



MAKING CANADA BETTER

The
Future
of Innovation
in Canada's
Healthcare
System



Insights from the Frontiers
of Data-Driven Innovation
p. 4



Maintaining The Value of
Canada's Public Health
System p. 5



Private Health Insurance:
a Prescription for
Sustainability p. 6

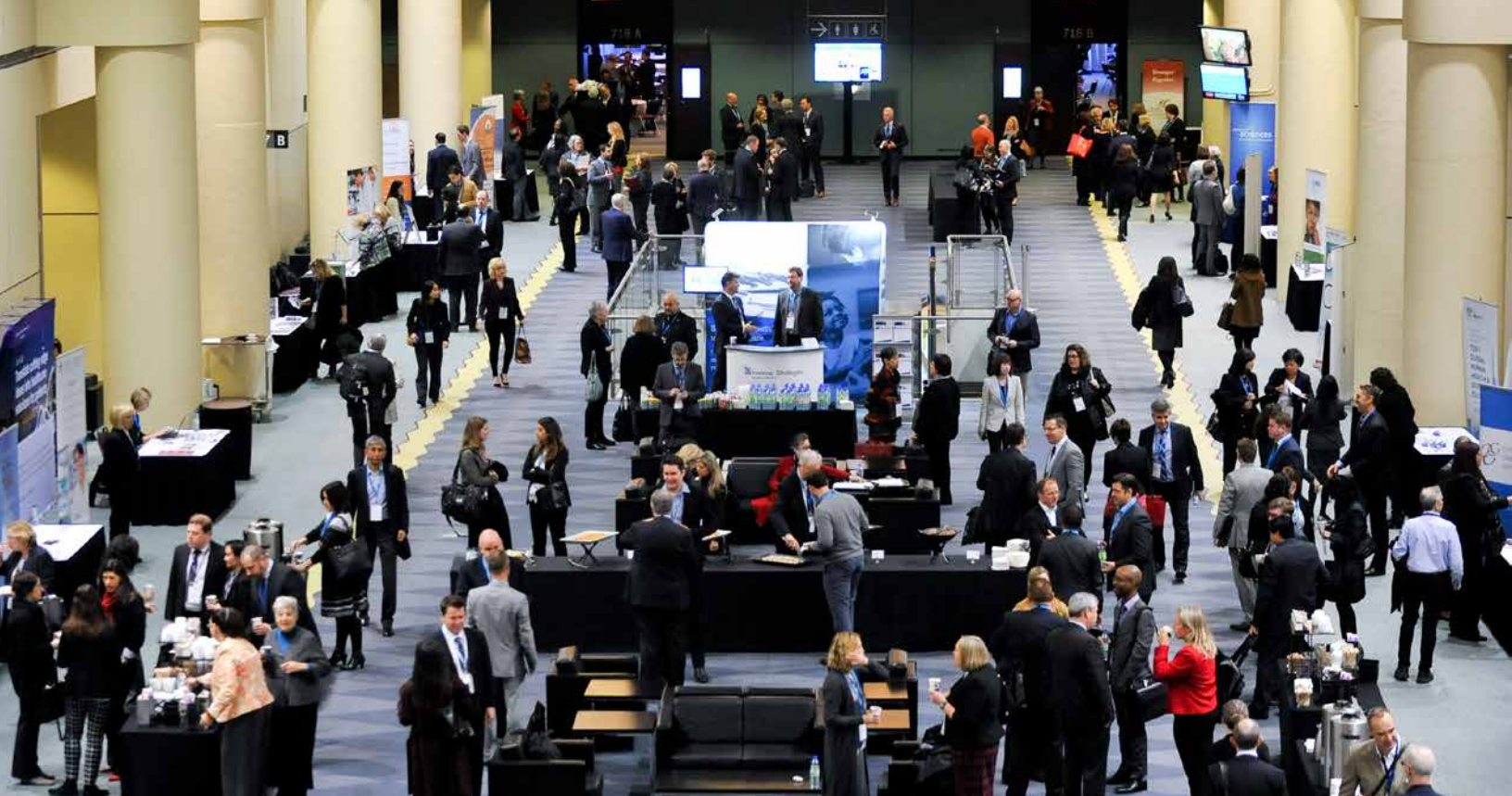


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PRESIDENT'S MESSAGE

Collaboration and innovation are critical to managing future health system challenges. We often talk about innovation in the context of new technologies. But we also need to consider how innovation can improve the processes that govern patient access to those technologies; how medicines factor into the broader continuity of care. Innovative Medicines Canada is committed to working with governments, patients, and health care providers to rethink how we collectively deliver value and improve the health of all Canadians.

Pamela C. Fralick

President, Innovative Medicines Canada



EXECUTIVE SUMMARY

Health system stakeholders agree – in order to manage future health system challenges, we need to continuously assess our regulatory and reimbursement models and how we define value for innovative medicines to ensure patient access to the most appropriate therapies. In the era of precision medicine, data is even more critical to decision making processes, both for companies doing research and for payers who must mediate competing demands.

Any system reforms should better incorporate real-world evidence and value to the health system in decision making. However, an open question is **who** can lead this effort? Real-world evidence models are promising but have been slow to materialize in Canada. Biopharmaceutical companies have the data and expertise to analyze it but require clear guidance from payers on their needs and objectives.

With the pace of innovation and a constricted fiscal situation, payers must be vigilant in monitoring spending. Decision-making models can seem to reflect primarily cost containment concerns rather than long-term benefits and improving health outcomes. For their part, suppliers often are viewed as only being focused on the need to drive quarterly value for shareholders. Both contribute to a collective neglect the best strategic thinking on how to optimize the health and pharma systems for the long haul.

Conference attendees are aligned on the need for **predictability**:

- Patients want access to medicines and clear and predictable decision-making processes;
