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Catastrophic Drug Coverage in Canada

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Catastrophic Drug Coverage in Canada
(Background Paper)

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CATASTROPHIC DRUG COVERAGE IN CANADA

1 INTRODUCTION

Unlike most member countries of the Organisation for Economic Co-operation and Development (OECD), Canada does not have a national pharmacare program – that is, a single system of public insurance coverage for prescription drugs. There are various models for such a system. The design of pharmacare programs is determined by a number of factors, including which population groups they target, which types of prescriptions they cover, and how they are financed.

The phrase "catastrophic drug coverage" refers to insurance models that protect individuals from drug expenses that threaten their financial security or cause "undue financial hardship."[1] According to the World Health Organization, "catastrophic" health expenditures are those that cannot be afforded unless a household cuts down on basic necessities such as food, clothing, or children's education.[2] Under a catastrophic drug coverage program, out-of-pocket expenses for prescription drugs are capped at a certain level to prevent financial hardship. This cap on out-of-pocket drug costs can be set either as a fixed dollar amount or as a percentage of personal or family income.

A 2002 study estimated that approximately 11% of Canadians faced the risk of high prescription drug costs because they lacked drug coverage entirely (2% of Canadians) or had insufficient drug coverage (9% of Canadians).[3] In an international study conducted in 2007, 6% of Canadian adults who responded said that their families had out-of-pocket expenses of more than $1,000 for prescription drugs per year; this percentage was higher than for all of the other seven countries surveyed, except the United States.[4] Another international survey, conducted in 2008, further revealed that this proportion rose to 17% for Canadians suffering from chronic illnesses such as diabetes or arthritis.[5]

Concerns regarding this lack of protection against catastrophic drug costs led both the Standing Senate Committee on Social Affairs, Science and Technology, chaired by Senator Michael Kirby, in its October 2002 final report on the state of the health care system in Canada ("Kirby Senate Committee"),[6] and the Commission on the Future of Health Care in Canada, led by Roy Romanow ("Romanow Commission"), in its November 2002 final report,[7] to recommend the establishment of a "national" or federal–provincial/territorial catastrophic drug insurance plan.

As part of the 2003 Accord on Health Care Renewal, Canada's first ministers agreed to take measures to ensure that all Canadians have "reasonable access to catastrophic drug coverage."[8] In addition, in 2004, as part of the "10-Year Plan to Strengthen Health Care," first ministers agreed to establish a federal–provincial/territorial ministerial task force to develop, assess and cost options for providing national catastrophic drug coverage as part of a National Pharmaceuticals Strategy.[9]

This paper gives an overview of progress toward providing catastrophic drug coverage in Canada, current challenges facing the drug coverage system in Canada, and the potential for creating a national catastrophic drug plan.

2 A "PATCHWORK" DRUG COVERAGE SYSTEM

Canada does not have a national prescription drug coverage system, but rather a "patchwork" of public and private drug insurance plans.[10] Federal, provincial and territorial governments all offer a variety of drug insurance plans, which complement the more than 1,000 private drug insurance programs offered by employers, unions and professional associations across the country.[11] Both public and private plans vary greatly in terms of eligibility, benefit payment structures and drug formularies.

This mixture of private and public drug plans can be explained by jurisdictional divisions with respect to health care and limitations imposed by the *Canada Health Act*. Under the 1867 Constitution, provinces and territories have primary responsibility for the administration and delivery of health services to Canadians, while the federal government is responsible for the delivery of health care to specific subpopulation groups.[12] Provision of health care in Canada is also based on the *Canada Health Act*, which establishes five principles that provinces and territories must uphold in order to receive federal funding for health care: public administration, comprehensiveness, universality, portability and accessibility.[13]

Although the *Canada Health Act* provides for public coverage of physician services and hospital care, the only pharmaceuticals it covers are those administered in hospital. By providing coverage for in-hospital prescription drugs, the *Canada Health Act* and its predecessors, the *Medical Care Act* of 1966 and the *Hospital Insurance and Diagnostic Services Act* of 1957, were seen at the time as sufficient in providing Canadians with protection from catastrophic drug costs, since the most expensive pharmaceutical drugs available were those provided as part of acute care in a hospital, and out-of-hospital prescription costs were not considered a major financial burden to most Canadians.[14]

However, the omission of out-of-hospital prescription drugs from the *Canada Health Act* means that any public provision of drug coverage outside the hospital setting remains the sole responsibility of the provinces and territories.[15] It also means that out-of-hospital prescription drug coverage is not considered medically necessary but, rather, as a fringe benefit offered by employers in the private sector.

3 TOWARD THE PROVISION OF CATASTROPHIC DRUG COVERAGE

3.1 RECOGNIZING THE NEED FOR OUT-OF-HOSPITAL PRESCRIPTION DRUG COVERAGE

The need to provide coverage for out-of-hospital prescription drugs was first recognized by the Royal Commission on Health Services in 1964, which

recommended that the federal government provide grants to the provinces to establish prescription drug programs.[16] The Commission felt that including out-of-hospital prescription drugs as an insured health service was necessary given:

- the rising costs of newer life-saving prescription drugs;
- the unpredictable nature of determining who might need access to those high-cost drugs; and
- the fact that some sectors of the population, including people on low incomes and those with chronic diseases, would be adversely affected by these costs.

