



INSTITUT **C.D. HOWE** INSTITUTE

COMMENTARY

NO. 384

Rethinking Pharmacare in Canada

Canada's provincial pharmacare models have flaws not found in countries with comparable healthcare systems. Shortcomings include a funding system that limits the potential for healthcare managers and providers to consider the full benefits and opportunity costs of prescription drugs as an input into the broader healthcare system.

Steven G. Morgan, Jamie R. Daw and Michael R. Law

THE INSTITUTE'S COMMITMENT TO QUALITY

ABOUT THE AUTHORS

STEVEN G. MORGAN

is Associate Professor, University of British Columbia, Centre for Health Service and Policy Research.

JAMIE R. DAW

is Policy Analyst, University of British Columbia, Centre for Health Service and Policy Research.

MICHAEL R. LAW

is Assistant Professor, University of British Columbia, Centre for Health Service and Policy Research.

C.D. Howe Institute publications undergo rigorous external review by academics and independent experts drawn from the public and private sectors.

The Institute's peer review process ensures the quality, integrity and objectivity of its policy research. The Institute will not publish any study that, in its view, fails to meet the standards of the review process. The Institute requires that its authors publicly disclose any actual or potential conflicts of interest of which they are aware.

In its mission to educate and foster debate on essential public policy issues, the C.D. Howe Institute provides nonpartisan policy advice to interested parties on a non-exclusive basis. The Institute will not endorse any political party, elected official, candidate for elected office, or interest group.

As a registered Canadian charity, the C.D. Howe Institute as a matter of course accepts donations from individuals, private and public organizations, charitable foundations and others, by way of general and project support. The Institute will not accept any donation that stipulates a predetermined result or policy stance or otherwise inhibits its independence, or that of its staff and authors, in pursuing scholarly activities or disseminating research results.

COMMENTARY No. 384

JUNE 2013

HEALTH POLICY



A handwritten signature in black ink that reads 'Finn Poschmann'.

Finn Poschmann
Vice-President, Research

\$12.00

ISBN 978-0-88806-904-7

ISSN 0824-8001 (print);

ISSN 1703-0765 (online)

THE STUDY IN BRIEF

All developed countries with universal healthcare systems provide universal coverage for prescription drugs – except Canada. Instead, Canadian provinces allocate limited public subsidies for prescriptions drugs, leaving the majority of costs to be financed out-of-pocket and through private insurance. We review three of the main approaches to provincial pharmacare policy – exemplified by British Columbia, Ontario, and Quebec – and compare them with policies in other countries. We find that Canadian models for prescription drug financing have major shortcomings.

All provincial systems involve considerable patient charges and multiple payers that are not responsible for financing patients' medical and hospital care. The costs borne by patients are known to reduce the use of medicines that might otherwise improve patient health and reduce costs elsewhere in the healthcare system. And the involvement of multiple payers adds administrative costs, diminishes purchasing power and creates funding silos that limit the potential for healthcare managers and providers to consider the full benefits and opportunity costs of prescription drugs as an input into the broader healthcare system.

The performance of countries with comparable healthcare systems shows that integrating pharmaceuticals into the healthcare system by covering medically necessary prescription drugs at little or no cost to patients would result in improved performance on all key pharmacare policy goals. Countries with such coverage achieve better access to medicines, and greater financial protection for the ill, at significantly lower total cost than any Canadian province achieves. In this *Commentary*, we suggest that provinces expand public pharmacare programs to all segments of the population with a specific focus on promoting access to medicines of proven value-for-money in our healthcare system. Though the immediate effect of this would be an increase in government spending, this would, over time, be more than offset by savings to patients, employers and individuals who purchase stand-alone private drug coverage.

C.D. Howe Institute Commentary© is a periodic analysis of, and commentary on, current public policy issues. James Fleming edited the manuscript; Yang Zhao prepared it for publication. As with all Institute publications, the views expressed here are those of the authors and do not necessarily reflect the opinions of the Institute's members or Board of Directors. Quotation with appropriate credit is permissible.

To order this publication please contact: the C.D. Howe Institute, 67 Yonge St., Suite 300, Toronto, Ontario M5E 1J8. The full text of this publication is also available on the Institute's website at www.cdhowe.org.

There are many ways for a healthcare system to finance medically necessary prescription drugs. None is perfect; however, the most costly, inequitable, and inefficient financing systems are those that diminish pharmaceutical purchasing power, impose considerable patient charges and isolate the management of prescription drugs from other key components of the healthcare system. This is not good news for Canada – the “pharmacare” systems in each of our provinces do all of these things.

No province provides universal public financing of prescription drugs in a way that would be comparable to how all provinces finance hospital and medical care. Instead, provinces allocate limited public subsidies for prescriptions drugs within an otherwise private, multi-payer system of financing. Provinces generally provide public funding for prescription drugs on the basis of age, income, or employment. The policies in Ontario, British Columbia, and Quebec, respectively, illustrate these main approaches to prescription drug financing in Canada. In this *Commentary*, we review these approaches and compare them with those found in other countries.

Taking a system-level view that includes the experiences of privately insured, publicly insured, and uninsured people, we assess the prescription drug financing systems in Ontario, British Columbia, and Quebec against three key policy objectives: (i) promoting access to necessary medicines; (ii) ensuring financial protection and equity; and (iii) achieving system efficiency. In

addition, we use the same criteria to consider their performance in relation to systems found in the United States, the United Kingdom, the Netherlands, Germany, Australia, and New Zealand.

We find that current provincial models for prescription drug financing have major shortcomings with respect to key policy objectives. Canadian provincial systems all involve considerable patient charges and multiple payers that are not also responsible for financing patients’ medical and hospital care. This results in access barriers, poor financial protection, and excessive costs. Though performance on each one of these outcomes varies across Canada, no province currently performs well across-the-board relative to comparable countries abroad.

There are a few critical attributes of effective pharmacare systems. First and foremost, universal coverage with limited patient charges is required to ensure equitable access to care. Ensuring such access to treatments for legitimate healthcare needs will improve health outcomes and generate

The authors would like to thank the staff of the C.D. Howe Institute, participants of the Institute’s Health Policy Council, and the many peer reviewers who provided comments and suggestions on earlier drafts of this report. This research would not have been possible without the support of the Canadian Institutes of Health Research (CIHR) through a CIHR/Health Canada Emerging Team grant on Equity in Access to Necessary Medicines.

returns in the form of savings elsewhere in the healthcare system. A second feature of high-performing pharmacare systems is appropriate integration of the financing for prescription drugs with the financing of other key components of healthcare system – specifically, medical and hospital care. This gives decision makers and prescribers incentives and opportunities to consider the benefits and costs associated with increased spending on medicines versus other forms of healthcare for patients and populations. Finally, to the questions of administration, pharmacare systems that involve single payers have certain advantages over multi-payer systems. Single-payer systems require considerably less administrative, marketing, and regulatory costs; they pool financial risks across larger populations; and they consolidate purchasing power in price negotiations with drug manufacturers.

We therefore conclude that all provinces should expand public drug benefits to cover all segments of the population – regardless of an individual's age, employment, or income. These expanded pharmacare programs should cover medicines of proven value-for-money in the healthcare system at modest costs to patients. They should also be appropriately integrated with the existing medicare systems that pay for physician and hospital services so that healthcare providers are given incentive to promote rational and cost-effective medicine use. Such reformed systems would improve access to necessary medicines, financial protection for the sick, bargaining power in drug price negotiations, and overall healthcare performance.

While the analysis of this paper suggests that the federal government should facilitate nationwide pharmacare reforms – because of the purchasing power advantages and harmonized cross-province access to drugs that would result – a detailed analysis of the appropriate federal role is beyond the scope of this paper. In light of past failures to realize such a federal role in Canadian pharmacare (Canada 1964; Canada 1997), it is likely that, in the

short term, one or more provinces will have to lead the way.

There is a compelling case that our failure to act on past recommendations has cost billions of dollars annually, that access barriers to necessary medicines are a persistent problem that drives up costs elsewhere in the healthcare system, and that changes in the nature of pharmaceutical development and pricing currently underway on a global scale will exacerbate the failings of our existing approaches to pharmacare. It is clearly time to rethink pharmacare in Canada. Though the immediate effect of expanding public drug coverage would be an increase in government expenditures, this would likely be more than offset by savings to patients, employers, unions, and individuals who purchase stand-alone private drug coverage, producing a net cost reduction for Canada as a whole.

BACKGROUND

The Canadian Context

Canada has the distinction of being the only country in the world with a universal public health insurance program that excludes coverage for prescription drugs. Despite the fact that drugs can manage, prevent and even cure illnesses, prescription drugs used outside of hospitals are excluded from the *Canada Health Act*. Lacking national standards, provincial drug benefit programs come in a variety of forms – covering different populations with different eligibility requirements and subsidy structures (Daw and Morgan 2012). These programs finance between 26 percent and 45 percent of total prescription drug expenditure on a provincial basis (CIHI 2012). Nationwide, just 44 percent of prescription drug costs are publicly funded compared to 90 percent of hospital costs and 99 percent of medical costs (CIHI 2012).

