



INSTITUTE OF  
HEALTH ECONOMICS  
ALBERTA CANADA



Health Innovation in Canada: Federal Role Roundtable  
*Executive Summary Report*  
November 17<sup>th</sup>, 2014

**The Institute of Health Economics (IHE):**

The Institute of Health Economics (IHE) is a non-profit Alberta-based research organization committed to producing, gathering, and dissemination evidence-based findings from health economics, health policy analyses, health technology assessment and comparative effectiveness research to support health policy and practice. Established in 1995, it is a unique collaborative arrangement among government, academia, and industry. More detailed information on the IHE is available on our website. ([www.ihe.ca](http://www.ihe.ca)).

**Eli Lilly Canada Inc.:**

Eli Lilly and Company Inc. (Lilly) has been in business more than 135 years. Its first link to Canada was in the 1920s when Lilly's research labs collaborated with the University of Toronto's Drs. Frederick Banting and Charles Best to purify and stabilize their ground breaking invention, insulin, to bring a treatment for diabetes, a then fatal illness, to the world.

Lilly Canada was founded in 1938, and has since grown into a leading research-based pharmaceutical company. Eli Lilly Canada built its first facility in 1946 and the Canadian headquarters are still located on this site in Toronto, Ontario. Today, the company employs more than 550 people across the country.

Eli Lilly Canada plays an integral role in the company's global Research and Development division, Lilly Research Laboratories (LRL). About 1/5th of Lilly Canada's employees work in the R&D division. In 2013, Lilly Canada conducted 69 clinical trials at 403 sites across the country, investing more than \$46 million in R&D in Canada. In 2004, Lilly became the first pharmaceutical company to voluntarily launch an online clinical trial registry.

Eli Lilly Canada Inc. is currently a sitting member on the IHE Board of Directors.

For more information on Eli Lilly Canada Inc., please see the following link: <http://www.lilly.ca/>

**The Institute for Health Services and Policy Research (IHSPR):**

The [Canadian Institutes of Health Research \(CIHR\)](http://www.cihr.gc.ca/) is Canada's major federal funding agency for health research. Its objective is to excel in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products, and a strengthened Canadian health care system.

CIHR's Institute of Health Services and Policy Research (IHSPR) has attempted to respond to the myriad of challenges entailed in its broad mandate to address problems and opportunities relating to:

- health services and policy research capacity in the country
- the research resources needed to undertake high quality, relevant research
- research gaps and emerging issues
- the CIHR-wide priority being placed on timely knowledge translation

For more information on CIHR or IHSPR, please follow the following link: <http://www.cihr-irsc.gc.ca/e/13733.html>

For more information on this summary report please contact The Institute of Health Economics at 1 (780) 448-4881, or email [info@ihe.ca](mailto:info@ihe.ca).

## Preface:

The federal Ministry of Health (Health Canada) announced the creation of the Advisory Panel on Healthcare Innovation on June 24, 2014, to examine innovative health care ideas and approaches that exist in Canada and internationally. The Panel's directive is to determine what approaches hold the greatest potential for Canadians and to create recommendations on how the Federal government can support those approaches. More specifically, the panel is to identify promising innovations, here and internationally, which could help Canada reduce growth in health spending while improving the quality and accessibility of care.<sup>1</sup>

In September 2014, the Panel made a call for stakeholder input<sup>2</sup> on healthcare innovation, on the assessment of current or potential practices, as well as determination of need and identification of gaps.

Guided by the federal advisory panel's call for stakeholder input on innovation, the IHE partnered with **Eli Lilly Canada Inc.** and **the Canadian Institutes of Health Research's Institute for Health Services and Policy Research** to convene a meeting of select thought leaders in health to provide policy makers and political representatives with recommendations on how to use innovation to meet the aforementioned goals.

The meeting was held in Ottawa in November 2014. Participants were sent a background document<sup>3</sup>, which outlined existing levers that the federal government can use to stimulate innovation, including through intellectual property legislation, taxation, and regulation. It also listed specific federal agencies that have roles to play in supporting innovation.

The background paper pointed out, however, that Canadian health systems are slow to adopt some innovations, such as information technology, patient-centered care and re-organization of service and delivery. Other innovations — such as new drugs or devices — may get quick uptake once they are on the market, but only after a drawn-out and often burdensome process of regulatory and legislative approvals.

The meeting was held under the Chatham House rule, which encouraged a free exchange of ideas by allowing information from the meeting to be used, while the identities and affiliation of participants are not revealed. This document represents a summary reflection of key points raised by participants and does not necessarily represent the consensus views of the participants or of the organizations involved.

The roundtable hosted by the Institute of Health Economics was supported by, developed and delivered in partnership with Eli Lilly Canada Inc., and the Canadian Institutes of Health Research's Institute for Health Services and Policy Research.

"Access to high quality care is important to all Canadians. We need to work together across all sectors of society to harness the tremendous potential of innovation in healthcare and improve the responsiveness and sustainability of the healthcare system."

- Rona Ambrose, Minister of Health

---

<sup>1</sup> Health Canada, "Minister Ambrose Launches Advisory Panel on Healthcare Innovation," June 2014, extracted Jan 2015 from <http://news.gc.ca/web/article-en.do?nid=860909>.

