Medtech Canada is the national association representing Canada's innovative medical technology (medtech) industry. Representing approximately 100 medtech companies (ranging from Canadian-owned to multinationals), Medtech Canada works closely with government and healthcare stakeholders to deliver a patient-centred, safe, accessible, innovative and sustainable universal healthcare system supported by the use of medical technology.
An Effective Canadian Recovery & Restart is Linked to a Robust Medtech Sector

Medtech Canada commends the Federal Government for its outstanding leadership throughout the COVID-19 pandemic and for recognizing the crucial role played by the medical technology industry in helping to address this unprecedented public health emergency.

This pandemic has placed medical technologies front and center as essential tools to combat COVID-19 and the medtech sector has stepped up by increasing manufacturing capacity, quickly scaling up production and retooling their product lines to deliver ventilators and respiratory support equipment, urgently needed PPE for front-line healthcare workers, diagnostic tests and a whole host of essential technologies ranging from mobile cardiac machines and hospital beds to syringes and thermometers to help maintain a functional healthcare system and to help treat and save COVID-19 patients. From N95 mask sterilization to enabling home and remote healthcare, there has been swift collaboration between the federal and provincial governments and medical technology companies in Canada.

We invite you to visit www.medtechinnovation.ca to get a better sense of the broad impact the medtech industry has had on the response to COVID-19 to keep Canadians safe and healthy.

But COVID-19 has also illuminated systemic challenges that will need to be addressed if we are to successfully battle subsequent waves of this virus and ensure that we have a robust Canadian medtech sector that is prepared to deal with it or another new unique health challenge that we know will inevitably arise. The Health and Biosciences Economic Strategy Table (HBEST) addressed these systemic challenges and Medtech Canada strongly encourages the government to adopt and implement their recommendations.

We believe that each of the following recommendations would strongly contribute to the robust growth of a vibrant Canadian medtech sector and the economy as a whole in a post-COVID-19 recovery and restart environment.
EXECUTIVE SUMMARY
MEDTECH CANADA RECOMMENDATIONS

Recommendation 1: Incentivize R&D Investment
That the government take a leading role in designing and implementing policies to incentivize global medical technology companies to spend their research and development (R&D) dollars in Canada - resulting in numerous economic spillover benefits, including employment.

Recommendation 2: Adopt Innovative Technologies
That the government provide funding to help provincial and territorial healthcare systems invest in and adopt novel and innovative medical technologies that will lead to a globally competitive medtech market in Canada and sustainable healthcare systems.

Recommendation 3: Establish Secure & Robust Access to Medical Supplies & Equipment
That the government take a leadership role to establish secure and robust access to medical supplies by providing incentives for increased Canadian production of medical supplies & equipment (including Personal Protective Equipment [PPE]), optimizing inventory management and addressing structural problems impacting the access and timely delivery of healthcare.

Recommendation 4: Virtual Care / Digital Health
That the government continue to invest in Virtual Care / Digital Health technologies as well as the training programs and change management processes required system-wide to ensure a successful implementation of these technologies post-COVID-19. We would recommend an initial investment of $150M.

Recommendation 5: Laboratory Medicine Infrastructure
In alignment with federal and provincial health mandates, that the government prioritize and target direct investments in federal, provincial and territorial (F/P/T) public health and laboratory infrastructure. Canada needs a pan-Canadian approach to Laboratory Medicine investment and revitalization including ongoing funding of at least $750 million per year for five years to improve capacity and modernize Laboratory Medicine in the specific areas of precision medicine, AMR resistance, Point of Care testing, digital diagnostics and to upgrade core laboratory capacity.
**Recommendation 1: Incentivize R&D Investment**

Our goal is to establish Canada as a global leader in medical technologies, with an economy that attracts significant Foreign Direct Investment (FDI) while spurring exports to promising global markets. This means that Canada should be in the Top 10 globally in attracting clinical trials (per capita), medical device exports (per capita) and R&D spend. This would align with the federal government’s Made-in-Canada Strategy and result in hundreds of millions of dollars in new FDI and thousands of new jobs.

**Medtech MNEs spend a significant amount of dollars globally on R&D.** Total R&D spending by pure play U.S. and European MedTech companies rose 5% in 2016 to US$27B.¹ Medical Device R&D investment in Canada from MNE’s is currently below US$100M (1.4% of revenues) which is well below the world average where investment in Medical Device R&D hovers around 7% of revenues.² This low level of investment can be tied to a Canadian landscape that has an outdated and fractured provincial procurement environment and a product approval regime that is both burdensome and lacks predictability, making it extremely challenging for industry to bring new and innovative technologies to market. Solving these systemic issues is instrumental to driving Canadian R&D investment to be on par globally.