Approximately 38 percent of expenditures on prescription drugs in Canada are financed through private insurance plans (CIHI 2011), which are voluntary in all provinces except Quebec. Statistics

Canada estimates that approximately 51 percent of Canadian workers have supplemental medical coverage, which would typically include prescription drug coverage (Statistics Canada 2008). Because work-related health insurance plans also cover dependents of employees with coverage – and some people purchase individual policies when not eligible for group-based coverage – as many as two-thirds of Canadians are covered in some way by private health insurance plans.

Approximately 18 percent of prescription drug expenditure in Canada is financed “out-of-pocket” by patients (CIHI 2011). This includes co-payments and coinsurance under insurance plans and the cost of medicines purchased by the uninsured, but excludes out-of-pocket premiums for private insurance paid by employees covered under work-related plans and by individuals who purchase stand-alone private drug coverage (Law, Daw et al. 2013).

The patchwork of public and private drug insurance in Canada was not a planned policy decision. It largely results from past decisions to build Canadian medicare using an incremental approach to policy development: start by covering hospital care, then medical services, and eventually, prescription drugs, homecare and other services (Taylor 2009). Implementing the pharmacare stage of medicare development has proven difficult because of steady pharmaceutical cost increases and the institutionalization of private financing arrangements (Boothe 2012).

New Policy Challenges

Today, new pressures are being placed on our prescription drug financing system, resulting in new policy challenges and renewed impetus for reform. Population aging is one such pressure. As babyboomers turn 65 in provinces with public pharmacare coverage for seniors – like Ontario and the Atlantic provinces – their drug costs shift from being a largely private liability to a largely public one. Societal costs of their medicines will not change dramatically; however, the source of

financing will. For better or worse, recognition of this pending liability has motivated some provinces to replace age-based programs with universal income-based drug coverage (Morgan and Coombes 2006).

Private drug benefit plans are also under increasing strain as prescription drug use and costs rise among working populations, and as provinces scale back public drug benefits for seniors – which increases employers’ cost of providing extended health coverage for retirees (Mercer 2011). These pressures are resulting in a decline in employer-sponsored private drug benefit plans in Canada, particularly for retirees. For example, to reduce sponsors’ liability for drug costs, the use of benefit-limiting tools such as coinsurance and annual or lifetime insurance caps has increased among private drug plans over the past decade (Kratzer, McGrail et al. 2013). Moreover, the percentage of Canadian employers offering retirement health benefits to new employees has fallen from 62 percent in 2002 to 49 percent in 2011 (Clarke and Durant 2012).

At the same time, the nature of drugs coming to market is changing in important ways. The pharmaceutical industry is in transition from the era of the blockbuster drug – those developed and sold at moderate costs for large segments of the population – to the era of the niche-buster drug – those developed and sold at very high costs for specific population groups, often those with serious unmet health needs (Aitken, Berndt et al. 2009). These specialized drug treatments are increasingly accompanied by diagnostic tests necessary to determine whether a patient is part of the population subgroup likely to benefit from the drug. Though cost-effective medicines of this kind will likely save costs elsewhere in the healthcare system, the prices of such drugs will necessarily be higher than conventional medicines. In a growing number of cases, the prices are measured in the hundreds of thousands of dollars per patient per year (Herper 2010). Incorporating these drug therapies into the healthcare system will require careful evaluation and management of the technologies themselves

as well as a system of financing that pools the related financial risks across the broadest possible population (Evans 2007).

Finally, we are also observing a change in pharmaceutical manufacturers' global pricing strategies with significant implications for prescription drug financing systems. Because many countries – including Canada – have historically regulated drug prices based on what companies charge in other markets, a transparent price reduction for one payer can drive global prices down. Manufacturers are therefore increasingly using confidential price rebates – offered under negotiated contracts between the manufacturer and insurance plans – as a mechanism to price discriminate in the global market (Docteur, Paris et al. 2008; Vogler, Zimmermann et al. 2012). Though few countries routinely negotiated confidential price rebates outside hospital settings before the recent global economic downturn, a growing majority of Western industrialized countries now do (Vogler, Zimmermann et al. 2012; Morgan, Daw et al. 2013).

The practice of negotiating confidential pharmaceutical price rebates has already become so widespread the World Bank has concluded countries can no longer rely on regulations based on “best available” list prices to effectively control costs (Seiter 2010). The organizations responsible for managing drug insurance benefits must therefore take on the responsibility for managing drug prices through the negotiation of rebates paid to them by manufacturers. If insurers – public or private – do not or cannot do this, they will be left paying inflated “list” prices that – like sticker prices at an automotive dealership – are meant to be the starting point for price negotiations (Morgan, Daw et al. 2013).

PROVINCIAL MODELS

We review the three provincial models of prescription drug financing that best represent the main approaches to prescription drug financing in Canada: allocations of public financing based

on age (Ontario), income (British Columbia), and employment (Quebec).

British Columbia: An Income-Based Drug Plan

Since 2003, British Columbia's public drug program has been a universal “catastrophic” pharmacare program. A drug plan of this kind is in place in Manitoba and Saskatchewan and has been recently proposed for Alberta. It is a voluntary program under which any resident may receive public subsidy for costs exceeding deductibles determined by income. Such programs are called “income-based” programs rather than “income-tested” programs as all people are eligible – regardless of income – but the subsidies received are a function of income. This differs from, say, programs to cover medicine costs for persons on social assistance; eligibility for such programs – including the one offered for social assistance clients in British Columbia – is based on income tests but the benefits under it are comprehensive for all that qualify.

As detailed in Table 1, the structure of income-based public subsidies for prescription drugs in British Columbia depends in part on whether an economic family (spouses and dependents) includes one or more persons born before 1939. This is because persons born before 1939 had received comprehensive drug coverage under the age-based pharmacare program that existed in British Columbia until 2003. The British Columbia government decided to provide such residents relatively low deductibles and coinsurance under the new income-based program to minimize the political and clinical consequences of eliminating their comprehensive, age-based drug coverage (Morgan and Coombes 2006).

Public coverage for all other families in British Columbia, including families whose members have turned 65 since 2003, involves higher deductibles and coinsurance rates. Such families earning \$33,000 or more – 70 percent of households in

Table 1: Terms of British Columbia’s Universal Income-based Catastrophic Plan

Family “Age” and Income	Deductible (net income)	Coinsurance (prescription drug costs)	Out-of-Pocket Maximum per Family (net income)
	<i>percent</i>		
Those born before 1939			
Under \$15,000	0	25	1.25
\$15,000 to \$30,000	1	25	2
Over \$30,000	2	25	3
All other families			
Under \$33,000	0	30	2
\$33,000 to \$50,000	2	30	3
Over \$50,000	3	30	4

Source: British Columbia Ministry of Health.

British Columbia – are eligible for a 70 percent subsidy of prescription drug costs exceeding 3 percent of net household income. Additionally, they are eligible for a 100 percent subsidy after their total private expenditure on prescription drugs – costs below the deductible plus the 30 percent coinsurance after the deductible – exceeds 4 percent of net household income. This is equivalent to a 100 percent subsidy on total pharmaceutical expenditures exceeding 6.33 percent of household income. This level of public coverage applies regardless of whether a family has private insurance. As the program is income-based, however, coverage is conditional on program registration and consenting to have the Canada Revenue Agency provide information about household income to the British Columbia Ministry of Health. It is worth noting that British Columbia’s income-based program offers the highest level of public subsidy under any of the

universal “catastrophic” pharmacare programs in Canada (Daw and Morgan 2012).

Ontario: An Age-Based Drug Plan

Detailed in Table 2, Ontario’s public drug program is a hybrid of comprehensive coverage for seniors and income-based coverage for all others. All Ontario residents over age 65 receive near first-dollar public coverage: low-income seniors face no deductibles and a fixed \$2.00 co-payment, and all other seniors face a \$100 deductible and a fixed \$6.11 co-payment. Non-senior residents are eligible for public coverage against drug costs that exceed income-based thresholds that are equal to approximately 4 percent of household income. Deductibles are adjusted for household size – larger households face slightly lower deductibles as a share of net household income. Non-seniors in Ontario face a \$2 co-payment after deductibles are hit. To register for the income-based program, non-

Table 2: Ontario's Blend of Age-based and Income-based Drug Coverage

Beneficiary Group	Deductible	Co-Payment
Low-income Seniors*	\$0	\$2.00
Other Seniors	\$100	\$6.11
All Non-Seniors	~4% net income	\$2.00

Note: * Low-income seniors include single seniors with net incomes less than \$16,018 and senior couples with net incomes less than \$24,175.

Source: Ontario Ministry of Health and Long-Term Care.

seniors in Ontario must declare that they do not have private health insurance or that their private insurance does not cover 100 percent of their prescription drug costs.¹

Quebec: An Employment-Based Drug Plan

In Quebec, all workers and retirees are required to purchase private insurance through their employment or occupation (Pomey, Forest et al. 2007). If employers or occupation groups offer health benefits to workers or retirees, they are required to offer prescription drug coverage as part of those benefits. Regulations require that these private drug plans cover all medicines on the public formulary and specify limits on patient deductibles and coinsurance. Private premiums may be adjusted on July 1st each year on the basis of costs incurred in the previous fiscal year and any anticipated costs of adding new drugs to the program in the current year.

