ICBP
International Cancer Benchmarking Partnership

September 2026

# Phase 2 Impact Report

## Evidence to impact

Partnership of clinicians, researchers, policy makers and data experts.

Explore differences in cancer survival and outcomes and factors that may be contributing.

Provide evidence for policy and practice change – to improve patient outcomes.

**Better data.**
**Better decisions.**
**Better outcomes.**

**Insights from stakeholder interviews and document reviews**

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# Foreword

It gives me great pleasure to introduce this report, which captures the substantial work undertaken by the International Cancer Benchmarking Partnership (ICBP) during Phase 2. Decisions regarding cancer policy and strategic direction are often not informed by evidence. ICBP helps address this challenge, and in Phase 2, the wealth of data captured has produced evidence-based insights to support significant policy decisions.

Phase 1 of the ICBP broke ground, providing not only a robust benchmark but also crucially, exploring the reasons behind the observed international variation. The impact report from Phase 1 demonstrates several ways in which evidence has driven action and continues to do so. Many lessons were learnt as to how to better drive evidence into action, which we have now taken forward into Phase 2.

In Phase 2, in addition to expanding the number of jurisdictions participating in the programme and the number of cancer sites being evaluated, the work generated key evidence that has become a catalyst for change. The data gathered and insights garnered have informed a proactive mindset, where data provides the crucial evidence to make critical decisions that can influence cancer policy and enhance cancer outcomes.

The partnership aspect of ICBP is a huge asset. We're not competing against each other, but against our common enemy: cancer. Working together, particularly internationally, has not only yielded crucial intelligence and joint learning but also empowered jurisdictions to use the accumulated data as evidence to underpin a case for change with their own government or Department of Health. ICBP data and advocacy has helped keep cancer at the top of the health agenda and been a key influencer of cancer policy and strategy. The partnership has also strengthened cancer data quality and comparability, highlighted the negative impact of emergency diagnosis and demonstrated the need for investment in diagnostics.

What lies ahead for ICBP? As Henry Ford said: "Coming together is a beginning. Keeping together is progress. Working together is success." The excellent 'working together' of all partners in Phase 2 has achieved many successes and I anticipate that Phase 3 will build on this. Data trumps opinion every time.

**Mark Lawler**
Professor of Digital Health & Chair in Translational Cancer Genomics at Queen's University Belfast
Former ICBP Chair
(2020-2026)

**"ICBP data and advocacy have helped keep cancer at the top of the health agenda and been a key influencer of cancer policy and strategy."**

Mark Lawler

# Executive summary: **Key impacts**

ICBP is a unique collaboration of clinicians, policymakers, data experts and researchers from different jurisdictions across the world. It compares cancer survival between the jurisdictions and explores the factors that may contribute to differences in outcomes. The ICBP Phase 2 programme aimed to provide insights to optimise and influence policy and clinical practice, with the ultimate aim of driving improvements in outcomes for cancer patients. The research programme generated novel and actionable evidence across a range of themes, including diagnostics, treatments, pathway timeliness, health systems and cancer strategies.

ICBP partners and decision-makers used this evidence in policy and health systems, leading to the following impacts across policy, practice, data systems and research priorities:

**Keeping cancer at the top of the agenda:** Phase 2 publications generated substantial public and political attention, supported by broad media coverage. This raised the profile of cancer, enabled decision-makers to use ICBP data, and acted as a catalyst for change by influencing cancer policies and strategies and driving improvements in cancer control and patient outcomes.

**Influencing national cancer policy and strategy development:** ICBP evidence was embedded in cancer strategies across multiple jurisdictions, shaping priorities across the cancer pathway and informing system performance monitoring. Benchmarking also enabled countries to identify, adapt and apply lessons from peers to inform local service redesign and improvement.

**Driving international focus on emergency cancer diagnosis:** Phase 2 included the first international study on emergency presentation of cancer. The data collected showed variation between jurisdictions in the proportion of cancer patients diagnosed in emergency departments. Since patients diagnosed through this route tend to have worse outcomes, this research drew attention to what can be done to reduce avoidable emergency presentations. Drawing on lessons from the UK, emergency presentation metrics were added to cancer registries and included in national and subnational analyses across many jurisdictions.