An audacious vision for Medtech R&D spending would have Canada punching above its weight with investments in the **US$750M - US$1B range on an annual basis.**

Medtech MNE’s have a stronger financial capacity to invest in innovation than home-grown SME’s. The capacity of Canadian SME’s to increase R&D spend is closely tied to their ability to generate revenue from both domestic and export sales. In 2016, Canada’s GERD (Gross Domestic Expenditures on R&D)/GDP was at 1.6% as compared to the OECD average of 2.4%.³ To bring GERD/GDP up to the OECD average, Canada would need to spend $10B more on R&D annually; of this, private industry would be asked to contribute roughly $5B (51%). While MNE’s can contribute strongly to this number, Canadian SME’s will also need to commit their fair share of R&D dollars; this can only occur if SME’s are able to generate increased domestic and export sales. Medtech-tailored government programs at both ISED and GAC that support a Made-in-Canada strategy are required to not only help SME’s sell into the Canadian market, but also to increase their export revenues.

**Given that the Medtech sector invested almost 7% of revenues in R&D globally, twice the average of industry in aggregate, a focus on Medtech will reap more significant rewards for the government vs. other sectors.**

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¹ Statista  
² Statista  
³ An Analysis of Budget 2018: Research, Innovation and Trade, Global Advantage Consulting Group Inc., March 2018
Recommendation 2: Adopt Innovative Technologies

Simply put, the market for medtech in Canada is not nearly as attractive as markets in other jurisdictions: **we are not competitive globally.** This makes it difficult for Canadian subsidiaries of MNE’s to advocate for Canada’s share of investment in R&D spending and new product launches, and extremely challenging for our home-grown SME’s who struggle to access global markets when they cannot point to their home market as an early adopter. In turn, investment decisions in R&D and manufacturing which align with a Made-in-Canada strategy are negatively impacted.

**Medtech companies will invest in jurisdictions where they can bring innovations to market quickly, and where those products will be adopted by the health system. Canada is not one of those jurisdictions.** We are competing for global investments and there are jurisdictions globally (e.g. Germany, Belgium, Netherlands) where the government has acknowledged its role in enabling innovation adoption and have done an excellent job of coordinating fully aligned, state sponsored stakeholder strategies.

Canada should be a leading power in a host of life sciences activities from clinical trials to R&D and manufacturing. We’ve been held back however, by our reluctance to adopt the kind of demand-side policies that commit resources to pulling innovations into our healthcare system that we’ve already applied in priority areas like renewable energy. **If we’re going to tap into that potential, then we need to collectively shift our mindset and begin to view healthcare as an economic driver rather than a cost center.**

Medtech Canada is advocating for a fund similar to that recommended by The Advisory Panel on Healthcare Innovation in their report *Unleashing Innovation: Excellent Healthcare for Canada.* The broad objective of their Healthcare Innovation Fund was to effect sustainable and systemic change in the delivery of health services to Canadians including stimulating technological innovation. *(APHI, Unleashing Innovation: Excellent Healthcare for Canada, July 2015)*


**Recommendation 3: Establish Secure & Robust Access to Medical Supplies & Equipment**

Considering the global supply chain and inventory issues associated with the pandemic that our country has experienced, Canada must establish more secure and robust access to medical supplies & equipment.

**Supply chain:**

To optimize self-sufficiency in supply chain for high-demand medical technologies, in part through enabling Made-in-Canada manufacturing, we recommend ensuring that there are **incentives for domestic medical supplies & equipment production** that can engage Canadian-based multinationals as well as Canadian-based SME’s to ensure local manufacturing. An example would be to guarantee a percentage of production to Canadian-based manufacturers, including global multinationals active in Canada.

**Inventory:**

In today’s market, manufacturers, distributors, and end-users are not equipped to keep significant inventories of medical supplies & equipment on hand. We would recommend keeping an **inventory buffer** representing at minimum 30 days of peak demand for critical medical supplies & equipment (including PPE), and ideally as high as 90 days. This inventory could be held by a mix of provincial and federal authorities, with hospitals also having a 30-day buffer on hand, particularly in geographically isolated areas.

**Structural:**

Canada has been experiencing structural problems impacting the access and timely delivery of health care, as well as delayed technology adoption (outlined by HBEST) for many years; the present crisis has brought some of these problems into sharper relief.