In the 1970s, provincial governments also started to recognize that the rising costs of prescription drugs could constitute an increasing financial burden on individuals with low or fixed incomes. As a result, provincial governments began to offer drug coverage to certain sectors of the population, including seniors and recipients of social assistance. By the 1990s, advances in pharmaceutical technology resulted in the expanded use of pharmaceuticals in the treatment of chronic conditions and led to rising costs. For that reason, all sectors of the population were now potentially at risk of experiencing financial hardship because of pharmaceutical costs. Consequently, some provincial governments, including those in Saskatchewan and Manitoba, began moving toward the provision of universal catastrophic drug coverage plans.[17]

In the 1970s and 1980s, the federal government also began to provide drug coverage to First Nations and Inuit, veterans, federal inmates, members of the Canadian Forces and the RCMP, and certain refugee claimants,[18] as part of its obligations to these particular subpopulations.[19] In addition, the federal government introduced a drug coverage program for its public service employees.[20]

3.2 Recommendations for a National Catastrophic Prescription Drug Plan

In undertaking their respective reports on health care delivery in Canada, both of which were published in 2002, the Kirby Senate Committee and the Romanow Commission examined the need to provide Canadians with additional protection from catastrophic drug costs as a result of the rapid rise of out-of-hospital prescription drug costs, which they attributed to increases in the costs of drug development, the increased use of prescription drugs to treat chronic conditions at home rather than in hospital, and the development of new, expensive drugs tailored to treat genetic diseases and conditions in smaller population groups.[21] Both the Kirby Senate Committee and the Romanow Commission suggested that these rising costs, coupled with the disparities in the provision of prescription drug coverage across the country, meant that an increasing number of Canadians would face catastrophic drug costs in the near future.

Consequently, both the Kirby Senate Committee and the Romanow Commission made proposals for the establishment of a national catastrophic prescription drug plan in which costs would be shared by federal, provincial and territorial governments.

The Romanow Commission recommended the establishment of a federal Catastrophic Drug Transfer, which would reimburse 50% of the costs of provincial and territorial drug insurance plans, above a threshold of $1,500 per person per year.[22] The commission estimated, on the basis of 2001 figures, that the total annual cost of the proposed transfer would be between $749 million and $1.01 billion.[23] The commission also suggested that the Catastrophic Drug Transfer would serve as a precursor to the eventual incorporation of out-of-hospital prescription drugs into the *Canada Health Act*.

The Kirby Senate Committee proposed instead that the federal government reimburse provincial and territorial drug plans for 90% of the drug costs of persons with total expenses exceeding $5,000 per year.[24] This proposal also called for the equivalent reimbursement of private plans. To receive funding, both provincial and private plans would have to cap costs paid by clients at 3% of income, or $1,500, whichever was less. The committee estimated that its plan would cost $500 million (in 2002 dollars) per year.[25] The Kirby Senate Committee saw its proposal as a means to expand existing provincial/territorial catastrophic drug coverage programs, as well as to reduce pressure on private plans.

3.3 2003 First Ministers' Accord on Health Care Renewal and the Expansion of Catastrophic Drug Coverage Plans Across Canada

In 2003, as part of the Accord on Health Care Renewal, the first ministers agreed "that no Canadian should suffer undue financial hardship for needed drug therapy."[26] They therefore made a commitment to take measures to ensure that all Canadians would have reasonable access to catastrophic drug coverage by 2005–2006. In support of this commitment, the federal government invested $16 billion in a five-year (2003–2004 to 2007–2008) Health Reform Fund to provide provinces and territories with more money to improve health care in a number of ways, including by expanding the provision of catastrophic drug coverage.[27]

Provinces with existing catastrophic drug coverage plans, namely British Columbia, Ontario, Manitoba and Saskatchewan, used the federal funds to broaden their drug formularies, providing increased coverage for blood products, cancer drugs and supplies for diabetics.[28] Meanwhile, Newfoundland and Labrador, Nova Scotia and Prince Edward Island began to introduce catastrophic drug coverage programs. Thus, seven provinces currently offer catastrophic drug coverage programs.

The remaining provinces and territories opted instead to maintain or introduce other types of drug coverage programs. Both Quebec and Alberta have kept their public drug programs that offer coverage to those who do not otherwise have access to private drug insurance. In 2014, New Brunswick opted to introduce a prescription drug coverage plan that provides coverage to residents who do not have any form of prescription drug coverage, rather than offering a program that provides coverage only for individuals facing high out-of-pocket drug costs.[29] The three territories do not offer catastrophic drug coverage programs, but do provide other types of drug coverage programs.

For further details regarding provincial and territorial drug coverage programs, see section 4 below.

3.4 The 10-Year Plan to Strengthen Health Care and the Development of Options for National Catastrophic Drug Coverage

In addition, as part of the 2004 10-Year Plan to Strengthen Health Care, the first ministers directed their health ministers to establish a task force to develop, assess and cost options for providing catastrophic pharmaceutical coverage as part of a National Pharmaceuticals Strategy and to report on their findings. In June 2006, the federal–provincial/territorial ministerial task force reported on its progress toward meeting the objectives of the National Pharmaceuticals Strategy, including the development of options for catastrophic drug coverage.

The task force proposed two main options with four variations for a national catastrophic drug coverage plan. The first option is based on a cap on out-of-pocket drug expenditures that varies by family income level, ranging from 0% of income for individuals whose annual family income is below $20,000, to a maximum of 9% of income for those whose family income exceeds $90,000. The percentage would increase by 1% for every $10,000 increase in annual family income.[30] The second option is based upon an out-of-pocket cap on drug expenditures that is set as a fixed percentage of family income, regardless of the annual income level of the family. The variations for each of the main options and the cost of the option with or without the maintenance of private plan coverage are outlined in Table 1.

