



THE HOSPITAL FOR SICK CHILDREN

February 14, 2020

Executive Summary

The current Patented Medicine Prices Review Board (PMPRB) pricing model from 30 years ago does not reflect the rapidly evolving therapeutic landscape across diverse clinical areas, such as oncology, genetic diseases, immunotherapies, and with respect to a wide array of rare diseases. In particular, the pharmaceutical industry's research and development focus has shifted from relatively low cost conventional small molecule drugs for common diseases aimed at large group of people to high cost biologics and genetic therapies targeted to smaller patient populations. The risk of excessive pricing is often greater for these new products. We anticipate that the request for consultation launch by PMPRB will help establish policies that ensure fair national pricing practices for drugs integral to the care of Children, Adolescents and Young Adults (CAYA) patients, without jeopardizing either the vitality of paediatric research in Canada or equitable access to innovative therapies for a unique, deeply valued, and often overlooked segment of our Canadian population. Below are the main concerns regarding the proposal:

- A one-size-fits-all pricing model is unlikely to be dexterous enough to incorporate the unique evidentiary, economic, and social values considerations relevant to ascribing value to drugs used for paediatric indications.
- We support the recommendation in a recent policy paper (1) entitled "Improving Paediatric Medicines: A Prescription for Canadian Children and Youth" that the federal government should establish a permanent, dedicated, appropriately funded Expert Paediatric Advisory Board (EPAB) at the health portfolio level to review, guide, and co-ordinate activities related to paediatric medication approvals, associated clinical research, and reimbursement activities.
- We recommend the creation of a sub-committee that includes National Initiative of Paediatric Centres, C17 Council, MICYRN, CORD along with pharmaco-economics experts, to provide early and iterative input into discussions about drug pricing in collaboration with Health Canada and other pertinent stakeholders.
- Promising innovative drugs may be the last and only chance for many patients with rare diseases or terminal illnesses. If vulnerable Canadians do not have access to such innovations, we risk violating the foundational principle of equitable, high-quality care for all Canadians.
- We need to ensure that the proposed regulations will not become a barrier to new medicines that the Canadian Drug Agency will rely on to complete the proposed comprehensive formulary.
- Will PMPRB decisions comes prior of after CADTH assessment? There needs to be coordinated efforts both nationally and provincially. We cannot have more bureaucracy and inequitable access across Canada.
- As leaders of paediatric health care providers and leading Canadian academic centres, we wish to continue to work in partnership with Health Canada's agencies such as the future Canadian Drug Agency, Pharmacare program development, Innovation Medicine Canada to ensure that Canada remains to be a major player in the development of innovative therapies and clinical trials.



THE HOSPITAL FOR SICK CHILDREN

Given the unique needs of the pediatric population, it is imperative that major stakeholders expert recommendations be considered into the final PMPRB their final recommendation and be integrated in a final document prior to its implementation on July 1, 2020. We appreciate the opportunity to provide feedback on behalf of professionals taking care of CAYA, including patients suffering from rare diseases.

We appreciate the opportunity to provide feedback on behalf of professionals taking care of Children, Adolescents and Young Adults (CAYA), including patients suffering from rare diseases. As paediatric research scientists and clinicians who have studied access and affordability of medicines for children and youth and efficacy of novel therapeutics, we are interested in being part of the solution for all Canadian children. SickKids has lead this response with contributions from the 16 Paediatric Academic Healthcare Centres across Canada and other pediatric societies. We have addressed the questions prompted by the PMPRB consultation process and provide comments and specific recommendations below.

We anticipate that this initiative and the feedback provided will generate productive discussions and help establish policies that ensure fair national pricing practices for drugs integral to the care of CAYA patients, without jeopardizing either the vitality of paediatric research in Canada or equitable access to innovative therapies for a unique, deeply valued, and often overlooked segment of our Canadian population.