Canada spends about half of the OECD average on medical devices (3.5% of healthcare spend vs. 6%). This small investment delivers remarkable results both in terms of diagnostics and treatment, however the federal government can play a critical strategic role in facilitating the restructuring of healthcare delivery to have a wider view of the overall value of a given product or service. Many provinces are already developing strategies for **value-based acquisition of healthcare solutions, including bundled product and service procurement**. These approaches can help reduce surgery backlogs in areas such as cardiology, orthopaedics and oncology; surgery backlogs will not only be a serious challenge in the years to come but have become a major concern during COVID-19 and require incremental funding to expand capacity and investments in high-value medical interventions to best utilize limited hospital resources.
**Recommendation 4: Virtual Care / Digital Health**

For the past 10-15 years, virtual health has been heralded as the next disrupter in the delivery of care, but there has been minimal uptick in adoption. The COVID-19 pandemic is pushing against structural barriers that had previously slowed health system investment in integrated virtual health applications.\(^4\)

The increased use of virtual healthcare tools due to COVID-19 highlights the need for a more robust national digital health strategy and infrastructure system with interoperable data platforms (as recommended by HBEST). We would recommend an initial investment of $150M. Digital health makes it easier for patients to continue receiving the health services and programs they need such as remote monitoring technologies which enhance care for people at home with or without COVID-19 as well as other vulnerable populations.

In alignment with the Universal Access principle of Canada’s Digital Charter, rural high-speed internet is a critical enabler for the remote monitoring technologies being introduced and should be a key priority for the government. For example, some patient groups do not have the basic digital infrastructure, like a mobile device, to engage virtually (Latulippe et al. 2017). Policymakers need to understand that the social determinants of health now have a digital dimension. We need to consider health equity when digital services are designed. In a situation where virtual care is the dominant access channel for receiving a particular care or treatment, patients with an inability to access virtual services will have a harder time accessing meaningful care.\(^5\)

While the short-term deployment of virtual care as an immediate response to a public health emergency has been largely successful, we now have an opportunity to build upon this momentum to harness digital health technologies (utilizing enablers such as digital health literacy and change management support) and unlock the full value of optimizing patient care, clinical outcomes and health system sustainability, including the appropriate use of digitally enabled medical technologies.

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**Recommendation 5: Laboratory Medicine Infrastructure**

The pandemic has demonstrated the critical importance of Laboratory Medicine to inform clinical decisions and treatment, as well as government policy. Laboratory Medicine’s vital role during the pandemic has been acknowledged from quickly establishing highly specific and sensitive diagnostic tests for COVID-19, diagnosing/reporting/monitoring both comorbidities and other diseases, informing patient treatment/management plans, as well as driving our economic recovery and helping to address the growing backlog of deferred procedures.

Laboratory Medicine informs 50-70% of all clinical decisions while accounting for only 3-5% of total healthcare spend. Relative to other disciplines in Canada and healthcare systems globally, Canadian laboratory infrastructure has been underinvested in despite high “value for money”.

Current laboratory budgets include (but are not limited to) tests for clinical biochemistry, pathology, cytology, genetics, hematology, immunology and microbiology (including SarsCoV-2). Present infrastructure supplies and labour are not sufficient to support the current and future vital role of Laboratory Medicine. Reasonable investments will yield large returns for healthcare systems and patients while helping shift the care focus from cure to prevention.

We must act now to bolster Laboratory Medicine to help Canadians weather not only any potential waves of the current or future pandemics, but also to ensure other critical elements of our health system function for the long term as Canadians expect. **We need a pan-Canadian approach to Laboratory Medicine investment and revitalization including ongoing funding of at least $750 million per year for five years to improve capacity and modernize Laboratory Medicine** (e.g. precision medicine, Point of Care testing, digital diagnostics and to upgrade core laboratory capacity). The ongoing investment is essential to better align with F/P/T health mandates to help:

1. Safeguard the health and well-being of Canadians through and after the pandemic.
2. Advance clinical decision-making in all areas of medicine (including managing antimicrobial resistance [AMR]).
3. Drive Canadian economic recovery plans, help address the growing backlog of deferred procedures and prepare for the future.

**CONCLUSION**

Canadians expect and deserve world-class healthcare and a robust economy. Medtech Canada looks forward to working with the Federal Government to deliver on both counts by implementing the recommendations outlined in this submission. We believe that these recommendations would strongly contribute to improved patient care, the robust growth of a vibrant Canadian medtech sector and the economy as a whole in a post-COVID-19 recovery and restart environment. Thank you for considering our recommendations.