Quebec residents are required to purchase premium-based drug coverage through the government if private drug coverage is not offered by an employer or occupation group, or if they are unemployed or employed in a position for which benefits are not offered – such as a part-time

position. As outlined in Table 3, the public drug program in Quebec requires that beneficiaries pay premiums; it also involves monthly deductibles of \$16.25 per adult and a 32 percent coinsurance rate. The Quebec program limits patient charges with monthly out-of-pocket limits per adult in a household – medicines for children under age 18 are free. Because many of the beneficiaries of this program are elderly or have low incomes, premium charges do not cover all costs of running the program – the balance is paid through general government revenues.

Comparing the Provincial Models at a Glance

Table 4 and Table 5 illustrate charges under the public programs of British Columbia, Ontario, and Quebec. These tables outline the premiums and patient contributions required for senior and non-senior, two-person households with median net incomes for their age groups. As can be seen, out-of-pocket drug costs borne by median-income seniors are highest in British Columbia and lowest in Ontario. The deductibles faced by median-income non-seniors are higher in Ontario than in British Columbia; however, for households that

1 For information about program description and registration requirements, including documentation of private insurance coverage, see http://www.health.gov.on.ca/en/public/programs/drugs/programs/odb/opdp_trillium.aspx.

Table 3: Quebec's Mandatory Plan for Those Not Eligible for Group-based Private Insurance

Beneficiary Group	Premiums (income-scaled)	Monthly Deductible	Coinsurance	Out-of-Pocket Maximum per Adult
	<i>Canadian dollars except where indicated</i>			
Seniors' share of earnings from low-income supports (Guaranteed Income Supplement).				
>94% GIS	0	0	0	0
1-93% GIS	0-579	16.25	32%	50.97
No GIS*	0-579	16.25	32%	82.66
Non-Seniors	0-579	16.25	32%	82.66

Note: * Senior households with a combined yearly income exceeding \$21,888 for couples or \$16,560 for singles do not qualify for the Guaranteed Income Supplement.

Source: Régie de l'assurance maladie du Québec.

Table 4: Annual Premium and Cost-sharing Structure for Senior Household with Two People and Median Net Income of \$56,200

	Premium	Deductible	Co-Payment	Out-of-Pocket Maximum for household
BC	-	\$1,686	30%	\$2,248
ON	-	\$100	\$6.11	None
QB	\$1,158	\$195	32%	\$1,222

Sources: Statistics Canada and authors' calculations.

Table 5: Annual Premium and Cost-sharing Structure for Non-senior Household with Two People and Median Net Income of \$80,600

	Premium	Deductible	Co-Payment	Out-of-Pocket Maximum for household
BC	-	\$2,418	30%	\$3,224
ON	-	\$3,134	\$2.00	None
QB	\$1,158	\$195	32%	\$1,982

Sources: Statistics Canada and authors' calculations.

exceed the Ontario deductibles, public coverage would be comparable to that offered in British Columbia because the per-prescription charge in Ontario is just \$2.00. Deductibles for non-seniors in Quebec are much lower than Ontario and British Columbia; however, the combination of monthly deductibles and high coinsurance rates in Quebec may still result in many households spending considerable sums out-of-pocket. Ontario and British Columbia have no equivalent to the \$1,158 premiums charged specifically for public drug coverage in Quebec.

Models from Abroad

We compare prescription drug financing systems and performance measures in the three Canadian provinces to six high-income countries for which performance data are available: the United States, the United Kingdom, the Netherlands, Germany, Australia, and New Zealand. The data presented for these countries come from the OECD Health Database and from the 2007 Commonwealth Fund International Health Policy Survey, a cross-national survey of adults' experiences with their healthcare systems (Morgan, Kennedy et al. 2009).

In Australia, New Zealand and the United Kingdom, prescription drugs are financed through universal public programs. Universal coverage for prescription drugs is also attained in Germany and the Netherlands through social health insurance mechanisms that mandate participation and strictly regulate health insurance provision to include minimum standards of drug coverage. It should be noted that prescription drug coverage in these

comparator countries is not isolated from healthcare insurance more generally. Prescription drug coverage is integrated into the broader system of public health insurance in the United Kingdom and New Zealand; it is also integrated into statutory social health insurance policies in Germany and the Netherlands. Australia's universal public drug insurance program is administrated at a national level, with public health insurance programs for medical and hospital care operated at a state level.

Citizens in all comparator countries with universal healthcare coverage may purchase voluntary private health insurance to cover costs not paid for by their public or statutory systems. Such supplementary private insurance might, for example, cover the co-payments on medical care, hospital visits or pharmaceuticals. In Germany, citizens with high incomes are permitted to fully opt out the statutory health insurance system and purchase private health insurance on a voluntary basis. In all cases, voluntary private health insurance would typically cover more than pharmaceuticals alone because none of these countries with universal healthcare system separates pharmaceuticals from the rest of the health insurance model.²

Prescription drugs in the United States are financed through mix of public and private coverage that does not include coverage for all people. Public health insurance in the United States has been limited to the very poor, the elderly and other groups such as the military and veterans. All of these public health insurance programs include a prescription drug benefit. Private health insurance has historically been available only through voluntary markets – generally through

2 To illustrate the level of private health insurance elsewhere, it accounts for less than 3 percent of pharmaceutical spending in the Netherlands, Australia, and New Zealand (OECD 2011). It accounts for 6.8 percent of spending in Germany. Data regarding drug expenditure through private insurance in the United Kingdom are not available; however, given the relatively comprehensive prescription drug coverage there, it is likely that private insurance accounts for a share of total pharmaceutical spending that is similar to the Netherlands, Australia, New Zealand.

employment-related health benefits packages. Virtually all employer-sponsored private health insurance plans (99 percent) include prescription drug coverage (Kaiser Family Foundation and Health Research and Educational Trust. 2012); these plans fund approximately 39 percent of total pharmaceutical costs in the United States. As of 2014, however, the United States will implement a universal health insurance plan involving mandated coverage under private or public plans, with strict regulations regarding insurance provision. Given the prevailing rate at which pharmaceutical coverage is integrated into both public and private health insurance in the United States, it is likely that the mandated insurance packages chosen by most Americans will include prescription drug coverage.

Though health systems in comparator countries aim to cover a range of prescription drugs that reasonably reflects community and individual preferences, no comparator country covers all prescription medicines on the market. This is in part because not all prescription drugs are used to treat conditions worthy of collective financing through public or social health insurance – few systems would, for example, cover drugs that treat male pattern baldness or drugs that promote thicker eyelashes. Limits are also required to balance the cost of pharmaceutical treatment against other investments in the health of patients and populations. Not all products offer sufficient value for money in terms of proven clinical- and cost-effectiveness, even when treating legitimate healthcare needs.

Australia and New Zealand use positive formularies – lists of drugs that will be covered – to define the limits of coverage by their public health insurance systems. The United Kingdom

uses a negative list to identify drugs that will not be publicly covered. Even countries with multi-payer social insurance systems such as Germany and the Netherlands identify lists of drugs that must be covered (Docteur, Paris et al. 2008). Similarly, in the United States, private insurers offering drug coverage for Medicare beneficiaries must cover one or more drugs from a fixed array of drug classes. This is because competing insurers could otherwise limit benefits so as to attract only healthy clients – a practice known as cream-skimming; for example, a low-cost health insurance policy that does not cover drugs for chronic illnesses might be attractive to young, healthy people but would not be attractive to people with chronic illness or at significant risk of chronic illness.

The extent of direct charges for patients using prescription drugs is low in all comparator countries but for the United States. In the United States, patients face varying out-of-pocket charges for prescriptions depending on whether or not they have insurance and the terms of coverage they might have. Among other comparator countries, Australian patients pay the highest co-payments – approximately C\$35 per prescription. Patients in Germany and New Zealand faced modest co-payments – approximately C\$7 to \$17 in Germany, and C\$2 to \$8 in New Zealand. Patients face little or no costs for prescription drugs in United Kingdom and the Netherlands.³

ACCESS TO NECESSARY MEDICINES

Despite being sold in ways that might give the impression that they are consumer goods, pharmaceuticals are instead intermediate goods – inputs into care provided to promote, maintain,

3 In Wales, there are no co-payments for prescription drugs; and in England and Scotland, people who are elderly, have low incomes, or have chronic conditions were exempted from the co-payments of CAD\$5 and CAD\$11, respectively, that applied at the time of the survey (Scotland eliminated all co-payments in 2011). In the Netherlands, cost-sharing at the time of the survey was limited only to surcharges for drugs priced higher than therapeutically equivalent alternatives.

and restore health (World Health Organization 2001). When prescribed and used appropriately, prescription medicines can prevent illness, aid in symptom management, and even cure disease – often making them the most cost-effective form of providing healthcare for patients and populations. Ensuring population-wide access to medically necessary prescription drugs is therefore a primary goal – perhaps the primary goal – of pharmacare policy. Ensuring access to cost-effective prescription drugs not only improves patient health outcomes; it can also reduce costs elsewhere in the healthcare system.