- Payers want budget predictability and to verify efficacy in the real-world beyond the lab; and
- Companies need predictability to make responsible investments.

Pricing is only one component of a large picture that should include a discussion on full health system value. The pharmaceutical industry has a clear responsibility to ethically engage with the health community and other stakeholders to jointly prepare for a more data-driven pharmaceutical system. A broad range of stakeholders need to be involved for any system reform to be successful.

Patient health is the number one priority for the innovative pharmaceutical industry and we look forward to continuing this dialogue to contribute to positive change for Canada's health systems and Canadians.



Dr. Jeremy Grushcow is Chief Business Officer of Sequence Bio, a data-driven biotechnology company in Newfoundland and Labrador leading a 100,000 person genome project. Dr. Grushcow presented on the innovative work being done in Canada on data-driven drug development. His talk highlighted two core themes: the future of data-driven drug development and the importance of partnership with governments.

CHANGE IS COMING!

Insights from the Frontiers of Data-Driven Innovation

DATA-DRIVEN DRUG DEVELOPMENT

There has been tremendous progress in the area of optimizing treatments according to genome identification; patient data can help to redefine diseases and create new treatment options. In the future, all disease areas will be touched by this data-driven approach. This change will challenge traditional drug development and pricing models.

For these efforts to succeed, patient data and participation is absolutely critical. We must collectively reframe the development model to reflect a "patient-as-partner" approach.

PUBLIC-PRIVATE PARTNERSHIP IS THE WAY FORWARD

According to Dr. Grushcow, good pan-Canadian health data and electronic medical records (EMRs) are challenged due to provincial fragmentation. This is not an insurmountable problem and there are many good commercial efforts underway. However, we must better *coordinate* provincial efforts. Dr. Grushcow reiterated that the success of Sequence Bio is largely based on having a supportive and responsive partner in the Government of Newfoundland and Labrador. This partnership is propelling a local initiative to have a global impact.

Collaborative public-private models to facilitate access to EMR data and improve process sophistication are critical.

