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# DRUG COVERAGE

## FOR LOW-INCOME FAMILIES

The Canadian reality and lessons from Switzerland and the Netherlands, by Nadeem Esmail and Bacchus Barua.





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# Foreword

## Dr. Brett Belchetz<sup>1</sup>

For several years now, in the media and in public policy discussions, there has been a growing chorus of calls for Canada to adopt a national, government funded plan for prescription pharmaceutical coverage. Dubbed Pharmacare by its proponents, such a plan is usually declared necessary to address two issues: First, Canada is regularly cited as the only industrialized country with universal health care that is lacking a universal drug plan; and second, it is claimed that the absence of such a plan is hurting our most vulnerable citizens—low income earners and the unemployed.

In early March 2015, the debate over this issue made national headlines when the Canadian Medical Association Journal (CMAJ) published a study that claimed Pharmacare could save Canadians approximately \$7 billion per year in drug costs, with little to no tax increases.

On the surface of it, Pharmacare sounds like a win-win situation—more coverage for less money. But on closer inspection, none of the assumptions used to support such a plan stand up well to scrutiny.

First, the assertion that Canada is the only industrialized country with a universal health care system that does not provide national drug coverage to its citizens is entirely false. In actuality, Canada is the only country in the industrialized world with universal health care that does not have a second, private tier of health care, and one of only three nations in the industrialized world that does not require its citizens to pay some form of user fee for medical services. This is significant in that public drug coverage is affordable to the governments in most other countries due to

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the savings achieved by shifting part of the burden of paying for health care to the private sector. Thus, the premise of comparing us to our international peers is misleading and inappropriate, a point well illustrated in Bacchus Barua's essay in this collection, "Universal Insurance for Pharmaceuticals in Switzerland and The Netherlands."

Similarly disingenuous, when it comes to Canada's vulnerable citizens, are claims of a lack of access to prescription medications, as Nadeem Esmail explains in his essay, "Drug Coverage for Low Income Families in Canada," also in this collection. Analysis of existing drug coverage shows that, in every single province, Canadians on social assistance receive coverage for drugs at very low or no cost to the patient, and that lower income Canadians across the country receive, at a minimum, catastrophic insurance for prescription drugs. A national drug plan would add little to such existing levels of coverage.

The cost savings the CMAJ study claims Pharmacare will achieve are also dubious, given the existing example of Canada's only public drug plan, in Quebec, which at a cost of \$1,065 per capita in 2014 achieved the second highest drug expenditures in this country. The CMAJ study was also flawed in that it based its cost assumptions for future pharmaceutical use on historic levels of demand, omitting the impact on demand for drugs that will occur when the price of prescriptions approaches zero, a miscalculation that could add billions in additional cost.

In summary, Pharmacare is a program that is not desperately needed, either to bring us in line with our international peers, or to ensure access to medications for our poorest citizens. Furthermore, the implementation of such a program may end up costing us unanticipated billions of dollars. In a time of extreme budgetary restraint, such a program, which is both unneeded and of unknown cost, simply does not measure up as something that should be a policy priority for Canada.

## Executive summary

Calls for government-operated universal drug insurance programs, commonly referred to as Pharmacare, can regularly be found in the nation's media. These demands are often based on concerns about the affordability of prescription drugs, and typically call for limited or no patient payments. What is missing in the discussion around these proposals is perspective on the merits of such expansion, particularly on what additional coverage such expansion would provide for lower income Canadians, and whether government-run insurance with limited patient payments is the best approach to providing drug insurance coverage to all Canadians.

The two essays in this study seek to fill this void to help inform the debate over drug insurance policy in Canada.

The first essay is a brief overview of the drug insurance coverage already available to lower income Canadians. While there may be theoretical concerns about affordability across the income spectrum, author Nadeem Esmail notes there should be particular concern for those with lower incomes, as they may be more likely to forego filling their prescriptions due to cost than middle or higher income Canadians. Middle and higher income Canadians are more likely to have effective private insurance through their employer, or by purchasing it directly, thus reducing their need for government assistance.

Esmail finds that Canadians with lower incomes currently have access to comprehensive drug coverage in all of Canada's provinces. Specifically, in every province, those on social assistance receive coverage for drugs at very low or no cost to the patient or insured individual. And while qualifying income levels vary across Canada, lower-income Canadians have access to at least catastrophic insurance for prescription drugs. Coverage under current plans also tends to be more generous for lower-income children and seniors than for non-senior adults, particularly those without children. Further, provincial catastrophic programs (which provide coverage after expenditures exceed a specified portion of income) provide similarly generous coverage to current insurance programs when the qualifying expenditure for lower-income Canadians is compared with deductibles or premiums charged in other provinces.

In the second essay, Bacchus Barua examines how Switzerland and the Netherlands, two nations with high performing universal access health care systems, provide drug insurance coverage to their populations. Both nations have been found to provide more timely access to higher quality health care services at a similar or lower cost than Canada. Neither nation has opted to pursue a government-run insurance scheme; both provide universal pharmaceutical coverage as a fundamental component of universal health insurance coverage, which is provided through regulated, competing, private insurance companies. Further, the universal schemes in both nations require cost sharing (including for prescription drugs) through both per-service charges and insurance deductibles.

Access to care for individuals and families regardless of health or income is ensured in these nations through a range of policies including community-rated premium regulations, taxpayer-funded premium assistance, programs that equalize risk among insurers, annual caps on cost-sharing, and public safety nets for vulnerable people. Importantly, rather than become an insurance provider, the government generally supports consumer choice for lower income individuals by allowing them to choose their insurer and remain active players in the insurance market.

Modern medicines are essential for improving health outcomes, alleviating pain and suffering, increasing longevity, and reducing expenditures on other medical services. While there is merit to pursuing a policy that expands access to those in need, it should be recognized that several avenues exist between the current, decentralized approach in Canada, and the sort of government-run, universal program that proponents of the single-payer system propose.

Expansions in government insurance coverage are not costless, and must be judged against coverage already provided by governments to lower income Canadians.



# Drug Coverage for Low Income Families in Canada

Nadeem Esmail

## Introduction

Calls for national or provincial universal drug insurance for Canadians are often predicated on concerns about the affordability of prescription medicines (see for example Gagnon, 2010; Daw and Morgan, 2012; and Morgan, Daw, and Law, 2013). Less often presented in the public debate is what coverage is already available to Canadians with lower incomes in order to ensure they have access to necessary prescription drugs. Understanding this aspect of current health policy is essential for those wanting to judge how well lower income Canadians are already protected from the potentially high costs of prescription medicines. It is also essential for anyone trying to determine whether an expansion to universal drug coverage, potentially with low or no premiums and deductibles or co-payments, is a sound use of taxpayer dollars.

Access to prescription drugs is important both for the health and well-being of individuals, and for enhancing the cost-effectiveness of medical care (Hermus et al., 2013; Labrie, 2013). Drug therapies not only cure or alleviate illnesses, but can also prevent deterioration in a patient's condition and reduce future health costs. Drug therapies, particularly newer ones and in spite of their higher price, have also been shown to reduce health care costs overall through reductions in the use of hospital and physician services (Lichtenberg, 2002).

An important aspect of access to medicines is the affordability of prescription drugs. While concerns are often raised about the cost of prescriptions for Canadians of all ages and incomes, there is a particular concern for those with lower incomes, as they may be more likely to forego prescriptions due to their cost than are middle or higher income Canadians. While the cost of pharmaceuticals is important to those at higher

incomes as well, the trade-offs they make to be able to purchase prescription drugs is considerably different. For example, a person with a lower income may be trading off food, shelter, or other necessities of life for medical treatment, while those at higher incomes may be less likely to face the same decisions and may instead be foregoing less essential goods and services.<sup>2</sup> Further, those at higher incomes are more likely to have effective private insurance through employment or direct purchase, and thus may have less need for governmental assistance.<sup>3</sup>

This essay provides an overview of drug insurance coverage for low income Canadians across Canada, including the definition of “low income” in each province. It does not explore other important aspects of drug insurance coverage, such as timely access to new medicines or the impacts of cost-control policies that may harm individuals by restricting access to particular therapies for a given condition (see for example, Skinner et al., 2009; Rawson, 2013; and Lybecker, 2013). The goal of this essay is to provide Canadians with a clearer view of what drug coverage is already available to those with lower incomes, among others (including seniors and middle-income earners), in an effort to better inform Canadians about the cost-benefit trade-offs of proposals to reform governmental drug coverage in Canada.

## Drug coverage by province

A review of provincial drug plans finds extensive coverage for lower income Canadians across Canada.<sup>4</sup> Coverage is, however, not uniform among the provinces; some offer notably more generous coverage than others. There are also important differences in what coverage is available to different family types and age groups within each province.

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<sup>2</sup> While these goods and services may be considered less essential from a basic needs perspective, they may still be perceived to be more valuable than the drug therapy to the individual making the trade-off, the result being that valuable drug therapies may still not be purchased, even in the presence of apparently sufficient income.

<sup>3</sup> While comprehensive data on the characteristics of private insurance holders in Canada is not available, those with higher incomes, those working in larger workplaces, those with full-time employment, those covered by collective bargaining agreements, and those in the finance and insurance industry, were more likely to have private health insurance coverage (Statistics Canada, 2008; Hurley and Guindon, 2008).

<sup>4</sup> More detailed descriptions of the drug coverage provided in each province are available in the appendix. All of the data and calculations presented in this section are drawn from the information presented there.

**Table 1: Maximum Income Level for Most Generous Coverage, Family of 4 (2 Non-Senior Non-Dependent Adults, 2 Dependent Children) Not on Social Assistance**

	BC	AB*	SK**	MB	ON	QC**	NB	NS	PE	NL
Income Limit	\$14,999	\$39,249 (\$34,346)	\$29,291	\$21,000	No limit	\$30,390	\$49,389	\$18,999	\$27,800	\$30,008
Premium	\$0	\$82.60 monthly (\$0)	\$0	\$0	\$0	\$0	\$67 monthly	\$0	\$0	\$0
Deductible (annual unless otherwise specified)	\$0	\$0 (\$0)	\$100 semi- annual (\$0)	2.91% of income	Approx 4% of net income	\$16.65 monthly (\$0)	N/A	1% of income	N/A	0%
Co-pay	30%	30% with \$25 max (0%)	35% (0%)	0%	\$2	32.5% (0%)	30% with \$30 max	20%	0% (phar- macy fee only)	20%
Out-of-pocket limit (annual unless otherwise specified)	2% of net income	None (None)	Special pro- gram for those whose drug costs exceed 3.4% of ad- justed family income	2.91% of income	None	\$1,006	None	4% of income	5% of income	5% of net income

\* All families (only for families meeting any of the requirements outlined in the appendix at the end of this chapter).

\*\* Adults (children)

Sources: See appendix at the end of this chapter; calculations by author.

As noted in the detailed descriptions of provincial coverage in the appendix, every province provides drug insurance for social assistance recipients. Provincial governments across Canada also provide drug coverage to select populations, including the severely disabled and those diagnosed with multiple sclerosis or cystic fibrosis, who may face considerable hardship as a result of either their medical care costs or other factors.

There are substantial differences in coverage between provinces for those with incomes above the lowest levels. There are also substantial differences within most provinces, where those with children or those over age 65 have more generous coverage than their younger and childless counterparts. These differences can be seen clearly in tables 1, 2, and 3 which show the maximum income level at which the most generous level of provincial drug coverage is available for families (table 1), individuals (table 2), and seniors (table 3).

**Table 2: Maximum Income Level for Most Generous Coverage, Single Individual (Non-Senior) Not on Social Assistance**

	BC	AB*	SK**	MB	ON	QC**	NB	NS	PE	NL
Income Limit	\$14,999	\$20,969 (\$15,545)	No program	\$15,000	No limit	\$14,890	\$26,360	\$9,999	No program	\$18,576
Premium	\$0	\$44.45 monthly (\$0)	No program	\$0	\$0	\$0	\$67 monthly	\$0	No program	\$0
Deductible (annual unless otherwise specified)	\$0	\$0 (\$0)	No program	2.91% of income	Approx 4% of net income	\$16.65 monthly	N/A	1% of income	No program	0%
Co-pay	30%	30% with \$25 max (0%)	No program	0%	\$2	32.50%	30% with \$30 max	20%	No program	20%
Out-of-pocket limit (annual unless other- wise specified)	2% of net income	None (None)	Special program for those whose drug costs exceed 3.4% of adjusted family in- come	2.91% of income	None	\$1,006	None	4% of income	3% of income for those with less than \$20,000 house- hold income	5% of net income

\* All families (only for families meeting any of the requirements outlined in the appendix at the end of this chapter).

\*\* Adults (children)

Sources: See appendix at the end of this chapter; calculations by author.

Among the provinces, the highest income level for the most generous level of public drug coverage for a family of 4 varies from \$14,999 in British Columbia to nearly \$50,000 in New Brunswick, while Ontario's deductible-based program has no income limit per se for the most generous level of coverage (table 1). For the most part, each of these programs requires either premiums to be paid (New Brunswick and Alberta), a deductible to be met (Saskatchewan, Manitoba, Ontario, Quebec, and Nova Scotia), or requires patients to pay at least some proportion of their prescription costs (i.e., a co-payment)<sup>5</sup> (British Columbia, Alberta, Saskatch-

<sup>5</sup> Co-payments or Co-insurance payments are either set dollar amounts that must be paid per prescription or a fraction of the prescription cost that must be borne by the patient. A deductible is the amount a patient must pay out of pocket during a period (monthly or annually for example) before the insurance program starts paying for or assisting with payment for medicines.

