Canadian Institute of Actuaries | Institut canadien des actuaires

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Advisory Council on the Implementation of National Pharmacare Secretariat
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The Canadian Institute of Actuaries (CIA) is the national, bilingual organization and voice of the actuarial profession in Canada. Its members are dedicated to providing actuarial services and advice of the highest quality. The Institute holds the duty of the profession to the public above the needs of the profession and its members.

We support the goal that every Canadian should have better health by being able to access the essential drugs for their medical needs and at an affordable price. A national pharmacare program should be sustainable. We can help ensure this consideration in the development of a program.

Actuaries have extensive experience in the design, pricing, and risk management of financial and social security programs. We believe that a national pharmacare program would benefit greatly from the perspectives that the actuarial profession can bring to the discussion.

The attached submission reflects our opinions on this important issue. In it, we identify program design considerations, including: who is covered; what drugs are covered and at what price; volume of covered drugs dispensed and their effective use; overall cost impact on the health-care system; and delivery, administration, and management costs. Additionally, we highlight monitoring requirements, including: modelling and sensitivities, data collection, and analysis of experience.

We thank you for this opportunity to contribute and would welcome further discussion with the Advisory Council on any of the concepts presented in our submission. Please contact Chris Fievoli, CIA staff actuary, communications and public affairs, at 613-656-1927.

Sincerely,

[original signature on file]

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Submission to the Advisory Council on the Implementation of National Pharmacare

Introduction

The central goal of national pharmacare is to ensure that every Canadian has better health by being able to access the essential drugs for their medical needs, and at an affordable price. We support this goal, and we believe that for a national pharmacare program to be successful, it must be able to achieve long-term sustainability.

A sustainable model requires careful up-front design and regular ongoing monitoring—both of which are informed by modelling the potential impacts of various pharmacare options, constant analysis of trends and evidence, and sound risk management. These are exactly the areas where actuaries have expertise and experience, and we believe that a national pharmacare program would benefit greatly from the perspectives that the actuarial profession can bring to the discussion.

This submission focuses on the financial and risk considerations to achieve sustainability, leaving the very important medical and ethical considerations to experts in other fields. In addition, we are not taking a position as to whether delivery should be public, private, or mixed.

Current Situation

Health care has been a growing segment of the national economy, reaching 11.5 percent of gross domestic product (GDP) in 2017, and represents close to 40 percent of provincial program expenditures in most jurisdictions.

A major challenge with health-care expenditures, including drugs, has been that the rate of growth has exceeded that of GDP. Therefore, to ensure a sustainable program, the ability to manage cost and cost trend is critical.

Up-front Design Considerations

The long-term cost of the program and its durability will be influenced by the following:

- Who is covered;
- What drugs are covered and at what price;
- Volume of covered drugs dispensed and their effective use;
- Overall cost impact on the health-care system; and
- Delivery, administration, and management costs.

Who is covered

Improving access to necessary drugs is the driving force behind consideration of national pharmacare. A national pharmacare program should ensure that the entire Canadian population is covered for clinically safe and effective drugs that are medically necessary for the health of each individual. Further, participation in the program should be compulsory for all

Canadians while leaving room for complementary coverage to coexist with national pharmacare.

What drugs are covered and at what price

The most critical aspect of plan design will be drug management: drug selection, formulary management and drug purchasing, as well as the management of biologic, oncology, and rare disease (BORD) drugs. These elements will have a predominant influence on the sustainability of a national pharmacare program.

Drug selection

One challenge will be striking a balance between health outcomes and the ability of the program to pay. This can be mitigated if the drug selection process uses a combination of clinical evidence and cost-effectiveness. Cost-effectiveness will require a model with the capability to predict the impact of adding specific drugs or categories of drugs when their addition can have a material impact on the overall cost of the program or on other components of the health-care system. Actuaries in insurance companies already use such techniques to assess the cost of private drug coverage.

The plan could include concepts such as least-cost alternatives in various drug classifications, generic substitution, the use of biosimilar drugs when clinically appropriate, and a formal process of drug deletion to ensure a contemporary drug list over time.

The plan should leverage the purchasing power of all drugs dispensed under national pharmacare regardless of public, private, or mixed delivery model. However, some risks to consider and manage include disruption in the supply compared to the savings achieved, and the need to ensure that pricing agreements result in overall savings, not only to one part of the delivery system.

Formulary management

Another key component will be the efficiency of the process to include drugs in the formulary. The pace at which new drugs are assessed and introduced into the formulary is critical to ensure that the benefit of these drugs is available to those who need them, on a timely basis. Historically, public delivery systems have been slow to add new drugs.

Biologic, oncology, and rare disease (BORD) drugs

Another challenge is managing the addition of new, more expensive, BORD drugs to the formulary. Given their significance, they could threaten the sustainability of national pharmacare over time. Ways to mitigate this risk must be built in from the onset of the program, such as establishing a mechanism to limit the level of cost increases from BORD drugs borne by the program. England, for example, introduced a maximum price on what their version of national pharmacare is prepared to pay for an additional year of healthy living.

Volume of covered drugs dispensed and their effective use

The volume of covered drugs dispensed will be driven primarily by aging, the progression of diseases, the evolution of drug therapies, prescribing habits, and the filling of prescriptions. It is a waste of national pharmacare's resources if a drug is prescribed, dispensed, and then either

not taken by the patient or not taken as prescribed, so that the anticipated health outcome is not achieved. This risk needs attention; therefore, adherence to protocols, analysis of prescribing patterns, and patient monitoring are examples of medical practice management that need up-front medical input and ongoing monitoring.