Table 1 – Proposed Catastrophic Drug Coverage Programs and Their Costs

<table>
<tr><th>Cap on Out-of-Pocket Costs</th><th>Variations</th><th>Estimated Costs in 2006 Dollars</th></tr>
<tr><td rowspan="2">Variable percentage of annual family income
FROM
0% if the annual family income is less than $20,000
TO
9% if an annual family income is $90,000 or more</td><td>With private plan</td><td>7.8 billion</td></tr>
<tr><td>Without private plan</td><td>10.3 billion</td></tr>
<tr><td rowspan="2">Fixed percentage of family income (4.3% of annual family income)</td><td>With private plan</td><td>6.6 billion</td></tr>
<tr><td>Without private plan</td><td>9.4 billion</td></tr>
</table>

Source: Table prepared by the author using data obtained from Federal/Provincial/Territorial Ministerial Task Force on the National Pharmaceuticals Strategy, *National Pharmaceuticals Strategy Progress Report*, June 2006, p. 31.

In its report, the ministerial task force recommended that the cost of a fixed 5%-of-income threshold above which Canadians would be eligible for catastrophic drug coverage be calculated and analyzed. The task force stated that this threshold would be easier to communicate and would not create a substantial difference in cost from the estimates for the 4.3% threshold – the average of the maximum income percentage thresholds of the four income-based public drug plans in Canada – used in its initial calculations.[31]

The task force also recommended that further policy, design and costing analysis should focus on a variable percentage-of-income threshold option that would maintain a private-payer role, and should also evaluate the sustainability of maintaining the private-payer role. Finally, the report also suggested that further studies were needed to determine the number of Canadians who do not have coverage through either a public or a private plan, and to examine the costs associated with extending coverage to them.

At a September 2008 meeting on the National Pharmaceuticals Strategy, provincial and territorial health ministers reaffirmed their commitment to extending catastrophic drug coverage to all Canadians. They further agreed to focus on a funding formula for national catastrophic drug coverage that would have, on average, an income threshold of 5%. The costs, estimated at $5.03 billion annually in 2006, would be divided equally between the provinces/territories and the federal government.[32] However, according to the provinces and territories, an inability to agree on this cost-sharing arrangement delayed further progress.[33]

Since 2008, federal, provincial and territorial governments have continued to collaborate on other areas of the National Pharmaceuticals Strategy, such as drug safety, common drug formulary listing decisions and drug pricing and purchasing strategies.[34] However, no further progress has been made toward the creation of a national catastrophic drug coverage program.

In its 2012 statutory review of the 10-Year Plan to Strengthen Health Care, the Standing Senate Committee on Social Affairs, Science and Technology recommended that the federal government continue to work with the provinces and territories to develop a national pharmacare program, which would include a national catastrophic drug coverage program.[35]

In January 2016, federal, provincial and territorial ministers of health expressed renewed interest in exploring approaches to improve drug coverage and access to prescription drugs in Canada.[36] They further agreed to create a federal–provincial/territorial working group to examine this issue.

4 OVERVIEW OF CURRENT LEVELS OF PROTECTION AGAINST CATASTROPHIC DRUG COSTS OFFERED BY PUBLIC AND PRIVATE DRUG PLANS

Although no national catastrophic drug coverage program exists, most Canadians have some protection against high out-of-pocket drug costs through a variety of private, provincial/territorial and federal drug plans, as outlined below.

4.1 PRIVATE PLANS

Private plans offered by employers, unions and professional associations are a major source of drug coverage in Canada, providing approximately 58% of Canadians with some degree of protection from catastrophic drug costs.[37] Of those individuals enrolled in private-sector programs, 55% have plans that protect against catastrophic drug costs, either through a cap on overall drug expenses, or through coverage of 100% of total drug costs. The remaining 45% have plans that provide substantial but incomplete coverage, commonly reimbursing 80% of drug costs, once a deductible is reached.[38]

Private-plan prescription drug expenditures in 2014 were projected to reach $10.3 billion, or 35.8% of total prescription drug expenditures in Canada.[39] Health economists have pointed out that the costs of private drug plans are also publicly subsidized, since the premiums of these programs are considered a tax-deductible expense for employers. Tax subsidies cover approximately 10% of the cost of these private programs.[40]

It is also important to note that although private-sector plans are the voluntary initiatives of plan sponsors, they can be regulated by the provinces and territories.[41] For example, in Quebec, prescription drug coverage is mandatory, and private plans are required to provide minimum coverage standards equivalent to those offered by the provincial public plan. This regulation enables the province to ensure that 100% of its residents have protection against catastrophic drug costs through both public and private programs.[42]

4.2 FEDERAL GOVERNMENT PLANS

The federal government administers prescription drug coverage plans for specific client groups that do not otherwise have access to private drug plans or to plans offered by provincial or territorial governments. In 2014, prescription drug expenditures for all federal drug plans amounted to $0.6 billion, or 2.1% of total prescription drug expenditures in Canada.[43]

These programs are managed by different departments:

- Health Canada, for registered First Nations and recognized Inuit;
- Veterans Affairs Canada, for veterans;
- Correctional Service of Canada, for inmates of federal penitentiaries;

- Immigration, Refugees and Citizenship Canada, for different types of refugee claimants, other protected persons, and persons detained by the department for immigration purposes;
- the Department of National Defence, for members of the Canadian Forces; and
- the Royal Canadian Mounted Police (RCMP) and Veterans Affairs Canada, for current and discharged members of the RCMP and their dependants.

Together, these federal plans cover approximately 1 million eligible clients, or 2% of the Canadian population.[44]

As an employer, the federal government also provides drug coverage to its employees through the Public Service Health Care Plan, which is managed by the Treasury Board of Canada Secretariat and administered by the private insurer Sun Life Financial. Beneficiaries of federal plans are relatively well protected from catastrophic drug costs through the provision either of 100% coverage or of partial coverage with out-of-pocket expenses capped at $3,000 per year. Further details regarding federal government drug coverage programs are given in the appendix.

