

# Canadians Deserve Better Access to Medical Imaging

Through an Enhanced Radiology Workforce  
Strategy and Technological Innovation

The Canadian Association of Radiologists' Annual Submission to the  
Federal Standing Committee on Finance



Canadian Association of Radiologists  
L'Association canadienne des radiologistes

# Radiology is the keyhole to medical treatment. Anyone who has a serious illness or accident passes through a radiology department to receive imaging to find out what is really going on with their health.

Waiting for imaging means waiting for treatment. But what if there are no technologists to operate the machines? What if there is insufficient equipment to perform the scans? What if the patient does not have access to the right test the first time? We know that Canadians support investments from governments to ensure these questions do not need to be asked. 90% of Canadians are aware of the value of radiology and would support Federal investment to improve access to **medical imaging (MI)**.<sup>i</sup>

Canadian healthcare systems face challenges. Radiology is among the most affected. The future sustainability of radiology is uncertain due to pressures on health human resources (HHR) exacerbated by aging and obsolete equipment. It is time for the Federal government to act. Although Canada spends over 20% more per capita on healthcare than the OECD average,<sup>ii</sup> those dollars are allocated in a way that does not adequately serve Canadian patients and communities.

The CAR recommends that the Federal Government ensures that investments are made in people, technology, and equipment to address the challenges facing medical imaging which, in turn, affect all Canadians.



## People

1. Invest in the **radiology workforce**. This would include the hiring and retention of MRTs, sonographers and radiologists as part of a health human resource strategy to reduce backlogs and improve health services.



## Technology

2. Demonstrate leadership in AI by establishing the **Health Artificial Intelligence Validation Network (HAIVN)** framework as an independent entity to improve the evaluation and regulation of AI in Canada as part of Health Canada's Medical Devices Directorate regulatory process.
3. Take a leadership role in the implementation of **Clinical Decision Support** systems, to streamline the imaging referral process and ensure patients receive the right test at the right time.



## Equipment

4. Guide an investment of \$2 billion over three years for **radiology equipment** to improve access to modern medical imaging equipment. Streamline the process for equipment installation and reduce the substantial associated labour costs.

# People

## Addressing the Extreme Radiology Workforce Shortage

Canada needs more technologists, radiologists, and sonographers now. The national shortage of these healthcare workers makes it difficult for radiology departments and clinics to maintain service levels for patients, creating domino effects for the entire system. The CAR, in consultation with the Canadian Association of Medical Radiation Technologists (CAMRT) and Sonography Canada, is advocating to increase human resource capacity within medical imaging to enable better care for patients.

Delayed imaging causes pain and suffering to patients and costs the Canadian economy billions in lost output. Prior to the pandemic, patients faced significant wait times for MI due to insufficient radiology human resources. In 2019, the Conference Board of Canada estimated that average wait times in 2022 would be **67 days for a CT and 133 days for an MRI**, far exceeding the acceptable **30-day standard**, and **resulting in a net loss to the economy of \$3.5 billion in GDP**.<sup>iii</sup> Wait times have gotten worse. In 2023, CIHI reported **that the 90<sup>th</sup> percentile of patients are waiting an average 90 days for a CT and 160 days for an MRI**.<sup>iv</sup> Patients with non-emergent, lower-priority indications experience longer, extremely lengthy wait times for MI.

Imaging wait times have continued to increase despite many clinics and departments operating 24/7 to accommodate increasing demand. As MI is stretched beyond its capacity, the pressures are leading to burnout for healthcare workers. The pandemic pushed MRTs to the breaking point. In 2021, there was an 80% jump in MRTs reporting signs of burnout, **meaning two-thirds (64%) of the workforce go to work feeling emotionally exhausted**.<sup>v</sup> Similarly, in 2021, 56% of sonographers reported that they were overextended at work to the point of emotional exhaustion, compared to 42% in 2018.<sup>vi</sup> A 2023 CAMRT survey revealed that 70% of MRTs reported burnout. Burnout further reduces imaging capacity, with the impacts of inadequate levels of staffing felt by patients.