Costs are among the most significant obstacles to accessing necessary medicines. People without health insurance are far less likely to fill prescriptions than those with insurance (Adams, Soumerai et al. 2001). Even in Canada, where everyone receives public insurance for medical services, people without prescription drug coverage are far more likely than people with drug coverage to report cost-related barriers to accessing the medicines their doctors prescribed (Law, Cheng et al. 2012). Among those with health and pharmaceutical insurance, even small charges can be a barrier to accessing medicines, dissuading patients from filling prescriptions for essential and non-essential medicines alike (Goldman, Joyce et al. 2007; Marin, Thomson et al. 2008; Eaddy, Cook et al. 2012). For this reason, most countries limit patient charges – such as deductibles, co-payments or coinsurance – for medically necessary drugs used by general populations and remove such charges entirely for specific populations, such as the chronically ill, the elderly, and the poor (Morgan, Kennedy et al. 2009).

Though there is good evidence to suggest that medicines are simultaneously overused, underused,

and misused in our healthcare system, there is little or no evidence to suggest that excess coverage of prescription drug costs is the root cause of these problems (Sketris, Lummis et al. 2007). Providing prescription drugs at little or no cost to patients does not generally induce over consumption because prescription drugs have no intrinsic value to healthy people. Patients who have become addicted to prescription medicines, for instance, are normally cases that involve a mental illness – proving that the only people who would willingly consume an unnecessary prescription drug when they are not sick are, in fact, sick (Evans 1984).⁴ That said, this inappropriate use of prescription drugs can and should be addressed through means other than by charges that may impede access by other patients for whom the treatments would be cost-effective.

There is a broader economic case to be made for providing unfettered access to medicines proven value in the healthcare system. Many medicines deliver benefits by reducing the statistical risk of a future illness – the actual benefits of which cannot be immediately felt or known by patients. Particularly in such classes of medicines, the low-cost provision of prescription drugs can improve health system efficiency by increasing medication adherence and consequently averting costly consequences of untreated illness (Choudhry, Avorn et al. 2011).

The level of direct charges faced by patients provides a process measure to gauge the degree to which pharmacare systems promote access to necessary medicines. By such a measure, the universal but income-based drug plans perform poorly: with sizable deductibles faced by all but the poorest of the population, the program in British Columbia is not structured in a way that encourages seniors or non-seniors to fill their prescriptions. In

4 Common examples of addictive substances are opioid analgesics, or those who suffer from Munchausen's syndrome or hypochondria who might willingly consume medicines that are not strictly medically necessary.

contrast, the low levels of cost-sharing under the age-based program in Ontario render this model the highest performing in terms of access for those over sixty-five.⁵ Quebec's model of mandatory insurance purchase is arguably best for promoting medicine use among non-seniors because all residents must be covered and, although the per-prescription charges are high by international standards, the costs to non-seniors in Quebec are lower than in Ontario and British Columbia.

The effect of the patient-charges under provincial pharmacare systems is evident in the results from surveys asking patients to self-report whether they have ever altered or not filled prescriptions due to cost. As illustrated in Figure 1, British Columbians are more likely to report such cost-related non-adherence than residents in Ontario and Quebec (Kennedy and Morgan 2009; Law, Cheng et al. 2012). Though some factors beyond the public pharmacare structure likely contribute to these findings, rigorous studies of administrative health data have shown that British Columbia seniors' access to essential medicines declined while their use of other healthcare services increased in 2003, when the province transitioned from age-based pharmacare – like Ontario's system – to its current income-based pharmacare system (Dormuth, Glynn et al. 2006; Dormuth, Neumann et al. 2009; Hanley, Morgan et al. 2011). Similar results – reduced drug use and increased costs elsewhere in the system – were also found for Quebec in 1997, when the province introduced new patient charges for seniors and low-income residents as part of its system of mandatory private insurance coverage (Tamblyn, Laprise et al. 2001; Blais, Couture et al. 2003).

International survey data concerning cost-related access barriers to prescription drugs also suggest

that patient charges negatively affect prescription drug use (Schoen, Osborn et al. 2010). As shown in Figure 1, among the six comparator countries, the rate of cost-related non-adherence to medicines is highest in the United States, where – at least until 2014 – many people have no health insurance or prescription drug coverage at all (Schoen, Osborn et al. 2010). Among the other comparator countries – all of which have universal prescription drug coverage – Australian patients pay the highest co-payments – CAD\$35 per prescription – and report the highest levels of access barriers. Cost-related non-adherence rates are lowest in countries with the lowest rates of patient cost-sharing for prescription drugs, such as the Netherlands and the United Kingdom – where patients face little or no charges for covered medicines.

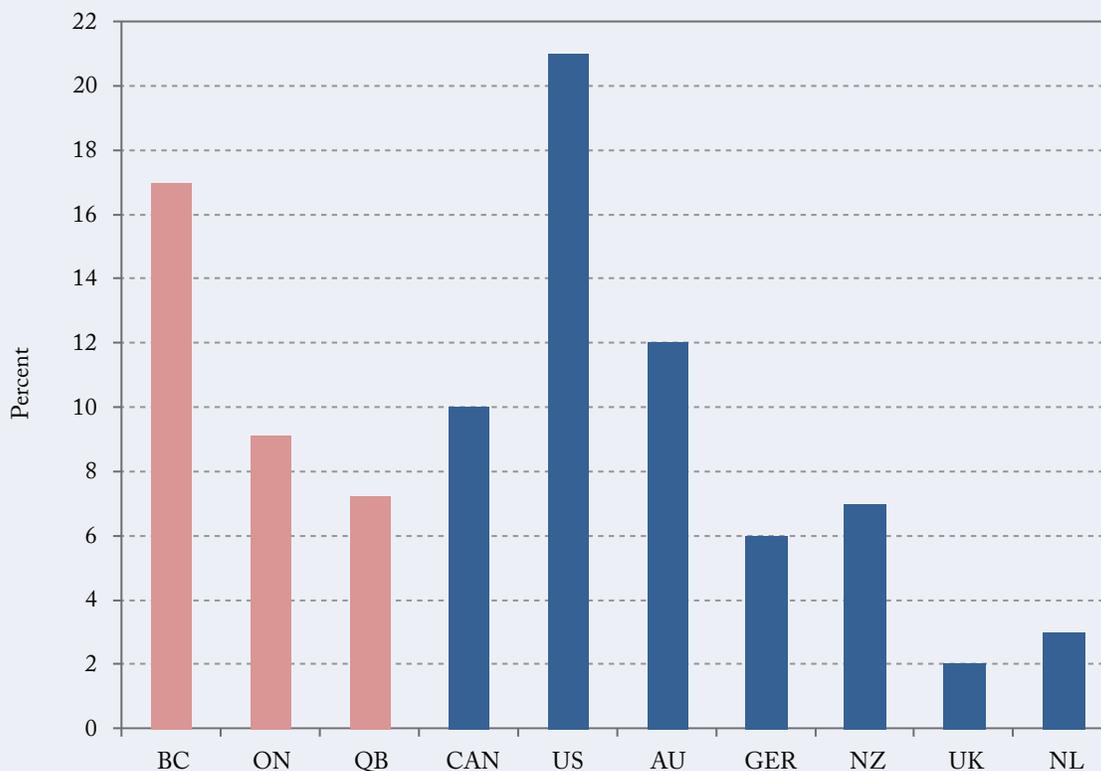
FINANCIAL PROTECTION AND EQUITY

Another key goal of prescription drug financing systems is to protect individuals from the financial consequences of illness requiring pharmaceutical treatment. Strengthening the degree of protection against the cost of necessary medicines offers benefits to everyone because even healthy people cannot be certain they won't develop serious or chronic illness next month or next year.

Though prescription drug plans are often referred to as “insurance” plans, protecting people from the financial consequences of pharmaceutical needs is not the equivalent of protecting them from the financial consequences of unpredictable, one-time losses, such as a home burning down. This is because a large share of pharmaceutical spending is on treatments for people with predictably high drug costs that occur year after year. Data from

5 Most seniors in Ontario would qualify for no-deductible coverage with a \$2 co-payment. In Quebec, the combination of monthly deductibles and coinsurance rates means that patients would be required to pay approximately \$25 for an average prescription costing \$45.

