost about \$2.2 billion combined in 2020, 60 percent less than the estimate of extending comprehensive coverage to

18 To account for the fact that many seniors in Canada have existing comprehensive prescription drug insurance provided by either a past employer or through a public program, estimates use the percentage of seniors without any insurance, not just those without employer-sponsored coverage.

all uninsured individuals. One of the reasons for this difference is that existing provincial programs predominantly cover seniors and children. The per capita cost of providing coverage to these age groups is higher than for working-aged Canadians. This will result in estimates for extending existing comprehensive coverage programs to uninsured individuals that are likely slightly higher than they would be in reality.

Since Quebec's Public Prescription Drug Insurance Plan collects premiums from working-age and high-income enrollees to cover the costs of the plan, premiums are a proxy for the lower costs of providing coverage to those individuals and the savings that result from pooling risk across the entire population.¹⁹ From this perspective, the estimated cost of implementing Quebec's public drug insurance program in all provinces should be considered as an estimate of the minimum increase in expenditures that would be required to achieve universal prescription drug insurance coverage. The underlying cause of different per capita expenditures between provinces is difficult to determine due to differing formularies, drug prices and public insurance programs.

One important conclusion can be drawn from these estimates: universal prescription drug insurance is attainable without large increases in government spending. When Quebec implemented mandatory insurance coverage, expenditures on prescription drugs increased by about \$20 per person from 1996 to 1997. The premiums collected amounted to \$23.25 per person, resulting in a reduction in direct provincial spending on prescription drugs of about \$5 per person. Insurance premiums paid through income taxes are, effectively,

revenue earmarked for prescription drug spending, and shouldn't be considered public savings per se. But, Quebec has achieved universal prescription drug insurance while maintaining public spending that is comparable to other provinces.

POLICY IMPLICATIONS: THE WAY FORWARD

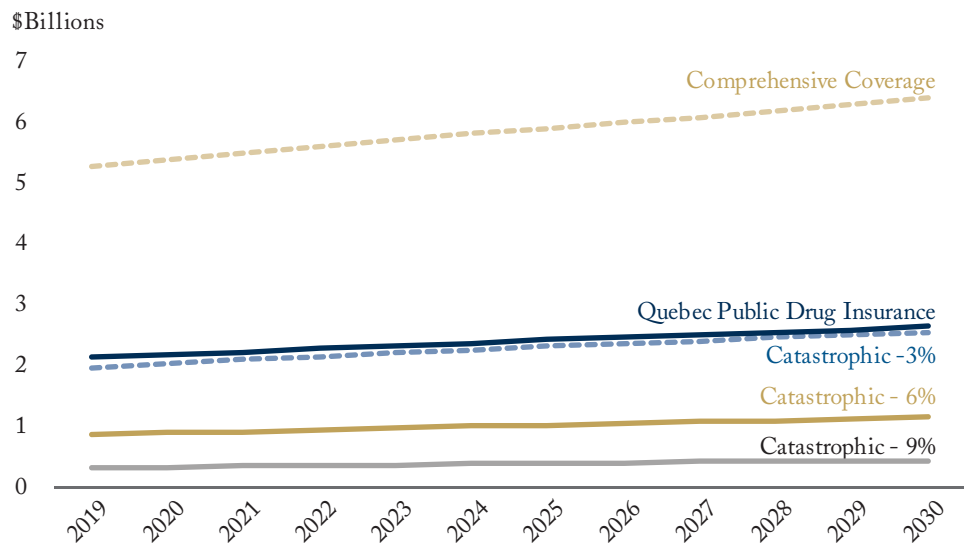
The provinces operate different tax-funded insurance plans that have different formularies and differing access restrictions. This presents a significant barrier to a single national formulary or drug plan. The current system does have gaps. The expansion of public plans to cover those who would otherwise be uninsured and to protect households from excessive costs when in acute need are sensible steps to address those gaps.

The scenarios for expanding catastrophic drug insurance coverage to households with expenses above a certain threshold are sensible, but the affordability of such a plan depends on the income thresholds that determine 'catastrophic.' In addition, since provinces have differing health and insurance systems, the fiscal implications vary by province. Extending insurance against prescription drug expenses that exceed 9 percent of income would increase total provincial government expenditures on prescription drugs by about \$340 million in 2020 (Figure 10). Extending tax-funded insurance coverage to the uninsured population would be considerably more expensive – about \$5.4 billion in 2020 or 40 percent above the baseline scenario.