**Strengthening data quality and international comparability:** As a result of Phase 2, several jurisdictions have improved cancer data quality and comparability, strengthened registry practices and shifted data use from descriptive reporting to system-level analysis and policy application. This has been achieved by increasing confidence in international benchmarking and revealing true variation in outcomes.

**Informing investments in cancer diagnostics:** ICBP evidence catalysed additional funding. For example, findings on variation in access to PET-CT scans informed investments in PET-CT expansion and the development of wider diagnostic services, leading to £25 million in imaging diagnostics in Wales and NZ$50 million in New Zealand.

**Countries benefited in different ways, depending on local priorities and their cancer survival in comparison to other countries.**

To join the ICBP, countries must have universal healthcare, comparable health spending and robust whole-population cancer registry data. Other factors may differ, which is where ICBP evidence adds value over cancer statistics alone. ICBP stakeholders consistently communicate the value of the programme, not only in comparing outcomes with similar health systems, but in providing the trusted evidence for policy development and the ability to share and learn with other jurisdictions.

**Stakeholders' perspectives on the biggest impacts from Phase 2 include:**

## Australia

- Informed the Australian Cancer Plan 2023–2033 and state cancer strategies in New South Wales and Western Australia.
- Supported improvements in cancer data collection and staging practices.
- Helped stakeholders in Victoria understand Australia's international performance and identify opportunities for cancer service improvement.

## Canada

- Contributed to the evidence base for the Canadian Strategy for Cancer Control 2019–2029, informed discussions on earlier diagnosis, including lung cancer screening, and helped identify priorities for further Canadian research and analysis.
- Highlighted differences in cancer outcomes across jurisdictions and reinforced the importance of reducing inequities in cancer care and outcomes.
- Emphasised the value of comparative data and international benchmarking in ongoing efforts to modernise Canada's cancer data ecosystem.

## Norway

- Provided an international perspective on cancer outcomes and system performance.
- Reinforced the value of sustained investment and long-term cancer planning.
- Supported knowledge sharing on pathways, diagnostics, and outcomes improvement particularly with Denmark.

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## Denmark

- Reinforced Denmark's long-standing approach to successive national cancer plans.
- Informed the development of Cancer Strategy V.
- Enabled international learning on cancer pathways, diagnostics, and service reform across partner jurisdictions.

## Ireland

- Provided confidence that international survival differences reflected real system variation rather than data quality issues.
- Informed discussions on future cancer strategy development.
- Supported enhanced performance monitoring and helped identify priorities for research and service improvement.

## New Zealand

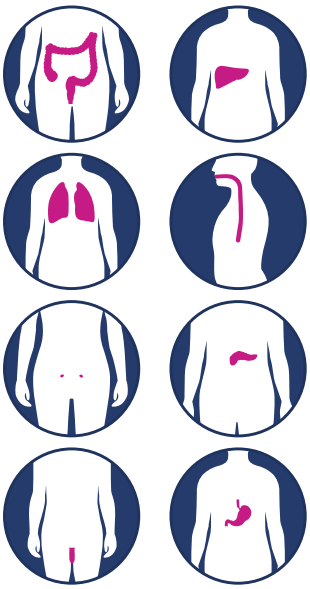
- Placed cancer outcomes in an international context, supporting advocacy for system reform.
- Contributed to the establishment of Te Aho o Te Kahu, the national Cancer Control Agency.
- Informed successive cancer plans and strengthened focus on earlier diagnosis, diagnostic pathways, and reducing inequities for Māori and Pacific populations.

## UK

- **England:** Strengthened the case for a National Cancer Plan and influenced prioritisation of cancer activity within the health system.
- **Northern Ireland:** Supported diagnostic pathways and Rapid Diagnostic Centres.
- **Scotland:** Informed the Cancer Strategy 2023-2033.
- **Wales:** Informed the Cancer Improvement Plan, supported PET-CT and diagnostic investment, and promoted learning from best practice.