**Table 3: Maximum Income Level for Most Generous Coverage, Single Individual (Senior) Not on Social Assistance**

	BC*	AB	SK	MB	ON	QC	NB	NS	PE	NL
Income Limit	14,999 (\$32,999)	No limit	Eligible for federal age credit	\$15,000	\$16,017	94% - 100% GIS**	Senior receiving GIS**	\$17,999	No limit	Receiving GIS and OAS**
Premium	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Deductible (annual unless otherwise specified)	\$0	\$0	\$0	2.91% of income	\$0	\$0	\$0	\$0	\$0	\$0
Co-pay	30% (25%)	30% with \$25 max	\$20	0%	\$2	\$0	\$9.05	30%	8.25 + pharmacy fee	\$6
Out-of-pocket limit (annual unless otherwise specified)	2% (1.25% of net income)	None	Special program for those whose drug costs exceed 3.4% of adjusted family income	2.91% of income	None	\$0	\$500	\$382	None	None

\* Seniors born after 1939 (Seniors born before 1939)

\*\* GIS = Federal Guaranteed Income Supplement; OAS = Federal Old Age Security

Sources: See appendix at the end of this chapter; calculations by author.

ewan, Ontario, Quebec, New Brunswick, Nova Scotia, and Newfoundland & Labrador). Only the program in Prince Edward Island (up to an income of \$27,800) does without premiums, deductibles, or co-payments (other than pharmacy fees). Total out-of-pocket expenditures on drugs are limited in all provinces except Alberta and New Brunswick, while Ontario's zero-premium scheme with small, \$2 co-payments uses an income-based deductible.

For a single individual, the highest income level for the most generous level of public drug coverage among the provinces varies from \$9,999 in Nova Scotia to more than \$25,000 in New Brunswick, while Ontario's deductible-based program has no income limit per se for the most generous level of coverage (table 2). Neither Saskatchewan nor Prince Edward Island has drug coverage programs for lower income, single individuals. As was the case for families, each of the programs in the 8 provinces that have them for single individuals requires either that premiums be paid (New Brunswick and Alberta), a deductible be met (Manitoba, Ontario, Quebec, and Nova Scotia), or that patients pay at least some proportion of

their prescription costs (British Columbia, Alberta, Ontario, Quebec, New Brunswick, Nova Scotia, and Newfoundland & Labrador). Total out-of-pocket expenditures on drugs are limited in all provinces except Alberta and New Brunswick, while Ontario's zero-premium scheme with small, \$2 co-payments uses an income-based deductible. While Saskatchewan and PEI do not have drug coverage programs for single non-senior individuals, both have programs that seek to limit total out-of-pocket expenditures (subject to an income requirement in PEI).

As was the case for families, every province maintains a drug coverage program for seniors (table 3). In most provinces these programs provide more generous coverage to lower income seniors; the income limits for the most generous coverage ranges from caps based on federal income supports to \$32,999 for British Columbians born before 1939. Both Alberta and PEI maintain non-means tested drug coverage programs for seniors. Unlike programs for non-seniors, contributions for coverage are far more limited for seniors with all but Manitoba offering coverage without deductibles or premiums. Most provincial programs do require co-payments, however.

Most provinces allow considerably higher incomes for families than for individuals when granting access to the most generous level of provincial drug coverage (tables 1 and 2). In Alberta, Quebec, New Brunswick, and Nova Scotia, the income limit for a family of four is nearly double that for a single individual, while it is around 40% higher in Manitoba and 60% higher in Newfoundland. Only in BC and Ontario are the income limits for most the generous coverage similar for families and single individuals. Other than the difference in income thresholds, there are few differences in insured contributions between single individuals and families with the exception of Alberta, where premiums are higher for families than for single individuals.

While there are differences among the provinces in the income thresholds at which people can have access to public coverage, coverage for seniors tends to be more generous than that for single non-seniors if the income limits have been satisfied (see tables 2 and 3). In Alberta and PEI, coverage is more generous for seniors regardless of income: both provinces maintain zero-premium and zero-deductible schemes for all seniors. This compares to a program for non-seniors that is subject to a premium payment in Alberta and no program for single non-seniors in PEI.

Another way of comparing the differences in, and extent of, provincial coverage for lower income Canadians is to examine coverage for a given level of income in each province. One possible way to decide what dollar figure constitutes "lower income" is to use Statistics Canada's low income cut-off (LICO). To determine LICO, Statistics Canada calculates

**Table 4: Drug insurance coverage for family of 4 (2 non-senior non-dependent adults, 2 dependent children) at Statistics Canada's Low Income Cut-Off\***

	BC	AB	SK**	MB***	ON	QC****	NB	NS***	PE	NL
Premium	\$0	\$118 per month	\$0	\$0	\$0	\$233*****	\$67	\$0	\$0	\$0
Deductible (annual unless otherwise specified)	\$1,100	\$0	\$1,260	\$1,737.74	\$1,076	\$16.65 (\$0) monthly	\$0	\$1,518	\$2,197	\$0
Co-pay	30%	30% (max of \$25)	Variable	0%	\$2	32.5% (0%)	30% (max of \$30)	20%	0% (pharmacy fee only)	47.2%
Out-of-pocket limit (annual unless otherwise specified)	\$1,475	None	Special program for those whose drug costs exceed 3.4% of adjusted family income	None	None	\$1,006	None	\$4,553	None	\$1,853

\* The 2012 Low Income Cut-Off (LICO) for Census Metropolitan Areas with populations of 500,000 or more (the highest LICO value) was used. The before tax value was \$43,942. The after-tax value of \$37,052 was used for net or adjusted income. No accounting was made for other income adjusting factors employed in provincial calculations like the Universal Child Care Benefit.

\*\* Children are assumed to be over age 14. Children under age 14 are covered by the Children's Drug Plan and pay \$20 per prescription.

\*\*\* Both spouses were assumed to be working. Changing that assumption to one working spouse for the entire income value reduced the deductible for Manitoba to \$1,600.34 and reduced the deductible and out of pocket maximum for Nova Scotia to \$1,222.97 and \$4,018.33 respectively.

\*\*\*\* Adults (children)

\*\*\*\*\* 2013 premium calculation from Revenu Quebec Premium Payable Under the Quebec Prescription Drug Insurance Plan form.

Sources: Statistics Canada, 2013; Ontario 2013; See appendix at the end of this chapter; calculations by author.

the average amount all families spend of their after-tax income on food, shelter, and clothing in the Family Expenditure Survey and the Survey of Household Spending, and then adds 20% to this amount. Thus, if the average expenditure on these items consumes 40% of after-tax income, families spending more than 60% of their after-tax income on food, shelter, and closing would be considered to be below the low income cut-off.

The use of LICO as a measure of poverty has been thoroughly criticized (see, for example, Sarlo, 1992, 2001, and 2013). The bulk of this criticism correctly centers on the notion that LICO is a relative rather than

absolute measure of poverty. As a relative measure, LICO remains “unrelated to the actual cost of acquiring necessities” (Sarlo, 2001: 14). Further criticism stems from the fact that the 20% additional expenditure above the average is entirely arbitrary and could be a result of political choices rather than a natural measure of some significance (Sarlo, 1992). Clearly, LICO has weaknesses in measuring deprivation or absolute poverty.

However, the purpose of this essay is not to use LICO as a measure of poverty, or even a measure of low income, but rather to examine the relative generosity of existing provincial drug insurance coverage. For this reason, the highest income value for LICO is used for the provincial comparisons below, and no income adjusting factors used by provincial programs to increase eligibility were applied. Also, as noted above, those with very low incomes and those receiving social assistance have access to extensive drug insurance benefits across Canada.

As table 4 shows, most provinces offer coverage to families with incomes at Statistics Canada’s pre-tax low income cut-off of \$43,942 (\$37,052 after taxes), subject to either a premium or an annual deductible. These annual premiums or deductibles range from \$233 in Quebec to \$2,197 in Prince Edward Island, with several provinces (BC, Alberta, Ontario, and Nova Scotia) having premiums or deductibles between \$1,000 and \$1,500. Quebec offers coverage with both a premium of \$233, and a monthly deductible of \$16.65 for adults and \$0 for children. After the deductible and/or premium is paid, most provinces also require co-payments. (Manitoba and Prince Edward Island do not, while Quebec’s program only requires co-payments for adults.)

Table 5 shows that most provinces also maintain drug coverage programs for single individuals at Statistics Canada’s pre-tax low income cut-off of \$23,647 (\$19,597 after tax). For individuals earning the equivalent of LICO, most provincial drug coverage is subject to either a deductible or premium, ranging from \$400 in BC to \$1,182 in PEI. Alberta, Ontario, New Brunswick, and Nova Scotia have premiums or deductibles that range between \$500 and about \$800. Quebec requires both a premium of \$289 and a monthly deductible of \$16.65 (with an annual out-of-pocket limit similar to the deductible in Manitoba), while coverage in Newfoundland & Labrador for single individuals at this income level is subject to neither a premium nor a deductible. After the deductible and/or premium is paid, most provinces require co-payments, though Manitoba, Quebec, and Prince Edward Island do not.

Examining provincial coverage at Statistics Canada’s low income cut-off, which is higher than the qualifying income for the most generous level of coverage in most provinces, provides a different perspective on the relative generosity of provincial schemes. In British Columbia, for instance,



**Table 5: Drug insurance coverage for single individuals (non-senior) at Statistics Canada's Low Income Cut-Off\***

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
Premium	\$0	\$63.50 monthly	\$0	\$0	\$0	\$289**	\$67 monthly	\$0	\$0	\$0
Deductible (annual unless otherwise specified)	\$400	\$0	\$666	\$1,021.55	\$500	\$16.65 monthly	\$0	\$591	\$1,182	\$0
Co-pay	30%	30% (max of \$25)	Variable	0%	\$2	\$0	30% (max of \$30)	20%	0% (phar- macy fee only)	22.5%
Out-of-pocket limit (annual unless otherwise specified)	\$600	None	Special program for those whose drug costs exceed 3.4% of adjusted family in- come	None	None	\$1,006	None	\$2,010	None	\$980

\* The 2012 Low Income Cut-Off (LICO) for Census Metropolitan Areas with populations of 500,000 or more (the highest LICO value) was used. The before tax value was \$23,647. The after-tax value of \$19,597 was used for net or adjusted income.

\*\* 2013 premium calculation from Revenu Quebec Premium Payable Under the Quebec Prescription Drug Insurance Plan form.

Sources: Statistics Canada, 2013; Ontario 2013; see appendix at the end of this chapter; calculations by author.

the income limits to be eligible for the most generous coverage fall at the lower end of the spectrum, particularly for families, but at higher income levels, BC's coverage is as generous, if not more so, than that in other provinces. Similarly, Saskatchewan, which lacks coverage for lower income single individuals (other than what is available through a catastrophic scheme), is as generous as other provinces when the qualifying expenditure of 3.4% of income is compared with the deductibles and premiums charged in other provinces.

Tables 4 and 5 also show that for those living below the low income cut-off, provincial schemes are as (or more) generous to single individuals as they are to families. Importantly, this result is driven by considerably different (pre-tax) LICO income levels of \$23,647 for individuals and \$43,942 for families, which themselves reflect differences in the costs of food, clothing, and shelter among the family types.

## Discussion

Numerous commentators have called for an expansion of provincial drug coverage towards a universal scheme with limited patient payments. Morgan, Daw, and Law, for example, suggest that provinces integrate drug coverage into the Medicare system, covering “medically necessary prescription drugs at little or no cost to patients” (2013: 3). The Canadian Health Coalition has recommended that Canada’s governments adopt a national drug plan that “would be publicly funded and administered, control costs, provide universal access, and ensure the safe and appropriate use of drugs,” and that such a plan should “cover essential drug costs in the same way that Medicare now covers hospitals and physicians,” that is, without cost sharing (2007: 4). Similarly, Gagnon (2010) recommends a national, universal program that provides first-dollar (ie., no cost sharing) coverage for all prescription drugs.

These recommendations must be considered in light of the already extensive coverage available to lower income Canadians, and the coverage that is not far from these recommendations for those at the lowest income levels. As shown above, while the income levels at which coverage applies do vary, in every province lower income Canadians have access to at least catastrophic insurance for prescription drugs, and often more extensive coverage. Social assistance recipients have coverage at with very low or no premiums, deductibles, and co-payments in every province. As might be expected, coverage for lower income children and seniors tends to be relatively more generous than for non-senior adults, particularly those without children.

Current provincial coverage for lower income Canadians does vary across the country, including for qualifying income levels and required premiums, deductibles, and co-payments. It might be argued that a national scheme or federal guidelines would provide a solution to concerns about these differences. However, harmonizing coverage under a national scheme (or provincial schemes under national guidelines) would not necessarily be an improvement over the present situation.

A national scheme is likely to ignore important provincial and regional characteristics, such as differences in population age, senior migration, and international immigration. Specific population needs may also vary due to differences in income and economic growth, and differences in health promoting behaviours. By imposing a uniform approach to drug insurance across the provinces, provincial flexibility in tailoring drug coverage to the specific needs of their populations will be reduced.