1. Overall Feedback:

Background

We agree that the current PMPRB pricing model from 30 years ago does not reflect the many dynamic changes occurring in the therapeutic landscape across diverse clinical areas, such as oncology, genetic diseases, immunotherapies, and with respect to a wide array of rare. In particular, the pharmaceutical industry's research and development focus has shifted from relatively low cost conventional, small molecule drugs for common diseases and large groups of patients to high cost biologics and genetic therapies targeted to smaller patient populations. The risk of excessive pricing is often greater for these new products since they have few, if any, competitive substitutes and the demand for new and better treatments among the more severely afflicted patient populations is very high. This is especially true for medicines that are the first of their kind, or for which alternatives are less effective or have less tolerable side effects.

The paediatric population: Rare diseases, unique clinical needs, relative policy neglect

A rare disease is a condition affecting fewer than 1 person in 2000 in their lifetime. There are over 7000 known rare diseases and dozens more being discovered each year. 1 in 12 Canadians will be affected by a rare disease.

About two-thirds of Canadians affected by a rare disease are children. It is currently estimated that 1 in 15 children are born with a rare disease. Furthermore, 75% of rare diseases manifest in childhood, and 1 in 4 paediatric hospital beds is thought to be occupied by a child with a rare disease. For comparison: childhood cancer has an incidence of 1 in 1,500, making rare diseases 100-fold more prevalent. (2) However as each disease affects only a small number of individuals, the expertise to optimally manage it, including in epidemiology and pharmacoconomics, is often limited and fragmented across the country



THE HOSPITAL FOR
SICK CHILDREN

Currently, only 60% of treatments for rare disorders are introduced into Canada through a clinical trial or market authorization and most are approved up to six years later than in the USA and Europe. People with rare disorders in Canada are already missing out on treatments that could save or significantly improve their lives. The concern is the new pricing may lengthen time to access novel therapeutics.

We acknowledge and greatly appreciate that PRMPR recognizes the need to consult with stakeholders as it develops this new approach for price regulation.

Children, and especially those with rare diseases, constitute a unique population, which has been poorly served by highly variable provincial drug plan programs. The lack of consistency in provincial drug plans both across Canada has contributed to inequitable access to needed medications for an already vulnerable population. It is essential that proposed new federal price regulation does not further exacerbate existing inequities and impediments to access for Canada's children and youth.(3)

Policies on drug regulation, pricing and reimbursement in Canada – like most comparable health systems – fail to account for the circumstances or needs of CAYA, resulting in significant existing access challenges. Regulatory and Health Technology Assessment (HTA) processes in Canada rarely incorporate the unique biological and sociological dimensions of child health and illness. This regulatory oversight is exacerbated by a gap in research on drug policy for CAYA. The vast majority of research on HTA and drug policy has focused on adult health problems and technologies, with comparatively little attention paid to child health. More fundamentally, HTA as currently conducted presents a variety of conceptual, normative and methodological problems in the context of child health. In short, uncritical application of current regulatory and HTA paradigms to drug pricing models will result in prices reflective of value for the treatment of adult diseases, without adequate consideration of their specific value in the treatment of childhood diseases.

2. Enhancing paediatric expertise in drug pricing policy

We support the recommendation in a recent policy paper (1) entitled “Improving Paediatric Medicines: A Prescription for Canadian Children and Youth” that the federal government should establish a permanent, dedicated, appropriately funded Expert Paediatric Advisory Board (EPAB) at the health portfolio level to review, guide, and co-ordinate activities related to paediatric medication approvals, associated clinical research, and reimbursement activities. The EPAB would further develop, apply, and evaluate paediatric-sensitive standards of clinical and economic evidence to inform HTAs and pricing processes.

Canadian Paediatric Academic Healthcare Centres such as Sick Kids and the other 16 centres across Canada, should be identified as critical stakeholders, with unique needs, and participate in this important consultation process through the creation of an Expert Paediatric Advisory Board (EPAB) at the health portfolio level. Specific mandates could be assigned to certain sub-committees that could include National Initiative of Paediatric Centres, C17 Council, MICYRN, CORD along with paediatric clinical pharmacology and pharmacoeconomics experts, just to name a few organizations, to provide early and iterative input into discussions about drug pricing in collaboration with Health Canada and other pertinent stakeholders. The paediatric community is working together to advocate for change to better suit the needs of Canadian Children Adolescent and Young Adults (CAYA). We strongly recommend using the expertise in this organized group to help advance some of the initiatives suggested by PMPRB.