MAINTAINING THE VALUE OF CANADA'S

PUBLIC HEALTH SYSTEM IN A CHANGING ENVIRONMENT

Canada's public healthcare system is globally regarded as a model to emulate. But, within our borders, there is on-going discussion about the sustainability of the current system and the possibility of expanding public health coverage to new products and services. An aging population, the introduction of new pharmaceutical and medical technologies, and a shifting relationship between public and private payers are framing the dialogue around health policy decision-making environment. Our panel highlighted the unique nature of Canada's mixed public-private pharmaceutical market and the challenges posed by a rapidly changing environment for health technologies.

Canada's system is characterized by a strong private market component with a public safety-net. One of the strengths of this system is the flexibility to reduce the risk of patients falling between the cracks.

However, due to demographic and technological change, overall utilization pressures are increasing and the system will continue to face sustainability challenges. In particular, one systemic, long-term question is how the system will absorb the pipeline of new oncology molecules under development.

These challenges are not insurmountable. It is possible to address sustainability without impacting the quality and breadth of coverage in Canada. Coverage options should respect competitive markets for on-patent and off-patent drugs. Government budgeting could also evolve to increasingly reflect a multi-year perspective. This would recognize that the norm of relatively low pharmaceutical budget growth sometimes spikes temporarily with the introduction of new breakthrough therapies.

The session highlighted that the Canadian public sector accepts relatively few new drugs in comparison to other OECD countries. Over the past five years, drug expenditures have declined slightly whereas hospital and physician expenditures have risen slightly. Annual growth in drug expenditures in the range of four to five per cent is expected to be the new normal.

The dynamic nature of the pharmaceutical industry is unique in that only one in 10 drugs tested in human clinical trials actually makes it to market. In addition, federal and provincial governments fund innovation separately. All stakeholders should be open to alternative payment models and new pathways for the delivery of patient care.

The reality of budgeting conversations is that they are typically centered on how to save money to the exclusion of other important factors. Collectively there is an opportunity to help "change the dialogue" from, short-term savings to long-term gains.



Michael Brogan



Dr. Brian Ferguson

Moderator:

- Janet Yale, President & CEO, Arthritis Society of Canada

Panellists:

- Michael Brogan, President, QuintilesIMS
- Dr. Brian Ferguson, Professor, Department of Economics, University of Guelph
- Patricia (Paddy) Meade, former Deputy Minister of Health and Wellness, Government of Alberta

PRIVATE HEALTH INSURANCE: A **PRESCRIPTION** FOR SUSTAINABILITY

The private market represents a key component to keeping Canada's workforce healthy and productive. Today's employers are challenged with finding cap space to ensure access to new medicines in the future amid overall rising healthcare premiums. Our panel examined the challenges facing the private market and looked at how individual stakeholders can have a positive impact on its future sustainability. The reality is that private markets are changing towards more active management but there is a broader question as to what direction the sector will go in the future with respect to the public-private mix.

Over the past decade, the patent expiry of many blockbuster drugs led to low growth in drug expenditures. The private insurance sector seems to have been caught off guard by the more recent expansion of specialty medicines. Private plans are on track to experience drug spend growth of 11% in 2016.

Some are questioning if private coverage should shift from away vision care, dentistry, and para-medical services to put more emphasis on drug coverage. Another approach would be to focus on catastrophic coverage, in the same way that home insurance no longer covers everything and focuses on catastrophic events.

We are likely to see the increased use of tiered formularies, prior authorization, and preferred pharmacy agreements to manage the costs associated with the shift to specialty medicines.

However, insurance design should also consider the patient perspective: the timeliness, flexibility, and choice provided by private insurance can make a big difference for patients.

Insurance gates can help to ensure "the right drug, at the right time, for the right patient." Employers, employees who proactively spend time considering insurance design and plan features is the first step in avoiding personal health and financial concerns.