Healthcare costs are rising faster than GDP and governments must be cautious about further expansions. The gaps in Canada's current

19 Individual insurance against health-related costs is notoriously hard for private-sector insurers to provide, because individuals often know more about the likelihood of their making a claim than the insurer can know, and because insurers are not easily able to monitor and influence behaviour that affects a person's likelihood of making a claim. Employment-related health insurance is common because it creates pools that reduce the adverse selection problem. Compulsory pooling over the entire population in a social insurance program essentially eliminates that problem – as has occurred in most doctor and hospital services in Canada, and in Quebec with pharmaceuticals and public plan enrollees.

Figure 10: Cost of Implementing Universal Prescription Drug Insurance - Projection Scenarios



Sources: Statistics Canada, CIHI NHEX (2018), Sutherland and Dinh (2017), Caldbick et al. (2015), Robson Busby and Jacobs (2018), authors' calculations. For detailed results, see the online Appendix.

pharmacare system should, however, be addressed. The first step is to expand insurance against catastrophic drug costs. The 2019 Federal Budget allocated \$500 million annually, starting in 2022/23, to making high-cost drugs for rare diseases more accessible. That funding is sufficient to cover all catastrophic drug costs above 9 percent of family income. The threshold at which people should be shielded from further drug costs could be a sliding scale, based on income, or an annual maximum. For example, for households making less than \$20,000 the threshold could be set low – 3 percent – and for high income households (>\$85,000) the rate could be set at 9 percent or higher, with progressive increases in the threshold along the income distribution. This would be similar to a maximum annual cap on prescription drug expenses of about \$600 and \$7,500, respectively.

Expanding current public insurance programs to cover those that are currently uninsured must be done with care. We analyze two possible options for

expanding pharmaceutical coverage that result in different estimates of potential costs.

Option 1, Automatic enrollment: If comprehensive coverage available to seniors, children and low-income households were simply expanded so that all uninsured individuals were automatically enrolled in a comprehensive public plan, it would increase expenditures by up to \$5.4 billion in 2020, and the cost of such a program could reach about \$6.4 billion annually by 2030 (Figure 11).

Option 2, the Quebec model: If, however, provinces were to implement a new public insurance scheme similar to that in Quebec, the cost implications are much less dire – about \$2.2 billion in 2020. Though there are many differences underlying the two estimates, one key feature of Quebec's insurance model is that people enrolled in public insurance finance the costs of their coverage by paying an annual premium.

Policymakers should carefully consider the structure, costs and benefits of existing programs

and reform them as they are expanded to the currently uninsured population. Further, premiums and copayments should remain a feature of any universal prescription drug insurance policies.

Expansion of prescription drug insurance to the uninsured population increases the consumer base of public insurance plans. This in turn, enhances the negotiating power of the pCPA or Canadian Drug Agency, once it is up and running.²⁰ This could lead to potential savings in the form of price reductions across the country and could blunt the fiscal effects of expanding tax-funded insurance coverage. At the same time, an increasing share of public prescription drug expenditures is being dedicated to high-cost treatments for relatively few beneficiaries. The fiscal challenges presented by high-cost drugs and increasing use of prescription drugs in general are unlikely to be outweighed by potential savings from price discounts or substitution of patented drugs for generic ones. Denying access to high-cost treatments would have drastic negative consequences for the individuals that require them. With continuing advances in biologic medicines and treatments for rare diseases, the challenge of balancing access to new treatments with fiscally responsible prescription drug expenditures will remain.

CONCLUSION

Pharmacare is a hot issue in Canada. Drugs are an increasingly important treatment for many medical conditions. Importantly, however, the conditions under which drugs are prescribed, approved and reimbursed differ from those governing hospital and doctor services. In particular, Canadians pay for many drugs out of pocket or through employment-related insurance, whereas we finance most hospital and doctor services through taxes.

These differences impede the integration of drug treatments with other major healthcare services. In addition, the price tag on some existing and many new drugs is straining insurance plans and threatening uninsured people with financial catastrophe.

The first step towards universal prescription drug insurance should be to expand insurance against catastrophic drug costs to individuals who are either not insured or under-insured. The cost of implementing catastrophic drug insurance would be relatively minor compared to the proposition of expanding general coverage to the uninsured population (Figure 11). In addition, the federal government has already budgeted \$500 million annually to improve access to high-cost treatments.