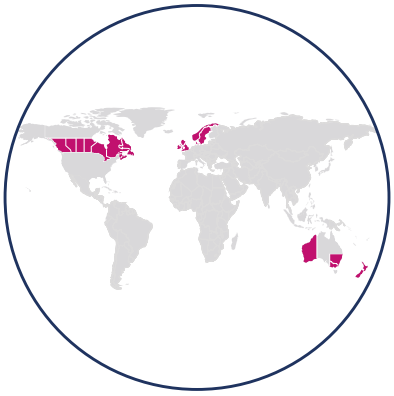
# Phase 2 in numbers

## 8 cancer sites studied



Colon, liver, lung, oesophagus, ovary, pancreas, rectal, stomach

## 21 jurisdictions participated



New Zealand, Western Australia, Victoria, New South Wales, England, Wales, Scotland, Northern Ireland, Norway, Denmark, Ireland, Ontario, Alberta, New Brunswick, Manitoba, Newfoundland and Labrador, Nova Scotia, Prince Edward Island, Saskatchewan, British Columbia, Quebec

## 29 research papers published in academic journals

**7** Published in Lancet Journals

**5** Published in specialised journals

**4** Published in International Journal of Cancer

**13** Published in other high impact journals

## ICBP publications cited over 2500 times

## ICBP referenced in 7 national cancer plans

## Over 400 media mentions of the ICBP

## Over 100 unique contributors to Phase 2 research papers

## ICBP presence at more than 20 international conferences

## Over 120 individuals involved in the partnership

# Introduction

## Background

The ICBP's unique policy-research partnership of clinicians, policymakers, data experts and researchers came together in 2009. The partnership has completed two phases of research programmes, with a transition phase bridging into the launch of the current Phase 3 programme (see ICBP programme timeline below). Each phase delivers a core benchmark study to understand variation in key cancer control metrics across the partner countries, including survival, incidence, mortality and stage at diagnosis. For an overview of ***Phase 1, read Celebrating 10 years of the International Cancer Benchmarking Partnership. An Impact Report: Stakeholder perspectives 2009-2019***.

Crucially, the partnership also unpicks why the differences exist through various exploratory research modules. This exploratory work answers the 'so what?' question, which is often posed when data is published. The findings from these modules provide unique insight into the drivers behind international variation, exploring health system structures, behaviour across key groups and clinical patterns.

This report examines the impact of Phase 2 activity and publications to date, which has been captured through stakeholder perspectives, citation analysis and document reviews. Throughout the development of this report, partners also shared ongoing impacts from Phase 1, which is a testament to how ICBP's impact lasts beyond the phases. Similarly, research and learning from Phase 2 will continue to influence policy and practice far beyond the publication date of this report.

Read the full methodology in Appendix 2.

## ICBP programme timeline

**The ICBP was established in 2009.** Participating countries initially included Australia, Canada, Denmark, Norway, Sweden[1], and the UK. Ireland and New Zealand joined the partnership in Phase 2.

### Phase 1

**2011**
**Benchmark publication**
The ICBP produced its first benchmark study comparing cancer survival, incidence and mortality across 6 countries and 4 cancer sites between 1995 and 2007.

**2009-2015**
**Phase 1 research modules**
- Awareness, attitudes, and beliefs about cancer
- Role of primary care
- Measuring time intervals and pathways from symptoms to diagnosis and treatment
- Impact of differences in cancer registry processes

2009 — 2015

### Phase 2

**2015**
**SURVMARK-2 research begins**
In Phase 2, the ICBP produced a second updated benchmark study including 7 countries and 8 cancer sites, analysing cancer survival, mortality, incidence and stage over the period 1995-2014.

**2016-2021**
**Phase 2 research modules**
- Access to diagnostics and investigations
- Access to treatment
- Cancer patient pathways
- Structure of health systems

2015 — 2021

### Transition Phase

**2021**
**Transition Phase launched**
After completing Phase 2, the ICBP decided to hold a 2-year Transition Phase to reflect on the prior 12 years of research by conducting knowledge mobilisation activities, creating networks and planning for the next phase of the partnership.

**2021-2023**
**COVID-19 impact**
The ICBP commissioned 2 research projects to compare the impact of COVID-19 on cancer services and outcomes internationally.

2021 — 2023

### Phase 3

**2025**
**SURVMARK-3 research begins**
An updated international cancer survival benchmark will continue to examine survival, incidence, mortality and stage for 10 cancer sites in 7 countries from 2002-2022.