Moderator:

- Suzanne Lepage, Private Health Plan Strategist, Suzanne Lepage Consulting Inc.

Speakers/Panellists:

- Joe Farago, Executive Director Healthcare Innovation, Innovative Medicines Canada
- Sarah Beech, President, Accompass
- Dawn Richards, Vice-President, Canadian Arthritis Patient Alliance
- Karen Voin, AVP Group Benefits & Anti-Fraud, Canadian Life and Health Insurance Association
- Mark Rolnick, Vice President, Payor Partnerships and Plan Sponsor Innovation, Shoppers Drug Mart

BUILDING TRUST AND PROMOTING TRANSPARENCY

Using Common Ground Towards the Best Possible Health Outcomes for Patients

Leading Canadian health organizations have created a set of ethical standards to guide collaboration among patients, healthcare professionals and the pharmaceutical industry called The Canadian Consensus Framework for Ethical Collaboration. Our panel focused on the development of joint codes of conduct and the guidance the Framework provides on activities like clinical trials, continuing health education, conferences, accountability and funding.

The framework was developed through multi-stakeholder dialogue that included Innovative Medicines Canada; the Health Charities Coalition of Canada; the Canadian Nurses Association; the Canadian Medical Association; the Best Medicines Coalition; and the Canadian Pharmacists Association.

These important healthcare stakeholders bring an important diversity of perspectives to governing appropriate interactions. Trust and transparency between stakeholders is critical: Innovative Medicines Canada **must continue** to be a leader in this space.

Canada has a high-quality and increasingly national approach to engagement on ethical issues. Activity through the Asia-Pacific Economic Cooperation (APEC) forum has also put Canada on the international map as an ethical leader. We must continue on the course of highly collaborative voluntary codes with strong audit mechanisms to maintain these standards.

All stakeholders agree that while industry-clinician interactions are important, ultimately they must serve the central goal of improving patient outcomes.



Left to right: Dr. Jeff Blackmer, Phil Emberley , Connie Côté, and Ronnie Miller

Moderator:

- Ronnie Miller, President & CEO, Hoffmann-La Roche Limited, Chair, Ethics Core Team

Panellists:

- Dr. Jeff Blackmer, Vice-President, Medical Professionalism, Canadian Medical Association
- Connie Côté, Executive Director, Health Charities Coalition of Canada
- Phil Emberley, Director, Professional Affairs, Canadian Pharmacists Association



"We need to talk about strategic investments:
5% of Canadians use 65% of healthcare."
– Fred Horne



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BEYOND COST-CONTAINMENT: **ELEVATING THE CONVERSATION**



Louise Binder, Canadian Cancer Survivor Network

Over lunch, former Alberta Health Minister Fred Horne reminded conference attendees of the importance of the role that innovative medicines play in a modern healthcare system and the need to elevate the conversation beyond cost-containment. How do we shift the paradigm from a commodity-based discussion to one about how technologies can improve lives?

According to Horne, industry and government need to work collectively to end the current transactional mindset where "we know the price of everything, but the value of nothing." We need to talk about strategic investments in order to achieve better value for Canadians by ensuring that innovations are used appropriately; that there is improved equity and timeliness of access; and those investments should be aligned within the context of impact on disease over time.

The Pharmacare debate *should* be about how to improve value and how to create smarter investments that improve access while generating positive health and economic outcomes.

Canada must move beyond cost-containment debates and introduce truly innovative, outcomes-based decision making processes. Establishing a "coalition of the willing" is perhaps the best way forward.

INNOVATIVE MEDICINES CANADA AND QUEEN'S UNIVERSITY

LAUNCH **MEDICAL** **ETHICS** STUDENTSHIP

Innovative Medicines Canada and Queen's University are pleased to announce the creation of the Russell Williams Studentship in Medical Ethics, in honour of Innovative Medicines Canada's past President Russell Williams.

