Empowering the Life Sciences in Ontario’s Post-pandemic Future

Summary Report

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Life Sciences Ontario: Empowering the Life Sciences in Ontario’s Post-pandemic Future

This year the focus of our Annual Policy Forum was around policy and research involving COVID-19. The pandemic played a crucial role in the 2020 Policy Forum, and its impact were a focal point for the theme of “Empowering the Life Sciences in Ontario’s Post-pandemic Future”.

Sessions answered some these important questions:

- How the pandemic can be a turning point for Canada’s Life Sciences sector. How can we best compete in a post-COVID world? What should Canada do to emerge strong from COVID-19?
- What was the state of the Canadian Medtech industry entering the pandemic? How did it respond to the crisis and how is it evolving as we enter this new reality?
- Has the relationship between government and life sciences shifted in light of recent events? Has public perception shifted? How will this affect life sciences policy in Canada going into 2021?
- How has the science behind the pandemic been communicated to the public? How informed are they? Explore the crucial role of Biology in understanding COVID-19, detecting the disease and growing a cure.
- How do we strengthen local supply chains in Canada? How do we boost adoption of new innovations and digital health solutions to be better prepared for future health crises?
- What does the future of pharma in Canada look like outside of COVID, with PMPRB modernization coming into effect on January 1st, 2021?
- What’s on the horizon for Canadian life sciences? Will COVID-19 spur a renaissance in research, innovation and adoption of life sciences technologies?
COVID-19: A Turning Point for Canadian Life Sciences?

COVID-19 was a wakeup call for many jurisdictions. Now, as we emerge from the pandemic, every global jurisdiction is trying to strengthen local life sciences; so how can Canada best compete in this post-COVID world? What should Canada do to emerge strong from COVID-19?

Key takeaways:

- COVID has significantly accelerated advances in digital health, but there is still more that needs to be done.
- A key tool to optimize digital health is data. However there are many issues surrounding data collection such as ethics and who is accountable for the data. We have all of these technologies, but there are little to no conversations on how to properly use and share this data.
- A well-developed data infrastructure could help predict future diseases and how to manage them.
- In the Nordics, they have developed a genomics and data plan that uses key data points and provides a deeper understanding of human behaviour to determine best practices. There is also a major focus on health promotion and prevention, which makes it easier to offer care to the most vulnerable patients.
- The key to successful data sharing is for it to be open and not categorized in silos, and for it to be patient-centered.
- In order to achieve a sustainable health model, we need to work with data and real-time knowledge. This could help for personalized interventions.
- Canada has potential in terms of collecting and sharing health data, but a major challenge is the way the country is structured with federal and provincial governments.
- The Nordic countries are in conversations with Canada to develop a similar process to achieve a more personalized health ecosystem by 2030.
- We now have an important opportunity to move forward on enhancing data collection and sharing to modernize and improve our health system.
Panel – The Future of Pharma in Canada

The panel focused on the outlook of the pharmaceutical industry in Canada; specifically impacts of PMPRB, COVID-19, and other key factors.

Key takeaways:
- The COVID-19 pandemic has underlined the need to foster a policy and business environment that supports and rewards innovation so that Canadians can benefit from new medical innovations in a timely way.
- The federal government’s PMPRB reforms are problematic in that they disincentivize and discourage innovation.
- The reform brings massive uncertainties for innovators, and it is critical to have a constructive dialogue between government and industry to find a more balanced solution.
- From a patient perspective, COVID has brought unprecedented uncertainties and challenges. The lack of a rare disease strategy, and the impacts of PMPRB reform hindering access to treatments and clinical trials is an additional stress to patients.
  - The federal government must engage in more constructive and meaningful dialogue with stakeholders on the PMPRB reforms and their impacts on the life sciences ecosystem and patients.
- We need to strike a better balance between medicine affordability and access, so that one does not come at the expense of the other.
COVID-19 has thrust biological science into the spotlight, creating opportunities to educate the public and policy makers alike. This session explored how well the science behind the pandemic has been communicated to the public. From transmission to detection, treatment to vaccine development; how informed is the public?