<sup>2</sup> For more information on the Panel and associated stakeholder consultation, please see the following link - <http://www.hc-sc.gc.ca/hcs-sss/innovation/cons/2014/chi-cis/consult-eng.php>.

<sup>3</sup> Please see Appendix A for a copy of the background document for this roundtable.

The objectives for the roundtable were to:

- **Discuss** the current and potential use of federal levers to support healthcare innovation.
- Deliberate **opportunities and barriers** for the federal government in engaging in the further development and application of healthcare innovation.
- **Identify some directions** and recommendations for the Advisory Panel on Healthcare Innovation's consideration.

The structure of the roundtable was as follows:

#### **Opening and Opening Remarks**

- *Moderator:* John Sproule, Senior Policy Director, Institute of Health Economics
- Lauren Fisher, Vice President, Corporate Affairs, Eli Lilly Canada Inc.
- Glenn Brimacombe, CEO of the Canadian Psychiatric Association and former CEO of the Association of Canadian Academic Healthcare Organizations

#### **Main Discussion: What can the federal government do to promote and support innovation in the healthcare system?**

- Overview of current state of healthcare innovation from a Federal Perspective
- Which specific mechanisms/levers are most critical to federal support for innovation in the healthcare system?
- What changes to current federal tools and programs should be made to better support innovation?
- What new mechanisms should be put in place to improve support for innovation in the healthcare system?
- Which approaches have the greatest potential to deliver improved value for money?

#### **Summary of Discussion**

#### **Closing Remarks**

#### **Roundtable Participants:**

Owen Adams - VP Health Policy and Research, CMA

Michael Martineau - Digital Health Commentator, eHealthMusings

Peter Brenders - General Manager, Genzyme

Tony Cruz - CEO, Transitions Therapeutics Inc.

Matthew Brougham - Director, BCG inc.

Glenn Brimacombe - CEO, Canadian Psychiatric Association

Bill Tholl, CEO, HealthcareCan

Dr. Duncan Stewart, CEO, Ottawa Hospital Research Institute

Jessica Nadigel, Research Associate, Clinical & Health Informatics Research Group, McGill University

Diane Forbes, Associate Director, Drug Safety and Effectiveness Network, Canadian Institutes of Health Research

Judith Glennie, President, J. L. Glennie Consulting Inc.

Jane Coutts, Writer, Coutts Communications

Marcel Saulnier, Director General, Policy Coordination and Planning Directorate, Strategic Policy Branch, Health Canada

Trish Bayne, Director, Policy and Government Affairs, Eli Lilly Canada Inc.

## Executive Summary:

In November, 2014, the **Institute of Health Economics** partnered with **Eli Lilly Canada Inc.** and **the Canadian Institutes of Health Research's Institute for Health Services and Policy Research** to hold a roundtable to discuss the federal role in healthcare innovation. The roundtable aimed to examine the existing state of healthcare innovation, its strengths and weaknesses (or gaps), while analyzing and debating new and existing government mechanisms to support or develop innovation. More specifically, participants discussed how to use innovation as a means to reduce expenditure growth and improve the quality of healthcare using new or existing federal levers.

### What is innovation in healthcare?

Healthcare innovation can be defined as "...the introduction of a new concept, idea, service, process, or product aimed at improving treatment, diagnosis, education, outreach, prevention and research, and with the long term goals of improving quality, safety, outcomes, efficiency, and costs."<sup>4</sup> Innovation goes beyond, "... the confines of research labs to users, suppliers, and consumers everywhere – in government, business and non-profit organizations across borders, across sectors, and across institutions."<sup>5</sup> It also takes many forms, including but not limited to organizational, product, and process innovation. This report attempts to address these various forms of innovation.

### What is the current federal role?

Current federal mechanisms to support innovation include legislative and policy levers, such as intellectual property law, tax, and regulation, as well as targeted funding programs, including responsibility for and funding of public sector research (e.g., through CIHR) and development in healthcare. The federal government also supports several national agencies, including CADTH, CFHI, CIHI, and CPAC that foster healthcare innovation.

### What changes are needed?

Some key points raised at the meeting were:

- **Leadership through improved coordination**– the federal government must take a stronger leadership role in fostering collaboration across governments and existing programs. Since all levels of government have a common goal of improving the health and welfare of Canadians, federal leadership through setting National standards, directed funding, partnership building, and promoting the spread of knowledge and innovation is vital for achieving health system goals. Key initiatives could include:
  - Strengthening relationships with all levels of government, for example, fostering system-wide healthcare improvements through collaboration with The Council of the Federation's Health Care Innovation Working Group (HCIWG)
  - Combining or harmonizing federal agencies or departments to ensure common goals. For example, the federal government could combine Health Canada and Industry Canada programs to encourage innovation or amalgamate agencies such as the Canadian Foundation for

---

<sup>4</sup> Omachonu, Vincent K., Einspruch, Norman G., "Innovation in Healthcare Delivery Systems: A Conceptual Framework," *The Innovation Journal: The Public Sector Innovation Journal*, Vol. 15(1), 2010.

<sup>5</sup> Organisation for Economic Co-operation and Development. The OECD innovation strategy getting a head start on tomorrow. [Internet]. Paris: OECD; 2010 [cited 2015 Jan 6].

Healthcare Improvement and the Canadian Agency for Drugs and Technologies in Health to better foster innovation.

