# Investing in Pancreatic Cancer Research: A National Imperative

#### **Executive Summary**

Pancreatic cancer is one of the deadliest cancers in Canada, yet it remains drastically underfunded and lacks a dedicated national strategy. With a five-year survival rate of only about 10% [1], pancreatic cancer is on track to become one of the top cancer killers in Canada by 2030 [1]. Currently, Canada has no comprehensive plan targeting this disease, and research investment is disproportionately low - less than 2% of Canadian cancer research funding is directed to pancreatic cancer [2].

This report makes the case for significantly increasing federal funding and creating a national pancreatic cancer strategy. It draws on comparisons with the United States, United Kingdom, and Australia, where targeted initiatives and funding boosts have correlated with improved patient outcomes. Key success metrics – such as earlier detection, better genetic profiling, greater clinical trial access, and robust public-private partnerships – underscore that strategic investments can save lives.

We recommend that the Canadian government launch a coordinated national strategy and substantially increase research and care funding for pancreatic cancer. Doing so will stimulate innovation in detection and treatment, improve care pathways, and ultimately give more Canadians a fighting chance against this "silent

killer." Policymakers have a pivotal opportunity to close the survival gap by acting decisively on this urgent health crisis.

#### The Pancreatic Cancer Crisis in Canada

Pancreatic cancer is a growing health crisis. An estimated 7,200 Canadians were diagnosed in 2023 [1], and most face a grim prognosis - 93% will die within five years of diagnosis [2]. Pancreatic cancer is almost always detected at an advanced stage, as there are no effective early screening tests and symptoms are often vague. As a result, the five-year net survival rate stands at only ~10% [1], the lowest among major cancers in Canada. Alarmingly, incidence is rising: by 2030, pancreatic cancer cases are projected to double [1].

Despite these harrowing figures, Canada currently lacks a comprehensive national strategy for pancreatic cancer. Unlike some other cancers, there is no dedicated national program to coordinate research, prevention, early detection, and treatment efforts. Instead, progress relies on piecemeal initiatives often led by charities or provincial efforts. This absence of a unified plan has contributed to fragmentation and under-prioritization.

Research funding is strikingly low. In 2022/2023, the Terry Fox Research Institute (TFRI) invested only about 5% of its research budget - roughly \$610,000 - into pancreatic cancer projects [1]. Pancreatic Cancer Canada has described the situation bluntly: "Pancreatic cancer has the lowest survival rate... yet receives less than two per cent of research funding in Canada" [2].

The consequences are evident: over the past decades, survival rates have improved for many cancers but remain stagnant for pancreatic cancer. Most patients still succumb within months of diagnosis, and over half die within the first year [2]. Canadian families facing this disease are left with limited options and scarce hope.

As one donor put it, "This is a stubborn and nasty cancer and deserves more attention from donors and researchers" [2].

## International Comparisons: Lessons from Peer Countries

#### **United States**

The U.S. took a major step in 2012 with the passage of the **Recalcitrant Cancer Research Act**, which required the National Cancer Institute (NCI) to develop scientific frameworks for low-survival cancers like pancreatic [4]. This triggered a focused national research effort. NCI funding for pancreatic cancer climbed from **\$17.3 million in 1999 to \$222.3 million in 2022** [3].

This investment has coincided with measurable improvements in outcomes. Two decades ago, the U.S. five-year survival rate was around 4-5%; today it exceeds **11-12%**, nearly tripling over 20 years [3]. This progress is attributed to new therapies, better diagnostics, and increased research output.

#### **United Kingdom**

The UK has among the **lowest five-year pancreatic cancer survival rates in the developed world** – around 7% as of the late 2010s [6]. For decades, successive governments underfunded pancreatic cancer research, contributing to stagnating outcomes [7]. Pancreatic Cancer UK noted that leukemia received **£800 million to £1 billion more** than pancreatic cancer over 20 years, resulting in major treatment breakthroughs for leukemia, while pancreatic cancer was left behind [7].

Advocates now urge the UK government to **invest at least £35 million per year** to reverse decades of neglect and double survival over the next 10 years [7].

#### **Australia**

In 2022, Cancer Australia launched the **National Pancreatic Cancer Roadmap**, a detailed strategy with 33 priorities and 60 actions covering the entire patient journey [5]. The government also invested in an Optimal Care Pathway, allocating ~**\$20 million AUD** to standardize high-quality care nationwide [5].

Australia now reports a **five-year survival rate of approximately 12.5%**, among the highest globally [5]. Experts credit Australia's forward planning and integrated care efforts as key to progress.

#### **Linking Funding to Survival Outcomes**

Global data consistently shows a clear correlation: when governments invest in targeted research for low-survival cancers, patient outcomes improve. Pancreatic cancer has historically lagged in survival gains because it has lagged in research attention and investment. By reversing this trend, Canada can make meaningful progress.