We need immediate action to address the 10% vacancy rate for these professions, along with a long-term strategy for HHR recruitment and retention. We know training and integrating more technologists and sonographers into the system is essential to its future viability, but education alone will not be enough to address our immediate problems. Canada should be focusing on foreign-trained technologists and sonographers and through Employment and Social Development Canada (ESDC), the Federal government has funded the development of a national bridging program for MRTs. The CAMRT is currently working on this through a contribution agreement from the Foreign Credential Recognition Program (FCRP).

**The CAR is calling on the Federal government to spearhead a national effort to recruit and retain radiologists, MRTs, and sonographers as part of a national HHR strategy.**



*“The vicious cycle of high vacancies, excessive workload, and burnout of professionals in medical imaging needs to be addressed to ensure Canadians can access essential care. MRTs may not be the most recognized healthcare professionals, but shortages in their ranks cause disruptions to the entire healthcare system.”*

Irving Gold, CEO, CAMRT

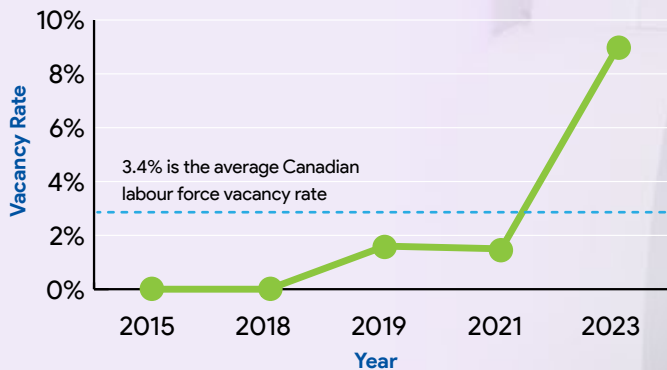
*“Without new investments in human resources, we worry that the accessibility and quality of diagnostic imaging and care provided will decline as a result of burnout among sonographers. In the past two years, 52% of sonographers considered leaving their jobs. Recruiting and retaining staff in the future is going to be even more daunting if we continue overstressing our healthcare system.”*

Susan Clarke, CEO, Sonography Canada

### Figure 1: Vacancy Rates for Mammography Technologists

Source: CAMRT survey, Statistics Canada Labour Force Survey, June 2024

The job vacancy rate in Canada is now 3.4% (April 2024)  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410037101>





# Technology

## Artificial Intelligence is Key for Sustainability

Artificial intelligence (AI) has incredible potential to transform the economy, improve the way we work, and enhance our way of life. The Federal government has committed \$2.4 billion to secure Canada's AI advantage.<sup>vii</sup> However, integrations of AI has been slow, as these technologies are increasingly deployed in healthcare, we need to implement safety and risk assessment systems. A national strategy for post-market reviews is necessary to ensure the safety and efficacy of AI-driven products. Providers and their patients deserve an effective regulatory process now. This is an opportunity to embed this effort as part of Health Canada's existing medical devices review process.

The CAR has developed a framework, the Health Artificial Intelligence Validation Network (HAIVN), to review and monitor AI-driven solutions through post-market evaluation. HAIVN goes beyond safety, by assessing the benefits, detriments, risks, and opportunities of working with a particular technology. HAIVN incorporates a review panel of experts to act as external advisors to Health Canada's existing medical devices review process. The HAIVN process is supported by other organizations including the **Canadian Medical Association and the Canadian Nurses Association**. HAIVN would provide ongoing clinical monitoring of the solution to provide confidence to Canadians, while ensuring that vendors receive all appropriate information to enhance their products.

**We are asking the Federal government to provide an investment of \$2 million in a cost-neutral manner to evolve the medical device licensing process to include post-market surveillance through HAIVN.**

This necessary investment in AI driven medical devices will not only help to expedite quality patient care but also generate revenue that is invested back into the Canadian economy.