4.3 Provincial and Territorial Government Plans

Drug plans offered by provincial and territorial governments provide catastrophic drug coverage to individuals who have only partial coverage through their private plans, have no coverage, or belong to population subgroups, such as seniors, that are likely to experience high drug costs relative to income. These programs offer access to drug coverage to approximately 53% of the Canadian population.[45] In 2014, provincial and territorial spending on prescription drugs through these programs was projected to reach $12.1 billion, or 42% of total prescription drug expenditures in Canada.[46]

4.3.1 Catastrophic Drug Coverage Plans

The drug coverage programs offered by provincial and territorial governments fall into three main categories. The first category consists of plans for individuals in the general population who have no other form of coverage and are experiencing high drug costs relative to their income. Seven provinces offer this type of program with varying benefit payment structures (premiums, deductibles and co-payments)[47] as well as caps on payments. Table 2 outlines the annual upper payment limit provided by each of these programs as protection against catastrophic drug costs.[48]

Table 2 – Catastrophic Drug Coverage Cap on Out-of-Pocket Costs, by Province

Province	Cap
British Columbia	1.3%–3.2% of net family income[a]
Saskatchewan	3.4% of total adjusted family income[b]
Manitoba	2.97%–6.73% of total adjusted family income[c]
Ontario	4% of net family income, plus a fee of $2 per prescription[d]
Nova Scotia	Varying percentage of total adjusted family income[e]
Newfoundland and Labrador	5%, 7.5% or 10% of net family income[f]
Prince Edward Island	3%, 5%, 8% or 12% of net family income[g]

Notes: a. Government of British Columbia, Ministry of Health Services, *Fair PharmaCare Assistance Levels – Regular*, August 2009.

b. Patented Medicine Prices Review Board, Appendix A: "Public Drug Plan Design" – Saskatchewan, in *NPDUIS Compass Rx: Annual Public Drug Plan Expenditure Report 2012/13*, 1st ed., 1 September 2015; and Government of Saskatchewan, "Special Support Program."

c. Manitoba Health, Healthy Living and Seniors, Pharmacare Deductible Estimator for the 2015/2016 benefit year, *Manitoba Pharmacare Program*.

d. Government of Ontario, *A Guide to Understanding the Trillium Drug Program*, 2013.

e. Government of Nova Scotia, *Nova Scotia Pharmacare Programs – The Nova Scotia Family Pharmacare Program*, December 2012.

f. Newfoundland Labrador Department of Health and Community Services, "Plan Overview," *Prescription Drug Program*.

g. Government of Prince Edward Island, "Catastrophic drug coverage for all Islanders," News release, 10 May 2013.

4.3.2 Universal Public Drug Coverage Plans

The second category of provincial or territorial drug coverage plan consists of universal public pharmaceutical coverage programs for individuals who have no other type of drug coverage. These individuals may not necessarily be experiencing drugs costs that would be considered catastrophic relative to their income levels. Three provinces offer this option: Quebec, through its Public Prescription Drug Insurance Plan; Alberta, through its Non-Group Coverage Benefit; and New Brunswick, through its New Brunswick Drug Plan.

Whereas Quebec's program protects individuals from catastrophic drug costs by providing an upper payment limit (currently set at $1,029),[49] Alberta's program caps out-of-pocket expenses at $25 per prescription.[50] In addition, individuals and families enrolled in those programs also pay a premium, which may be subsidized depending on the income level of the individual or family.

The New Brunswick Drug Plan provides coverage for individuals who either lack insurance entirely or have insufficient private insurance through their employer to cover the costs of their medication.[51] Under the program, individuals pay a premium, which is based upon their income level, as well as a co-payment on each prescription with a maximum cap – also income-based – for each prescription. However, the plan does not have an overall limit on out-of-pocket costs.

4.3.3 Targeted Drug Coverage Programs

The third category of drug coverage program offered by provinces and territories is targeted to people with specific illnesses, individuals on social assistance and seniors). Most provinces and territories offer these programs in addition to or as a supplement to their other drug coverage programs.

Through these programs, provinces and territories provide coverage as described below:

- People with specific illnesses that require high-cost prescription drugs (the illnesses covered vary by province and territory) receive 100% of drug costs.
- Persons on social assistance and seniors with low incomes receive full drug costs, less minimal co-payments in some programs.
- Seniors with higher incomes tend to face premiums, deductibles and higher co-payments, although these amounts are usually capped.

Finally, it is important to note that many residents in the territories are recognized Inuit and therefore have access to Health Canada's Non-Insured Health Benefits Program, which provides full drug coverage for recognized Inuit, in addition to programs offered by the territorial governments. Therefore, many of the programs offered by the territories are intended for residents who do not have coverage through this program, such as Métis and non-Aboriginal Canadians who are either seniors or have specific illnesses or low incomes.

5 KEY ISSUES

5.1 Inequity

Although more jurisdictions have made prescription drugs more accessible and affordable to their residents in the last few years, studies have shown that disparities remain with respect to which groups are covered by drug coverage plans. For example, one study showed that the Canadians who are most likely to be underinsured or to have no insurance at all are young (between the ages of 18 and 34), have low to middle incomes, or work part time.[52]

There are also regional disparities in the provision of catastrophic drug coverage in Canada. In particular, the levels of coverage offered by catastrophic programs vary significantly from one province to the next because of differences in premiums, co-payments, and limits on out-of-pocket expenditure. For example, a person whose annual household income is $14,000 per year and whose drug costs to treat her hypothyroidism and hyperlipidemia total $807 annually would pay $490 a year under Saskatchewan's Special Support Program, but only $375 under Ontario's Trillium Drug Program.[53] Researchers have therefore concluded that the expansion of catastrophic drug coverage programs across Canada has not resulted in a reduction of regional inequities in drug coverage.