- Encouraging mechanisms for more private-public sector partnerships centered on fostering innovation. The use of these programs in Israel was cited as an example to follow. One suggestion was to create a National Healthcare Innovation Fund, possibly in connection with the Venture Capital Action Plan that would offer matching funds for industry or other investors to incent investment in Canada.
- **Removing barriers to innovation** – there still exist significant barriers to fostering innovation within the current healthcare environment that will require federal government action. A culture of innovation requires clear signals to future innovators and a predictable working environment. Some key actions discussed included:
  - Ensure adequate patent protection - Canada's current patent regime has created uncertainty compared with other jurisdictions internationally. Some have suggested this may lead to a drain in investment and the reduction in presence of some private sector innovators in Canada
  - Create a National Healthcare Innovation Fund - The federal government could also create a partnership between the federal government and industry, which would offer matching funds for industry or other investors, to provide the incentive for the domestic and foreign investment Canada does not offer now.
  - Provide organizational incentives for adopting innovation – Healthcare delivery organizations may be unable to quickly adopt innovation due to cultural factors and other lack of incentives for change. The federal government could remove organizational inertia through increasing awareness of potential benefits and risks and strategic investment. It could also foster mechanisms that allow organizations to measure the impact of innovation. One suggestion was to create a federal, integrated, real-time data gathering system, which is accessible to provinces and industry as a means to make informed decisions quickly. These measures could be accompanied by a hastening of federal approval processes so that patients have access to real innovation.

## Conclusions

Although no one suggested the federal government assume responsibility for healthcare delivery, the collective message was a call for collaboration and the need for greater federal leadership. The introduction of innovation — new ideas, new models of practice, new therapies in the Canadian health system — cannot be achieved rapidly or effectively if we are constrained by outdated attitudes, system culture and programs. Participants were hopeful that the recommendations from the Advisory Panel on Healthcare Innovation will provide some win-win solutions that advance health innovation in Canada – for patients, for providers, for innovators and for the taxpayer.

## Roundtable Report:

Canadians have come to expect a high quality, high performing healthcare system that leads to strong health outcomes, and fosters a healthy and productive populace and workforce. At the same time, our population is not only aging, but also living longer, at times with chronic illnesses, while the growth of healthcare-related federal and provincial budgets constrict. The public sector must now find a way to meet the high expectations of Canadians while containing growth in healthcare expenditures.

Healthcare innovation can be defined as “...the introduction of a new concept, idea, service, process, or product aimed at improving treatment, diagnosis, education, outreach, prevention and research, and with the long term goals of improving quality, safety, outcomes, efficiency, and costs.”<sup>6</sup> It should be thought of as a gradient measure, “...rather than a binary concept where something is or is not innovation,”<sup>7</sup> as there are many variations in defining or describing what is innovation. The key points outlined in this report will span variety of forms of innovation along this gradient, from product innovation, to organizational and process innovation.

If innovation is a critical component of business productivity and competitive survival, then healthcare innovation will not only help make a more prosperous, successful and efficient healthcare system, but can also help manage growth of provincial and federal healthcare related budgets. The identification, development, implementation, and support of healthcare innovation will prove critical in the creation of cost saving policies that will maintain the high level of care Canadians expect.

The federal mechanisms to support innovation are varied. In addition to numerous legislative and policy levers, such as intellectual property law, tax, and regulation, and targeted funding programs, the federal government is both responsible for and the predominant funder of research and development in healthcare. There are also several national agencies, including CADTH, CFHI, CIHI, and CIHR, which support healthcare innovation at a national level.

### Leadership Through Improved Coordination

The federal government has five major levers at its disposal for encouraging innovation — to tax, spend, inform, regulate and legislate. However, many of the ideas that emerged during the afternoon called on another lever, inherent in government, but nevertheless discretionary: leadership. Participants stressed the need for the federal government to take a stronger leadership role in support of a national collaborative effort, a single driving force, in the exploration, identification, and enactment of opportunities for fostering healthcare innovation. From direct funding, to nationwide partnership building, to promoting the spread of knowledge and technology, to improving regulatory frameworks, many roundtable participants called on the federal government to show more leadership in healthcare and innovation in healthcare. The following recommendations summarize some key thoughts from the deliberations.

#### *Working with all levels of government*

---

<sup>6</sup>Omachonu, Vincent K., Einspruch, Norman G., “Innovation in Healthcare Delivery Systems: A Conceptual Framework,” *The Innovation Journal: The Public Sector Innovation Journal*, Vol. 15(1), 2010.

<sup>7</sup>HTAi 2013 Policy Forum Background Paper, “HTA and Value: Assessing value, making value-based decisions, and sustaining innovation,” (Feb 2013). Extracted Nov 2014 from

[http://www.htai.org/fileadmin/HTAi\\_Files/Policy\\_Forum\\_Public/HTAi\\_Policy\\_Forum\\_Background\\_Paper\\_2013.pdf](http://www.htai.org/fileadmin/HTAi_Files/Policy_Forum_Public/HTAi_Policy_Forum_Background_Paper_2013.pdf)

One barrier to improvement, a participant said, is our failure to use innovations or ideas we already have. There are pockets of excellence all around the country, but these ideas do not spread. The recommendation was for the federal government to take a greater role in knowledge transfer, to build platforms for provinces to share and experiment with new ideas.