The scholarship will be used to fund a studentship for a Queen's student enrolled in the School of Medicine in the summer immediately after their first or second year. Under the supervision of a School of Medicine Faculty member, the student will undertake research, clinical work or academic endeavours in medical ethics, including, but not limited to, biopharmaceutical ethics. "Ethics and integrity in the pharmaceutical and medical fields have always been a passion of mine. Innovative Medicines Canada and Queen's University have been leaders in this field, both domestically and internationally, and I am pleased that this Studentship will continue the advancement of medical ethics," said Russell Williams.



Left to right: Seth Chitayat, Gail Williams, Russell Williams, Michael Tremblay and Elaine Campbell

Quick Facts:

- The value of the Studentship will be variable, up to \$5,000 per summer, and will culminate with the production of a report that will highlight the significance of the award and the impact it has had on the applicant's research.
- The Studentship will be awarded on the basis of academic excellence and demonstrated interest in medical ethics, as well as the merits of the proposed research, clinical work or academic endeavour.
- Applicants will submit applications per the Undergraduate Medical Education summer studentship application process, and will then be chosen by the School of Medicine Awards Committee.



Left to right: Glenn Monteith, Louise Binder, Perry Eisenschmid, Dr. Peter Vaughan and Chris Halyk



Rocco Rossi, Prostate Cancer Canada

Moderator:

- Glenn Monteith, Vice President, Innovation and Health Sustainability, Innovative Medicines Canada

Panellists:

- Louise Binder, Health Policy Consultant, Canadian Cancer Survivor Network
- Perry Eisenchmid, CEO, Canadian Pharmacists Association
- Dr. Peter Vaughan, Deputy Minister, Health & Wellness, Nova Scotia
- Chris Halyk, President, Janssen Inc.

PHARMACEUTICAL COVERAGE IN CANADA

The debate about the role of pharmaceuticals in the Canadian health system and how best to provide effective and affordable coverage for these important products has been a policy and political challenge for years. Innovative Medicines Canada's Glenn Monteith facilitated a highly interactive dialogue on coverage and affordability issues from different health system stakeholder perspectives: patients, payers, pharmacists, and manufacturers.

Public payers remain concerned about immediate cost and the sustainability of drug budgets. They shoulder the responsibility of keeping public plans from "going under" and look to leverage Health Technology Assessment (HTA) reviews and interprovincial negotiations as a critical tool in supporting plan sustainability.

Ultimately, all payers want to know that the evaluation of efficacy established in clinical trials bears out over time in real-world use. As such, payers will increasingly look for evidence throughout the product lifecycle to promote plan sustainability. Removing less effective drugs from the formulary to make room for new or more effective medicines is a favoured strategy for managing drug budgets.

But patient choice in an era of personalized medicine is an important part of the discussion. Patients are sometimes skeptical of the term 'sustainability' given a potential link to cost shifting. Some patients would like to see the dialogue shift from "solving sustainability" to improving processes. High quality and transparent processes can help to manage uncertainty.

"You get the process right, and the cream always rises to the top," said Louise Binder, a health policy consultant with the Canadian Cancer Survivor Network.

Between Health Canada, PMPRB, CADTH, INESSS, pCPA and individual provincial processes, drugs are already one of the most scrutinized components of health spending. Medicines are a highly cost-effective use of public resources and have many downstream benefits in other areas of the healthcare system. The current siloed approach to health budgeting does not always recognize this value.

Drug cost containment sometimes looks like an easy political target, but is not really a solution to provincial healthcare spending challenges. The panel also highlighted the need to focus on desired outcomes: access to essential medicines without undue financial hardship, a safe and stable drug supply, and effective implementation in care are also high priorities and need to be included in the discussion around the future of pharmaceutical coverage in Canada.