Finally, some commentators have expressed concerns regarding regional disparity in the number and types of drugs covered by different provincial and territorial drug plans and the need for a common national formulary. However, a 2009 study that compared the breadth and depth of the formularies of provincial and territorial drug plans for the general population, social assistance recipients and seniors concluded that Canada was operating with a significant "implicit national formulary" by virtue of the fact that provincial formularies independently yet mutually list most of the top-selling medicines on the market.[54] The study further noted that different formulary listings also appear to be the result of differences in the provinces' interpretation of the clinical data regarding those therapeutic products, as well as their health system priorities.

These findings are consistent with a written submission provided by the Canadian Agency for Drugs and Technologies in Health (CADTH) to the Standing Senate Committee on Social Affairs, Science and Technology, as part of the committee's statutory review in 2012 of the 2004 10-Year Plan to Strengthen Health Care.[55] CADTH houses the Common Drug Review (CDR), a pan-Canadian process for conducting objective, rigorous reviews of the clinical effectiveness of drugs as well as their cost-effectiveness relative to other drugs and treatments. On the basis of these reviews, the CDR makes recommendations for formulary listings for all of Canada's publicly funded drug plans except Quebec's, which has its own process. Although jurisdictions do not have to comply with the recommendations made by the CDR, the agency indicated in its written submission that participating jurisdictions followed its recommendations 90% of the time.

It is important to note that few studies have compared the formularies for other provincial and territorial drug coverage programs targeted at diseases with high treatment costs, such as cancer, diabetes and HIV, to determine whether there is harmonization across the country for these programs as well.[56] However, to promote consistency in formulary-listing decisions for cancer drugs across the country, provincial and territorial ministries of health, with the exception of the Quebec ministry, established the pan-Canadian Oncology Drug Review (pCODR), now part of CADTH, to make recommendations regarding the coverage of new cancer drugs on provincial and territorial formularies, based on an evaluation of the clinical and cost effectiveness of these new treatments.[57]

5.2 Out-of-Hospital Prescription Drugs: An Integral Part of Health Care

Some observers have pointed out that the mix of public and private coverage in Canada fails to reflect the fact that, because of changes in medical practice, out-of-hospital prescription drugs have become an integral part of the health care system.[58] Acute conditions that used to be treated in hospital are now treated at home because of advances in technology and drug therapy. For example, medications for peptic ulcers have eliminated the need for surgery.[59] Similarly, some chronic conditions such as asthma and high blood pressure are treated with prescription medications.

Consequently, critics argue that prescription drug coverage can no longer be considered a "fringe benefit" offered by employers, but rather constitutes a significant part of Canada's health care system.[60] They claim that, as a result, prescription drug coverage should be incorporated into the *Canada Health Act*. Commentators who hold this view contend that the country is falling short of the ideal of having all prescription drugs covered under a national drug plan. Indeed, the Romanow Commission saw the creation of a national catastrophic drug coverage plan as a first step toward the establishment of a universal first-dollar coverage[61] pharmacare program.

5.3 The Possible Consequences of Rising Prescription Drug Costs

The increased use of prescription medicines to treat illnesses has resulted in a rise in the amount that Canadians spend directly on those drugs. Since 1988, out-of-pocket expenses for prescription drugs have increased from $59.26 per capita to $179.97 per capita in 2014, when adjusted for inflation.[62] The extent to which rising out-of-pocket prescription drug costs represent a significant burden to Canadians is a matter of ongoing debate. Some researchers have suggested that, since most Canadians do not experience out-of-pocket prescription drug costs that create a major financial burden relative to income, the current level of coverage offered by public and private plans is sufficient, provided that efforts are made to ensure that individuals who do experience high costs relative to income have comprehensive protection against these costs.[63]

Other studies, however, have demonstrated that out-of-pocket costs for prescription drugs have resulted in non-adherence to treatment plans and negative health outcomes. A study published in 2012 found that approximately 1 in 10 Canadians who receive a prescription do not adhere to the treatment for cost-related reasons.[64] In addition, the study found that cost-related non-adherence rates varied from 7.2% in Quebec to 17.0% in British Columbia (see Table 3 for the rates for all provinces).

Table 3 – Prevalence of Cost-Related Non-adherence to Prescribed Pharmacological Treatment, by Province, 2007

Province	Weighted Prevalence of Cost-Related Non-adherence, Percentage[a]
Atlantic provinces	11.9
Quebec	7.2
Ontario	9.1
Saskatchewan and Manitoba	8.9
Alberta	7.6
British Columbia	17.0
Overall	**9.6**

Note: a. According to the study's authors, percentages were calculated using the number of respondents who reported receiving a prescription, weighted to represent the overall Canadian population.

Source: Table prepared by the author using data obtained from Michael Law et al., "The effect of cost on adherence to prescription medications in Canada," *Canadian Medical Association Journal*, Vol. 184, No. 3, 21 February 2012.

Studies have also demonstrated that cost-related non-adherence to prescriptions for medication can result in negative health outcomes. For example, one researcher found that patients aged 65 or older were less likely to fill their prescriptions when they had to pay for them. This in turn resulted in increases in rates of hospital admissions, emergency care and visits to physicians. These results have led some health policy researchers to argue that prescription drugs need to be considered medically necessary under the *Canada Health Act.*[65]

Furthermore, it is expected that an increasing proportion of Canadians will experience rapidly rising out-of-pocket drug costs as a result of the aging of the population and the increasing use of high-cost drugs, such as biologics,[66] in the treatment of age-related diseases and conditions.[67] According to the Patented Medicine Prices Review Board, demographic effects accounted for 2.5% and 2.7% of increases in drug costs for private and public plans respectively in 2012–2013.[68]

Meanwhile, high-cost drugs such as biologics now account for approximately 20% of both public and private prescription drug plan expenditures and contribute to between 3.5% and 4.1% of growth in drug costs, a trend that is expected to continue as a result of the number of new and promising biologics currently under development by pharmaceutical companies.[69] These rising costs will be borne by both private and public drug coverage plans, as well as by individuals, who will have higher co-payments and deductibles as a result.[70]