One specific aspect to manage is the clinical follow-up on drug efficacy, especially for BORD drugs and for patients with high-cost drug regimens. Cost-effectiveness and affordability trends will be highly influenced by the ability of national pharmacare to implement mechanisms to monitor health outcomes of these individuals. The inability to do so will likely increase the need for other more expensive health-care services. Hence, there is a need to determine the types of professional services required to effectively manage these critical groups and the level of financial incentives for health-care professionals to do so.

Effective use of drugs can be influenced by plan design where payment is contingent on following certain protocols and step therapies (e.g., demonstrating failure to achieve health outcomes with a cheaper drug or demonstrating inappropriateness of treatment before payment for a more expensive drug).

Financial participation of individuals in the program will also influence use of drugs. Patients and prescribers' choices of drugs or therapies could be influenced through some form of deductible and co-insurance. These will assist in keeping the cost trend in check; however, they can also reduce the ability of the most vulnerable to access essential drugs and, indeed, everyone's access to more expensive drugs. Therefore, any system to enrol individuals to contribute to the program should include an annual out-of-pocket maximum based on income level, or other measures to help ensure that access to essential drugs is not compromised.

Overall cost impact on the health-care system

Better access to drugs should mean better health outcomes. This in turn should lead to reduced expenses in other areas of the health-care system as individuals' health conditions are resolved or managed by the drugs. Risks centre around failure to achieve savings due to poor adherence to drugs, over- or under-prescribing of drugs, failure to prescribe the right drugs, and failure to monitor patients with high-cost drug regimens.

To further inform the initial financial and design elements of the implementation of national pharmacare, there should be an analysis of the impact that different designs of a national pharmacare program might have on other health-care expenditures. This would help to fully determine the benefit, cost, and sustainability of each possible design of a program to provide access to drugs to all Canadians.

At the same time, the potential impact of other parts of the health-care system on the national pharmacare plan should also be monitored. Are there more effective methods to treat medical conditions rather than drugs? Or cost-effective public health methods to prevent or reduce the need for drugs?

Delivery, administration, and management costs

Efficient delivery, administration, and program management will impact the performance, level of satisfaction, and overall cost of national pharmacare. Even though these elements represent a small percentage of the total cost—the cost of the actual drugs is much higher—they can play

a critical role in the effectiveness of a new pharmacare plan and help improve the health of Canadians.

Various risks include the following: failing to achieve the potential savings in drug costs; failing to efficiently manage eligibility for the program; inability to obtain timely access to specific drugs; insufficient control of prescribing protocols; poor program delivery; and inefficient payment system.

Ongoing Monitoring

The world of drugs is evolving rapidly and the national pharmacare design will need ongoing improvements, course corrections, and reassessment. One way to achieve this is to apply the same rigour to the ongoing review of the performance of national pharmacare that applies to other social programs. Such formal monitoring should take place every three to five years, for example. The Canada Pension Plan is a good example of a program that gets significant benefit from an independent, systematic review of its performance and financing, yielding high confidence in the sustainability of the system.

To support this periodic evaluation, the program will have to include strategies for the following:

- Modelling and sensitivities;
- Data collection; and
- Analysis of experience.

Modelling and sensitivities

A model of the system, as has been developed for other social programs, is crucial to the ongoing management and sustainability of national pharmacare. While models cannot predict the future, given good data and analysis they can give a very good indication of what is happening, and more importantly, can be used to identify the sensitivities and allow pre-emptive actions to help proactively manage the program.

A good example of sensitivity modelling will be the addition of BORD drugs. The model should allow the demonstration of the financial impact of these drugs on national pharmacare and on other health-care services as part of the initial decision stage.

Unless the model includes the impact on the rest of the health-care system, there is a risk that decisions may consider only the significant cost to national pharmacare without offsetting potentially significant savings in the rest of the system. The discovery of drug treatment for hepatitis C is a good recent example: a US$68,000 drug treatment will almost certainly cure the disease and lead to potentially hundreds of thousands of dollars saved from what would otherwise be needed in future treatment—possibly 10 to 30 years in the future.

Data collection

Complete and accurate data provides better modelling and more ways to analyze the trends. So, an essential element is the accumulation of information on all drugs dispensed through the program regardless of the delivery process (public, private, or mixed) and the geographical location.

Analysis of experience

The total cost of the program comes from a combination of the price of each drug and the volume of drugs dispensed, which is driven by prescribing habits and patient adherence to their prescriptions.

As part of the periodic reviews, it will be important to undertake exhaustive data analysis on drug utilization, drug price evolution, and prescribing patterns to identify trends and understand emerging patterns. In-depth analysis of BORD drugs and high-cost drug regimens will be critical because of their significant share of the total cost of the program.

These analyses will feed into the models and help develop insights into the performance of the program, and assist in shaping proper program policies, such as the development of new prescribing guidelines and consumer information on drug utilization.

Conclusion

The Canadian Institute of Actuaries' primary goal is to serve the public interest.

Actuaries have been instrumental in the development, implementation, and ongoing monitoring of social programs both in Canada and abroad. Actuarial expertise has been leveraged during the creation of comprehensive drug plans in Québec, and several OECD nations have noted the value-added by actuaries' unique skill set, and have integrated actuaries into their health-care system. In Canada, actuaries model and constantly examine trends in the drug experience of private drug plans to appropriately assess and suggest ways to mitigate risk for plan members, plan sponsors, and insurers.

We are convinced that sustainable national pharmacare can be achieved with sound financial management of the program through regular periodic evaluation, modelling of trends, and collection and analysis of data on drugs. The application of sound risk management principles outlined in this submission are also essential to the implementation of a sustainable national pharmacare that will achieve better health for all Canadians.

We would welcome an opportunity to elaborate on any of the concepts in this submission.