Figure 1: Percentage of Adults Reporting Cost-related Non-adherence, by Jurisdiction



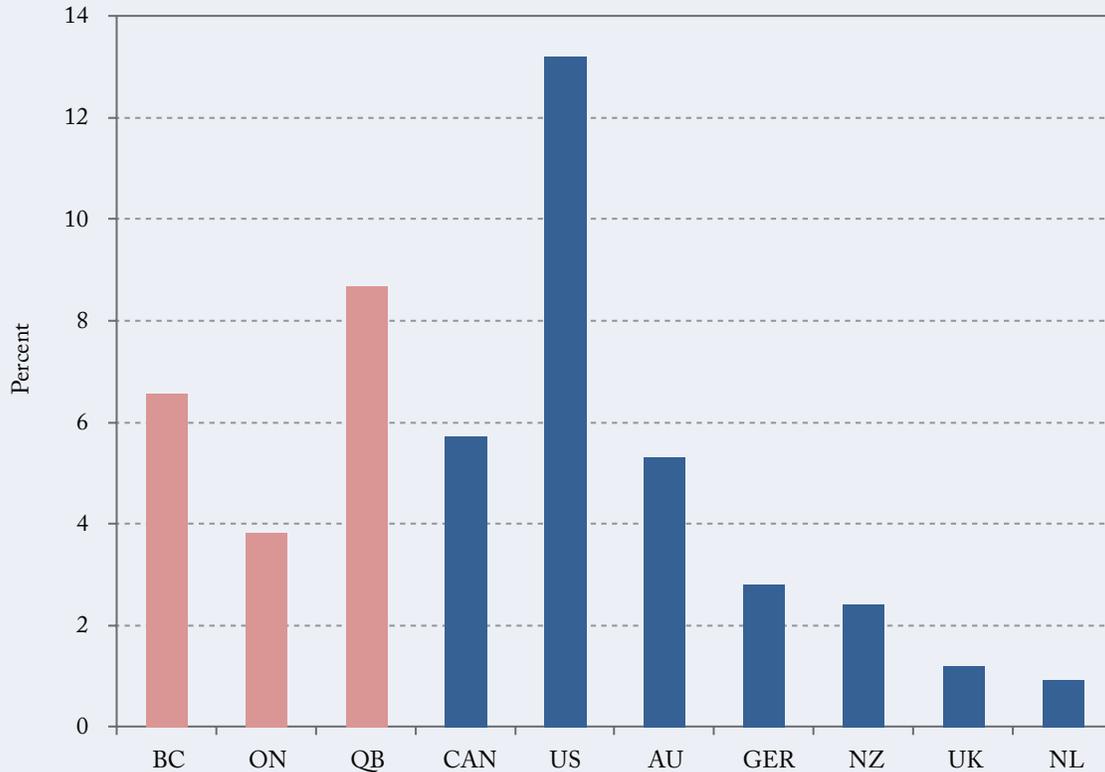
Sources: Red (light) bars above are from the 2007 Canadian Community Health Survey. Blue (dark) bars above are from the Commonwealth Fund 2010 International Health Policy Survey. Due to differences in data sources, differences in the levels of red versus blue bars should be interpreted with caution.

British Columbia show that just 20 percent of the population accounts for 80 percent of total spending on prescription drugs, and that these people have greater than 70 percent chance of requiring high-cost pharmaceuticals for many years – often until death (Hanley and Morgan 2009). Such people do not need insurance per se because they do not face an uncertain financial burden associated with illness; they need ongoing assistance because they face predictable medical needs.

The level of financial protection offered by a financing system can be gauged by the share of the population that spends significant sums out-of-pocket on prescription drugs in a given year. The level

of such spending commonly used in international health system comparisons is \$1,000 or more (Schoen, Osborn et al. 2010). Figure 2 illustrates such shares for our representative provinces and comparator countries. Data from Statistics Canada's survey of household spending show that 8.7 percent of Quebec households incurred more than \$1,000 in out-of-pocket drug costs in 2007 – this is in addition to the premiums they paid for compulsory drug coverage in Quebec. The monthly deductibles and coinsurance for each adult member of a family in Quebec are what make such financial burdens commonplace. The universal but catastrophic coverage for medicines in British Columbia

Figure 2: Percentage of Households Reporting Out-of-pocket Expenses for Prescription Medicines Exceeding US \$1,000, by Jurisdiction



Source: Red (light) bars above are from Statistics Canada’s 2007 Survey of Household Spending. Blue (dark) bars above are from the Commonwealth Fund 2007 International Health Policy Survey. Due to differences in data sources, differences in the levels of red versus blue bars should be interpreted with caution.

also performs poorly even though residents can hold private drug coverage for drug costs below the public deductibles. In 2007, 6.6 percent of households in British Columbia incurred over \$1,000 in out-of-pocket drug costs. Because of the relatively comprehensive coverage provided to seniors and the combination of voluntary private insurance with a public safety-net for non-seniors, Ontario has the lowest share of households (3.8 percent) facing high drug out-of-pockets among the three exemplar pharmacare models.

However, as shown in Figure 2, none of the Canadian pharmacare models performs well in terms of protecting individuals against high out-of-

pocket medicine costs when compared to most of our comparator countries. Only the United States does worse than Canada as a whole. There, over 13 percent of residents report paying \$1,000 or more for prescription drugs. In the other comparator countries – all of which provide universal prescription drug coverage – rates of significant financial burdens on patients align closely with the extent of patient charges under their pharmacare systems. Owing to high co-payments in Australia, for example, a patient could reach \$1,000 in annual out-of-pocket costs by filling two or three prescriptions per month. In all other comparator countries – Germany, New

Table 6: Expenditures on Prescription Drugs by Source of Financing and Province, 2001 and 2011, Inflation-adjusted (2011) Dollars per Capita

		2001	2011	Average Growth Rate 2001–2011
		<i>Canadian dollars</i>		<i>percent</i>
BC	Provincial Government	198	210	0.6
BC	Other Sources	215	366	5.5
BC	Total	413	575	3.4
ON	Provincial Government	228	335	3.9
ON	Other Sources	323	450	3.4
ON	Total	551	785	3.6
QC	Provincial Government	217	301	3.3
QC	Other Sources	360	612	5.5
QC	Total	577	912	4.7

Source: CIHI (2012), Drug Expenditure in Canada, total expenditure on prescription drugs.

Zealand, the United Kingdom and the Netherlands – the rates of high out-of-pocket prescription drug costs are much lower than even the best performing Canadian province, Ontario.

SYSTEM EFFICIENCY

Ensuring access to necessary medicines and protecting people from financial burdens associated with healthcare needs are central objectives of a well-functioning system of drug financing. But the system must also be efficient. This requires attention to the system's administrative costs, ability to secure competitive prices in the global pharmaceutical

market, and capacity to balance the costs and benefits of increased spending on pharmaceuticals versus spending on other forms of healthcare for patients and populations.

As a percentage of total system costs, administrative costs are estimated to be on the order of 15 percent in multi-payer healthcare environments and 5 percent in public health insurance systems like Canadian medicare (Nicolle and Mathauer 2010). While administrative costs comprised only 3.2 percent of public spending on healthcare in Canada in 2009, administration costs represented 15.1 percent of spending financed through private insurance (CIHI 2012).⁶

6 The CIHI (2012) report includes reference to private administration costs being 6.2 percent of all private healthcare spending, including private spending that did not flow through private insurance companies. The appropriate statistic is the share of private health insurance spending in Canada that is attributable to private insurance administration: 15.1 percent.

The significant difference in administrative costs is a result of the additional costs of marketing, risk-adjustments based on the health of insured individuals or groups, regulatory oversight, and supply negotiations required in multi-payer contexts (Nicolle and Mathauer 2010). There is little or no duplication of these administrative costs in a single-payer system; indeed, some of these costs – such as marketing – are eliminated altogether in a single-payer public system. Based on this comparison, a single-payer system would reduce administrative costs in Canada by approximately \$1 billion per year relative to the status quo.

The cost of having multiple insurers in the pharmaceutical sector will likely grow under the new global paradigm of drug pricing by way of confidential rebates paid by drug manufacturers to insurers (Seiter 2010; Vogler, Zimmermann et al. 2012; Morgan, Daw et al. 2013). Single-payer systems reduce or eliminate duplication of legal, technical, and administrative costs associated with rebate negotiation, monitoring, and enforcement in multi-payer systems (Morgan, Thomson et al. 2013; Morgan, Daw et al. 2013).

The new pharmaceutical pricing paradigm raises another key advantage of single-payer financing: it increases the systems' ability to secure low prices through procurement processes. A single-payer system consolidates purchasing power of the entire population – whether for a province or the country as a whole. This gives the managers of the system increased bargaining powers with drug manufacturers. In contrast, individual insurers in multi-payer systems have relatively little bargaining power. This is in part because all jurisdictions that achieve universal coverage through multi-payer financing systems – including the province of Quebec – set minimum standards for which drugs must be covered. As mentioned above, they do so to avoid the possibility that insurers might use limited coverage as a means of attracting only healthy clients into their drug plans. This necessarily limits individual insurers' abilities to use coverage negotiations to reduce drug prices. Even

if individual insurers are permitted to select which drugs they will cover from predefined therapeutic classes, they will have less bargaining power as countries – like the United Kingdom and Australia – that negotiate prices on behalf of tens of millions of people.

The structure of the financing system also affects incentives and capacity for prudent management of costs. If financing systems allow cost increases to be easily passed on to program sponsors – e.g., taxpayers, employers, or beneficiaries – there will be reduced incentives to manage costs carefully. In Quebec, for example, though insurers may compete on the percentage of expenditures they charge for administering drug plans, the law that requires all eligible citizens to purchase private insurance also provides for annual premium increases that are determined by actual expenses for the year prior and projected cost increases for the current year.

There is also a risk of wider inefficiencies if the financing of medicines is separated from the financing of other forms of healthcare. If managers are only concerned about controlling the cost to the drug plan – private or public – and not related costs elsewhere in the system, the result can be inefficient from a healthcare system perspective.