Finally, an increasing number of high-cost orphan drugs are being developed for the treatment of rare diseases or disease subtypes. Approximately one in 12 Canadians suffer from one of approximately 7,000 different rare diseases, 80% of which are genetically based.[71] Advances in genetics have meant that the number of rare diseases identified continues to increase alongside the development of new drugs to treat them.[72] Since 1983, the number of orphan drugs approved by the U.S. Food and Drug Administration has increased from 38 to 373, with an average of 14 new drugs approved per year.[73] However, because of costs associated with the research and development of these drugs, the limited number of patients with a particular disease, and the lack of competition within the market, orphan drugs are expensive. For example, the average annual cost of Aldurazyme, a drug used in the treatment of mucopolysaccharidosis type 1 (Hurler syndrome), an inherited genetic enzyme deficiency disorder that occurs once in 100,000 births, is approximately $435,000 per year.[74]

The increasing number of orphan drugs available and their associated costs, coupled with the growing number of rare diseases that are recognized and diagnosed, means that an increasing number of Canadians will be at risk of facing catastrophic drug costs, placing further pressure on private and public drug coverage programs to meet this demand while simultaneously trying to contain the costs of these programs.[75]

5.4 EFFICIENCY

Some health economists question the efficiency of maintaining the current mix of private and public drug coverage plans.[76] They argue that private drug coverage plans are less efficient than public ones: because their revenue is based on a percentage of the expenditures made through their programs, they have no incentive to control the rising costs of their plans or to limit their formularies to reflect the most cost-effective medications. Furthermore, the administrative costs of Canada's public health insurance programs are lower than those of private plans, amounting to 1.3% as opposed to 13.2% for private plans.[77]

Finally, public drug coverage programs have more purchasing power than private insurance companies and are therefore able to negotiate better prices for pharmaceuticals through product listing agreements (PLAs), which establish a price for each drug included in a prescription drug plan on the basis of volume, thus helping to lower the overall costs of their programs. These factors, combined with the costs associated with tax subsidies provided to employers who sponsor these programs, have led some commentators to argue that cost savings could be achieved through the establishment of a single-payer public drug coverage system, provided that efforts were made to control the cost of such a program.[78]

Private drug insurance companies also view the current system as inefficient and inequitable.[79] In particular, the Canadian Life and Health Insurance Association (CLHIA), which represents the interests of private drug insurance companies, has noted that although governments are able to use their purchasing power to negotiate lower drug prices for pharmaceuticals, under competition law private drug insurance companies face restrictions against working together to enter into similar PLAs with pharmaceutical companies. This in turn means that Canadians with private insurance face higher out-of-pocket costs than those under public plans, which has led private drug insurers to call for one price for a prescription drug for Canadians through market-based approaches to drug pricing.

Moreover, CLHIA also sees the current system as inefficient because of a lack of alignment between private and public drug coverage programs, which means that individuals face challenges in transitioning between public and private programs when their circumstances change, such as when they retire or reach the age of 65, reach a cap on their private coverage, or need access to a drug not currently on their private plan's formulary. The organization argues that the current system can be reformed by promoting greater harmonization and collaboration between public and private drug coverage programs.

6 CONCLUSION

Since the commitments made by first ministers in the 2003 and 2004 health accords, there has been a concerted effort to expand publicly funded catastrophic drug coverage programs across the country. However, efforts to create a national catastrophic drug coverage program to date have been limited to analyzing and calculating the costs of various policy options, because of a lack of agreement over cost-sharing arrangements among federal, provincial and territorial governments.

It is expected that both public and private drug coverage programs will face increasing pressures from prescription drug costs as the population ages and health care technology evolves. Consequently, regional disparities in the drug coverage offered by different provincial and territorial governments may be felt more acutely as more Canadians experience higher drug costs relative to income in the future. Debates surrounding the merits of catastrophic drug coverage programs in Canada therefore continue as policy-makers turn their attention to finding ways to contain the costs of these programs.

NOTES

1. Ken Fraser and Richard Shillington, "Protecting the Unprotected," *Canadian Healthcare Manager*, April 2005, p. 16.
2. Ke Xu et al. "Designing Health Financing Systems to Reduce Catastrophic Health Expenditure," Technical Briefs for Policy-Makers, No. 2, World Health Organization, Geneva, 2005, p. 2.
3. Having "insufficient drug coverage" means that there is no protective cap on costs in the drug insurance plan. The following study is the most recent one available: Fraser Group and Tristat Resources, *Drug Expense Coverage in the Canadian Population: Protection from Severe Drug Expenses,* August 2002. See p. 3.
4. Health Council of Canada, *A Status Report on the National Pharmaceuticals Strategy: A Prescription Unfilled*, January 2009, p. 9.
5. Ibid.
6. Senate, Standing Committee on Social Affairs, Science and Technology [SOCI], *The Health of Canadians – The Federal Role. Volume Six: Recommendations for Reform*, October 2002.
7. Commission on the Future of Health Care in Canada, *Building on Values: The Future of Health Care in Canada*, November 2002.
8. Government of Canada, *2003 First Ministers' Accord on health care renewal*, 5 February 2003.
9. Government of Canada, "A 10-year plan to strengthen health care," Backgrounder, *First Ministers' Meeting on the future of health care 2004*, 16 September 2004.
10. The Canadian Centre for Policy Alternatives and the Canadian Health Coalition, *Life Before Pharmacare: Report on the Canadian Health Coalition's Hearings into a Universal Public Drug Plan*, November 2008, p. 11.
11. Valérie Paris and Elizabeth Docteur, *Pharmaceutical Pricing and Reimbursement Policies in Canada*, OECD Health Working Papers, No. 24, DELSA/HEA/WD/HWP(2006)4, 15 February 2007, p. 18.
12. These include First Nations people living on reserves, Inuit, serving members of the Canadian Forces, eligible veterans, inmates in federal penitentiaries, and refugee protection claimants. Health Canada, "The Role of Government," *Health Care System*.
13. Ibid.
14. Commission on the Future of Health Care in Canada (2002), p. 189; Fraser Group and Tristat Resources (2002), p. 7; and Royal Commission on Health Services [Hall Commission], *Royal Commission on Health Services: 1965. Volume II*, 7 December 1964.