Although the 13 provinces and territories have a common goal of delivering high-quality healthcare to Canadians, the separate systems produce a fragmented marketplace for innovations, which may limit potential for larger private and public sector investment and partnerships.

“The provinces are somewhat stifled because they don’t have the capacity to adequately share information and then translate it and implement it.”  
- Roundtable Participant

In addition there as a strong call for consistent and transparent objectives to be outlined for the health system. It was recommended that the federal government facilitate discussions with the provinces and territories to develop national standards or national performance indicators, with some form of clear accountability matrix. There was also a call for a renewed working relationship with all levels of government that is focused on system-wide healthcare improvements. The Council of the Federation’s Health Care Innovation Working Group (HCIWG) was referenced as a group that could be used as a platform for collaboration allowing a link between federal and provincial initiatives in healthcare innovation.

#### *Link and leverage what we have*

“There are federal institutional barriers that should be eliminated to give innovation a boost”, one participant said. Both Health Canada and Industry Canada have programs to encourage innovation in healthcare, but they do not appear to always work in partnership. The recommendation for the federal government was to harmonize programs in the two departments, to encourage them to work together to promote innovation, or to create a new departmental entity altogether with a healthcare innovation specific mandate.

“It seems to me, they (“C” Groups) are somewhat silo driven, they focus on elements of quality of care. We should be thinking about how we actually bring them together, perhaps in a different agency that really does focus around driving innovation, again, across the dimensions of fault.”

- Roundtable Participant

In addition to greater collaboration between federal departments, the Canadian government should take greater advantage of the existing infrastructure at their disposal to support further innovation. There are national organizations that already exist and that support innovation in some form. One participant called these organizations the “C”

groups (example: The Canadian Foundation for Healthcare Improvement, or the Canadian Institute for Health Information). The recommendation was to collaborate more with and leverage the effectiveness of these groups through amalgamation, networking or joint programs.

#### *Encouragement of private/public partnerships and avenues for dialogue*

In order for us to identify, develop and adopt innovations in healthcare effectively, efficiently and conscientiously, we need process changes that involve all innovation stakeholder perspectives, including industry.

Public sector healthcare leaders in Canada, however, have a tendency to avoid industry partners in policy discourse. Israel was cited as an example of a successful approach to public-private collaboration. During a recent mission to Israel, a roundtable participant recounted meeting with both private and public sector Israeli leaders to discuss their collaborative efforts in healthcare policy, including industry co-funded research grants. “They use industry to really make sure that in fact, their science is actually applicable,” the participant said. The recommendation for the federal government was to take the lead in involving the pharmaceutical industry in innovation efforts, to help validate new products and break down traditional suspicion and isolation.

The Patent Medicine Prices Review Board reports on pharmaceutical trends and ensures that the cost of medicines sold to Canadians are not excessive. The organization was cited as an example of an effective government agency that has worked well with industry in the past. Concern was raised, however, over the exclusion of industry by PMPRB in consultations over the current review of their mandate. There was a suggestion to permit greater discourse with industry in these deliberations.

### **Removing Barriers to Innovation**

Federal policies should foster a healthy business environment, conducive to industry expansion and investment, to stimulate innovation. This can be done by clarifying legislation and/or creating a funding program that could be enhanced through matching industry investment.

#### *Ensure good patent protection*

The Patent Act is a fundamental piece of Canadian legislation governing patent law. A major concern cited during the roundtable was the revocation recently of up to 20 patents by Canadian courts for not meeting the test of “utility” under the law. Canada’s interpretation stands at odds with international practice. In order to create a healthy business environment that attracts investment and stimulates innovation, a culture of security and trust between public and private sectors is imperative. These recent decisions, however, appear to have created uncertainty, which could lead to a drain in investment and the reduction in presence of some private sector innovators in Canada. The recommendation raised was for the government to amend patent legislation to ensure that it produces clear, transparent, predictable and reliable outcomes.

“Innovation is the only line of business we are in ... we rely on government for good patent policy, in order to do research and discover medicines, to recruit investment, and also to fund the next round of discovery...”  
– Roundtable Participant.

#### *Start a national innovation fund*

Canada has done some work toward funding innovation — with money to build networks and leverage business possibilities, but not enough to take science to the next level, one participant said.

“You have to incentivize investment, because it’s a high risk at that stage of development,” he said. “It’s not that our risk is any different than anybody else’s. It’s just there isn’t the infrastructure and there’s no incentive to fund these at an early stage.”

The recommendation for the federal government was to create a National Healthcare Innovation Fund, a partnership between the federal government and industry, which would offer matching funds for industry or other investors, to provide the incentive for the domestic and foreign investment Canada does not offer

now. This could be done in connection with the Venture Capital Action Plan. Models that exist in Israel were cited as good examples to examine for possible application in Canada.

One participant described the SPOR (Strategic for Patient-Oriented Research) launched by Canadian Institutes of Health Research's Institute of Health Services and Policy Research as an example of a successful funding program for healthcare innovation and collaboration. It requires the researchers include patients, clinicians, policy makers and decision makers in their innovation project. They are encouraged to seek industry partners to match CIHR funding. The recommendation for the federal government is to help speed up adoption of innovations, by requiring the involvement of stakeholders and end users, including patients, frontline providers and other stakeholders, in innovation projects.