A national scheme, or federally imposed policy structure, may also reduce policy innovation among the provinces, similar to what has been

seen with medicare. In that program, federal guidelines and interpretations have limited provincial policy freedom and have resulted in relatively costly, but poorly performing health care systems across Canada's provinces (Clemens and Esmail, 2012). Allowing provincial flexibility in setting health care policy, including the ability to experiment and emulate other successful approaches even in this one area of health care, would be superior to forcing all provinces into a uniform construct.<sup>6</sup>

Current provincial drug coverage for many lower income Canadians also does not meet the recommendations that governmental drug schemes should be without direct cost to consumers (no premiums, co-payments, or deductibles).<sup>7</sup> Again, this should not be considered a failure of current provincial coverage. Vitaly, coverage for those with the lowest incomes typically does come without direct cost to the individual or family. Further, the requirement that lower (but not lowest) income Canadians must pay some direct cost for prescription drugs and prescription drug coverage is very much in line with the drug coverage provided through universal health insurance schemes in other developed nations.<sup>8</sup>

Universal-access health care systems across the developed world require patients to share in the cost of services consumed—including prescription medicines. The effect of cost sharing generally is to encourage more informed decision making about the use of health care services, leading to a reduction in the use of those services overall without harming

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<sup>6</sup> It might be argued that a national program, with a national formulary or list of covered medicines, would reduce disparities in health coverage (particularly coverage of different and often newer medicines) across Canada. It is not at all certain, however, that a national formulary would result in improved access for everyone. On the contrary, it is possible a national formulary would reduce access to medicines for many.

<sup>7</sup> In a study on health reform barriers that the Canada Health Act (CHA) has created, Clemens and Esmail (2012) note that the CHA's limitations on cost sharing discourage the inclusion of pharmaceuticals under the taxpayer-funded universal health insurance scheme. The authors argue that the "free" physician and hospital care required by the CHA encourages patients to forego pharmaceutical care unless the province sets deductibles and/or co-payments to zero and bears the full cost. This either harms the health of patients and decreases cost-effectiveness, or forces provincial policy decisions regarding pharmaceutical coverage. Clemens and Esmail further note that this distortion under the CHA relates to many areas of health care in addition to pharmaceuticals, including home care and long-term care.

<sup>8</sup> The accompanying essay by Bacchus Barua explores the drug coverage offered in two high-performing universal-access health care systems (Switzerland and the Netherlands) in far greater detail. The discussion below provides only a broad overview of cost sharing in select nations to illustrate that Canadian coverage for lower-income individuals and families is not out of line with the health policy approaches of other developed nations that also maintain universal health insurance schemes.

health, as long as low income populations are exempt (Esmail and Walker, 2008). In many developed nations, the costs paid by those covered by and accessing the universal health care system can be several percentage points of family income, even for those with lower incomes (though typically not the lowest income groups). This is especially true when social insurance premiums for universal access health care coverage in countries like Germany, the Netherlands, or Switzerland are included.

In Germany for example, families must pay 8.2% of their wage or pension income for universal health insurance premiums (alongside an employer contribution). Beyond this, patients may be required to pay 10% of the cost of prescriptions with a €5 minimum (not to exceed the cost of the product) and €10 maximum. The co-payment is waived for prescriptions that are at least 30% below the reference price, while a number of limits and exemptions to cost sharing apply, including exemptions for children and pregnant women, and an annual out-of-pocket limit (not including prescription price differentials) of 2% of family income that falls to 1% for the chronically ill or those receiving ongoing treatment for the same illness (Esmail, 2014).

As noted in the complementary essay by Bacchus Barua, similar payments are required of Swiss and Dutch residents covered by the universal scheme.

In Switzerland, premiums for the universal insurance product are capped to between 8 and 10% of family income, and adults face a CHF 300 minimum annual deductible plus a 10% co-payment after the deductible is met (20% for brand name drugs when a generic option is available, unless the physician requests no substitution). Exemptions to cost sharing in Switzerland are provided to those needing social assistance, and to recipients of supplementary old age and disability benefits among others.

Families in the Netherlands must also pay insurance companies premiums for universal health insurance coverage, while those without an employer who are not receiving unemployment benefits also pay a share of income. Beyond this, there is a mandatory annual deductible of €350 (2013), though again exemptions and limits apply.

Countries with tax-funded universal access health care systems (a funding approach more similar to that employed by Canada's provinces) such as Sweden and Australia also require patients to share in the cost of universally insured prescription drugs. In Sweden, a deductible of SEK 1,100 (€122) applies to prescribed drugs, after which a sliding subsidy based on prescription spending is applied until an out-of-pocket maximum of SEK 2,200 (€244) is reached.<sup>9</sup> In most Swedish county councils,

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<sup>9</sup> 50% coverage from SEK1,101 to 2,100; 75% coverage from SEK2,100 to 3,900; 90% coverage from SEK3,900 to 5,400.

those under 20 are exempt from cost sharing for prescription drugs (Anell et al., 2012).

In Australia, a co-payment of AU \$35.40 applies to each prescription (plus an upcharge if the medicine is only partially covered) while pensioners and holders of other entitlement cards pay AU \$5.80. After an annual limit is reached, general consumers pay \$5.80, while those at the lower co-pay rate face no further cost sharing (Esmail, 2013).

The health care systems of Germany, the Netherlands, Switzerland, Sweden, and Australia have all been found to provide superior access to health care, if not also superior outcomes from the health care process at lower cost than Canada's health care system (see for example, Esmail, 2014; Esmail, 2013; and Esmail and Walker, 2008). Clearly, a higher level of consumer cost sharing overall and throughout the health care system has not reduced the relative performance of these health care systems.<sup>10</sup>

This is not to say that current provincial approaches have necessarily struck the right balance between financial responsibility and access to medicines, nor to say that current exemptions for those with low incomes provide sufficient protection and are applied appropriately. International experience does show, however, that low or zero cost sharing for prescription medicines is not a prerequisite to a high performing health care system.

## Conclusion

Access to prescription drugs is important for the health and well-being of individuals, and for enhancing the cost-effectiveness of medical care. The importance of prescription medicines paired with concerns about their affordability for those stricken with illness form the basis for many calls for a national or at least a provincial universal approach to insurance coverage at little or no direct cost to patients. Lacking in the debate is a clear understanding of the coverage that is already available to those with low incomes

<sup>10</sup> Looking more closely at the breakdown of out-of-pocket expenditures, Canada's policy approach does bias out-of-pocket spending towards certain categories of health expenditure (while also denying the ability to purchase others) leading to some 18% of prescription drug spending being financed out of pocket in Canada (Daw and Morgan, 2012). However, total Canadian out-of-pocket expenditures (including drugs) are not necessarily higher than in other nations that maintain universal drug insurance schemes. In 2009 (or the nearest year for which data was available), total Canadian out-of-pocket expenditures as a share of household consumption (2.9%) were below those in a typical developed country (3.2%), and well below those in Switzerland (6.2%), and Sweden (3.5%). On the other hand, they were the same as in Australia (2.9%), but higher than in Germany (2.4%) (OECD, 2011).

who may be more likely to forgo filling their prescriptions due to cost than those with higher incomes.

A review of provincial drug insurance coverage reveals that lower-income Canadians have access to at least catastrophic insurance (limiting out-of-pocket costs to a small percentage of income) for prescription drugs, if not more extensive coverage, in every Canadian province. Coverage for lower income children and seniors tends to be relatively more generous than for non-senior adults, particularly those without children. Recipients of social assistance have coverage at very low or no premiums, deductibles, and co-payments in every province.

## Appendix: Detailed Summaries of Provincial Drug Coverage

The information in this section is based on a review of provincial drug plan websites in August, 2014: CIHI (2014); PBI (2013); and Great-West Life (n.d.), unless otherwise noted.

### *British Columbia*

British Columbia's Fair Pharmacare program provides drug coverage to all British Columbians subject to an income-based deductible.

Income-based deductibles and out-of-pocket maximums under the Fair Pharmacare program are calculated as shown in tables A1a and A1b.

**Table A1a: British Columbia's Fair Pharmacare plan for those born after 1939**

<b>Net annual family income</b>	<b>Family deductible (% of net income, approximate*)</b>	<b>Share of costs covered</b>	<b>Maximum beyond which 100% coverage (% of net income, approximate*)</b>
< \$15,000	No deductible	70%	2% of net income
\$15,000 - \$30,000	2% of net income	70%	3% of net income
> \$30,000	3% of net income	70%	4% of net income

\* The deductible and maximum are based on income bands rather than direct percentages of income.

Source: British Columbia, n.d.

**Table A1b: British Columbia's Fair Pharmacare plan for those born before 1939**

<b>Net annual family income</b>	<b>Family deductible (% of net income, approximate*)</b>	<b>Share of costs covered</b>	<b>Maximum beyond which 100% coverage (% of net income, approximate*)</b>
< \$33,000	No deductible	75%	1.25% of net income
\$33,000 - \$50,000	1% of net income	75%	2% of net income
> \$50,000	2% of net income	75%	3% of net income

\* The deductible and maximum are based on income bands rather than direct percentages of income.

Source: British Columbia, n.d.

In addition to the scheme providing coverage for all British Columbians subject to an income-based deductible, British Columbians who are permanent residents of licensed care facilities, recipients of British Columbia income assistance, or severely disabled children receive 100% coverage for eligible prescription drugs. BC also has programs to cover the cost of psychiatric medications for those in need and to cover the cost of eligible cystic fibrosis medicines.

A key cost containment initiative pursued by British Columbia's Pharmacare program is reference-based pricing of drugs, where full coverage is provided only for those drugs deemed the least costly in their category. Drug classes included in the reference drug program are: histamine 2 receptor blockers, non-steroidal anti-inflammatory drugs, nitrates, angiotensin converting enzyme inhibitors, and dihydropyridine calcium channel blockers. This approach has been criticized in the past on the grounds of providing both inferior cost control and health consequences (see, for example, Graham, 2002).

## *Alberta*

Alberta's provincial drug plan makes coverage available to all Albertans through a partially premium-funded program with premium subsidies available to those in lower income and no premiums charged to those over age 65 and their dependants. Prescriptions covered under the program are

**Table A2a: Coverage for Albertans in low income (including children for families with children)**

<b>Family Type</b>	<b>Maximum Qualifying Income</b>
Single	\$15,545
Single parent with 1 child	\$24,397
Single parent with 2 children	\$29,073
Single parent with 3 children	\$34,056
Single parent with 4 children*	\$39,336
Couple with no children	\$21,763
Couple with 1 child	\$29,285
Couple with 2 children	\$34,346
Couple with 3 children	\$38,997
Couple with 4 children*	\$44,000

\* Add \$4,663 to qualifying income for each additional child.

Source: Alberta Health, n.d. (a).



**Table A2b: Coverage for non-senior Albertans not in low income**

<b>Family Type</b>	<b>Income</b>	<b>Monthly Premium</b>
Single	< \$20,970	\$44.45
	≥ \$20,970	\$63.50
Family without children	< \$33,240	\$82.60
	≥ \$33,240	\$118.00
Family with children	< \$39,250	\$82.60
	≥ \$39,250	\$118.00

Source: Alberta Health, n.d. (b).

subject to a 30% co-payment (maximum of \$25) per prescription. There is no deductible for coverage, nor is there an out-of-pocket maximum.

Albertans who are severely handicapped, those on social assistance, those leaving social assistance with low incomes (subject to the income test in table 2a), pregnant Albertans with low income (subject to the income test in table 2a), lower-income adults with high ongoing prescription needs (subject to the income test in table 2a), and children of lower income families receive full coverage for drugs with no premiums or cost sharing. Programs are also offered for those receiving palliative care at home, suffering from multiple sclerosis, and cancer.

Non-senior adult Albertans can elect to receive coverage with the premiums and premium subsidies according to taxable family income shown in table A2b.

### **Saskatchewan**

Saskatchewan maintains several drug schemes that are available to residents on the basis of age, family type, and income:

A universal catastrophic scheme known as the Special Support Program is in place for all residents who are at risk of having drug costs exceed 3.4% of combined family income.

Children 14 and under pay no more than \$20 per prescription under the Children's Drug Plan.

Seniors eligible for the federal age credit will pay no more than \$20 per prescription under the Seniors' Drug Plan. Seniors with a Guaranteed Income Supplement or Seniors Income Plan receive coverage with semi-

annual deductibles of either \$100 (for those residing in special care home) or \$200 (for those living in the community) and a 35% co-payment.

Lower income families may be covered by the Family Health Benefits scheme, which provides children with 100% coverage for prescription drugs and provides adults with 65% coverage (35% co-payment) after a \$100 semi-annual deductible. To be eligible, family income must be below \$29,291 for families with 1 to 3 children, with \$1,392 added for each additional child to a limit of \$51,313 for families with 11 to 15 children.

Children in families receiving social assistance receive 100% coverage for prescription drugs. Adults pay no more than \$2 per prescription.

Those receiving palliative care or those with long term disabilities receive 100% coverage.

### **Manitoba**

Manitoba's Pharmacare program is a universal scheme that provides full coverage for prescription drugs (100% coverage, no co-payment) after a deductible based on adjusted family income (family income less \$3,000 per dependent) has been met. The deductibles are shown in table A3.

Those on social assistance receive full coverage for pharmaceuticals without premium, deductible, or co-payment.