An example of system-level inefficiency occurs when prescribers are entirely isolated from the financial consequences of their prescribing choices. Ultimately, prescribers are – by nature of the prescription-only designation of most medicines financed through health insurance systems – key decision-making agents with respect to the selection of therapeutic alternatives for treating illnesses. Recognizing this, several countries have used mechanisms to provide financial incentives for doctors at an individual and area level to consider the financial applications of their prescribing decisions; and evidence suggests that these incentives can be effective at reducing prescription volume overall and of high-cost medicines in particular (Soumerai and Ross-Degnan 1997; Delnoij and Brenner 2000; Busse and Riesberg 2004; Mossialos and Oliver 2005; Sturm, Austvoll-

Dahlgren et al. 2007). Implementing schemes of this nature that might give incentives and opportunities for managers and prescribers to consider the full benefits and opportunity costs of investing in pharmaceuticals versus other forms of healthcare would be very difficult if the insurer for medical and hospital care was not also the insurer for prescription drugs.

None of the provincial pharmacare models in Canada is a single-payer system integrated with the financing of medical and hospital care. Our systems can therefore be expected to perform poorly on system efficiency goals. The Ontario government is effectively a single-payer for prescription drugs for seniors. This gives government considerable purchasing power in price negotiations and, at least in theory, the potential incentive to consider the system-level value prescription drugs versus other forms of healthcare for seniors. But gaps in non-seniors' coverage remain in Ontario. That the Ontario government is payer of last resort for most non-seniors diminishes purchasing power in price negotiations and, simultaneously, leaves uninsured non-seniors and the sponsors of private drug plans for non-seniors exposed to high list prices for medicines because such individual patients and insurers have far less capacity – if any – to negotiate confidential price rebates of their own.

The negative consequences of fragmented financing are worse in British Columbia, where government is effectively payer of last resort for all residents. Being the single-payer for no well-defined population group, but instead a group defined by family income and composition, the British Columbia government has limited purchasing power in price negotiations and leaves a large share of the population exposed to high list prices for drugs – by way of costs below their deductibles and coinsurance paid on list prices after deductibles are reached.

Quebec's system of prescription drug financing also has a high degree of fragmentation that limits negotiation opportunities. To ensure that private plans offer a minimum standard of benefits, the

Quebec government defines what drugs must be covered by all insurers in the province. The government does not negotiate or receive rebates on behalf of all insurers in the province in part because passing a government-negotiated secret rebate on to a private insurance company that operated in other markets in Canada and abroad would effectively violate the confidentiality of the rebate and set a precedent for rebates to that insurance company in other markets. Moreover, the government cannot negotiate rebates only to be paid to the public program because Quebec has laws in place that require private insurers be offered the best available prices, including best available rebates, that might be given to the Quebec government (Quebec 2012). These challenges are not entirely unique to Quebec as similar problems with rebate negotiations have been reported by policymakers in other countries where healthcare financing – including pharmaceuticals – is organized through multi-payer social insurance systems (Morgan, Daw et al. 2013).

The levels and growth rates of pharmaceutical costs in British Columbia, Ontario, and Quebec are roughly consistent with the above theory regarding the impact of policy structures. As shown in Table 6, total prescription drug expenditures have been higher and growing more rapidly in Quebec than in other provinces – and this holds even if population age is taken into account (Morgan, Raymond et al. 2008). Total prescription drug expenditures in British Columbia have been lower than Ontario but growing at about the same rate over the past decade. The low levels of expenditure in British Columbia may stem from the fact that, before switching its public program from an age-based to an income-based drug plan in 2003, the BC government had applied relatively aggressive cost-control measures that had measurable impacts on both private and public spending (Morgan, Bassett et al. 2004). Since that era, per capita government spending on prescription drugs has been virtually unchanged but costs to patients and private insurers have grown very quickly.

Table 7: Total Expenditures on Pharmaceuticals, 2000 and 2010 by Country, Inflation-adjusted (2010) Canadian Dollars per Capita (PPP)

Country	2000	2010	Average growth rate, 2000-2010	Percentage funded by private insurance (2010 or closest year)	Share of total health care expenditure (2010 or closest year)
	<i>Canadian dollar</i>				
United States	813	1,198	3.96	39.4	11.9
Canada	603	903	4.13	31.1	16.7
Germany	545	780	3.65	6.8	14.8
Australia	505	692	3.21	2.9	14.7
Netherlands	411	587	3.62	2.2	9.5
United Kingdom	391	481	2.10	N/A	11.8
New Zealand	304	348	1.35	2.2	9.4

Sources: OECD Health Data 2012, expenditure on pharmaceuticals and other medical non-durables. US National Health Expenditure Accounts (2011), expenditure on prescription drugs and non-durable medical products.

The levels and growth rates of pharmaceutical expenditures among comparator countries are also consistent with theory regarding the limited incentives and opportunities for expenditure management created by the fragmented financing systems in Canadian provinces. As shown in Table 7, Canada had the second-highest level of pharmaceutical spending among international comparators in 2000 and in 2010 – second only to the United States – and the fastest rate of spending growth during that decade. The share of total healthcare expenditures allocated to pharmaceuticals was also higher in Canada than in all comparator countries.

New Zealand and the United Kingdom stand out as the countries with the most controlled pharmaceutical spending growth. Both countries fund medicines through single-payer public financing systems that are integrated with the financing of medical and hospital care. To better manage the pharmaceutical component of their

costs, local health authorities in New Zealand centralize formulary management and contract negotiations to a national agency – PHARMAC – that is provided with an annual pharmaceutical budget to work within when negotiating terms of coverage on the national formulary (Brougham, Metcalfe et al. 2002; Morgan, Hanley et al. 2007). In contrast, the United Kingdom does not have a centralized formulary. Though national prescribing guidance is issued for medicines with particularly contentious clinical or financial implications, systems there have devolved responsibility to regional bodies that must purchase all forms of healthcare for their local populations. The National Health Service (NHS) in England has even used risk-sharing with individual practices as a means to incentivize physicians to prescribe cost-effectively (Mossialos and Oliver 2005). The United Kingdom, however, is beginning to re-centralize some management practices, particularly in relation to the negotiation of confidential price rebates for

medicines – because devolving such responsibility increases administrative costs and reduces purchasing power.

DISCUSSION AND RECOMMENDATIONS

No financing system for prescription drugs is perfect. Nevertheless, Canada's provincial pharmacare models have serious flaws not found in countries with comparable healthcare systems. Each model for financing prescription drugs found in Canadian provinces involves multiple private and public payers for medicines and considerable direct costs to patients by way of deductibles, co-payments and coinsurance. The costs borne by patients are known to reduce the use of medicines that might otherwise improve patient health and reduce costs elsewhere in the healthcare system. The involvement of multiple payers adds administrative costs, diminishes purchasing power and creates funding silos that limit the potential for healthcare managers and providers to consider the full benefits and opportunity costs of prescription drugs as an input into the broader healthcare system.

As indicated by the performance of countries with comparable healthcare systems, providing universal coverage for medically necessary prescription drugs with little or no direct patient charges would result in better performance for Canada on all key pharmacare policy goals. Countries with such coverage achieve better access to medicines and greater financial protection for the ill at significantly lower total cost than any Canadian province achieves. Given this evidence, provinces should expand public pharmacare programs to all segments of the population with a specific focus on promoting access to all medicines of proven value for money in our healthcare system.

Though such an expansion of public pharmacare programs will require an increase in government spending, such programs could actually lower total expenditures on prescription drugs while improving health outcomes and, thereby, generating further

savings elsewhere in the healthcare system. For example, if per capita spending on medicines in Canada could be reduced to the level of Germany, the country with the next highest per capita level among comparators, we would spend \$4 billion less per year in total. If our spending per capita matched that in the United Kingdom or New Zealand, we would spend at least \$14 billion less per year.

The savings achieved in comparator countries do not come by way of restricting access to necessary medicines: on the contrary, as noted above, access to medicines in comparator countries with universal, comprehensive drug coverage is significantly better than in Canada. Savings in these countries are achieved through lower pricing and more cost-conscious prescribing. In the United Kingdom, for example, all citizens receive public coverage for a wide range of medicines with limited co-payments. The British system achieves prices for patented drugs that are 18 percent lower than in Canada and prices for generic drugs are approximately 30 percent lower (PMPRB 2010; PMPRB 2012). Physicians in the United Kingdom – not patients – are given financial incentives to consider the relative costs and benefits of prescribing decisions, which has reduced overall prescribing and encouraged more cost-effective therapeutic choices (Mossialos and Oliver 2005). The result is better access to medicines at dramatically lower cost; yet, is also worth noting that the pharmaceutical industry invests considerably more in research and development in the United Kingdom than in Canada on a per capita basis (OECD 2012).

It is therefore bears repeating that costs are not the barrier to pharmacare reform in Canada – nor is concern about lowering the quality of healthcare. Indeed, universal pharmacare for cost-effective treatments is the fiscally responsible policy option. Already, taxpayers are footing a majority of the commensurate costs of such a system through direct spending on the patchwork of government drug plans in place and indirect spending on private drug insurance for public employees and tax subsidies for all employer-sponsored private drug insurance

plans. If a universal pharmacare system could be accomplished in any province, or nationwide, the savings found in virtually any reasonable comparator country suggest that public spending need not increase dramatically – certainly not to the level of total prescription drug expenditures in Canada today.