## The Right Test at the Right Time

The Federal Government needs to take a leadership position in integrating Clinical Decision Support (CDS) systems to help ensure that Canadians get the right test at the right time. The demand for imaging continues to increase, with additional referrals contributing to lengthy waitlists.

MI touches every aspect of the healthcare system, necessitating systems to prioritize referrals. We need to work with referring health professionals to ensure that they have access to the latest Canadian imaging guidelines through the implementation of CDS systems. With CDS, we can prioritize imaging as effectively and efficiently as possible to help ensure that every patient receives the right test at the right time. CDS has been implemented successfully abroad in countries such as the UK and the US and there is evidence to support its value.

**We are asking for the Federal Government's support in ensuring provinces integrate CDS into their EMR systems.**



# Equipment

## Investing in Capital Equipment and Addressing Installation Costs

The Federal Government can provide targeted funding outside of the bilateral healthcare agreements to close the gap in investment in equipment to service communities across Canada. In 2023, **one third of radiology equipment needed to be replaced because it fails to meet the needs of patients and providers.**<sup>viii</sup> In 2024, we know that this percentage is higher, especially in smaller institutions with reduced budgets.

The Government can also address the equipment issue by convening with the provinces to address the labour costs associated with installation of MRI and CT machines.

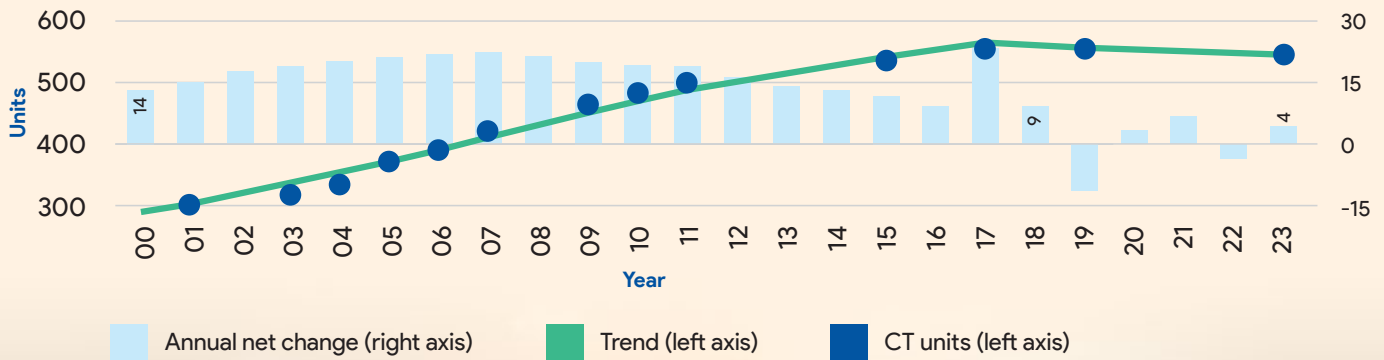
**We are asking for the Federal government to guide an investment of \$2 billion over three years for radiology equipment to improve access to modern medical imaging equipment.**

While the Government of Canada is flowing new funding for healthcare as part of the 2024 Working Together bilateral health agreements, it is clear that there was inadequate funding directed towards addressing these critical infrastructure gaps in Provinces and Territories.

Investing in radiology is necessary to safeguarding patient health and preventing further losses to the Canadian economy. The CAR would welcome the opportunity to appear before the Standing Committee on Finance to further elaborate on our recommendations to reduce wait times for medical imaging and ensure that all Canadians receive the care they need and deserve in a timely manner.

**Figure 2: Stagnant Growth Trends in CT Units**

CT Machines, total units and annual net change, 2000–2023 Source: Conference Board, CADTH and CIHI



## About the CAR

Since 1937 the CAR has been the national voice for radiologists in Canada, dedicated to imaging excellence and advocating for the highest standard of patient care across the country. We represent 3,000 radiologists who provide vital MI for millions of patients.

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