THE FUTURE OF MEDICINE

Dr. David Agus is one of the world's leading physicians and pioneering biomedical researchers. Over the past twenty years, he has received acclaim for his innovations in medicine and contributions to new technologies, which continue to change the perception of health and empower people around the world to maintain healthy lives. Dr. Agus' closing remarks at *Making Canada Better 2016* offered an inspiring look at new technologies and new approaches to treating disease.

According to Dr. Agus, we are at an inflection point where the curve of progress versus time is changing dramatically and all of us have to react to it.

If our goal is to live nine or 10 decades, the very simple way to do this is to avoid disease. The paradox is that this can actually lower healthcare costs. And Dr. Agus has a new approach to this puzzle.

The solution for many health challenges may be to change the body-system in which the disease operates rather than the disease itself – the goal is to change the state. As Dr. Agus said, one doesn't get cancer, "it's something the body does [and] if you change the soil, the seed doesn't grow."

A key piece for this solution is data. Big data is power. Big data is changing the way we think about assessing efficacy.

However, society adopts new evidence into life practice very slowly: we continue to use interventions that are not supported by evidence and do not always amend our daily habits to promote health.

Agus also provided a reality check on industry's image. There is a lot of talk in multiple countries about pharmaceutical companies being the "bad-guys." But if you look at the percentage of healthcare



"Big data is powerful. Big data is exciting, but big data can also be scary."

– Dr. David Agus

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For example we know that sitting for 5.5 hours per day has the equivalent health impacts of smoking a pack and a half of cigarettes. Walking every day can add years onto a person's life.

"How do we get people to take a preventative pill today that will have health benefits in years to come?" said Dr. Agus, raising statins and low dose ASA as examples of underleveraged preventative regimens.

costs that are drugs, it's actually very low. According to Dr. Agus, the pharmaceutical industry is "the hope to all of our patients" and technological advances are changing the field of medicine, literally overnight.

We live in the midst of an amazing healthcare revolution where we are developing completely new ways of understanding and treating diseases and it's happening at a tremendous pace.

CHARTING OUR FUTURE COURSE SUMMARY AND NEXT STEPS

There is consensus among stakeholders that current decision making models require an evolution of thinking. The future promises exciting opportunities to improve human health, and the time is now to put policies and processes in place to ensure they are leveraged and provide the most impact.



Michael Tremblay, Chair of Innovative Medicines Canada's Board of Directors and President of Astellas Pharma Canada, Inc.

We need to collectively move beyond the confines of our own views and objectives and introduce truly innovative, outcomes-based decision making processes that will benefit patients. Pricing is only one component of a larger picture, a component that must be discussed as part of a larger conversation on full health-system value.

Access to high quality data is critical to drug development, diagnosis, and making decisions. It is critical that stakeholders, provincial and federal governments work together to better utilize Big Data.

Going forward, multi-stakeholder collaboration and mutual trust is essential, and above all the patient voice needs to be a strong participant. It is clear that collectively we have the tools, knowledge and expertise to build a health system that truly reflects Canadian values and leaves no one behind. We look forward to working with all healthcare stakeholders to build a new vision for Canada's health system.



CELEBRATING THE VALUE OF HEALTH INNOVATION

Dr. Josée Brisebois, Elaine Campbell, Chatrick Paul, Dr. Grant Pierce, Dr. Philip Halloran, Dr. Julio Montaner, Dr. Cheryl Rockman-Greenberg, Mel Cappe and Hugh Scott.

HRF
Medal of Honour Recipient
Dr. Cheryl Rockman-Greenberg

Prix Galien:
Innovative Product Award Recipient
Vedolizumab, Takeda Canada, Inc.

Prix Galien:
Innovative Product Award Recipient
Harvoni, Gilead Sciences Canada, Inc.

Prix Galien:
Innovative Research Award Recipient
Dr. Philip Halloran

Research Canada's Leadership Award for
Health Research Advocacy Recipient
Dr. Grant Pierce

Research Canada's Leadership Award for
Health Research Advocacy Recipient
BC Centre for Excellence in HIV/AIDS

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