*Encourage organizations to take risks on innovations*

Changing people's established patterns is never easy, but beyond the human factor, there are many practical barriers to innovation. Organizations are locked into contracts (with both providers and unions). Provincial funding is rarely flexible, but adopting an innovation often requires re-channeling money. The recommendation for the federal government was to help innovation overcome institutional inertia through a combination of information on cultural change, to encourage development of the characteristics of more innovative systems, and targeted spending to overcome budget barriers and fear of risk.

*Speed up the process of adapting innovation*

The health system's ability to adapt is out of sync with the pace of innovation and change. One participant estimated that healthcare innovations can take 5-10 years to gestate. Therefore by the time health innovations are actually applied and realized, technology in every other industry is so far advanced that the "new" health technology or program no longer makes sense. One participant attributed this disparity in timelines to the problematic process of seeking approvals for innovative solutions or technologies from those proponents who have incentives to maintain the status quo. It was suggested that government realign its process of seeking approvals for new innovations to avoid such conflicts of interest.

"In the healthcare system, if we had tried to implement something comparable to an ATM machine in a bank, the current solution would be to ask the bank tellers whether they thought it was a good idea."

- Roundtable Participant

Good innovation policy requires real-time data to accelerate decisions. It was suggested that the federal government take initiative to create a federal, integrated, real-time data gathering system, which is accessible to provinces and industry. For example, information pertaining to the real-time assessment of drugs could be fed into this system and immediately accessed by researchers and policy leaders - data would translate into real-world evidence that could be used to inform policy.

## Conclusion:

There was some frustration expressed at the roundtable meeting that many stakeholders in Canadian healthcare — rich in knowledge and committed to improving care — are not able to do a better job of adopting new organizational ideas, products, and processes.

“It’s hard to bring innovation to the system,” one participant said. “We have some barriers to overcome.” Those barriers include an over-cautious attitude toward working with industry; groups and organizations heavily invested in maintaining the current status quo; the fragmentation of healthcare among 13 provinces and territories; budget pressures; and lack of a single driving force.

Importantly, participants were not advocating for the federal government to take over healthcare, or for it to ignore jurisdiction and order the provinces to deliver care differently. The collective message was a call for collaboration and the need for greater federal leadership.

The introduction of innovation — new ideas, new models of practice, new therapies in the Canadian health system — cannot be achieved rapidly or effectively if we are constrained by outdated attitudes, system culture and programs. Participants were hopeful that recommendations from the Advisory Panel will provide some win-win solutions that advance health innovation in Canada – for patients, for providers, for innovators and for the taxpayer.

## Appendix A: Backgrounder



INSTITUTE OF  
HEALTH ECONOMICS  
ALBERTA CANADA



# Health Innovation in Canada: Federal Role Roundtable

### **The Institute (IHE):**

The Institute of Health Economics (IHE) is a non-profit Alberta-based research organization committed to producing, gathering, and dissemination evidence-based findings from health economics, health policy analyses, health technology assessment and comparative effectiveness research to support health policy and practice. Established in 1995, it is a unique collaborative arrangement among government, academia, and industry.

More detailed information on the IHE is available on our website. ([www.ihe.ca](http://www.ihe.ca)).

### **Eli Lilly Canada Inc.:**

Eli Lilly and Company Inc. (Lilly) has been in business more than 135 years. Its first link to Canada was in the 1920s when Lilly's research labs collaborated with the University of Toronto's Drs. Frederick Banting and Charles Best to purify and stabilize their ground breaking invention, insulin, to bring a treatment for diabetes, a then fatal illness, to the world.

Lilly Canada was founded in 1938, and has since grown into a leading research-based pharmaceutical company. Eli Lilly Canada built its first facility in 1946 and the Canadian headquarters are still located on this site in Toronto, Ontario. Today, the company employs more than 550 people across the country.

Eli Lilly Canada plays an integral role in the company's global Research and Development division, Lilly Research Laboratories (LRL). About 1/5th of Lilly Canada's employees work in the R&D division. In 2013, Lilly Canada conducted 69 clinical trials at 403 sites across the country, investing more than \$46 million in R&D in Canada. In 2004, Lilly became the first pharmaceutical company to voluntarily launch an online clinical trial registry.

Eli Lilly Canada Inc. is currently a sitting member on the IHE Board of Directors.

For more information on Eli Lilly Canada Inc., please see the following link: <http://www.lilly.ca/>

### **The Institute for Health Services and Policy Research (IHSPR):**

The [Canadian Institutes of Health Research \(CIHR\)](http://www.cihr-irsc.gc.ca) is Canada's major federal funding agency for health research. Its objective is to excel in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products, and a strengthened Canadian health care system.

CIHR's Institute of Health Services and Policy Research (IHSPR) has attempted to respond to the myriad of challenges entailed in its broad mandate to address problems and opportunities relating to:

- health services and policy research capacity in the country
- the research resources needed to undertake high quality, relevant research
- research gaps and emerging issues
- the CIHR-wide priority being placed on timely knowledge translation

For more information on CIHR or IHSPR, please follow the following link: <http://www.cihr-irsc.gc.ca/e/13733.html>

**Purpose:**

The purpose of this roundtable is to gather a small, select group of thought leaders to engage in informed discourse, which will be summarized in a report that will be submitted to the new federal Healthcare Innovation Advisory Panel.