**Table A3: Manitoba's Pharmacare deductibles**

<b>Adjusted total family income</b>	<b>Deductible (% of income)</b>
≤ \$15,000	2.91%
\$15,001 to \$21,000	4.14%
\$21,001 to \$22,000	4.18%
\$22,001 to \$23,000	4.26%
\$23,001 to \$24,000	4.32%
\$24,001 to \$25,000	4.36%
\$25,001 to \$26,000	4.42%
\$26,001 to \$27,000	4.47%
\$27,001 to \$28,000	4.51%
\$28,001 to \$29,000	4.55%
\$29,001 to \$40,000	4.58%
\$40,001 to \$42,500	4.98%
\$42,501 to \$45,000	5.10%
\$45,001 to \$47,500	5.20%
\$47,501 to \$75,000	5.27%
≥ \$75,001	6.60%

Source: Manitoba, n.d.

## Ontario

Ontario operates two principal drug programs: the Ontario Drug Benefit Plan and the Trillium Drug Program.

The Ontario Drug Benefit Plan provides drug coverage for those over age 65. Deductibles and co-payments for seniors vary under the plan according to the income-based rules for seniors listed in table A4.

**Table A4: Coverage for Ontarians under the Ontario Drug Benefit Plan**

Member	Deductible	Co-payment
Single senior with income below \$16,018	\$0	\$2.00
Senior couple with income below \$24,175	\$0	\$2.00
Single senior with income of \$16,018 or more	\$100	\$6.11
Senior couple with income of \$24,175 or more	\$100	\$6.11

Source: OMHLTC, n.d.

The Ontario Drug Benefit Plan also provides drug coverage for those living in long-term care homes or special care homes, those receiving home care, or those on social assistance including those with disabilities with no deductible and no more than a \$2 co-payment per prescription.

The Trillium Drug Plan is a plan with income-based deductibles available to all non-seniors. Those registering for the plan must declare either a lack of private health insurance or declare less than 100% coverage of prescription drug costs under private insurance. The deductibles under the plan are based on the number of members in a household and household net income, and are approximately 4% of net income (PBI, 2013). Prescriptions are subject to a \$2 co-payment after the deductible has been met.

## Quebec

Quebec requires residents not covered by private group insurance<sup>11</sup> to enroll in the government drug insurance plan (RAMQ). Those receiving public assistance (including the unemployed) are covered by the government scheme. RAMQ requires insured individuals to pay premiums subject to a scaled subsidy. Monthly deductibles and co-payments apply for

<sup>11</sup> Private group insurance in Quebec is also subject to regulations regarding what medicines are covered and the financial participation of insured individuals.

**Table A5: Quebec's statutory plan for those without private insurance**

<b>Member</b>	<b>Annual premium (with income-based subsidy)</b>	<b>Monthly deductible</b>	<b>Co-insurance after deductible</b>	<b>Monthly out-of-pocket maximum</b>	<b>Annual out-of-pocket maximum</b>
Those receiving social assistance	\$0	\$0	\$0	\$0	\$0
Children (under 18)	\$0	\$0	\$0	\$0	\$0
Full-time students aged 18 to 25, not married and living with parents	\$0	\$0	\$0	\$0	\$0
Persons aged 18 to 64	\$0–\$611	\$16.65	32.5%	\$83.83	\$1,006
Seniors with no GIS*	\$0–\$611	\$16.65	32.5%	\$83.83	\$1,006
Seniors with 1% to 93% of GIS*	\$0–\$611	\$16.65	32.5%	\$51.16	\$614
Seniors with 94% to 100% of GIS*	\$0	\$0	\$0	\$0	\$0

\* Guaranteed Income Supplement

Source: RAMQ, nd.

adults to a monthly maximum, while prescriptions for those under 18 are not subject to co-payment. Premium costs, deductibles, co-payments, and out of pocket maximums are given in table A5.

### ***New Brunswick***

The New Brunswick Prescription Drug Program provides coverage for seniors receiving the federal Guaranteed Income Supplement and lower income seniors. The program also provides coverage for those with cystic fibrosis, those with multiple sclerosis, those covered by or in care of the Department of Social Development, special needs children, those in a residential care facility, organ transplant patients, those with growth hormone deficiency, and those who are HIV positive (see table A6a).

The New Brunswick Drug Plan provides drug coverage to residents who are enrolled in medicare and do not have existing drug coverage (including no coverage for a specific drug and those who have reached annual or lifetime maximums under current drug coverage). Adults enrolled in the program must pay a premium based on income, while children 18 and younger are covered on a parent's policy without a premium. A 30% co-payment to a maximum of \$30 per prescription applies. Table A6b shows the premiums.

**Table A6a: New Brunswick's Prescription Drug Program**

<b>Member</b>	<b>Registration Fee</b>	<b>Co-payment</b>	<b>Annual out-of-pocket maximum</b>
Senior receiving GIS*	\$0	\$9.05	\$500
Single senior with income of \$17,198 or less	\$0	\$15.00	No maximum
Senior couple with income of \$26,955 or less	\$0	\$15.00	No maximum
Couple with one senior and income of \$32,390 or less	\$0	\$15.00	No maximum
Cystic fibrosis	\$50	20% to max of \$20	\$500 (family)
Adult in licenced residential facility	\$0	\$4.00	\$250.00
Department of Social Development client (adult)	\$0	\$4.00	\$250 (family)
Department of Social Development client (child)	\$0	\$2.00	\$250 (family)
Children in care of Social Development/Special needs children	\$0	\$0	\$0
Multiple Sclerosis	\$50	Based on income	No maximum
Organ transplant recipients	\$50	20% to max of \$20	\$500 (family)
Growth hormone deficiency	\$50	20% to max of \$20	\$500 (family)
HIV/AIDS	\$50	20% to max of \$20	\$500 (family)
Nursing home residents	\$0	\$0	\$0

\* Guaranteed Income Supplement

Source: New Brunswick, n.d.(a).

**Table A6b: Premiums for the New Brunswick Drug Plan**

<b>Gross Income</b>		<b>Premiums (per adult)</b>	
<b>Individual</b>	<b>Single with children/ Couple with or without children</b>	<b>Annual premium</b>	<b>Monthly Premium</b>
≤ \$26,360	≤ \$49,389	\$800	\$67
\$26,361 to \$50,000	\$49,390 to \$75,000	\$1,400	\$117
\$50,001 to \$75,000	\$75,001 to \$100,000	\$1,600	\$133
> \$75,000	> \$100,000	\$2,000	\$167

Source: New Brunswick, n.d.(b).

These premiums are expected to decrease in 2015 when participation is expanded. At that time, a 100% subsidy for premiums are expected to be provided to some lower-income New Brunswickers.

### ***Nova Scotia***

Nova Scotia operates two principal drug insurance programs: Seniors Pharmacare and the Family Pharmacare Program.

Seniors Pharmacare provides drug insurance coverage to those aged 65 and over who do not have private coverage or coverage under any other program. An annual premium of \$424 is required, though those receiving the Guaranteed Income Supplement, single seniors with incomes below \$18,000, and married seniors with joint income below \$21,000 may not be required to pay it. Single seniors with incomes between \$18,000 and \$24,000, and married seniors with joint income between \$21,000 and \$28,000 may receive premium reductions. All covered seniors must pay a 30% co-payment to an annual maximum of \$382.

The Family Pharmacare Program is a plan with income-based deductibles and out-of-pocket maximums available to all residents who are without drug coverage or facing high drug costs. Both the income-based deductibles and co-payment maximums vary depending on income and family size, with income adjusted downwards by \$3,000 for a spouse and each person under 18. The co-payment is 20% of the prescription price, with the first 20% of every prescription applied towards the co-payment maximum and the remaining 80% being applied towards the deductible. After the deductible is met, only the 20% co-payment is required per prescription. 100% coverage (zero co-payment) applies after the co-payment maximum is met. The deductibles and co-payment maximums use the percentages of adjusted income shown in tables A7a and 7b.

Nova Scotia also provides drug coverage to those receiving social assistance under the Department of Community Services, including those on income assistance, children in low income, and those with disabilities. Drug coverage is also provided to those receiving palliative home care. An income-based assistance program (income less than \$15,720) exists for those diagnosed with cancer.

**Table A7a: Nova Scotia's Family Pharmacare deductibles**

<b>Adjusted family income</b>	<b>Deductible (% of income)</b>
< \$10,000	1.0%
\$10,000 to < 15,000	1.0%
\$15,000 to < \$17,000	1.5%
\$17,000 to < \$20,000	2.0%
\$20,000 to < \$25,000	2.5%
\$25,000 to < \$30,000	3.0%
\$30,000 to < \$35,000	3.5%
\$35,000 to < \$40,000	4.0%
\$40,000 to < \$45,000	4.5%
\$45,000 to < \$50,000	5.0%
\$50,000 to < \$52,000	5.5%
\$52,000 to < \$54,000	6.0%
\$54,000 to < \$55,000	6.5%
\$55,000 to < \$57,000	7.0%
\$57,000 to < \$58,000	7.5%
\$58,000 to < \$60,000	8.0%
\$60,000 to < \$61,000	8.5%
\$61,000 to < \$63,000	9.0%
\$63,000 to < \$65,000	9.5%
\$65,000 to < \$67,000	10.0%
\$67,000 to < \$68,000	10.5%
\$68,000 to < \$70,000	11.0%
\$70,000 to < \$71,000	11.5%
\$71,000 to < \$73,000	12.0%
\$73,000 to < \$75,000	12.5%
\$75,000 to < \$77,000	13.0%
\$77,000 to < \$78,000	13.5%
\$78,000 to < \$80,000	14.0%
\$80,000 to < \$81,000	14.5%
\$81,000 to < \$83,000	15.0%
\$83,000 to < \$85,000	15.5%
\$85,000 to < \$87,000	16.0%
\$87,000 to < \$88,000	16.5%
\$88,000 to < \$90,000	17.0%
\$90,000 to < \$91,000	17.5%
\$91,000 to < \$93,000	18.0%
\$93,000 to < \$95,000	18.5%
\$95,000 to < \$97,000	19.0%
\$97,000 to < \$98,000	19.5%
\$98,000 and over	20.0%

Source: Nova Scotia, 2011.

**Table A7b: Nova Scotia's Family Pharmacare co-payment maximums**

<b>Adjusted family income</b>	<b>Co-payment maximum (% of income)</b>
< \$10,000	4.0%
\$10,000 to < \$20,000	5.0%
\$20,000 to < \$30,000	6.0%
\$30,000 to < \$40,000	8.0%
\$40,000 to < \$50,000	9.5%
\$50,000 to < \$60,000	11.0%
\$60,000 to < \$70,000	12.0%
\$70,000 to < \$80,000	13.0%
\$80,000 to < \$90,000	14.0%
\$90,000 and over	15.0%

Source: Nova Scotia, 2011

### ***Prince Edward Island***

Prince Edward Island operates three drug programs that provide coverage to lower income Canadians: The Seniors' Drug Cost Assistance Program, the Catastrophic Drug Program, and the Family Health Benefit Drug Program.

The Seniors Drug Cost Assistance Program provides coverage to residents of PEI aged 65 and older. Seniors pay only an \$8.25 co-payment for prescriptions plus the pharmacy's professional fee. There is no premium or out-of-pocket maximum.

The Family Health Benefit Drug Program provides coverage to low income families with children (under 18) or full-time students under 25. Those eligible for the program pay only the pharmacy fee for prescriptions, with no premium or deductible. The annual family income amounts required to qualify for coverage are shown in table A8a.

The Catastrophic Drug Program provides annual maximum out-of-pocket drug costs for all permanent residents of Prince Edward Island. The program covers all drug costs for households that have spent a specified percentage of their income on prescription drugs in a given year. See table A8b.

In addition to these programs, Prince Edward Island also offers coverage for children in custody of Child Welfare, for people living in nursing homes, and for those receiving social assistance. A number of



**Table A8a: Eligibility for PEI Family Health Benefit**

<b>Number of Children</b>	<b>Maximum Family Income</b>
1	< \$24,800
2	< \$27,800
3	< \$30,800
4	< \$33,800
More than 4	\$3,000 per additional child

Source: Health PEI, 2013

**Table A8b: Deductible for PEI Catastrophic Drug Program**

<b>Household Income</b>	<b>Deductible (share of income)</b>
< \$20,000	3%
\$20,000 to \$50,000	5%
\$50,000 to \$100,000	8%
> \$100,000	12%

Source: Health PEI, 2014.

disease-specific programs are also available including for those diagnosed with HIV/ AIDS, those needing anti-psychotic medications, those diagnosed with cystic fibrosis, those suffering chronic renal failure or who are on kidney dialysis, those with a growth hormone deficiency, those diagnosed with hepatitis, those needing Intron A-Interferon, those with a history of rheumatic fever or with rheumatic heart disease, and organ transplant patients. A high cost drug program for select medicines is also available with income-dependent co-payments ranging from \$2.00 plus the pharmacy professional fee to the full cost of the drug.

### ***Newfoundland & Labrador***

Newfoundland & Labrador's Prescription Drug Program has three programs that provide coverage to lower income Canadians: the 65Plus Plan, the Access Plan, and the Assurance Plan.

The 65Plus Plan provides drug insurance coverage to seniors who receive Old Age Security Benefits and the Guaranteed Income Supple-

**Table A9: Drug cost limits for Newfoundland & Labrador's Assurance Plan**

Household income	Cost limit (% of income)
≤ \$40,000	5%
\$40,000 to \$74,999	7.5%
\$75,000 to \$149,999	10%
≥ \$150,000	No coverage

Source: NLDHCS, n.d.

ment. The plan covers the cost of drugs with a co-payment of up to \$6. No deductible or premium is required.