Phone: 416-813-7654 ext. 328042

ruan.parekh@sickkids.ca



THE HOSPITAL FOR SICK CHILDREN

This proposed expert advisory group will enable both the appropriate representation of paediatric expertise in these crucial policy deliberations, and facilitate the identification and appraisal of key paediatric demographic, epidemiological, clinical, and health system data to ensure that the proposed value-based approach to drug price regulation takes account of the unique realities of child health and illness.

We recognize that modernization of the Health Canada Division 5 Food and Drug Act will also have an impact on the reduction of the drug and device life cycle development and therefore will lead to the overall drug cost reduction. Additionally, it is important to recognize the pricing will be independent of the requirements of the Food and Drug Act, yet, downstream effects of the changes will impact drug pricing and access to the drugs, specifically novel agents.

3. Specific Feedback and questions and Recommendations:

How can we ensure that the proposed new regulations result in lower global prices for new medicines and that the price assessment will be population specific?

Targeting specific population, rather than a single model fitting all persons.

While PMPRB is driven by an understandable desire to ensure that medicines are affordable, we want to ensure that the proposed reform is based on solid scientific and economic data that recognizes the distinct vulnerabilities and needs of children. A one-size-fits-all pricing model is unlikely to be dexterous enough to incorporate the unique evidentiary, economic, and social values considerations relevant to ascribing value to drugs used for paediatric indications.

Will all Canadians continue to have access to medicines at affordable prices?

How can we ensure that we will not be lose pharmaceutical industry R&D investment leading to less access to novel therapies for Canadians.

As a group of professionals and clinicians supporting the paediatric and adolescent/young adult/rare disease population, we need to ensure that the risk of driving the price too low with any proposed reforms will not result in longer delays for access to the most innovative medicines or the complete lack of availability if a decision is made not to launch in Canada. Promising innovative drugs may be the last and only chance for many patients with rare diseases or terminal illnesses. If vulnerable Canadians do not have access to such innovations, we risk violating the foundational principle of equitable, high-quality care for all Canadians

The results of a recent survey conducted with Innovative Medicines Canada is raising legitimate concerns related to a potential drop in pharmaceutical industry R&D investment, with resultant access barriers to novel therapies for Canadians. According to a recent [Ernst Young Report](#) (4), Innovative Medicines Canada member companies make significant contributions to the country's economy generating \$19 billion in economic activity, investing \$1.2 billion annually (9.97% of revenues) into R&D, and support 30,000 high-value jobs. That investment in R&D ranges from collaborative initiatives with Canadian universities, hospitals, and centres of excellence, to funding for early stage biopharmaceutical companies, and health charities. It also includes 4,500 clinical trials involving 24,000 Canadians across the country, making Canada a leading jurisdiction for clinical trials, which provide free and timely access to the latest cutting-edge and in some cases life-saving treatments.



THE HOSPITAL FOR SICK CHILDREN

These treatments, particularly for rare diseases, can be expensive in the short-term, but can generate significant savings to the healthcare system through reduced hospital stays and long term safety or in the case of hepatitis C, actually curing what was once a chronic disease. These factors need to be taken into consideration when assessing the value of innovative medicines through the HTA.

There is a clear connection between the price of innovative medicines and the industry's ability to invest in R&D and launch new drugs. At the moment, more than 60% of new medicines launched in key global markets are available in Canada. That compares to 40% in Australia and 30% in South Korea – two of the nations included in PMPRB's proposed new basket of comparator nations.

What about the impact on global prices unless the rest of the developed world decides to publish their negotiated prices? Transparent pricing, in the long run, is probably a better approach, but Canada cannot go it alone. If we really want changes, we have to work collectively, especially with other OECD countries

How will this new PMPRB be integrated with the future Canadian Drug Agency?