A universal pharmacare program with limited patient charges has been recommended before. This was the vision of the Royal Commission on Health Services in the 1960s and the recommendation of the National Forum on Health in the 1990s (Canada 1964; Canada 1997). It has not yet come about. This may be because the political climate at federal and provincial levels at the time of the recommendations was not suitable, or because the case for reform has not been adequately made and communicated to citizens. It may also be because radical transformations are difficult at a national level given Canada's unique style of federalism – particularly with respect to jurisdictional responsibilities for healthcare. It is likely, therefore, that Canada needs provincial leadership to make the compelling case for radical reform or to initiate incremental pharmacare expansion in a manner that would build political support as public drug programs evolved (Forest 2004; Boothe 2012).

If incremental reform is the path forward, two lessons ought to be heeded. First, the scale and pace of change matters (Boothe 2012). If proposed changes do not do enough – in the sense of making the system more accessible, affordable and efficient for most citizens – they may fail for lack of political support. Second, some incremental reforms in pharmacare may be steps backward. The evidence on the performance of pharmacare in British Columbia and Quebec illustrates pitfalls associated with two possible options for what might appear to be pharmacare expansion. The universal income-based pharmacare model that British Columbia exemplifies does little to remove financial barriers to accessing medicines; provides limited financial protection for the ill, particularly against chronic high-cost medicine needs; and actually reduces

government's incentives and capacity to manage pharmaceutical costs at a system level. Quebec's model of compulsory private insurance achieves universality of coverage and therefore encourages access to medicines; however, the system involves significant patient charges, regressive financing through premiums, and legislation that works against effective expenditure control. Therefore, neither of the routes exemplified by British Columbia or Quebec should be considered progress relative to, say, the status quo in Ontario.

That said, the status quo for Ontario is also not a viable option in the long run. Offering benefits based on age privileges some members of the population while putting public expenditures on medicines under somewhat artificial pressures: though total costs of medicines will only increase by approximately 1 percent per year as a result of the aging babyboomer generation, the public liability for those costs increases far faster when there is an age-based entitlement to drug coverage (Morgan and Cunningham 2011).

The policy challenge is therefore to build incrementally toward the system that we know will provide greater access, financial protection and efficiency: a universal system of pharmacare that is comparable to and integrated with the other elements of medicare. Steps in that direction might include universal coverage for drugs with known value propositions in terms of reduced public spending on hospitals – such as universal coverage for cost-effective cardiovascular medicines (Dhalla, Smith et al. 2009; Choudhry, Avorn et al. 2011). Another option might include universal first-dollar coverage of generic medicines acquired under tendering processes – in provinces or nationally – that could save enough money to render the expansion of coverage revenue neutral to government (Morgan, Hanley et al. 2007; Law and Morgan 2011).

In the short run, reducing direct charges to patients and better integrating universal pharmacare coverage with the rest of our universal health insurance system will increase government

spending. This will raise politically difficult, but nonetheless resolvable, questions about the financing mechanism – including questions about the mix of taxes or premiums and whether financing should be clearly earmarked. But, if well designed and run, a universal system of pharmacare would save billions of dollars, employers and workers would see the costs of extended health

benefits fall considerably and more patients would enjoy more coverage for more medicines. Reform is not impossible, especially as a greater number of taxpayers and businesses find they can no longer afford the status quo, and as they learn that they are currently paying a lot more for their pharmacare systems while getting a lot less than their peers around the world.

REFERENCES

- Adams, A. S., S. B. Soumerai, et al. 2001. "The Case for a Medicare Drug Coverage Benefit: A Critical Review of the Empirical Evidence." *Annual Review of Public Health* 22: 49-61.
- Aitken, M., E. R. Berndt, et al. 2009. "Prescription Drug Spending Trends In The United States: Looking Beyond The Turning Point." *Health Affairs* 28(1): w151-160.
- Blais, L., J. Couture, et al. 2003. "Impact of a Cost Sharing Drug Insurance Plan on Drug Utilization among Individuals Receiving Social Assistance." *Health Policy* 64(2): 163-172.
- Boothe, K. 2012. "How the Pace of Change Affects the Scope of Reform: Pharmaceutical Insurance in Canada, Australia, and the United Kingdom." *Journal of Health Politics, Policy and Law* 37(5): 779-814.
- Brougham, M., S. Metcalfe, et al. 2002. "Our Advice? Get a Budget!" *Healthcare Papers* 3(1): 83-5; discussion 87-94.
- Busse, R. and A. Riesberg. 2004. *Health Care Systems in Transition: Germany*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.
- Canada. 1964. *Royal Commission on Health Services*. Ottawa: Queen's Printer.
- . 1997. *Canada Health Action: Building on the Legacy*. Ottawa: National Forum on Health.
- Choudhry, N. K., J. Avorn, et al. 2011. "Full Coverage for Preventive Medications after Myocardial Infarction." *New England Journal of Medicine* 365(22): 2088-2097.
- CIHI. 2011. *Drug Expenditure in Canada, 1985-2010*. Ottawa: Canadian Institute for Health Information.
- . 2012. *National Health Expenditure Trends, 1975 to 2012*. Ottawa: Canadian Institute for Health Information.
- Clarke, T. and G. Durant. 2012. "Retiree Benefits: A Rare Breed." *Benefits Canada* (May): 52-55.
- Daw, J. R., and S. G. Morgan. 2012. "Stitching the Gaps in the Canadian Public Drug Coverage Patchwork? A Review of Provincial Pharmacare Policy Changes from 2000 to 2010." *Health Policy* 104(1): 19-26.
- Delnoij, D., and G. Brenner. 2000. "Importing Budget Systems from other Countries: What can we Learn from the German Drug Budget and the British GP Fundholding?" *Health Policy* 52(3): 157-169.
- Dhalla, I. A., M. A. Smith, et al. 2009. "Costs and Benefits of Free Medications after Myocardial Infarction." *Healthcare Policy* 5(2): 68.
- Docteur, E., V. Paris, et al. 2008. "Pharmaceutical Pricing Policies in a Global Market." Paris: Organisation for Economic Co-operation and Development.
- Dormuth, C. R., R. J. Glynn, et al. 2006. "Impact of two sequential drug cost-sharing policies on the use of inhaled medications in older patients with chronic obstructive pulmonary disease or asthma." *Clinical Therapeutics* 28(6): 964-978.
- Dormuth, C. R., P. Neumann, et al. 2009. "Effects of prescription coinsurance and income-based deductibles on net health plan spending for older users of inhaled medications." *Medical Care* 47(5): 508-516.
- Eaddy, M. T., C. L. Cook, et al. 2012. "How patient cost-sharing trends affect adherence and outcomes: a literature review." *Pharmacy and Therapeutics* 37(1): 45.
- Evans, R. G. 1984. *Strained mercy : the economics of Canadian health care*. Toronto: Butterworths.
- Evans, J. P. 2007. "Health care in the Age of Genetic Medicine." *JAMA: The Journal of the American Medical Association* 298(22): 2670-2672.
- Forest, P.-G. 2004. "To Build a Wooden Horse ... Integrating Drugs into the Public Health System." *HealthcarePapers* 4(3): 22-26.
- Goldman, D. P., G. F. Joyce, et al. 2007. "Prescription Drug Cost Sharing: Associations With Medication and Medical Utilization and Spending and Health." *JAMA* 298(1): 61-69.