15. Health Canada, "Access to Insurance Coverage for Prescription Medicines," *Health Care System*.
16. Hall Commission (1964).
17. Steven G. Morgan and Jamie R. Daw, "Canadian Pharmacare: Looking Back, Looking Forward," *Healthcare Policy*, No. 8, Vol. 1, 2012.
18. Citizenship and Immigration Canada, *Interim Federal Health Benefits Program: Summary of Benefits*, 5 November 2014.
19. Health Canada, "Federal Public Drug Benefit Programs," *Health Care System*.
20. National Joint Council of the Public Service of Canada, *Public Service Health Care Plan Directive*.
21. SOCI (2002), p. 127; and Commission on the Future of Health Care in Canada (2002), p. 196.
22. Commission on the Future of Health Care in Canada (2002), p. 197.
23. Ibid., p. 198.
24. SOCI (2002), p. 142.
25. Ibid., p. 141.
26. Government of Canada (2003).
27. Health Canada, "Federal Health Investments," *Health Care System*, 5 February 2003.
28. Saskatchewan Health, *A Report on the Health Reform Fund and Diagnostic and Medical Equipment Fund*, December 2004, p. 4; and Government of British Columbia, Ministry of Health Services, *Federal Funding in British Columbia 2003/04: Health Reform Fund – Primary Health Care – Diagnostic and Medical Equipment Fund*, pp. 12–13.
29. Government of New Brunswick, "Frequently Asked Questions," *Health*.
30. Federal/Provincial/Territorial Ministerial Task Force on the National Pharmaceuticals Strategy, *National Pharmaceuticals Strategy Progress Report*, June 2006, footnote 19.
31. Ibid., p. 31.
32. Canadian Intergovernmental Conference Secretariat, Annual Conference of Provincial–Territorial Ministers of Health, "Backgrounder: National Pharmaceuticals Strategy Decision Points," 4 September 2008.
33. Health Council of Canada (2009), p. 16–17.
34. SOCI, *Time for Transformative Change: A Review of the 2004 Health Accord*, March 2012, pp. 55–58.
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36. Canadian Intergovernmental Conference Secretariat, "Statement of the Federal-Provincial-Territorial Ministers of Health," News release, 21 January 2016.
37. Fraser Group and Tristat Resources (2002), p. 11.
38. Ibid., p. 13.
39. Canadian Institute for Health Information [CIHI], *Prescribed Drug Spending in Canada, 2013: A Focus on Public Drug Programs*, 2015, p. 8.
40. Marc-André Gagnon and Guillaume Hébert, *The Economic Case for Universal Pharmacare: Costs and Benefits of Publicly Funded Drug Coverage for all Canadians*, Canadian Centre for Policy Alternatives and Institut de recherche et d'informations socio-économiques, 13 September 2010, p. 20.

41. Paris and Docteur (2007), p. 18.
42. Fraser Group and Tristat Resources (2002), p. 39.
43. CIHI (2015), p. 9.
44. Health Canada, "Federal Public Drug Benefit Programs," *Health Care System*.
45. It is important to note that approximately 13% of the population have overlapping access to both private and public plans. Fraser Group and Tristat Resources (2002), p. 11.
46. CIHI (2015), p. 6.
47. A premium is a fixed amount that a beneficiary must pay to be eligible for a reimbursement program, whereas a deductible is the fixed amount or percentage of income that represents the first portion of the costs that must be borne by the beneficiary before the insurer shares a payment. A co-payment is a fixed amount that a beneficiary must pay for each prescription, once the deductible is reached. Virginie Demers et al., "Comparison of provincial prescription drug plans and the impact on patients' annual drug expenditures," *Canadian Medical Association Journal*, Vol. 178, No. 4, 12 February 2008.
48. For a complete description of these and other provincial and territorial drug coverage programs, please see Patented Medicine Prices Review Board [PMPRB], *NPDUIS Compass Rx: Annual Public Drug Plan Expenditure Report 2012/13*, 1st ed., 1 September 2015.
49. Régie de l'assurance maladie du Québec, "Amount to pay for prescription drugs," *Prescription drug insurance*.
50. Alberta Health, *Non-Group coverage benefit*.
51. Government of New Brunswick, "Frequently Asked Questions," *Health*.
52. "Underinsured" individuals have insurance that offers no protective cap over prescription drug costs. Vishnu Kapur and Kisalaya Basu, "Drug coverage in Canada: who is at risk?," *Health Policy*, Vol. 71, No. 2, 2005, p. 189.
53. In this example, the person is experiencing catastrophic drug costs that constitute approximately 5.7% of income. This example is based upon the study conducted by Demers et al. (2008); see Figure 3.
54. Steve Morgan et al., "Breadth, Depth and Agreement among Provincial Formularies in Canada," *Healthcare Policy*, Vol. 4, No. 4, 2009.
55. SOCI (2012), p. 56.
56. Morgan et al. (2009).
57. Pan-Canadian Drug Oncology Review, *About the pan-Canadian Drug Oncology Review (pCODR)*.
58. Commission on the Future of Health Care in Canada (2002), p. 189.
59. Ibid, p. 193.
60. Ibid, p. 190.
61. First-dollar coverage refers to an insurance policy that provides full dollar coverage of the service without the payment of a deductible by the client.
62. Calculated by the author based on the figures in the following document: CIHI, "Expenditure on Drugs by Type, by Source of Finance, and as a Share of Public, Private and Total Health Expenditures, Canada, 1985–2015," *Data Tables*, 2015.
63. Logan McLeod et al., "Financial burden of household out-of-pocket expenditures for prescription drugs: Cross-sectional analysis based on national survey data," *Open Medicine*, Vol. 5, No. 1, 2011.