For more information about the Healthcare Innovation Advisory Panel, please see the following link:  
<http://www.hc-sc.gc.ca/hcs-sss/innovation/index-eng.php>

**Location:**

Fairmont Château Laurier  
1 Rideau Street  
Ottawa, Ontario K1N 8S7  
Tel : (613) 241-1414  
Fax : (613) 562-7030

**Agenda:**

Monday, November 17th, 2014

- 2:00pm Roundtable begins (Tudor Room, Fairmont Chateau Laurier).  
*\*Coffee, tea, an assortment of juices and water will be available.*
- 2:00-2:20pm Introduction by Mr. John Sproule, Senior Director of Policy, Institute of Health Economics, followed by brief remarks by Ms. Lauren Fisher, Vice President, Corporate Affairs, Eli Lilly Canada Inc..  
  
Mr. John Sproule to introduce Glenn Brimacombe, CEO of the Canadian Psychiatric Association and former CEO of the Association of Canadian Academic Healthcare Organizations to kick off discussions.
- 2:20-3:45pm Session 1: What can the federal government do to promote and support innovation in the healthcare system?  
  - Each participant will be given 4-5 minutes to discuss Canada's strengths and weaknesses, and identify the key elements under federal jurisdiction. They can build or comment on a former participants views at any time but should ensure that they use their time allocation to put their particular position into play at the table. The remaining time period for the session will be used to discuss what has been raised.
- 3:45-4:00pm Coffee/bathroom break.
- 4:00-4:45pm Session 2: Which approaches have the greatest potential to deliver improved value for money?

- Each participant will be given 4-5 minutes to which approaches under federal jurisdiction have the greatest potential to deliver improved value for money.

4:45-5:00pm Closing remarks by Mr. John Sproule, Senior Policy Director, Institute of Health Economics.

5:00-6:30pm Networking Reception (Gatineau Room, Fairmont Chateau Laurier).

**Please note: Several federal political representatives will join us for this portion of the program.**

*\* Beverages and hors d'oeuvres will be offered.*

### **Participant Role:**

The two sessions outlined in the agenda above will begin with introductory remarks. Following these remarks, each participant will have approximately 4 – 5 minutes to outline their thoughts on the session topic/question. Participants will then have the opportunity to discuss any contributions raised, identifying strengths, weaknesses and levels of importance.

Please try to be as specific and succinct in your recommendations and thoughts as possible.

### **Overview:**

This roundtable, created in response to the Federal Healthcare Innovation Advisory Panel's call for stakeholder input, is an exciting opportunity to provide policy makers and political representatives with recommendations on how to use innovation as a means to reduce costs and improve the quality of healthcare. The background material following is presented to provide general informational support, upon which discourse for the roundtable can be built. Materials presented below are not all encompassing and discourse may go beyond the particular details or general themes highlighted in this brief.

### **The Federal Role:**

Support for innovation development can occur at a federal level through the use of various legislative and policy levers including, for example, intellectual property, tax, regulation, and support for research and development. Some examples are the following:

- There are several National agencies. (e.g., CIHI, CADTH, CIHR, CFHI, CHI, PMPRB) and pieces of legislation which support and/or regulate health innovation.
  - The Patent Act: is one of the main pieces of Canadian legislation governing patent law in Canada. As such, it sets a framework for intellectual property protection in Canada. It sets out the criteria for patentability, what can and cannot be patented in Canada, the process for obtaining a Canadian patent, and provides for the enforcement of Canadian patent rights.

- Canadian Institute for Health Information (CIHI): CIHI engages in the development and maintenance of comprehensive and integrated health information that informs policy and health system management. ([www.cihi.ca](http://www.cihi.ca)).
  - Canadian Agency for Drugs and Technologies in Health (CADTH): CADTH provides health care decision-makers with credible, impartial advice and evidence-based information about the effectiveness and efficiency of drugs and other health technologies. ([www.cadth.ca](http://www.cadth.ca)).
  - Canadian Institutes of Health Research (CIHR): CIHR is Canada's federal funding agency for health research. Composed of 13 Institutes, CIHR provides leadership and support to more than 13,200 health researchers and trainees across Canada. ([www.cihr-irsc.gc.ca](http://www.cihr-irsc.gc.ca)).
  - Canadian Foundation for Healthcare Improvement (CFHI): CFHI supports healthcare leaders from different jurisdictions to work together on common improvement priorities, providing opportunities to share and implement evidence-informed solutions across regions, provinces and territories. ([www.cfhi-fcass.ca](http://www.cfhi-fcass.ca)).
  - Canadian Health Infoway (CHI): CHI works with the health care community, Canadians, government, and the technology industry to improve access to health information for better care in Canada. Of note, there are concerns that progress to implement electronic health record infrastructure will be seriously jeopardized without renewal of funding for Canada Health Infoway. Provincial and Territorial Health Ministers have announced that they are united in calling for the federal government to renew funding for Canada Health Infoway.
  - Patented Medicine Prices Review Board (PMPRB): PMPRB ensures that the prices of patented medicines sold in Canada are not excessive and reports on pharmaceutical trends. ([www.pmprb-cepmb.gc.ca](http://www.pmprb-cepmb.gc.ca)).
- The federal government's National Research Council's Industrial Research Assistance Program (IRAP) program provides early funding for research and development to small and medium-sized Canadian businesses.
  - The Scientific Research and Experimental Development Tax Incentive Program (SR&ED) is a federal tax incentive program, administered by the Canada Revenue Agency (CRA), which encourages Canadian businesses of all sizes, and in all sectors to conduct research and development (R&D) in Canada. The SR&ED Program gives claimants cash refunds and / or tax credits for their expenditures on eligible R&D work done in Canada.
  - International trade can be used as a lever - strengthening intellectual property protection legislation was recently highlighted in the Comprehensive Economic Trade Agreement (CETA) between the European Union and Canada.
  - The federal government can increase capacity of Canada's regulatory agencies to help increase the speed of the regulatory approval system. Or they can also iron out inefficiencies in the approval process by ensuring that there are no duplication of services (e.g. the "one project, one review" approach to environmental regulations).