- Hanley, G. E., and S. Morgan. 2009. "Chronic catastrophes: exploring the concentration and sustained nature of ambulatory prescription drug expenditures in the population of British Columbia, Canada." *Social Science & Medicine* 68(5): 919-24.
- Hanley, G. E., S. G. Morgan, et al. 2011. "Income-related inequity in initiation of evidence-based therapies among patients with acute myocardial infarction." *Journal of General Internal Medicine* 26.
- Herper, M. 2010. The World's Most Expensive Drugs. *Forbes*. Retrieved 22 Aug 2011 from <http://www.forbes.com/2010/02/19/expensive-drugs-cost-business-healthcare-rare-diseases.html>
- Kaiser Family Foundation and Health Research and Educational Trust. 2012. Employer Health Benefits: 2012 Annual Survey. Menlo Park (CA): Kaiser Family Foundation.
- Kennedy, J., and S. Morgan. 2009. "Cost-related prescription nonadherence in the United States and Canada: A system-level comparison using the 2007 international health policy survey in seven countries." *Clinical Therapeutics* 31(1): 213-219.
- Kratzer, J., K. McGrail, et al. 2013. "Cost-control Mechanisms in Canadian Private Drug Plans." *Healthcare Policy* [in print].
- Law, M. R., L. Cheng, et al. 2012. "The effect of cost on adherence to prescription medications in Canada." *CMAJ* 184(3): 297-302.
- Law, M. R., J. R. Daw, et al. (2013). "Growth in private payments for healthcare by Canadian households." *Health Policy* (in print).
- Law, M. R., and S. G. Morgan. 2011. "Purchasing Prescription Drugs in Canada: Hang Together or Hang Separately." *Healthcare Policy* 6(4): 22-26.
- Marin, G., S. Thomson, et al. 2008. "What impact do prescription drug charges have on efficiency and equity? Evidence from high-income countries." *International Journal for Equity in Health* 7(1): 12.
- Mercer. 2011. "Cost Trends in Health Benefits for Ontario Businesses: Analysis for Discussion." Toronto, Mercer (Canada) Limited.
- Morgan, S., K. Bassett, et al. 2004. "Outcomes-Based Drug Coverage in British Columbia." *Health Affairs* 23(3): 269-276.
- Morgan, S., and M. Coombes. 2006. "Income-based Drug Coverage in British Columbia: Toward an Understanding of the Policy." *Healthcare Policy* 2(2): 92-108.
- Morgan, S., and C. Cunningham (2011). "Population Aging and the Determinants of Healthcare Expenditures: The Case of Hospital, Medical and Pharmaceutical Care in British Columbia, 1996 to 2006." *Healthcare Policy* 7(1): 68-79.
- Morgan, S., G. Hanley, et al. 2007. "Influencing Drug Prices through Formulary-based Policies: Lessons from New Zealand." *Healthcare Policy* 3(1): 1-20.
- Morgan, S., J. Kennedy, et al. 2009. "Toward an Understanding of High Performance Pharmaceutical Policy Systems: A "Triple-A" Framework and Example Analysis" *The Open Health Services and Policy Journal* 2(1): 1-9.
- Morgan, S., P. Thomson, et al. 2013. "Inter-jurisdictional Cooperation on Pharmaceutical Product Listing Agreements: Views from Canadian Provinces." *BMC Health Services Research* 13(1): 34.
- Morgan, S. G., and J. R. Daw. 2012. "Canadian Pharmacare: Looking Back, Looking Forward." *Healthcare Policy* 8(1): 14-23.
- Morgan, S. G., J. R. Daw, et al. 2013. "International best practices for negotiating 'reimbursement contracts' with price rebates from pharmaceutical companies." *Health Affairs* 32(4):771-7.
- Morgan, S. G., M. K. Friesen, et al. 2013. "Use of Product Listing Agreement by Canadian Provincial Drug Benefit Plans." *Healthcare Policy* 8(4): 45-55.
- Morgan, S. G., C. B. Raymond, et al. 2008. *The Canadian Rx Atlas*, 2nd Edition. Vancouver: Centre for Health Services and Policy Research.
- Mossialos, E., and A. Oliver. 2005. "An overview of pharmaceutical policy in four countries: France, Germany, the Netherlands and the United Kingdom." *International Journal of Health Planning & Management* 20(4): 291-306.

- Nicolle, E. and I. Mathauer. 2010. "Administrative Costs of Health Insurance Schemes: Exploring the Reasons for their Variability." Discussion Paper. Geneva: World Health Organization (WHO).
- OECD. 2011. "OECD Health Data 2011: Frequently Requested Data." Retrieved April 27, 2012, from http://www.oecd.org/document/16/0,3746,en_2649_33929_2085200_1_1_1_1,00.html.
- . 2012. "Structural Analysis (STAN) Databases: R&D expenditures by Industry." Retrieved 17 Feb 2013, from <http://stats.oecd.org/>.
- Pauly, M. V. 2004. "Medicare Drug Coverage and Moral Hazard." *Health Affairs* 23(1): 113.
- Pomey, M.-P., P.-G. Forest, et al. 2007. "Public/private partnerships for prescription drug coverage: Policy formulation and outcomes in Quebec's universal drug insurance program, with comparisons to the Medicare prescription drug program in the United States." *Milbank Quarterly* 85(3): 469-498.
- PMPRB. 2010. "Generic Drugs in Canada: Market Structure – Trends and Impacts." Ottawa: Patented Medicine Prices Review Board.
- . 2012. "Patented Medicine Prices Review Board: Annual Report 2011." Ottawa: Patented Medicine Prices Review Board.
- Quebec, G. o. 2012. "Règlement sur les conditions de reconnaissance d'un fabricant de médicaments et d'un grossiste" A-29.01. Quebec, Canada.
- Schoen, C., R. Osborn, et al. 2010. "How Health Insurance Design Affects Access To Care And Costs, By Income, In Eleven Countries." *Health Affairs* 29(12): 2323-2334.
- Seiter, A. 2010. *A Practical Approach to Pharmaceutical Policy*. Washington, D.C.: World Bank.
- Sketris, I. S., H. Lummis, et al. 2007. *Optimal prescribing and medication use in Canada: challenges and opportunities*. Toronto: Health Council of Canada.
- Soumerai, S. B., and D. Ross-Degnan. 1997. "Prescribing Budgets: Economic, Clinical, and Ethical Perspectives." *Australian Prescriber* 20: 28-9.
- Statistics Canada. 2008. "Workplace and Employee Survey Compendium 2005." Ottawa: Statistics Canada.
- Sturm, H., A. Austvoll-Dahlgren, et al. 2007. "Pharmaceutical Policies: Effects of Financial Incentives for Prescribers." *Cochrane Database Syst Rev* (3): CD006731.
- Tamblyn, R., R. Laprise, et al. 2001. "Adverse Events associated with Prescription Drug Cost-sharing among Poor and Elderly Persons." *JAMA* 285(4): 421-429.
- Taylor, M. G. 2009. *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.
- Vogler, S., N. Zimmermann, et al. 2012. "Discounts and Rebates Granted to Public Payers for Medicines in European Countries." *South Med Rev* 5(1): 38-46.
- World Health Organization. 2001. *How to Develop and Implement a National Drug Policy* (Second Edition). Geneva: World Health Organization.

RECENT C.D. HOWE INSTITUTE PUBLICATIONS

- June 2013 Howitt, Peter. *From Curiosity to Wealth Creation: How University Research Can Boost Economic Growth*. C.D. Howe Institute Commentary 383.
- May 2013 Beaudry, Paul, and Philippe Bergevin. “The New ‘Normal’ for Interest Rates in Canada: The Implications of Long-Term Shifts in Global Saving and Investment.” C.D. Howe Institute E-Brief.
- May 2013 Mysicka, Robert, and Marty McKendry. *Beer, Butter, and Barristers: How Canadian Governments Put Cartels before Consumers*. C.D. Howe Institute Commentary 382.
- May 2013 Masson, Paul R. *The Dangers of an Extended Period of Low Interest Rates: Why the Bank of Canada Should Start Raising Them Now*. C.D. Howe Institute Commentary 381.
- May 2013 Brydon, Robbie, and Benjamin Dachis. *Access Denied: The Effect of Apprenticeship Restrictions in Skilled Trades*. C.D. Howe Institute Commentary 380.
- April 2013 Pantaleo, Nick, Finn Poschmann and Scott Wilkie. *Improving the Tax Treatment of Intellectual Property Income in Canada*. C.D. Howe Institute Commentary 379.
- April 2013 Sutherland, Jason M., R. Trafford Crump, Nadya Repin and Erik Hellsten. *Paying for Hospital Services: A Hard Look at the Options*. C.D. Howe Institute Commentary 378.
- April 2013 Laurin, Alexandre. “A Reality Check for BC: The Impact of Behavioural Responses on the 2013 Budget’s Proposed Income Tax Increases.” C.D. Howe Institute E-Brief.
- April 2013 Behrens, Kristian. *Strength in Numbers? The Weak Effect of Manufacturing Clusters on Canadian Productivity*. C.D. Howe Institute Commentary 377.
- March 2013 Fyfe, Stephen, Mark Garner, and George Vegh. *Mergers by Choice, Not Edict: Reforming Ontario’s Electricity Distribution Policy*. C.D. Howe Institute Commentary 376.
- March 2013 Laurin, Alexandre, and William B.P. Robson. *Prudence and Opportunity: A Shadow Federal Budget for 2013*. C.D. Howe Institute Commentary 375.
- March 2013 Busby, Colin, and Daniel Schwanen. *Putting The Market Back in Dairy Marketing*. C.D. Howe Institute Commentary 374.
- March 2013 Bergevin, Philippe. “Who Is Still Standing in Line? Addressing a Mismatch of Skills and Jobs in the Canadian Labour Market.” C.D. Howe Institute E-Brief.

SUPPORT THE INSTITUTE

For more information on supporting the C.D. Howe Institute’s vital policy work, through charitable giving or membership, please go to www.cdhowe.org or call 416-865-1904. Learn more about the Institute’s activities and how to make a donation at the same time. You will receive a tax receipt for your gift.

A REPUTATION FOR INDEPENDENT, NONPARTISAN RESEARCH

The C.D. Howe Institute’s reputation for independent, reasoned and relevant public policy research of the highest quality is its chief asset, and underpins the credibility and effectiveness of its work. Independence and nonpartisanship are core Institute values that inform its approach to research, guide the actions of its professional staff and limit the types of financial contributions that the Institute will accept.

For our full Independence and Nonpartisanship Policy go to www.cdhowe.org.



C.D. HOWE
INSTITUTE

67 Yonge Street, Suite 300,
Toronto, Ontario
M5E 1J8

Canadian Publication Mail Sales
Product Agreement #40003848