The Access Plan provides lower income families with co-payments that vary between 20% and 70% depending on income level. To qualify, single individuals must have an income of \$27,151 or less, couples must have an income of \$30,009 or less, and families (including single parents) must have an income of \$42,780 or less.

The Assurance Plan provides drug coverage for those whose drug costs exceed a percentage of net family income. The program limits annual, out-of-pocket drug costs to this percentage, with a co-payment based on the previous year's total expenditure relative to the limit applied during the current year.<sup>12</sup> The drug cost limits are shown in table A9.

In addition to these insurance plans, Newfoundland & Labrador provides full coverage for those receiving income support benefits; children in the care of Child, Youth and Family Services; and individuals in supervised care under the province's Foundation Plan; and for disease-specific prescriptions for those diagnosed with cystic fibrosis and growth hormone deficiency under the Select Needs Plan.

<sup>12</sup> For example, if a family earned \$35,000 (giving an out-of-pocket maximum of \$1,750) and had actual expenses of \$2,500 in the previous year, the co-payment in the current year would be 70% (\$1,750/\$2,500).

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# Universal Insurance for Pharmaceuticals in Switzerland and the Netherlands

Bacchus Barua

## Introduction

Several studies have alluded to the success of the universal health care insurance systems in Switzerland and the Netherlands (for example, see Esmail, 2014; and Rovere and Barua, 2012a; 2012b).

These countries depart significantly from Canada in the manner in which their health care systems function, and are funded. Broadly speaking, instead of relying on a tax funded, monopoly government insurer, they encourage private health insurers to compete in a regulated market to deliver universal coverage of core medical goods and services to their entire populations. They also rely (to varying degrees) on cost-sharing for medical services, private provision of acute hospital and surgical services, activity-based funding for hospital care,<sup>13</sup> and furthermore, they do not prohibit the purchase of private health care services.

Importantly, these systems have repeatedly shown that they provide high quality, timely access to care at a similar, or lower, cost than Canada (see table 1).

For example, data from 2010 show that Switzerland's (age-adjusted) expenditure on health care was 12.4% lower than Canada's (as a portion of GDP). Moreover, it had more professionally active doctors, practicing nurses, acute-care beds, and MRI and CT scanners per capita. Patients also faced significantly shorter wait times, and similar (if not superior) health care outcomes.

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<sup>13</sup> Payment based on services provided, as opposed to budgetary models that pre-fund patient care in bulk.

**Table 1: Health system performance—Canada, Netherlands, and Switzerland**

<b>Indicator*</b>	<b>Canada</b>	<b>Netherlands</b>	<b>Switzerland</b>
Total health expenditure (age-adjusted, % of GDP)	12.1	12.5	10.6
Professionally active physicians (age-adjusted, per 1,000 pop.)	2.6	3	3.7
Practising nurses (age-adjusted, per 1,000 pop.) **	10	8.7	14.4
MRI machines in hospitals (age-adjusted, per 1,000,000 pop.)	6.9	11.9	17.5
CT Scanners (age-adjusted, per 1,000,000 pop.)	15.4	12.7	31.6
Curative (acute-care) hospital beds (age-adjusted, per 1,000 pop.) ***	1.9	3.4	3
Waited less than 30 minutes in an emergency room before being treated	20%	52%	44%
Same- or next-day appointment with doctor or nurse when sick or needed care	45%	72%	93%
Waited less than one month for specialist appointment	41%	70%	82%
Waited less than one month for elective surgery	35%	59%	55%
Waited four hours or more in emergency room before being treated	31%	3%	6%
Waited six days or more for access to doctor or nurse when sick or needed care	33%	5%	2%
Waited two months or more for specialist appointment	41%	16%	5%
Waited four months or more for elective surgery	25%	5%	7%
Infant mortality rate (per 1000 live births)	5.0	3.8	3.8
Mortality amenable to health care (per 100,000 pop.) ****	74	68	-
Five-year relative survival rate for breast cancer *****	87.7%	84.9%	-
Five-year relative survival rate for cervical cancer *****	66.0%	68.0%	-
Five-year relative survival rate for colorectal cancer *****	63.5%	60.6%	-
In-hospital fatality rates within 30 days (AMI)	6	6.8	5.9
In-hospital fatality rates within 30 days (hemorrhagic stroke)	24.2	25.9	16.5
In-hospital fatality rates within 30 days (ischemic stroke)	10.5	7.5	7
Uncontrolled diabetes hospital admission rate (per 100,000 pop.)	15.3	-	23.3
COPD hospital admission rate (per 100,000 pop.)	205.5	162.1	95.1
Asthma hospital admission rate (per 100,000 pop.)	15.6	31.8	30.2
Obstetric trauma, vaginal delivery, with instrument (per 100 births)	16.9	3.3	7.1
Obstetric trauma, vaginal delivery, without instrument (per 100 births)	3.1	2.5	3.7
Retained surgical item or unretrieved device fragment (adj. per 100,000 discharges)	7	-	11.6
Post-operative pulmonary embolism or deep vein thrombosis (per 100,000 discharges)	674.3	-	499.6
Post-operative sepsis (per 100,000 discharges)	661.6	-	350

\* 2010, unless otherwise noted.

\*\* Data is for 2008.

\*\*\* The OECD reports a difference in methodology for the Swiss data.

\*\*\*\* Data is from 2007.

\*\*\*\*\* For the five years ending 2008.

Sources: OECD (2013); Commonwealth Fund (2010); Gay et al., (2011); calculations by authors.



The Netherlands (age-adjusted) expenditure on health care was 3.3% higher than Canada's in 2010 (as a portion of GDP). For this level of spending, the Netherlands had more professionally active doctors, MRI machines, and acute-care beds, but fewer nurses and CT scanners. Again, patients faced significantly shorter wait times, with similar (and sometimes superior) health care outcomes.

In summary, the combination of superior health care access and outcomes with fewer resources suggests that further examination of the health care systems in these countries may hold important lessons for Canadians.

One often overlooked aspect in such comparative analyses is that private insurers in these countries are also required to provide coverage for prescription pharmaceuticals as part of the mandated universal insurance package. This approach of private insurers providing universal coverage for pharmaceuticals is distinctly different from both the current decentralized approach in Canada and the national universal scheme being proposed by proponents of the single-payer system.

Regulations and policies in Switzerland and the Netherlands ensure that low-income individuals and those exposed to high drug costs have access to health insurance and health care services (including pharmaceuticals) through premium assistance, exemptions from cost sharing, and other forms of financial support. Importantly, individuals and families receiving such support generally still receive access to the same wide range of prescription pharmaceuticals as those not receiving support.

This paper aims to build upon existing knowledge and comprehensively describe how Switzerland and the Netherlands integrate pharmaceutical coverage into their broader universal systems. We intend to examine these systems with a particular focus on how competitive (but regulated) private insurers ensure universal coverage of prescription pharmaceuticals. The paper will also delve into the extent of support systems for low-income individuals and families.

## **The importance of access to modern medicine**

Pharmaceuticals are a fundamental component of any well-functioning health care system. Research has consistently shown that the consumption of prescription drugs (and, in particular, newer prescription drugs) is related to better health outcomes and increased longevity.

For example, Miller and Frech (2002) found that pharmaceutical consumption was strongly associated with increases in disability-adjusted life expectancy (DALE), as well as reductions in mortality due to circu-

latory disease at all ages, and cancer and respiratory disease mortality among the elderly. Lichtenberg (2008, 2012) found that the use of newer drugs was associated with faster increases in life expectancy and survival rates, and that newer cardiovascular drugs reduced the average length of stay in hospital and the age-adjusted cardiovascular mortality rate.

Drug consumption and vintage (the age of the drug) have also been found to play an important role in freeing up other medical and non-medical resources. For example, Lichtenberg (1996) found that increases in prescription drug use were linked to reductions in the number of hospital bed-days consumed. The Conference Board of Canada (Hermus et al., 2013) found that the \$1.22 billion spent on six<sup>14</sup> pharmaceutical treatments in Ontario generated offsetting health and societal benefits of \$2.44 billion. Importantly, newer drugs may generate considerable cost savings by reducing the need for other health care services such as hospital and physician care. A 2002 study by Lichtenberg found that using newer drugs<sup>15</sup> increased prescription costs by \$18 per patient in the US, but reduced non-drug spending (primarily hospital and physician spending) by \$129 or about 7.2 times as much as the increase in drug spending. Further, Lichtenberg (2008) also estimated that per capita hospital expenditures would have been 70% (\$89) higher in 2004 in the absence of improvements in drug vintage.

Clearly access to modern medicines is not only beneficial to health and well-being, but may also generate additional reductions in health care costs for society.

## Potential limitations of public provision of universal pharmaceutical insurance

In response to the recognition that access to pharmaceuticals is important, and the cost of some advanced medicines is high, there have been a number of calls to either cover pharmaceuticals under provincial single-payer universal public health insurance systems, create new universal schemes at the provincial level parallel to the existing scheme, or to create a national universal scheme for Canadians (for example, Lexchin, 2001; Gagnon and Hebert, 2010; Morgan et al., 2013).

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<sup>14</sup> ACE inhibitors (for high blood pressure), statins (for high cholesterol), biguanides (for diabetes), biological response modifiers (for rheumatoid arthritis), inhaled steroids (for asthma), and prescription smoking cessation aids.

<sup>15</sup> Specifically, a unit decrease in the log of the average age (years since FDA approval) of the drugs consumed for a condition, which would occur if, for example, one switched from 15 year-old drugs to 5.5 year old drugs (Lichtenberg, 2002: 5, 6).

While these approaches may improve access to modern medicines to some extent, and while such expansion may be accompanied by the benefits cited above, public provision of such insurance coverage is not a necessary prerequisite to universal access or access for those with low incomes, and may even be accompanied by undesirable consequences.

Public drug plans are often subject to restrictive government regulations that are focused on lowering costs. While these approaches may (in some cases) successfully reduce direct costs, such regulations may also create a number of negative unintended consequences.

For example, governments use two related, but distinct policies to manage the costs associated with drug insurance coverage: Therapeutic Reference Based Pricing (TRBP)<sup>16</sup> and Therapeutic Substitution. Under the former arrangement (TRBP), therapeutically similar drugs are grouped together and a reimbursement level is set (often equal to the cheapest drug in the category). Patients are usually still able to purchase their preferred drugs by paying the difference between its price and that of the reference drug. By contrast, under Therapeutic Substitution policies, in order to receive reimbursement, patients are forced to switch from a prescribed/preferred drug to the cheapest available alternative on the formulary within the therapeutic class. If patients believe the substitute drug is inferior and do not wish to consume it, they must pay the entire cost for their preferred alternative without being reimbursed for any portion of the cost. While such a policy may reduce expenditures on pharmaceuticals in the short term, research indicates that they may actually increase net health care costs due to adverse reactions and increased use of other medical services (Skinner et al., 2009).

Governments may also purchase pharmaceuticals in large volumes in order to negotiate lower per unit costs—a policy called Bulk Purchasing. Bulk Purchasing agreements have been shown to consistently generate cost savings. Those savings are sometimes passed along to consumers, potentially encouraging adherence to prescribed drug regimens. However, these policies may also limit choice for patients and physicians whose preferred drug is left out of the agreement, may lead to monopolistic supply conditions, and may lead to increased prices for other drugs in exchange for the lower price on the negotiated drug (Lybecker, 2013).

Research also indicates that public drug plans offer slower access to a smaller range of new drugs than private plans (Rovere and Skinner, 2012). For example, between 2004 and 2010, public drug plans only covered about a quarter of the new drugs approved for sale in Canada, while

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<sup>16</sup> This is different from External Reference Based Pricing where a maximum reimbursement price is determined based on pricing data from a basket of other countries.

private drug plans covered more than three-quarters of the same set of new drugs. Data also indicate that public drug plans in Canada are slower at including new drugs on their formularies for reimbursement. Such delays may have serious adverse consequences for patients waiting for newly discovered treatments for their illnesses. For example, Rawson (2013) estimated that approximately 3,472 patients may have been negatively affected by delayed provincial reimbursement approval for just five<sup>17</sup> new oncology drugs approved in Canada between 2003 and 2011.

## **Universal insurance for pharmaceuticals done differently**

As mentioned at the beginning of this paper, Switzerland and the Netherlands offer interesting approaches to universal insurance for pharmaceuticals that lie somewhere in between the current decentralized approach in Canada, and the sort of national public universal program being proposed by proponents of the single-payer system. The following sections describe how these countries integrate pharmaceutical coverage into the broader scheme of universal health care through competitive, but regulated, private insurers, as well as the extent of support systems in place for low income individuals and families.

### **Switzerland**

#### ***Universal insurance for health care through regulated private insurers: an overview***

Switzerland's health care system is based on a largely decentralized model, where the primary responsibility for the delivery of health care services lies with the country's 26 cantons (states). In this setting, the federal government is primarily concerned with ensuring universality (through legislation and supplementary funding) to its citizens in an environment of managed competition.

Following the implementation of the of the 1994 Health Insurance Law (LAMal),<sup>18</sup> residents must<sup>19</sup> purchase (pay premiums for) basic insur-

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<sup>17</sup> Avastin, Halaven, Jevtana, Tarceva and Torisel.