Key takeaways:

- Health communication has been critically important during this pandemic. Individuals consume far more media than they did before and have access to more information very easily.
- In the absence of therapeutics against COVID-19, we are stuck with behavioural interventions like social distancing. For the interventions to be effective, there needs to be proper crisis communication.
- There are 6 key points in crisis communication
  - Get the facts straight
  - Acknowledge uncertainty
  - Treat emotions as legitimate
  - Establish your own humanity
  - Offer people things to do
  - Worry less about “panic” and more about “denial”
- Key players for crisis communication are the leaders sharing the information. Leadership during a crisis requires transparency, credibility and trust. You build trust and credibility over time, which is what politicians have provided in Canada.
- Messages must be adapted to the various demographics. An example of poor communication was stressing how younger people generally have less severe symptoms than older individuals. Some youth did not follow the recommendations set forth by public health officials and have been spreading the virus in communities.
- Researchers must have some form of medical communication training. Many scientists have recognized the need to try to take complex messaging at the podium and communicate it in a more meaningful way.
Empowering the Life Sciences in Ontario’s Post-pandemic Future

Panel – The Biology of a Pandemic

Biology is the key to understanding zoonotic disease transmission to humans such as what was observed in COVID-19. Biologic interventions such as vaccines hold the most promise for a return to normal. This panel explored the crucial role of Biology in understanding COVID-19, detecting the disease and developing a cure.

Key takeaways:
- Canada’s response to COVID-19 has been extremely uneven since outcomes vary so greatly between provinces and regions.
- Academia and researchers have tremendously contributed to understanding the virus, and there have been several positive public-private partnerships that have emerged to support this work. These collaborations are key.
- Many of the challenges related to research collaboration have been due to limitations in data sharing.
- Our scientific response to the pandemic speaks to Canada’s research readiness. The investments we’ve made have allowed the research community to pivot. We need to continue funding these efforts and invest in public health readiness.
- Recommendations that emerged during the discussions include:
  - The creation of a national pandemic decision center which would collect all pandemic-related data in a centralized location and predict accurate outcomes
  - Ensure that decision-makers are constantly surrounded by experts and making decisions based on the professional recommendations
  - There needs to be more sustained investment in infectious disease departments, as well as R&D in general.
Leadership in Challenging Times

This session provided perspectives from a leader of a multi-national pharmaceutical company’s Canadian operations during these challenging times. With the COVID-19 pandemic still ongoing, PMPRB regulations coming into full effect Jan.1st, 2021 and national pharmacare on the horizon; how do Canadian pharma leaders navigate these challenges within the context of a global operation?

Key Takeaways:
- The keynote speaker provided insights on Bayer’s approach to managing the pandemic, both internally and externally
- Ensuring the wellbeing of employees, consumers and patients has been key for Bayer in the fight against the pandemic
- A major challenge in Canada has been on the regulatory side.
- The environment needs to be balanced in order for there to be investments leading to access to new medications. Currently, there has been increased uncertainty with new regulations, making Canada a less attractive market to launch medicines. Clinical trials may also not be brought to Canada.
- The more complex the regulatory environment is, the more uncertainty there is in bringing new investments to Canada
- The regulatory framework for patented medicines must be revisited in order to ensure new products and trials come to Canada

Keynote Speaker:
Alok Kanti, President & CEO, Bayer Inc.
COVID19, USMCA, protectionism/nationalism, the WHO, US election, Black Lives Matter, China relationship(s) – these all shape the political landscape here in Canada. Has the relationship between government and life sciences shifted in light of recent events? Has public perception shifted? How will this affect life sciences policy in Canada going into 2021?

Key Takeaways:

- Science has both been perceived extremely positively and negatively during the pandemic. A less traditional vaccine skepticism has also become prevalent.
- Communication is key for all forms of skepticism. We need to communicate on the public’s level and cannot simply give facts and evidence. There needs to be emotion in the messaging. Science communications must be as important as the R&D put behind it.
- Lobbying has changed during the pandemic. Without a COVID angle to a proposal, the likelihood of it being brought forward to government as a whole is much slimmer.
- COVID has been somewhat politicized in Canada, although not to the same extreme as in the United States. Some leaders follow the science, whereas others are less inclined to follow every recommendation made. There have also been times where science has been at odds with policy and ideological aims.
Canadian Medtech pre-, during and post-pandemic

Medical technologies emerged into the common lexicon during the pandemic: N95 masks, ventilators, swabs, point of care diagnostics. What was the state of the Canadian Medtech industry entering the pandemic? How did it respond to the crisis and how is it evolving as we enter this new reality?

