BACKGROUNDER:

Health Research in Canada

Ontario Hospitals are Top Drivers of Research and Innovation in Canada

- In 2020, research hospitals attracted **$1.75 billion in investment**, which supports nearly **21,000 highly skilled researchers and support staff** along with research space, equipment and technology.
- Over half of Canada's hospital-based research is conducted in Ontario, and **19 of Canada's Top 40 research hospitals are in Ontario**.
- Research hospitals are tightly connected to universities and medical schools across the province and are a major training vehicle for science in the province.
- Hospital-based research is directly tied to patient care with patients both participating in and benefitting from research. In no other setting are researchers as connected to patients or as involved in the delivery of care as in hospitals.
- As the hub of innovation, research hospitals work to improve health and Ontario's health system which directly and indirectly contributes to the economy.
- The benefits of hospital-based research are felt across the province in large and smaller centres. Outside of the larger urban areas, research has the added benefit of supporting local community needs, attracting and retaining more health care providers to under-serviced areas, and enabling a wider range of specialized services and care to be provided closer to home.
- The tremendous range of hospital-based research and innovation generates a broad array of benefits.
  - New knowledge is created, health improvements are made, health system costs are reduced, and new products and services are marketed.
  - Among the largest of economic benefits is the economic productivity stemming from a healthier population.
- In 2019-20, commercialized research in Ontario's hospitals resulted in **115 commercialized products and 273 disclosures**. Research institutes and their business arms or commercialization partners work strategically to transform the fruits of research to marketable products and services for health and economic benefits.

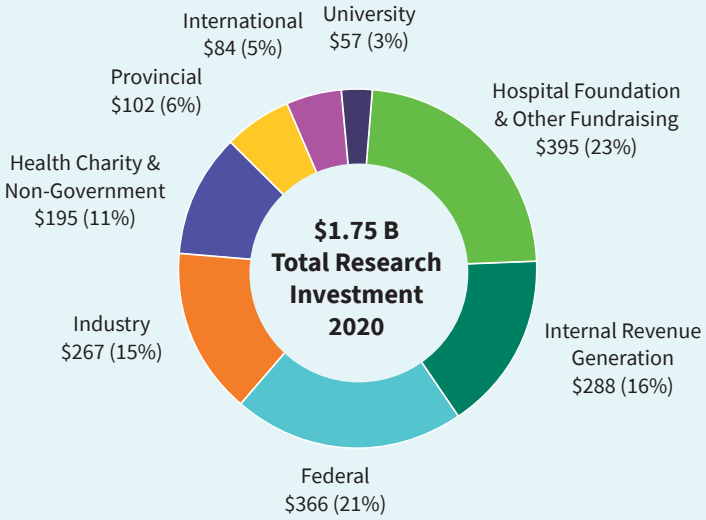
Canada's Global Leadership in the COVID-19 Pandemic

- Research hospitals and their scientists and clinician-researchers have led or contributed to a host of breakthroughs in the pandemic response involving critically important functions, such as isolating the virus and identifying variants through genetic research, conducting vaccine research and clinical trials for drugs and treatment protocols, and much more.
- Collectively, Canadian researchers published over 3,000 COVID-19 related research papers between January and November 2020.
- Now is a pivotal time to consider the role, impact and future of the important research that is conducted within Ontario's hospitals as a key contributor in the research and innovation ecosystem.

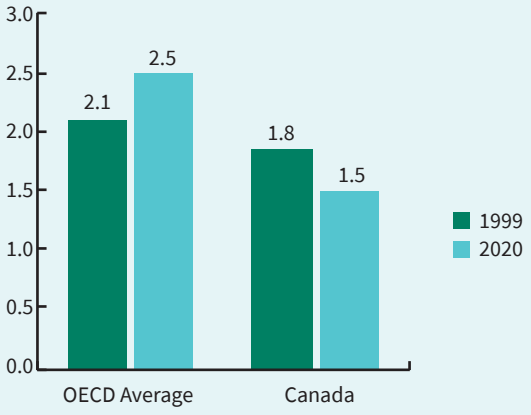
Canada's Funding Environment for Health Research

- A mix of public and private sector sources including federal and provincial governments, industry, philanthropy and health charities provide direct funding support for hospital-based research.
- In 2020, hospitals attracted $1.75 billion in research funding.
- Federal research funding in Canada flows through three major federal research granting councils:
  - The Canadian Institutes of Health Research (CIHR)
  - Natural Sciences and Engineering Research Council (NSERC)
  - Social Sciences and Humanities Research Council (SSHRC)
- Federal funding for Ontario research hospitals totaled $366 million in 2020 which represents a $30 million (9%) increase over 2019. This is the third year of growth in federal investment. Almost all federal funding for hospital research is from CIHR. Funding through CFI is matched by the province and the institute.
- In 2020 the Government of Ontario provided $102 million in hospital research funding which represented a $ 9 million (8%) reduction from 2019. This was the first funding reduction since 2016. Provincial investment flowed through a number of specific programs including:
  - Ontario Research Fund (ORF)
  - Early Researcher Award (ERA)
  - Health System Research Fund (HSRF)
- While the importance of health research in Canada has never been greater, overall support for scientific research and development (R&D) has been waning over the last two decades.
  - In 2019, Canada's combined public and private sector investment in R & D, totaling $35.5 billion, represented 1.5% of gross domestic product (GDP) which is significantly less than the 1.8 % level of investment that was made 20 years ago.
  - In comparison, in 2019, the average level for all OECD countries was approximately 2.5% of GDP.

Value in $ Millions



R&D as a % of GDP



Source: OECD

Ontario Hospital Association