<sup>18</sup> The law came into effect in 1996.

<sup>19</sup> If an individual does not take out insurance, the cantonal authority will

ance packages from one of a number<sup>20</sup> of non-profit insurers (both public and private), who compete with each other in a regulated competitive market. Notably, “[t]he range of benefits provided under the compulsory health insurance program is the same everywhere; the only difference between the health insurance funds is the level of service they provide” (OFSP, 2014a).

All basic insurers<sup>21</sup> are required to provide coverage for a standard package of governmentally-determined benefits to all applicants. This standard package covers the majority of treatments performed by a doctor and/or in a hospital including maternity, accidents, illness, and certain preventative measures.

Insurers are required to accept all applicants. While premiums may differ between insurers on the basis of several factors, each can only vary premiums for the universal insurance product based on an applicant’s place of residence<sup>22</sup> (community rating) and a limited set of broad age groups (0-18, 19-25, and 25+). They cannot charge different premiums to patients with differing medical histories or pre-existing conditions. The government thus imposes a large degree of regulation on the arena within which the industry operates, although the provision of health insurance is executed by private organizations. Freedom and flexibility among insurers is, in this manner, regulated<sup>23</sup> in order to ensure universal coverage.

On the other hand, choice and financial responsibility for the individual are central to the Swiss approach. Patients are free to choose between insurers, free to choose among select plan characteristics including managed care and higher deductibles, and are usually subject to deductibles and cost-sharing for all medical services.

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automatically register the person with a health insurance fund. Diplomats, individuals working for international organizations, temporary students with equivalent health insurance coverage, and some individuals with health insurance in another EU member state may be exempt from compulsory coverage (OFSP, 2014a).

<sup>20</sup> “Compulsory health insurance can be obtained from any branch of the approximately 60 health insurance funds operating in Switzerland” (FOPH, 2014a).

<sup>21</sup> That is, those insurers who are not exclusively dealing in voluntary supplementary insurance services.

<sup>22</sup> Health insurers can set a maximum of three regional premium levels within a canton (OFSP, 2014a).

<sup>23</sup> Such regulations do not apply to voluntary supplemental insurance services.

### ***Universal insurance for pharmaceuticals through regulated private insurers***

The provision of pharmaceutical coverage (regardless of age and income) through its universal social health insurance system is a fundamental feature of health care in Switzerland.

The mandatory standard health insurance package that must be offered by private insurers participating in the universal insurance marketplace covers all medicines that are “prescribed by a physician, employed in accordance with the approved indications/uses specified in the package insert, and included on the list of reimbursable pharmaceutical specialties (Specialties List/SL).”<sup>24</sup> It is estimated that patients using only the universally accessible insurance have access to about 2,500<sup>25</sup> medicines appearing on the specialty list (OFSP, 2014b).

The maintenance of this list of reimbursable medicines (a positive list) is in contrast to other core medical services, which are usually covered unless they are specifically excluded (a negative list). The government’s decision to include a drug on the list for reimbursement is generally based on the following conditions:

1. Approval for marketing by Swissmedic
2. The Federal Drug Commission’s recommendation for inclusion if deemed to be effective, appropriate, and cost-effective

The breadth and variety of drugs covered by the basic insurance package is, however, broadly regarded to be “quite comprehensive,” while decisions to not “list a drug that is a candidate for reimbursement is rare, with the main issue being ‘at what price’ to list rather than ‘whether to list’” (Paris and Docteur, 2007: 15). The Federal Office of Public Health<sup>26</sup> (Office Fédéral de la Santé Publique, OFSP) does, however, retain the “right to include or maintain a drug in the positive list against the manufacturer’s will, when the drug is particularly important” (Paris and Docteur, 2007: 15).<sup>27</sup>

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<sup>24</sup> The list of medicines covered by the SL is available at [www.listofpharmaceuticalspecialties.ch](http://www.listofpharmaceuticalspecialties.ch).

<sup>25</sup> As of December 1st, 2012, 2,844 medicines (out of the 7,812 authorized medicines) were included on the Swiss positive list under 9,378 product names. About 92% of products on this list are for prescription medications while the remaining 8% are over-the-counter medications (Interpharma, 2013: 74-79).

<sup>26</sup> The website of the Federal Office of Public Health states that it “is part of the Federal Department of Home Affairs. Along with the cantons it is responsible for public health in Switzerland and for developing national health policy” (FOPH, 2014d).

<sup>27</sup> Note that some manufacturers may prefer to stay off the list if they believe there is enough demand for their product even at higher prices. Further, the price at which

In addition, compounded medicines (ie., those mixed or created in a pharmacy) are reimbursed if the active substances and other ingredients are included in the *Arzneimittelliste mit Tarif ALT*<sup>28</sup> (OFSP, 2014b). Insurers may also offer coverage for drugs not included on the positive list.

A large number of vaccinations are also covered by the basic insurance plan, including vaccinations against diphtheria, tetanus, pertussis (whooping cough), poliomyelitis, type-B *Haemophilus Influenzae* and chickenpox, MMR (measles, mumps and rubella), hepatitis B and (for certain risk groups) hepatitis A, influenza (for seniors and those at increased risk), tick-borne encephalitis, and cervical cancer for school-age girls and young women up to the age of 26 (OFSP, 2013a).

In certain instances, medicines purchased abroad in accordance with treatment unavailable in Switzerland, or because a citizen may have succumbed to illness during their temporary stay abroad, may also be covered. However, travel vaccinations and preventive treatments are usually not covered.

### *How pharmaceuticals are approved*

Switzerland has its own regulatory framework for the approval of pharmaceuticals that is similar, but distinct, from the rest of the European Union (Furst-Ladani, 2012).

Swissmedic is the regulatory authority responsible for approval of therapeutic products in Switzerland. It is a public institution, attached to the Federal Department of Home Affairs, whose service mandate is established by the Federal Council. However, it retains considerable organization and management independence and has its own budget, which is only partially funded through government payments. In 2012, it received approximately 32.4% of its funding from fees charged for market authorization and other procedures, 48.9% from levies on sales, and 18.5% from federal contributions (Swissmedic, 2013; calculations by author).

Companies that want to file a marketing authorization application (MAA) with Swissmedic must be either located in Switzerland, or have a Swiss subsidiary. Reviews may be expedited for drugs that have already been approved in countries<sup>29</sup> with a “comparable control system” (Ladani,

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drugs are offered in one country is often used as a reference for pricing in others countries. Manufacturers may opt to lose out on a small market in order to retain high drug prices in other markets. That being said, because of the expected benefits of being listed, this is not common, as will be discussed in a later section.

<sup>28</sup> The list of medicines covered by the ALT is available at [www.bag.admin.ch/themen/krankenversicherung/06492/06493/index.html?lang=de](http://www.bag.admin.ch/themen/krankenversicherung/06492/06493/index.html?lang=de).

<sup>29</sup> Australia, Canada, EEA member states, Japan, New Zealand, Singapore and the US, for example.

2012). A fast track procedure is also available (at a higher price) for innovative or critical products. Authorizations are only valid for five years at a time, and the holder must apply for an extension in order to renew authorization at each interval.

Switzerland is often the country of first-launch for many pharmaceuticals. This may be a result of the flexibility manufacturers have in determining the price of their product in Switzerland in the absence of data from reference countries in the EU (Paris and Docteur, 2007).

### *How pharmaceutical prices are regulated*

While the prices of over-the-counter (OTC) and prescription drugs not included on the specialty list for reimbursable products are non-regulated,<sup>30</sup> there is a large degree of regulation for those that do appear on the list. Drug manufacturers are free to not seek reimbursement.<sup>31</sup> However, there are large expected benefits of having their drug listed. Consumers will generally tend to purchase drugs that are covered, at least partially, by their insurance plans, especially when similar options are available. Thus, choosing to be not listed may result in drug companies losing revenue due to decreased demand, even though they are able to charge a higher price for the unlisted drug. Therefore, the expected benefits of having their drug listed, combined with the regulation of listed drugs, leads to an environment of de facto price regulation (Paris and Docteur, 2007).

The ex-factory price (the price paid to manufacturers) and maximum<sup>32</sup> public price for listed pharmaceuticals are regulated by the Swiss Federal Office of Public Health, as are the distribution margins<sup>33</sup> for wholesalers and pharmacists. While consideration is made for R&D costs and the relative effectiveness of drugs, the international price in comparable countries is also a factor when determining the permissible ex-factory price. Paris and Docteur note that “[p]rices in Germany, Denmark, the United Kingdom, and the Netherlands are first considered. France,

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<sup>30</sup> They may, however, still be “subject to surveillance by the Price Council” (Paris and Docteur, 2007: 12).

<sup>31</sup> Some drugs, if deemed to be important for public health, may be included on the positive list even if the manufacturer does not seek reimbursement. Prices of non-listed drugs are also monitored in order to ensure that dominant market positions are not abused (Paris and Docteur, 2007).

<sup>32</sup> Manufacturers, wholesalers and pharmacists may offer discounts (Paris and Docteur, 2007).

<sup>33</sup> These consist of a proportional and fixed component, which varies according to price brackets. A fee schedule determines remuneration for services rendered by pharmacists, although negotiation is possible.



Austria, and Italy can be considered as subsidiary countries, and other countries may be included in the comparison” (2007: 16). (Further details regarding pricing and distribution margins can be found in Paris and Docteur, 2007: sec. 1.4.)

The effectiveness of this system is, however, somewhat limited since, as mentioned above, Switzerland is often the country of first-launch for many pharmaceuticals, and thus there is often no data available in other countries for comparison.

In response to mounting data indicating drug prices in Switzerland were much higher than in comparable European countries, as well as pressure from manufacturers caused by delays in the drug approval process, a trial deal was struck between the Swiss government and the pharmaceutical industry in 2013. Essentially, pharmaceutical companies have agreed to subject themselves fully to referencing pricing policies for reimbursable drugs<sup>34</sup> without the threat of law-suits in return for the government reducing approval delays for new drugs to about 60 days (from an average of about 200) (Taylor, 2013).

### *Individual contributions for health care and pharmaceuticals*

Individuals directly<sup>35</sup> contribute toward the cost of basic/compulsory insurance in two notable ways: through insurance premiums and co-payments. Since pharmaceuticals are covered<sup>36</sup> by the basic insurance package, regulations regarding the overall insurance package are largely relevant to, and responsible for, pharmaceutical coverage in Switzerland.

#### *Premiums*

In 2012, the average premium for the basic insurance package, which includes pharmaceuticals, was CHF 3,576 per year for adults and CHF 937 per year for children (OFSP, 2013b). While, as mentioned previously, premiums are not dependent on a person’s income or medical history, they

<sup>34</sup> Purportedly expected to result in a potential saving to patients of CHF 720 million over the next three years.

<sup>35</sup> Data for financing of health care services is not available separately for those services exclusively covered by basic health insurance. However, individual premium contributions account for 35.4% of all health system financing, while out-of-pocket expenditures account for 19.7%. Taxes on individuals also pay for other health system services covered by the state, which cumulatively account for 32.3% of all financing (including health services and social protection benefits) (Federal Statistics Office, 2014).

<sup>36</sup> Social health insurance finances 67% of drug expenditures (Paris and Docteur, 2007).

do vary according to age,<sup>37</sup> between health insurance funds, and across communities and cantons.

### *Cost sharing*

Cost sharing is a fundamental characteristic of the Swiss health care system, and is applied to all insured core medical goods and services in the benefits basket, including prescription medications.

In addition to premium payments, individuals primarily contribute to the cost of prescription drugs in the basic benefit basket in two ways. The first way is through a standard deductible that applies to all insured medical services. At present, the minimum<sup>38</sup> annual deductible for the basic health insurance package is set at CHF 300 for adults.<sup>39</sup> The second way is through a 10% co-payment (retention fee) to which patients are subject for the services they consume after reaching their chosen deductible, up to a maximum of CHF 700 per year. A 2006 decision by the federal government resulted in an increase in this co-insurance rate to 20% for brand names drugs if a less expensive generic version (less by a certain dictated margin) was available in the market and listed on the formulary<sup>40</sup> (OFSP, 2014a). Contributions for such drugs are capped at CHF 933 annually (Paris and Docteur, 2007).

Generally speaking, Switzerland is known for having a health care system with relatively high out-of-pocket expenditures<sup>41</sup> compared to the rest of the OECD. In contrast to the Netherlands, private supplementary health insurance is not allowed to cover deductibles and cost-sharing for the basic benefit basket.

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<sup>37</sup> Reduced premiums are offered for children and adolescents (0-18) and young adults (19-25).