Key Takeaways:
- Canada has been a slow jurisdiction to develop medical technologies. There is a decentralized and complex supply chain system, there are multiple buying groups, and there has been little direct oversight from government in Ontario. As a result, there is a lack of strategic healthcare spending supporting the development of medical technologies in Canada.
- The system in Ontario exacerbated the challenges for obtaining critical supplies, and how to ensure a quality standard. There is a lack of integration of the supply chain in the healthcare system.
- As part of the pandemic response, Ontario Health took more control over procurement, which was critical for the eventual success of obtaining PPE.
- Medtech Canada – in an effort to help – launched a resource hub on their website to help government and procurement officials better understand Health Canada regulations and provided information for non-medical manufacturers so they could pivot their manufacturing and understand how to comply with Health Canada requirements and government portals.
- In the future, procurement should be integrated, and value based.
- There needs to be more communication and data sharing between the healthcare system, healthcare professionals, pharmaceutical companies and medical technology companies. It’s much harder to solve various healthcare problems/challenges, if the medical technology companies do not know the extent of the issue and how well we are doing or not (ie: wait times).

Keynote Speaker:
Nicole DeKort,
Vice-President,
Ontario & Marketing,
Medtech Canada
COVID-19 has placed medical technologies in the spotlight. How do we strengthen local supply chains in Canada? How do we boost adoption of new innovations and digital health solutions to be better prepared for future health crises?

Key Takeaways:

- There is no simple answer to why it takes so long to adopt new technologies in Canada that are available elsewhere.
- The adoption of innovative technologies depends on the funding models and the ability of health system funders to take them and implement them.
- The savings we see with new technologies are often difficult to quantify. Savings are hard to extract and calculate because they are part of the continuum of care.
- A massive challenge for technology adoption is billing codes. There is often a resistance to adopt these new technologies by physicians and the healthcare system.
- In health systems, especially in Ontario, funding is siloed. Budgets are allocated for specific projects or departments. Since medical technologies touch so many sectors and different budgets, it is challenging to justify the funding of some technologies.
- Collaboration and information sharing are critical.
- Medical technology companies need to come to the table with government and other stakeholders to foster a dialogue that pulls innovations through to commercialization and then adoption in the healthcare system.
Remarks – Hon. Victor Fedeli, MPP – Nipissing, Minister of Economic Development, Job Creation and Trade, Chair of Cabinet

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Key Takeaways:
- Minister Fedeli believes that the life sciences sector is key to Ontario’s economic recovery.
- The government is committed to working in partnership to enhance the sector’s long-term competitiveness. The 2020 budget recognizes the role of life sciences in our daily lives, and the need to ensure that innovators have the support they need to get established and grow in Ontario.
- The government has established Supply Ontario, a new supply-chain agency that will ensure supply of high-quality critical products and deliver high quality products at scale to serve the public interest in a financially responsible way. The new entity will stimulate economic growth and job creation through buy-local programs and will connect businesses and entrepreneurs to the government.
- Life sciences is a pillar of another new agency, Invest Ontario. The agency will help create anchor investments that will create jobs and new sources of revenue in the sector.
Let’s gaze into the crystal ball – What’s on the horizon for Canadian life sciences? Will COVID-19 spur a renaissance in research, innovation and adoption of life sciences technologies? Will protectionism lead to strong domestic industry or choke global supply chains and stymie collaboration?

Key takeaways:
- The life sciences sector has been one of the most challenged sectors during the pandemic and has been put in the spotlight.
- The push to domestic production is an interesting opportunity for the sector, but the way some people are viewing science is concerning.
- We also know that there will be massive deficits to come so governments may cut funding for the sector. Their perspective may be to blame the pharmaceutical industry for high drug prices. A concrete example of this is the PMPRB reform. The new guidelines were released recently, and it did not get any media attention, which is concerning.
- The future of the industry heavily relies on the COVID vaccine. What’s unfortunate is that a lot is politicized and outside of the sector’s hands.
- Communication about health, science and vaccines is a big challenge and is critical.
- We need to change the secrecy related to data and share it more. There is a lack of proper use, analysis and transparency of data.
## Organizing Committee

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