- National strategies can be created and outlined by the federal government, similar to the Science and Technology Strategy at Industry Canada, outlining federal priorities and intent, which can stimulate growth and investment.
- The Federal government has the power to commission surveys and reports through Statistics Canada. Information derived from those surveys could, in turn, inform policy that would lead to process innovation, etc.

### **Backgrounder Brief:**

Healthcare innovation is “...the introduction of a new concept, idea, service, process, or product aimed at improving treatment, diagnosis, education, outreach, prevention and research, and with the long term goals of improving quality, safety, outcomes, efficiency, and costs.”<sup>1</sup>

Increasingly, the goal of the health system is to be “patient-centered” and innovations in how we organize, fund and deliver services around that concept will, perhaps, be the most significant innovation. The health system is very slow to adopt measures which would improve productivity through information technology or consumer/people/patient participation in their own health care and self-management. The business model for health care is often organized more so around the needs of highly specialized providers than what might be a more logical and responsive customer-focused model of services. Probably the biggest innovations we might see in health care will be from the organizational design and incentives mechanisms which are truly patient centered. There are significant organizational barriers to do what we know is appropriate based on best evidence, a lack of real-time information supports for providers, and a significant lack of market segmentation in the health system to target programs for specific populations geared to their particular needs. It is estimated that about 5% of the population utilize 65% of resources and most of those would greatly benefit from new models to organize services to deal with their complex needs.

Innovation can improve the way services are delivered, which in turn may increase quality, efficiency and the cost effectiveness of the health care system. Efficient and innovative healthcare systems, in turn, support a healthy populous, which not only increases productivity, but also stimulates economic growth and prosperity<sup>2</sup>.

Besides logical design of delivery models and incentives which support more patient-centered care – a key solution to sustainable health care will be through the advancement of science. It is through such healthcare innovation that we may find methods for enhancing life expectancy, quality of life, and diagnostic and treatment options.

Unfortunately, the approval, adoption and protection processes for healthcare innovation in Canada can be slow, costly, and unpredictable, which means we may not be realizing its full potential. The Canadian

---

<sup>1</sup> Omachonu, Vincent K., Einspruch, Norman G., “Innovation in Healthcare Delivery Systems: A Conceptual Framework,” *The Innovation Journal: The Public Sector Innovation Journal*, Vol. 15(1), 2010.

<sup>2</sup> Department of Health, NHS Improvement & Efficiency Directorate, Innovation and Service Improvement, “Innovation Health and Wealth: Accelerating Adoption and Diffusion in the NHS,” *NHS Chief Executive Innovation Review: Call for Evidence and Ideas*, (Dec 2011).

regulatory process is often attributed to be a significant barrier to the adoption of innovation.<sup>3</sup> According to [BIOTECCanada](#), a biotechnology product can take approximately 10-15 years and cost \$1.5 billion dollars to commercialize.

With respect to product innovation, there are some products that are real breakthroughs, with a dramatic improvement of survival or outcomes. There are other examples where improvement in outcomes relies on small, stepwise improvements, which add up to significant improvements overtime. This leads to controversy over the appropriate valuation of each of the incremental steps, largely reflected in difficult pricing negotiations and demonstrating the need for more innovative and nuanced approaches to reimbursements to address uncertainty of evidence at the time of launch.

Once a new technology is introduced, critical insights from healthcare providers during what is often called a “post-marketing surveillance” phase can help researchers to properly assess value and appropriate utilization and to incorporate new insights into broad system impacts, interactions with other therapeutic interventions, arising safety issues, appropriate dosing etc. Breast and colon cancers are good examples of incremental innovation, where a series of relatively modest gains resulted in significant improvements over a 10 to 15 year period.

Finding ways to ensure patients have access to new therapeutic developments is essential for such step-wise progress to occur and support what is often called a “learning health system.” At the same time, affordability and value for money are key drivers within the public health system that must play an essential role in appropriate funding for innovation. A basic concept in economics is that opportunity cost and funding spent on health care cannot be spent on other valuable areas, so demonstrating value for money is an increasing demand for all health systems. This need must be supported through appropriate investments in infrastructure to allow such assessments to take place.