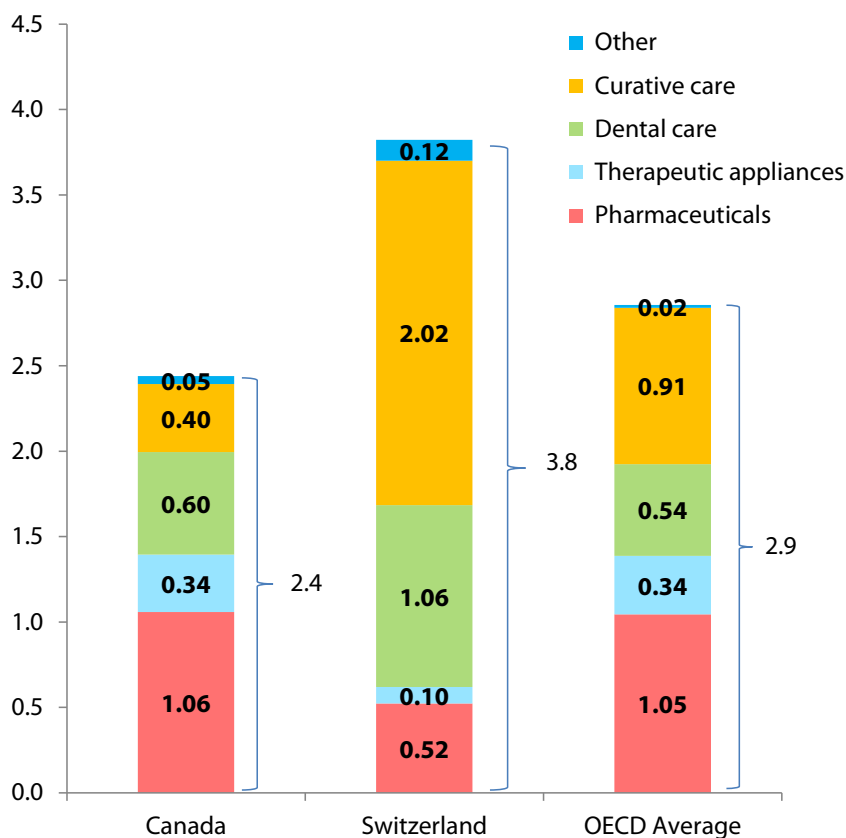
<sup>38</sup> Insurers can also offer plans with reduced premiums in exchange for higher deductibles (up to a maximum of CHF 2,500), “Managed Care” plans (with restricted doctor and hospital choice), and “Bonus Plans” (which enable individuals to enjoy progressive reductions in premium payments for each year without any claimed reimbursements). Approximately 31% of insurance contracts in 2010 were for basic insurance with standard deductible, 22% included increased deductibles, 0.1% were bonus schemes, and 47% were restricted choice arrangements (FOPH, 2012; calculations by author).

<sup>39</sup> Individuals may, however, choose plans with increased deductibles (up to CHF 2,500) in order to pay reduced premiums.

<sup>40</sup> Unless a physician specifically requested no substitution, in which case the rate reverts to 10%.

<sup>41</sup> In 2011, average per capita out-of-pocket payments totaled 1454.7 US PPP, whereas the OECD average amounted to 562.4 US PPP (OECD, 2013).

**Figure 1: Shares of out-of-pocket medical spending by services and goods in Canada, Switzerland, and the OECD, 2011**



Source: OECD 2013; calculations by authors.

However, data suggest that the Swiss do not experience relatively high cost sharing for drugs. For example:

- a) In 2011, out-of-pocket expenditures on prescription pharmaceuticals (ie., excluding OTC medicines) represented only 13.6% (60.3 US PPP (or purchasing power parity)) of total expenditures on prescription drugs in Switzerland. This contrasts with Canada where it accounted for 19.6% (123.6 US PPP)<sup>42</sup> (OECD, 2014; calculations by authors).
- b) In 2011, out-of-pocket expenditures on pharmaceuticals represented only 0.52% of final household consumption in Switzerland. This contrasts with Canada where it accounted for 1.06% (see figure 1).

<sup>42</sup> Canadians also rely heavily on private supplementary insurance for drugs, which finances about 35.5% of all prescription pharmaceutical expenditures, whereas it only finances 3.9% of pharmaceutical expenditures in Switzerland (OECD, 2014; calculations by authors).

### ***Regulations and support for low income individuals***

The Swiss health care system provides numerous avenues of assistance to ensure that low income individuals are able to receive quality health care. This outcome is achieved with a combination of premium regulations and subsidies, the operation of a prospective risk-based financial redistribution scheme among insurers, and support for cost-sharing.

### ***Premium regulations and subsidies***

Individuals and families who cannot afford to purchase the basic insurance package receive government subsidies to help with their basic health insurance premiums. These subsidies are means-tested, generally based on consumer income and assets, and financed by both the cantons and federal transfers.

In 2001, the Council of States recommended that cantons provide subsidies to ensure that premiums do not exceed 8% of household income. However, the criteria for receiving subsidies, and the amount, are established individually by each canton and may vary considerably. While most cantons establish maximum limits on the percentage that households contribute towards premiums (and subsidize the remaining amount), eight cantons set fixed absolute amounts (by income bracket), and two use a combination of these approaches (OECD, 2011). Cantons also dictate whether consumers are subsidized directly or the payment is made to the insurer (Herzlinger and Parsa-Parsi, 2004). One study (Gerritzen et al., 2014) suggests that differences in the financial ability of each canton to provide subsidies has led to considerable cross-canton variations in the load premiums placed on households.

In 2012, approximately 29% of the insured population received a subsidy<sup>43</sup> (CHF 1,714 average) (OFSP, 2013b). Thus, rather than become an insurance provider, the government supports consumer choice for low income individuals by offering them the option of choosing their insurer and remaining an active player in the insurance market.

### ***Support for cost-sharing***

As mentioned earlier, there are annual caps on co-payment to ensure that the related costs are not prohibitive.

For example, if total co-payments made by a consumer surpass the annual CHF 700 ceiling, subsequent co-payments are fully subsidized. Children under the age of 18 are not required to be subject to a deductible (though optional ones are available) and annual co-payments are capped at

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<sup>43</sup> These subsidies may also be used for co-payments.

CHF 350.<sup>44</sup> As of March 1, 2014, pregnant women will not have to contribute to the cost of medical services after the 13th week of pregnancy until eight weeks after the birth. Children under 18 years of age, young adults up to age 25 in training, and pregnant women are not required to pay daily hospital contributions CHF 15 (OFSP, 2014e). National old age, survivor, and disability/invalidity insurance programs “provide pensions to qualified individuals that they can use to purchase health insurance and pay cost-sharing amounts” (Kaiser, 2013: 18). Further, “Swiss cantons provide means-tested supplementary benefits to those with old age, survivors, or invalidity insurance that consists of monthly benefit payments and non-contributory reimbursement of costs due to sickness and disability” (Kaiser, 2013: 18).

### *A note on risk equalization*

Swiss cantons operate a risk-adjustment scheme that redistributes premium revenue among insurers to account for the potential adverse effects of community rating. The primary reason for such payments is to balance financial capacity between insurers mandated to provide universal coverage to populations with disparate health in order to discourage risk selection.

The risk formula used for these payments was previously based primarily on age and gender categories. However, significant differences in premiums for the basic benefits package still existed in Switzerland both within and between cantons. For example, in 2005 there existed an 89% difference between the highest and lowest premiums available in Zurich for a CHF 300 plan. While such differences may be attributable to differences in quality and efficiency, it was generally suspected that the risk formula resulted in inadequate risk equalization among insurers (Leu et al., 2009). There was also a 95% difference between the canton with the lowest average premium (Appenzell Innerrhoden), and the highest (Basel-Stadt) in 2012 (OFSP, 2013b; calculations by authors). However, this is not surprising because equalization is performed separately for each canton.

Eventually, the standard risk formula based on age and gender categories was deemed inadequate for reducing incentives for risk selection and after January 2012 was altered to include a history of hospital or nursing home stays of more than three days in the previous year (Leu et al., 2009).

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<sup>44</sup> Large families with several children are subject to a maximum CHF 1,000 co-payment for all their children combined.

## The Netherlands

### *Universal health care through regulated private insurers: an overview*

The Netherlands has a single compulsory insurance scheme. Under that umbrella, private health insurers compete in a regulated environment. In this setting, the role of the Dutch government is simply to ensure a properly functioning health care insurance market.

Since the implementation of the 2006 Health Insurance Act, everyone living in the Netherlands must<sup>45</sup> purchase a standard insurance package from one of a number of private insurers, who may choose to operate on a for-profit basis, in a regulated but competitive market.

Insurers are required to accept all applicants, and are “obliged to offer a core universal insurance package at a fixed price for all” (Netherlands, 2014a: Health Issues). This universal insurance coverage must include core services covered by general practitioners, medical specialists and obstetricians, and hospital treatment. The definition of covered services is extremely broad and only a small negative list of excluded services is maintained.

While the premium can vary among them, insurers must determine a flat, community-rated premium for adults that applies uniformly across the country and which cannot be adjusted for individual factors like age, gender, or illness. Insurers are, however, free to choose where and by whom the care is delivered, resulting in a system of insurers competing on price and quality of services offered.

Individuals are free to choose the insurer and health plan of their choice, and can switch insurers from year to year without fear of financial penalty. Adult patients are usually subject to a small deductible, after which they are not expected to make any co-payments for received medical treatment. Individuals must, however, pay an additional income-dependent contribution (with a maximum limit for annual contributions)

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<sup>45</sup> If an individual does not take out insurance, they first receive a warning letter from the College voor Zorgverzekeringen (CVZ), after which they are charged with a penalty equivalent to three times the standard premium. If, following a second penalty (charged three months after the first) they still do not comply, the CVZ will take out insurance on their behalf and require the individual to “pay an administrative premium for 12 months equal to 100%, which amount, where possible, will be withheld at source” (VWS, 2012: 34). Conscientious objectors and soldiers on active service may be exempt from compulsory coverage. All other uninsured individuals are required to pay a fine, as well as the cost for all medical services consumed during the period of non-insurance (CVZ, 2014).

either through their employer, or directly to the relevant tax authority. It is estimated that “[t]ogether with the public funding,<sup>46</sup> the income-related contribution covers 50% of the total macro premium burden,” with nominal premium charges covering the other half (VWS, 2012).

The Netherlands also has a separate, publically funded national insurance program that specifically covers long-term care for the elderly, chronically ill, and disabled. This program, the Exceptional Medical Expense Scheme (AWBZ), essentially acts as a universal safety net and protects residents against catastrophic bills and certain chronic conditions. The range of services covered by this plan is set to change in 2015.

### *Universal Pharmacare through regulated private insurers*

The provision of pharmaceutical coverage regardless of age and income is a fundamental feature of health care in the Netherlands. Standard insurance packages offered by private insurers (discussed above) must provide reimbursement for medicines included on a positive list. As part of the basic insurance plan, the drugs included on this list are decided upon by the Ministry of Health, Welfare and Sport (VWS) with advice from the Health Care Insurance Board (CVZ). Insurance companies may also offer plans with preferred drug policies that only reimburse a narrow range of drugs in each group of therapeutically interchangeable products.

Drugs on the positive list are generally categorized into three groups: annex 1A (for therapeutically interchangeable products), annex 1B (for unique products for which clustering is not possible), and annex 2 (for medicines that are only reimbursed under specific circumstances).

It is estimated that “[a]pproximately, 80% of all prescription drugs are reimbursed in the Netherlands” (Garattini et al., 2007: 334).

### *How pharmaceuticals are approved*

Before a drug is marketed in the Netherlands, the manufacturer must get the drug approved and registered by the Dutch Medicines Evaluation Board (MEB).

Since the Netherlands is a member of the European Union, manufacturers have a variety of options for seeking market authorization. Through the centralized procedure overseen by the European Medicines Agency (the Pan-European regulator of new medicines), manufacturers can, by virtue of a single application, receive authorization to market a medicine to patients and health care professionals throughout the Euro-

<sup>46</sup> Estimated at about 5% (Kleef, 2012).

pean Economic Area (EEA) (EMA, 2013a).<sup>47</sup> Manufacturers may also follow a mutual recognition procedure where authorization is sought from national regulators in a country on the basis of previous authorization in another reference country. Manufacturers may also apply for marketing approval directly from the Dutch government through the national authorization procedure.

### *How pharmaceutical prices are regulated*

Since 1996, the price of prescription drugs (including generics) has been regulated in accordance with the Prices of Medicines Act (Wet Geneesmiddelprijzen, WGP). The maximum wholesale price for each drug is determined by the Ministry of Health (VWS) through a process of external reference pricing based on the average of prices for the same or similar drug in Belgium, Germany, France, and the United Kingdom. These prices are reviewed and revised twice a year to account for changes in market conditions and exchange rates. Manufacturers have the right to lodge legal complaints and appeal against the maximum price decisions (Zuidberg, 2010; Netherlands, 2014d).

There has been some deregulation of pharmaceutical prices since 2012. For example, in previous years, pharmacists' dispensing fees were also centrally determined by the Dutch Health care Authority (NZa). However, in 2012, a new treatment-related remuneration system was set up that provided more flexibility (SFK, 2012). Under this system, pharmacists and insurers can now negotiate prices between each other, although the government still sets the maximum price for which pharmacists purchase the drug (Netherlands, 2014c).

These recent policy changes, in addition to the health insurers' move toward preferred drug policies (ie., limiting the choice of medicine)<sup>48</sup> have been cited as reasons that contributed to the reining-in of drug prices in recent years (Schut, 2013; SFK 2012). However, the net effect that such policies have had on other health care costs and outcomes are yet to be assessed.

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<sup>47</sup> Some drugs are specifically required to use the centralized procedure. These include "biologic agents or other products made using high-technology procedures ... products for HIV/AIDS, cancer, diabetes, neurodegenerative diseases, autoimmune and other immune dysfunctions and viral diseases, [and] products for orphan conditions" (MaRS, 2010: 1).