- In the **United States**, NCI funding for pancreatic cancer increased from \$17.3 million in 1999 to \$222.3 million in 2022 [3]. During that same period, the five-year survival rate nearly tripled from ~4-5% to over 11% [3]. Researchers at the Pancreatic Cancer Action Network credit this improvement to increased access to trials, new drug approvals, and early detection research supported by sustained funding.

- In the **United Kingdom**, disparities in funding led to dramatic differences in outcomes. For example, leukemia received up to £1 billion more in research funding than pancreatic cancer, resulting in new targeted treatments and a sharp increase in survival. Meanwhile, pancreatic cancer outcomes remained stagnant [7].
- A **Canadian analysis** in *Current Oncology* found that pancreatic cancer was one of the most underfunded cancers relative to its mortality burden [9]. The report concluded that funding misalignment was likely contributing to slower progress and stressed the need for strategies that direct research investment based on impact.
- Investments in early detection have paid off for other cancers. For example, mammograms for breast cancer and low-dose CT for lung cancer have helped shift diagnoses to earlier stages and improved survival. Pancreatic cancer has no equivalent test but research into blood-based biomarkers, AI imaging, and risk profiling is underway globally. Canada must fund this work if we hope to catch the disease early.

The takeaway is clear: **funding drives discovery, and discovery drives survival**. If Canada wants better outcomes, it must commit to long-term, sustained investment in pancreatic cancer research and care infrastructure.

## **Key Areas for Improvement and Success Metrics**

#### 1. Early Detection and Diagnosis

- % of diagnoses made at Stage I or II
- Development of a blood-based detection test
- Launch of national high-risk screening programs [1][5][7]

#### 2. Genetic Profiling and Personalized Medicine

- % of patients tested for germline and somatic mutations
- Targeted therapy enrollment rates
- Research into new biomarkers [1][8]

#### 3. Clinical Trials and Treatment Access

- Clinical trial participation doubled in 5 years
- Time from approval to access: <12 months
- Tele-trial rollout through CRAFT [8][10][11]

#### 4. Partnerships and Research Collaboration

- Matching funds for research

- Co-funded public-private initiatives
- National multi-center projects [2][8]

#### 5. Standardized Care Pathways

- Wait times from referral to treatment
- % of patients seen at multidisciplinary centers
- Provincial adherence to care protocols [5][10]

## Recommendations for a Canadian Pancreatic Cancer Strategy

To address the gaps and capitalize on the opportunities identified, we propose a bold but achievable plan of action. The Canadian Parliament's Standing Committee on Health should urge the government to implement the following recommendations:

#### 1. Launch a National Pancreatic Cancer Strategy

Develop and fund a **comprehensive national strategy** specifically for pancreatic cancer, similar to Australia's roadmap. This strategy should be led by Health Canada in partnership with provincial cancer agencies, researchers, and patient advocacy groups. It must set clear goals for improving survival, increasing early detection, and ensuring equitable care.

A dedicated task force or advisory panel (including leading clinicians, scientists, and patient representatives) should oversee the strategy's implementation. The strategy would outline initiatives across the continuum: awareness, prevention (where possible), rapid diagnostics, research investment, and patient support. Importantly, it should include a **timetable and metrics** for accountability.

By officially prioritizing pancreatic cancer at a national level, Canada would signal that it is no longer "business as usual" for this disease.

#### 2. Increase Federal Research Funding Substantially

Commit new federal funding to pancreatic cancer research on the order of **tens of millions of dollars per year**, sustained over at least a decade. This could be achieved through the **Canadian Institutes of Health Research (CIHR)** by creating dedicated grant streams, and/or through special programs (e.g., a "Pancreatic Cancer Challenge Fund").

The increase should be **commensurate with disease burden** – for instance, aiming for pancreatic cancer to receive **at least 8-10%** of site-specific cancer research funding (up from <2% now). In concrete terms, an initial commitment of **30 million annually** would significantly amplify research.

These funds should support basic science, translational diagnostics, and clinical trials, with emphasis on **collaborative**, **multi-center projects** and **recruiting top talent**. The expected return is high – **new treatments**, **earlier detection**, and **improved survival**.

### 3. Establish Early Detection and Screening Initiatives

Use federal funding to jump-start an **Early Detection Initiative**. This could include:

- Large-scale research to validate biomarkers (blood, urine, etc.)
- Pilot screening programs for high-risk groups (e.g., family history, new-onset diabetes)
- National guidelines for surveillance of genetically predisposed individuals

Set a goal to **develop a viable detection test within 5-7 years**, with interim milestones. Fund **centres of excellence** and international collaborations. Success would mean catching 10-20% of cases earlier – a game changer for survival.

#### 4. Facilitate Precision Medicine and Genetic Testing

Work with provinces to ensure that **all pancreatic cancer patients receive genetic testing**, including somatic and germline. Establish national standards and **fund testing access** (similar to what petition e-5186 advocates).