The changes to the PMPRB and the Patented Medicines Regulations must be considered in the context of both national and provincial drug policy reforms and initiatives. We need to ensure that the proposed regulations will not become a barrier to new medicines that the Canadian Drug Agency will rely on to complete the proposed comprehensive formulary.

What will be the consultative role of CADTH?

CADTH has developed economic guidelines to help standardize and facilitate the economic evaluation of health technologies in Canada. Will PMPRB decisions create a double standard?
Will PMPRB decisions come prior or after CADTH assessment?

There needs to be coordinated efforts both nationally and provincially. We cannot have more bureaucracy and inequitable access across Canada.

How and when PMPRB decisions be integrated within a potential future pharmacare program?

Done right, consultations with our national pediatric groups on a potential future national pharmacare program could lead to affordable and appropriate access to medicines that patients need to be well and, in many cases, survive. The Canadian Pediatric Society's position is outlined in the position paper "Pharmacare in Canada: The Paediatric Perspective" (5)

Risk assessment and transparent regular monitoring of the impact of the drug cost assessment is necessary. In order to address drug access and clinical trial investment specific to pediatric/adolescent and young adults and persons with rare disease. If innovative life sciences companies both global and home grown are forced to look to markets elsewhere in the world, Canadians will pay the price. Canada will cease to be a destination for clinical trials and product launches; among benchmark countries.

Currently, Canada is second only to the U.S. in number of clinical trials, and we are consistently a priority market for new products.



THE HOSPITAL FOR
SICK CHILDREN

The benefits of clinical drug trials are broad and undeniable in particular in paediatric oncology where 70% of oncology patients participate to open clinical trials leading to an overall cure rate of 80%. These trials often represent the very earliest access to innovative and life-saving therapies for patients and the economic advantages gained by these investments are far-reaching. To reap these benefits, however, Canada's health and biosciences companies have to have a fair and competitive market for launching any new medicines.

As leaders of paediatric health care providers and leading Canadian academic centres, we wish to continue to work in partnership with Health Canada's agencies such as the future Canadian Drug Agency, Pharmacare program development, Innovation Medicine Canada to ensure that Canada remains to be a major player in the development of innovative therapies and clinical trials.

This newly created EPAB could support PMPRB on several aspects of their proposed methodology data collection and participate in policy forums and be representative of paediatric stakeholders, and will also be invited to appear in person to make their views known to the Board. It is imperative that major stakeholders' expert recommendations be included into their final recommendation and be integrated in a final document prior to its implementation on July 1, 2020.

As a group of health care professionals taking care of paediatric/adolescent and young adult patients, we look forward to continued engagement with governments, patient communities and other stakeholders. While we remain concerned regarding the potential risk of fewer opportunities for Canadian participation in clinical trials and access to innovative medicines, we are optimistic that continuous dialogue, we can find common ground to address affordability of medications to all Canadians.

Submitted respectfully,

A handwritten signature in black ink that reads "Rulan Parekh".

Rulan S. Parekh MD, MS, FRCPC
Canada Research Chair in Chronic Kidney Disease Epidemiology
Associate Chief, Clinical Research
Hospital for Sick Children Research Institute

Professor of Pediatrics and Medicine
Oreopoulos-Baxter Division Director Nephrology, Department of Medicine
Hospital for Sick Children, University Health Network and
University of Toronto



THE HOSPITAL FOR
SICK CHILDREN

A handwritten signature in black ink, appearing to read "SBA", written over a horizontal line.

Sylvain Baruchel MD
Senior Medical Advisor Innovative
Therapies
Emeritus Professor, University of Toronto
Senior Emeritus Scientist
The Hospital for Sick Children



THE HOSPITAL FOR
SICK CHILDREN

References

1 <https://www.cps.ca/en/documents/position/improving-paediatric-medications>

2

http://www.health.gov.on.ca/en/common/ministry/publications/reports/rare_diseases_2017/rare_diseases_report_2017.pdf

3 <https://www.cmaj.ca/content/189/30/E990>

4 http://innovativemedicines.ca/wp-content/uploads/2017/10/20171030_EY-REPORT_IMC_FINAL.pdf

5. <https://www.cps.ca/en/documents/position/pharmacare>