<sup>48</sup> Insurance companies may offer plans with preferred drug policies that only reimburse a narrow range of drugs in each group of therapeutically interchangeable products.



## ***Individual contributions for health care and pharmaceuticals***

Individuals are primarily required to contribute for basic health insurance services in two ways: through a flat-rate community-rated premium and through income-related contributions. Since pharmaceuticals are covered by the basic insurance package, regulations regarding the overall insurance package are largely relevant to pharmaceutical coverage in the Netherlands.

### ***Premiums***

In 2013, the average premium for the basic insurance package, which includes pharmaceuticals, was approximately €1,213 (NZa, 2013). While premiums are not dependent on a person's income and medical history, they do vary between health insurance funds and plans. These contributions fund approximately half the expenditures related to basic insurance services (Kleef, 2012). As mentioned previously, insurers must determine a flat-rate premium for adults that applies uniformly across the country, and which cannot be adjusted for individual factors like age, gender, or illness.

### ***Income-dependent contributions***

The rest of the expenditures related to basic insurance services are largely funded by an income-related contribution that individuals must pay through their employer, or directly to the relevant tax authority.

The required rate of contribution for employed individuals in 2014 is around 7.5% of income. The government, however, also sets a “maximum contribution income” limit. Individuals are not required to contribute further payment on income earned above this limit. In 2014, the maximum contribution income limit was €51,414, effectively making the maximum contribution €2,776 for high earning individuals. These contributions may be used to equalize the risk insurers bear, finance care for children under 18, as well as assist low income earners (Belastingdienst, 2014).

### ***Cost sharing***

The Dutch health care system generally imposes very little cost-sharing on individuals. In 2013, adult patients were responsible for paying a small €350 deductible<sup>49</sup> (set by the government) for received medical goods and services, after which their health insurance kicks in and covers all the costs of treatment (Westert and Wammes, 2013). Services provided by GPs, obstetric and postnatal care, and dental care for insured persons under 22,

<sup>49</sup> Paid to the health insurer (Schäfer et al., 2010).

among select other services, are not subject to the deductible. Individuals may also opt for plans with increased deductibles in order to enjoy reduced premiums.

Beyond the deductible, the Dutch health care system imposes cost-sharing for pharmaceuticals in the form of co-payments. Drugs included on the positive list are subject to slightly different rules, and may require a larger degree of co-payment depending on patient choice. As mentioned previously, for the purposes of reimbursement, drugs are categorized into three groups (Zuidberg, 2010):

1. Annex 1A:<sup>50</sup> Therapeutically interchangeable products:  
Medicines are first clustered into groups of therapeutically interchangeable products (including generics).<sup>51</sup> Under the standard drug coverage, the average price of the cluster of interchangeable products is determined and if the price of a drug is above this amount, the patient is required to pay the difference (Zuidberg, 2010). In this way, patients are not solely constrained to consuming those pharmaceuticals fully covered by their insurer, as they have the choice to opt for a more expensive medicine from the same category while only paying for the difference instead of the entire cost (Schäfer et al., 2010; WHO, 2011a). Insurers must fully reimburse at least one medicine in each group under a preferred drug program. Further, if the prescribing physician decides that a more expensive medicine is necessary to treat the patient, the patient will not have to pay the excess (Schäfer et al., 2010).
2. Annex 1B: Unique products for which clustering is not possible:  
No intra-group “reference” price exists, and as such, there is no limit on the rate of reimbursement. These products are reimbursed at the manufacturers recommended price, and are only included on the list on the basis of demonstrated therapeutic value and cost efficiency (Garattini et al., 2007).
3. Annex 2: Medicines reimbursed under specific circumstances:  
Patients generally have to fulfill specific criteria in order to be eligible for Annex 2 medicines.

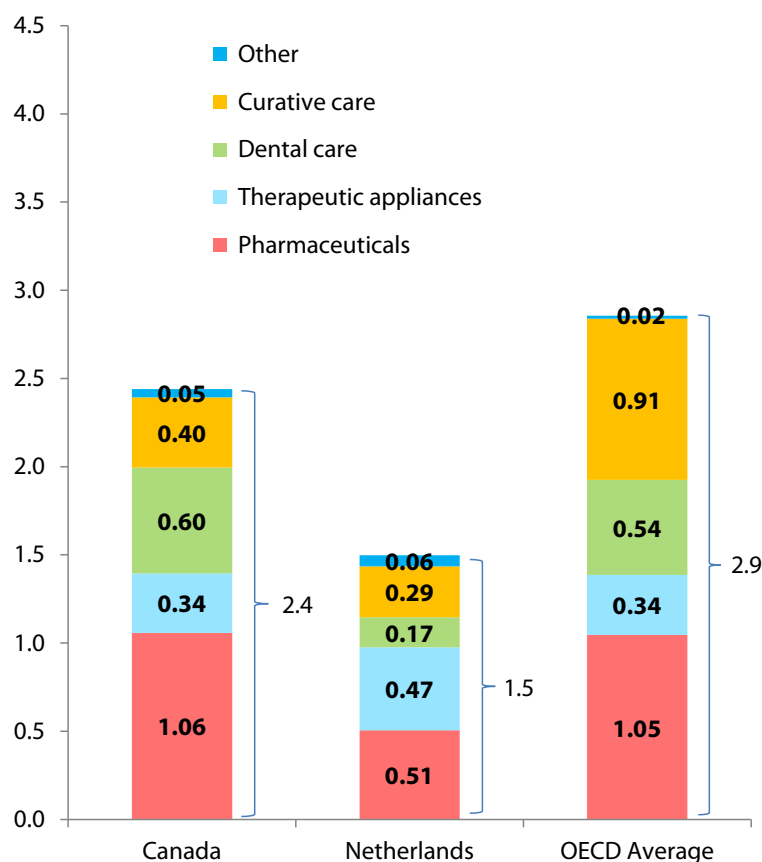
In contrast to Switzerland, where insurance cannot cover mandatory co-payments for drugs, in the Netherlands private health insurance companies can offer supplementary plans that reimburse patients above the limits set

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<sup>50</sup> Roughly, “90% of the medicines in this category are fully reimbursed” (Zuidberg, 2010: 11).

<sup>51</sup> Since 2002, the criteria used to determine interchangeability include whether the medicines are used for the same indications, have the same form, and are used for patients in the same age category. Clinical characteristics are also involved in the determination process (Zuidberg, 2010).

**Figure 2: Shares of out-of-pocket medical spending by services and goods in Canada and the Netherlands, 2011**



Source: OECD 2013; calculations by authors.

by the government (Zuidberg, 2010). In some cases, there is evidence to suggest that the manufacturers themselves pay the difference (SFK, 2012).<sup>52</sup> In addition, since 2009, health insurers may also choose to waive the deductible when patients use preferred pharmaceuticals (Schäfer et al., 2010).

Figure 2 clearly shows the low level of cost sharing for pharmaceuticals in the Netherlands. Specifically, out-of-pocket expenditures on pharmaceuticals only represented 0.51% of final household consumption in the Netherlands in 2011. This contrasts with Canada where it accounted for 1.06%.

<sup>52</sup> The manufacturers may, for strategic reasons, “prefer not to price the concerned products below the reimbursement limit,” but still not “want the users of their medicines to have to pay the patient contributions” (SFK, 2012: 28).

### ***Regulations and support for low-income individuals***

There are several ways in which the Netherlands ensures that individuals receive universal health care and coverage for prescription drugs, irrespective of their financial condition. This is achieved through a combination of premium regulations and subsidies, the operation of a risk equalization scheme for insurers, a low level of cost sharing (with exemptions for certain groups), and a separate, publicly funded national insurance program (the AWBZ) that specifically covers long-term care for the elderly, chronically ill, and disabled. The public health system also provides medicines free of charge for certain conditions, including tuberculosis, STDs, and HIV/AIDS, and operates an expanded program on immunization (EPI) vaccines for children (WHO, 2011a).

### ***Premium regulations and subsidies***

As mentioned previously, insurers are required to accept all applicants and must determine a flat community-rated premium for adults. This premium can vary between insurers, but must apply uniformly across the country, and cannot be adjusted for individual factors like age, gender, or illness. In order to ensure that premiums do not pose a significant impediment to care for low income individuals, the Netherlands has a tax-funded Health Care Allowance (WZT) to provide premium assistance to those for whom the cost of health care premiums exceeds 5% of household income. This allowance is based on the income of the individual and their partner, and the average price of the standard premium. For example, in 2014, if an individual or a couple is earning less than €28,482 or €37,145, respectively, they are determined to qualify for the allowance (Belastingdienst, 2014). It is estimated that approximately 5.6 million people (about one third of the population) received an average health care allowance of €662 in 2009 (VWS, 2012). The health care allowance is paid in monthly instalments and “because the allowance is independent of the choice of insurers, consumers are fully price sensitive at the margin” (van de Ven and Schut, 2008: 774).

### ***Support for cost sharing***

Chronically ill individuals are eligible to receive partial compensation for the deductible. For example, in 2008, those with high medicine use and those living in long-term care facilities received compensation of €47, which was transferred to them at the end of the year (Schäfer et al., 2010). This transfer is in addition to other income related subsidies that individuals may already be receiving. In addition, since 2009, health insurers may

also choose to waive the deductible when patients use preferred pharmaceuticals (Schäfer et al., 2010).

### ***The Exceptional Medical Expenses Act (AWBZ)***

As mentioned earlier, the Netherlands also has a separate, publically funded national insurance program that specifically covers long-term care for the elderly, chronically ill, and disabled individuals. This program essentially acts as a universal safety net and protects residents against catastrophic bills and certain chronic conditions. This insurance scheme, called the Exceptional Medical Expenses Act (AWBZ), comprises almost half of the health care budget (Kleef, 2012) and is funded through tax related premiums,<sup>53</sup> government grants, and the personal contribution of insured persons (VWS, 2012).

Patient co-payments under such insurance equates to roughly 10% of costs, up to a maximum of €12.60 per hour of care received in their own home, and €1,800 per month in institutions (Schut et al., 2013; Colombo et al., 2001). Individuals may also opt for a “personal care budget” and receive a cash amount instead of “in-kind” care. Schut et al. suggest that “insufficient screening and monitoring” of patients has resulted in a spending boom that is unsustainable (2013: 28).

This, in addition to the lack of cost containment incentives that regional agencies face, led the government in 2015 to attempt significant reform in order to maintain financial sustainability. Effectively, the AWBZ will be replaced by the new Long-Term Care Act (WLZ), aimed specifically at “people who need constant supervision,” while the New Social Support Act (WMO) encourages decentralized support from the municipal government, and the Health Insurance Act (Zvw) will regulate nurses to provide more home nursing care (Netherlands, 2014e; Shut, 2013).

### ***A note on risk equalization***

The Netherlands operates a risk equalization fund to minimize risk selection and compensate insurers for the adverse effects of the mandated community rating. The operation of a risk pool is generally intended to ensure

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<sup>53</sup> “The premium for insurance under the AWBZ and the premiums for other national insurance schemes are collected via the income and payroll tax system. Each year, the government sets the AWBZ premium as a percentage of taxable income, applied to the first and second income/payroll tax brackets. The premium percentage for the AWBZ in 2011 is 12.15%. The premium for employees is withheld by the employer and transferred to the Dutch Tax and Customs Administration. Non-employees who are liable to pay tax and social insurance contributions pay the AWBZ premium via a tax assessment” (VWS, 2012).

that differences in premiums are a reflection of efficiency and service, rather than reflective of underlying health risks or due to risk selection on the part of insurers (Leu et al., 2009).

In 2011, approximately 117 patient characteristics were considered in the calculation of risk equalization payments (Kleef, 2012). The ex-ante adjustment criteria include age, gender, nature of income, region, pharmaceutical cost groups, diagnostic cost groups, and socioeconomic status (VWS, 2012). There is also an ex-poste adjustment based on a retrospective calculation at the end of the year to adjust for unexpected differences. In total, governmental funding only accounted for 5% of financing, with the remainder of financing coming from individual income-dependent contributions and a redistribution of collected community-rated premiums.

Although the Netherlands health care system features a complex risk equalization system, insurers may still be engaging in risk selection. One study suggested that insurers may choose not to contract with well-regarded physicians who have expertise in treating those illnesses for which insurers take a predictable net loss. Further, insurers may choose to advertise to specific segments of the population only, and may be extremely selective about which patients receive supplemental insurance (Kleef, 2012).<sup>54</sup>

## Conclusion

Modern medicines play an essential role in improving health outcomes, alleviating pain and suffering, increasing longevity, and reducing expenditures on other medical services. While there is merit to pursuing policies that expand access to those in need, it should be recognized that several avenues exist in between the current decentralized approach in Canada, and the sort of national public universal program being proposed by proponents of the single-payer system.

Switzerland and the Netherlands provide two interesting examples of countries where pharmaceutical coverage is a fundamental component of the universal health insurance coverage provided by regulated private insurers. Both of these countries also ensure that this access is available to individuals and families regardless of income through premium assistance, risk equalization schemes, annual caps on cost sharing, and public safety nets for vulnerable populations. Importantly, rather than become an insurance provider, the government generally supports consumer choice for low income individuals by offering them the option of still being able to choose their insurer and be active players in the insurance market.

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<sup>54</sup> Since patients often buy basic and supplemental insurance from the same company, this may also reduce the number of “undesirable” patients applying for the basic package (Kleef, 2012).

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