64. Michael Law et al, "The effect of cost on adherence to prescription medications in Canada," *Canadian Medical Association Journal*, Vol. 184, No. 3, 21 February 2012.

65. Robyn M. Tamblyn, "Prescription drug coverage: An essential service or a fringe benefit?," *Canadian Medical Association Journal*, Vol. 173, No. 11, 2005.

66. Biologics are drugs manufactured from, or through the use of, animals or microorganisms. Because they are derived through the metabolic activity of living organisms, they tend to be more variable and structurally complex than chemically synthesized drugs. Consequently, they are more expensive to produce than chemically synthesized drugs and are therefore sold at a high cost. For example, Remicade, a biologic used in the treatment of rheumatoid arthritis and Crohn's disease, has an average cost of $4,223 per prescription. (See Health Canada, "Fact Sheet: Subsequent Entry Biologics in Canada," Drugs and Health Products, 9 November 2009; and PMPRB, "Figure 4.4.2: Top ten and bottom five drugs contributing to new and existing drug effect, all select public drug plans, 2012/13," in Chapter 4: "The Drivers of Drug Costs, 2011/12 to 2012/13," *NPDUIS Compass Rx* [1 September 2015]).

67. PMPRB, *NPDUIS Compass Rx* (1 September 2015), p. 26.

68. PMPRB, *Cost Drivers of Private Drug Plans in Canada, 2012/13*, March 2015; and PMPRB, *Cost Drivers of Public Drug Plans in Canada, 2012/13*, March 2015.

69. PMPRB, *Cost Drivers of Private Drug Plans in Canada, 2012/13*, March 2015; PMPRB, *Cost Drivers of Public Drug Plans in Canada, 2012/13*, March 2015; and PMPRB, *New Pipeline Monitor, 6th edition – December 2014*, 9 September 2015.

70. Canadian Life and Health Insurance Association, *Ensuring the Accessibility, Affordability and Sustainability of Prescription Drugs in Canada*, 2013.

71. David K. Lee and Barbara Wong, "An orphan drug framework (ODF) for Canada," *Journal of Population Therapeutics and Clinical Pharmacology*, Vol. 21, No. 1, 2014.

72. Canadian Institutes of Health Research [CIHR], *The Changing Landscape of Treatments for Rare Diseases*.

73. The majority of these drugs have also received approval in Canada as well. For further details, see Lee and Wong (2014).

74. CIHR, *The Changing Landscape of Treatments for Rare Diseases*.

75. Morgan and Daw (2012).

76. Gagnon and Hébert (2010).

77. Ibid., p. 19.

78. Ibid., p. 24.

79. Canadian Life and Health Insurance Association (2013).

APPENDIX – FEDERAL GOVERNMENT PRESCRIPTION DRUG PROGRAMS

Department	Program	Population Group	Level of Coverage
Health Canada	Non-Insured Health Benefits Program[a]	Registered First Nations under the *Indian Act* and Inuk recognized by one of the Inuit land claim organizations.	The program provides full coverage to those who do not have access to a private or provincial/territorial drug plan.
Treasury Board of Canada Secretariat, administered by Sun Life Financial	Public Service Health Care Plan[b]	Federal public service employees and their dependants.	The program provides catastrophic drug coverage whereby members pay 20% of drug costs up to a maximum of $3,000 per year.
Veterans Affairs Canada, administered by Sun Life Financial	Group Health Insurance[c] (under the Public Service Health Care Plan)	Eligible veterans and certain survivors.[d] Current and former members of the RCMP who are eligible for disability pension and health benefit programs for a service-related injury or illness.[e]	The program provides catastrophic drug coverage whereby members pay 20% of drug costs up to a maximum of $3,000 per year.
Royal Canadian Mounted Police, administered by Sun Life Financial	Public Service Health Care Plan[f]	RCMP members, their dependants and civilian employees.	The program provides catastrophic drug coverage whereby members pay 20% of drug costs up to a maximum of $3,000 per year.
Department of National Defence	Canadian Forces Health Services[g]	Regular Canadian Forces personnel.	The program provides full coverage for all prescription drugs.
Immigration, Refugees and Citizenship Canada, administered by Medavie Blue Cross	Interim Federal Health Program	Protected persons. Refugee claimants. Certain detained persons.	The program offers varying levels of drug coverage to individuals according to their status under the *Immigration and Refugee Protection Act*.[h]
Correctional Service Canada	Health Services[i]	Federal inmates.	Full coverage of medications is considered part of "essential health care" services provided to federal inmates.

Notes:
a. Health Canada, "Benefits Information," *First Nations and Inuit Health.*
b. National Joint Council of the Public Service of Canada, *Public Service Health Care Plan Directive*.
c. Veterans Affairs Canada, *Group Health Insurance*.
d. Ibid.
e. Royal Canadian Mounted Police, "Help after a service-related injury or illness," *VAC services & benefits available to RCMP members.*
f. Royal Canadian Mounted Police, *Health/Dental Claims & Information*.
g. National Defence and the Canadian Forces, *Supplemental Health Care*.
h. For further details, see Citizen and Immigration Canada, *Interim Federal Health Benefits Program: Summary of Benefits*.
i. Correctional Service Canada, *Health Services*.