This enables personalized treatments (e.g., PARP inhibitors, immunotherapy). Fund a **national tumor database** and trials focused on molecular subtypes (e.g., KRAS inhibitors).

Use **federal health transfers** to tie adoption of testing standards to funding. This ensures equity and enables future clinical trial matching.

#### 5. Expand Clinical Trial Access and Infrastructure

Improve access to cutting-edge therapies through:

- **Investing in trial networks and sites** (e.g., Canadian Cancer Trials Group)
- **Decentralizing trials** via the CRAFT framework, telemedicine, and community hospitals

- **Fast-tracking promising therapies** (e.g., conditional approvals, pCPA reform)

Set clear targets: **no more than 6 months** from drug approval to public access. Within 5 years, **double the % of patients enrolled in trials**, and **remove geographic access barriers**.

#### 6. Promote Public-Private and Interagency Partnerships

Create a Pancreatic Cancer Research Partnership Fund that matches private/philanthropic dollars. If a charity raises \$5M, the federal government matches it.

Encourage biotech/pharma co-investment in detection tools and new therapies. Leverage international collaborations (e.g., with the U.S. NCI or World Pancreatic Cancer Coalition).

Success can be measured by **co-funded projects**, **external funds leveraged**, and **research breakthroughs** that result.

#### 7. Improve Patient Care Pathways Across Canada

Work with the Canadian Partnership Against Cancer and provincial health systems to create a Pan-Canadian Optimal Care Pathway for Pancreatic Cancer.

This should include:

- Timely referrals and diagnostic protocols (e.g., upfront CT)
- Short wait times to surgery or oncology
- Early integration of palliative care

Also fund **high-volume regional surgical centers** and ensure that **rural and Indigenous patients** have equitable access (via telehealth, mobile teams, etc.).

Measure success through diagnostic/treatment wait times, multidisciplinary access, and patient satisfaction/outcomes.

#### 8. Engage in Awareness and Education Campaigns

Invest in public and provider awareness. This includes:

- Campaigns about symptoms (e.g., weight loss, jaundice, pain)
- November as Pancreatic Cancer Awareness Month
- Primary care provider education for earlier referral

Success should be tracked via **stage-at-diagnosis data**, **awareness surveys**, and improved **time-to-diagnosis** metrics.

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These recommendations are interlocking and mutually reinforcing. At their core is the call for **significantly greater federal investment and leadership**.

The Canadian government has a range of policy tools – from research grants to convening power – that can **jump-start meaningful progress**. The Standing Committee on Health must help move pancreatic cancer from the **shadows to the spotlight**. Other countries have done it. Canada must too.

#### **Conclusion**

Pancreatic cancer has been described as a "silent killer," but the time for silence is over. Canadians are increasingly voicing that the status quo - where pancreatic cancer remains a virtual research orphan with dismal outcomes - must change. As

one Canadian advocacy group implored, "Pancreatic cancer patients deserve more funding toward early detection and treatments today for a lower mortality rate tomorrow." This report has detailed why that plea must be heeded. We have a moral imperative to align our nation's resources with the magnitude of this disease's threat.

For too long, pancreatic cancer has lurked in the shadows of our cancer research enterprise, receiving only token funding while claiming the lives of thousands of Canadians each year. We now understand the costs of inaction: without intervention, cases will continue to rise, and survival will remain stuck in the single digits. But by acting boldly - investing in research, galvanizing innovation, and improving care - we can change the trajectory. Increased funding is not merely an expenditure; it is an investment in hope. It buys the chance to develop an early detection test that catches tumors while they are operable. It enables the next breakthrough drug that could add precious months or years to patients' lives. It builds infrastructure so that no matter where a patient lives, they can access world-class care and clinical trials.

The evidence from abroad is encouraging: countries that have made pancreatic cancer a priority are beginning to see glimmers of progress. Canada has world-class scientists and clinicians ready to contribute - many are already collaborating in promising initiatives, but they need support. With political will and appropriate funding, Canada can become a leader in the fight against pancreatic cancer, rather than a cautionary tale of neglect.

In practical terms, we recommend establishing a national strategy and dramatically increasing research investment now. These steps will lay the foundation for meeting key success metrics (earlier diagnoses, better treatments, higher survival). As those metrics improve, so will the ultimate outcome we care about: more Canadians surviving and thriving after a pancreatic cancer diagnosis. The human impact

- mothers, fathers, siblings, and friends getting more time and more hope - is incalculable, and it starts with decisions made in Parliament.

We urge the Standing Committee on Health and the Parliament of Canada to adopt the recommendations in this report. By doing so, you will be saving lives and signaling to every Canadian facing pancreatic cancer that they have not been forgotten. Now is the time for leadership, investment, and action. Canada can and must rise to this challenge. The fight against pancreatic cancer deserves nothing less.