If innovation is generally a critical component of business productivity and competitive survival, then healthcare innovation will not only help make a more prosperous, successful, and efficient healthcare system, but can also help manage growth of provincial and federal health care related budgets. Although total health expenditure in Canada has doubled in the last decade, rising from approximately \$100 billion to more than \$200 billion, growth has moderated since 2005.<sup>4</sup> Federal and provincial governments must now work within their constrained fiscal frameworks to control spending and find efficiencies and savings, in order to continue enhancing the health care system to meet the growing needs, demands, and expectations of Canadians.

Greater still are the fiscal pressures created by an aging population and chronic illness. Increased longevity is, to a great extent, a sign of success of past efforts in innovation. The Canadian population is getting older, and will in turn, increase the demand and cost of the healthcare delivery. Seniors are the largest user group of healthcare services and have the greatest per capita spending per hospital visit than any other demographic.<sup>5,6</sup> By 2036, the percentage of people aged 65 or older in Canada is expected to

---

<sup>3</sup> Hall, Linda, Bagchi-Sen, Sharmistha, “A study of R&D, innovation, and business performance in the Canadian biotechnology industry,” *Technovation* 22 (2002) 231-244.

<sup>4</sup> Canadian Institute for Health Information, *National Health Expenditure Trends, 1975 to 2013*, (2013), extracted from [https://secure.cihi.ca/free\\_products/NHEXTrendsReport\\_EN.pdf](https://secure.cihi.ca/free_products/NHEXTrendsReport_EN.pdf).

<sup>5</sup> Canadian Institute for Health Information, *Health Care Cost Drivers: The Facts*. Ottawa: Canadian Institute for Health Information, (2011), extracted from [https://secure.cihi.ca/free\\_products/health\\_care\\_cost\\_drivers\\_the\\_facts\\_en.pdf](https://secure.cihi.ca/free_products/health_care_cost_drivers_the_facts_en.pdf).

<sup>6</sup> Canadian Institute for Health Information, “National Health Expenditure Trends, 1975 to 2013,” (2013), extracted from [https://secure.cihi.ca/free\\_products/NHEXTrendsReport\\_EN.pdf](https://secure.cihi.ca/free_products/NHEXTrendsReport_EN.pdf).

be at least 23% (up from 15% in 2011, or 8% in 1960)<sup>7,8</sup>. There is also growing evidence of the need for early intervention and investment in children to create a ‘healthy life trajectory’. Investments in this area will only be possible if we are able to more effectively manage the growth of overall health spending.

### **Federal Healthcare Innovation Advisory Panel:**

The Canadian Ministry of Health announced the creation of the Advisory Panel on Healthcare Innovation on June 24, 2014, to examine innovative health care ideas and approaches that exist in Canada and internationally. The Panel’s directive is to determine what approaches hold the greatest potential for Canadians and to create recommendations on how the Federal government can support those approaches.

In September, the Panel made a call for stakeholder input<sup>9</sup> on healthcare innovation. More specifically, the assessment of current or potential practices, as well as determination of need and identification of gaps.

Of the questions posed by the panel in their request for stakeholder feedback, the roundtable will address the following:

- 1) What can the federal government do to promote and support innovation in the healthcaresystem? Current mechanisms include tax and other incentives, regulation, support for research and development, and support for a number of federal and/or pan-Canadian agencies.
  - Which specific mechanisms/levers are most critical to federal support for innovation in the healthcare system?
  - What changes to current federal tools and programs should be made to better support innovation?
  - What new mechanisms should be put in place to improve support for innovation in the healthcare system?
- 2) Thinking about the range of areas in healthcare that are undergoing change, which approaches have the greatest potential to deliver improved value for money (e.g. process improvement, data analytics, payment models, chronic disease management, electronic records, consumer incentives, pharmaceutical and/or device development, diagnostics, workforce management)?

This roundtable seeks to inform these questions and provide input in the form of a summary report for the Advisory Panel’s consideration.

---

<sup>7</sup> Statistics Canada, “Population Projections for Canada, Provinces and Territories, 2009-2036,” *Catalogue 91-520-X*, (Ottawa, Statistics Canada 2009).

<sup>8</sup> Statistics Canada, “The Canadian Population in 2011: Age and Sex,” *Catalogue 98-311-X2011001*, (Ottawa, Statistics Canada 2012).

<sup>9</sup> For more information on the Panel and associated stakeholder consultation, please see the following link - [http://www.hc-sc.gc.ca/hcs-sss/innovation/cons/\\_2014/chi-cis/consult-eng.php](http://www.hc-sc.gc.ca/hcs-sss/innovation/cons/_2014/chi-cis/consult-eng.php).

**Types of Innovation:**

Discourse will not be restricted to any particular form of innovation. Depending on your vantage point/background, you are encouraged to provide input and speak to any or all types of innovation.

**Chatham House Rules and Summary Report:**

The event will follow Chatham House rules and respondent's individual comments will be confidential but key issues raised will be summarized in a summary report.

The summary report will be submitted to the Federal Healthcare Innovation Advisory Panel once completed.

**Contact:**

**Jasmine Brown** (Project  
Lead) Senior Policy  
Associate Institute of  
Health Economics 1200-  
10405 Jasper Ave  
Edmonton, AB T5J 3N4  
Cell: (587) 340-7100  
[jbrown@ihe.ca](mailto:jbrown@ihe.ca)