Expanding general prescription drug insurance to uninsured individuals should be done in the context of broader reforms to existing tax-funded insurance programs across the country. We provide two estimates of the cost of filling gaps in comprehensive coverage: the first estimate models expanding insurance programs available to seniors or low-income households to the uninsured population and the second estimates the cost of all provinces implementing an insurance scheme similar to that of Quebec. These estimates suggest that providing prescription drug insurance coverage to the uninsured population would increase total provincial government spending across the country in 2020 by about \$2.2 billion using the Quebec model, and by \$5.4 billion under the automatic-enrollment model.

One advantage of the Quebec model is that it includes a funding mechanism: enrollees pay an annual premium. Adopting a prescription drug insurance model that includes a funding mechanism would reduce the potential for short-term strain on provincial budgets as pharmacare coverage

20 Projection scenarios do not depend on individual drug prices, but aggregate per capita spending on prescription drugs. Consequently, projections do not account for the potential impact of drug price reductions.

is expanded. Insurance premiums paid through income taxes are, effectively, revenue earmarked for prescription drug spending, and shouldn't be considered public savings per se. But, Quebec has achieved universal prescription drug insurance while maintaining public spending that is comparable to other provinces. In addition, since Quebec has already signaled that it will opt-out of a federal pharmacare program, other provinces adopting its model would be a feasible way to bring us one step closer to harmonized prescription drug coverage across the country.

The current system has gaps that should be addressed. At the same time, prescription drug expenditures have been increasing faster than other health expenditures, which in turn are outpacing GDP growth. Extending prescription drug insurance to those currently not covered in an already fiscally strained system is a significant challenge. Significant progress has already been made, and with careful expansion and revision of public programs, prescription drug insurance for all Canadians is within reach.

APPENDIX: FILLING THE GAPS: A PRESCRIPTION FOR UNIVERSAL PHARMACARE

Table A1: Prescription Drug Insurance Coverage Rates Calculated With Different Data Sources (percent)

	Total Insured		Eligible Potential (Public Eligibility or Private Coverage)	Government Coverage		Private Coverage		
	CB	CCHS		CB	CCHS	CB	CCHS*	CLHIA
Canada	88.7	79.9	98.1	36.3	26.1	62.2	67.1	68.1
Newfoundland and Labrador	92.0	82.1	91.5	19.4	26.5	67.9	66.0	75.6
Nova Scotia	84.2	75.7	100	19.9	19.8	64.3	69.0	72.4
Prince Edward Island	92.0	84.4	100	30.3	26.1	66.5	65.2	71.3
New Brunswick	73.4	81.1	100	17.0	19.9	64.5	65.6	71.1
Quebec	100	87.7	100	43.6	36.9	66.1	56.3	70.3
Ontario	89.1	76.4	95.4	24.1	23.5	63.0	71.0	69.0
Manitoba	71.1	74.9	100	62.2	15.6	56.8	72.8	65.0
Saskatchewan	84.8	79.3	100	54.5	21.2	57.5	69.0	60.1
Alberta	73.4	83.3	100	17.2	18.7	59.0	72.0	67.7
British Columbia	90.0	73.6	100	73.0	23.0	56.8	72.1	66.4

Notes: CB: Conference Board (adjusted for OHIP+ in Ontario), CCHS: Canadian Community Health Survey 2015/16, CLHIA: Canadian Life and Health Insurance Facts 2018.

*Employer provided only.

Table A2: Provincial Expenditures on Prescription Drugs, Baseline Projection

	Total Expenditures (\$millions)			Per Capita Expenditures (\$)		
	2020	2025	2030	2020	2025	2030
Canada (Provincial Total)	13,223	15,449	17,468	362	402	433
Newfoundland and Labrador	145	151	159	273	291	311
Nova Scotia	303	331	353	319	344	362
Prince Edward Island	39	43	47	260	274	284
New Brunswick	303	331	353	399	430	452
Quebec	2,550	2,802	3,047	305	325	343
Ontario	6,266	7,627	8,809	445	520	577
Manitoba	336	362	399	251	254	259
Saskatchewan	355	405	463	305	322	340
Alberta	1,795	2,152	2,497	411	434	447
British Columbia	1,131	1,245	1,340	235	247	256

Sources: CIHI NHEX 2018 Series G, Robson Busby and Jacobs (2018), authors' calculations.

Table A3: Estimated Cost of Providing Catastrophic Drug Insurance

Catastrophic Spending Threshold: 3 Percent of Household Income						
	Total Expenditures (\$millions)			Per Capita Expenditures (\$)		
	2020	2025	2030	2020	2025	2030
Canada (Provincial Total)	2,041	2,325	2,558	56	61	63
Newfoundland and Labrador	52	57	60	98	109	116
Nova Scotia	57	64	69	60	67	71
Prince Edward Island	16	18	20	107	115	118
New Brunswick	57	64	69	75	83	89
Quebec	630	692	741	75	80	83
Ontario	492	565	625	35	39	41
Manitoba	140	159	176	105	111	114
Saskatchewan	111	125	141	96	100	104
Alberta	178	221	261	41	45	47
British Columbia	308	359	395	64	71	75

Table A3: Continued

Catastrophic Spending Threshold: 6 Percent of Household Income						
	Total Expenditures (\$millions)			Per Capita Expenditures (\$)		
	2020	2025	2030	2020	2025	2030
Canada (Provincial Total)	888	1,029	1,147	24	27	28
Newfoundland and Labrador	32	36	38	61	69	75
Nova Scotia	33	37	41	34	39	42
Prince Edward Island	9	10	11	60	65	67
New Brunswick	33	37	41	43	48	52
Quebec	150	166	180	18	19	20
Ontario	246	287	321	17	20	21
Manitoba	68	78	86	51	54	56
Saskatchewan	55	62	71	47	50	52
Alberta	92	116	138	21	23	25
British Columbia	169	199	221	35	39	42
Catastrophic Spending Threshold: 9 Percent of Household Income						
	Total Expenditures (\$millions)			Per Capita Expenditures (\$)		
	2020	2025	2030	2020	2025	2030
Canada (Provincial Total)	337	396	445	9	10	11
Newfoundland and Labrador	16	18	20	31	35	38
Nova Scotia	20	24	26	21	25	27
Prince Edward Island	4	5	5	28	30	31
New Brunswick	20	24	26	27	31	33
Quebec	22	25	27	3	3	3
Ontario	107	127	144	8	9	9
Manitoba	31	35	40	23	25	26
Saskatchewan	23	26	30	19	21	22
Alberta	19	25	30	4	5	5
British Columbia	74	88	99	15	17	19

Sources: Statistics Canada, Caldbeck et al. (2015), Robson Busby and Jacobs (2018), authors' calculations.

Table A4: Estimated Cost of Filling the Gaps in Prescription Drug Insurance

Expanding Comprehensive Provincial Insurance						
	Total Expenditures (\$millions)			Per Capita Expenditures (\$)		
	2020	2025	2030	2020	2025	2030
Canada (Provincial Total)	5,397	5,904	6,385	148	154	158
Newfoundland and Labrador	46	44	42	86	84	82
Nova Scotia	140	146	148	147	152	152
Prince Edward Island	9	10	10	62	61	60
New Brunswick	338	364	385	444	472	494
Quebec	0	0	0	0	0	0
Ontario	932	1,029	1,062	66	70	70
Manitoba	618	651	688	462	457	447
Saskatchewan	79	88	99	68	70	73
Alberta	3,013	3,317	3,664	690	668	656
British Columbia	222	256	288	46	51	55
Quebec Public Drug Insurance						
	Total Expenditures (\$millions)			Per Capita Expenditures (\$)		
	2020	2025	2030	2020	2025	2030
Canada (Provincial Total)	2,607	2,852	3,095	71	74	77
Newfoundland and Labrador	31	31	31	58	59	60
Nova Scotia	57	60	62	60	62	64
Prince Edward Island	9	10	11	59	61	64
New Brunswick	69	76	83	90	99	107
Quebec	0	0	0	0	0	0
Ontario	978	1,049	1,109	69	72	73
Manitoba	115	130	147	86	91	96
Saskatchewan	97	111	129	83	89	95
Alberta	368	432	502	84	87	90
British Columbia	467	514	555	97	102	106

Sources: Statistics Canada, CIHI NHEX, Sutherland and Dinh (2017), Robson Busby and Jacobs (2018), authors' calculations.

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