**2023-2028**
**Phase 3 research modules**
- Access to treatment
- Cancer patient pathways
- Cancer workforce
- Models of care

2023 — 2028

[1]Sweden only participated in Phase 1 of the partnership

# Phase 2 research programme

The scope in Phase 2 expanded to include 7 countries, 21 jurisdictions and 8 cancer sites (colon, liver, lung, oesophagus, ovary, pancreas, stomach, and rectum). The research programme built on previous work and delivered a benchmark study and 4 exploratory research modules:

### Benchmark study (SURVMARK-2)

SURVMARK-2 analysed cancer registry data from 3.9 million patients diagnosed between 1995 and 2014. The study examined trends in cancer survival, incidence and mortality, including differences by stage, age and cancer type. While survival improved across all participating countries over time, variations persisted.

### Access to diagnostics and investigations

This module examined access to diagnostic services and referral pathways. Research explored the availability of PET-CT scan and how differences in referral pathways and routes to diagnosis could influence the timeliness of cancer detection. The findings revealed substantial differences between countries in access to diagnostics and referral processes, highlighting opportunities to support earlier, timelier and more equitable cancer diagnosis.

### Access to treatment

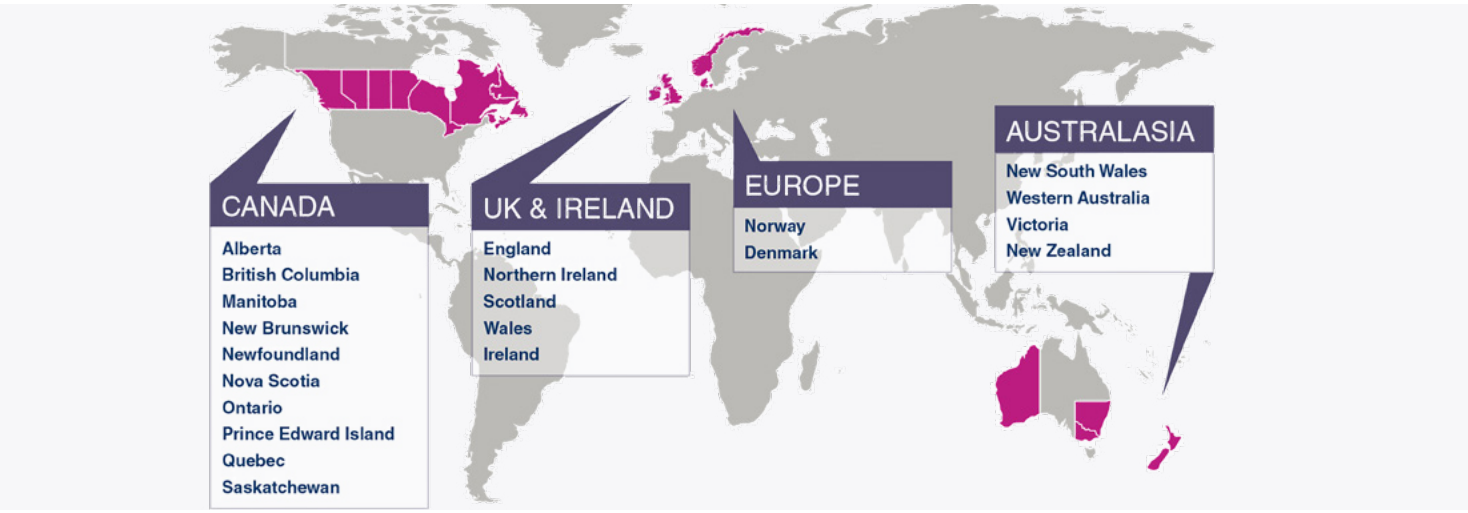
This module explored international differences in cancer treatment, including clinical guidelines, treatment patterns and service delivery. Studies focused particularly on ovarian and lung cancer, identifying significant variation in treatment approaches. The research helped build consensus on key actions to improve outcomes, including implementing lung screening, optimising access to treatment services and introducing national policies.

### Cancer patient pathways

This module explored how patients move through cancer services from diagnosis to treatment. Studies examined emergency presentations, treatment pathways and the use of chemotherapy and radiotherapy. The findings highlighted considerable international variation in access to timely diagnosis and treatment, identifying opportunities to improve patient outcomes.

### Structure of health systems

This module investigated how health system factors influence cancer outcomes. The research examined areas such as service capacity, leadership, governance and national cancer strategies. The findings suggested that sustained policy commitment, strong leadership and adequate workforce and infrastructure capacity are important drivers of improved cancer outcomes.



## Phase 2 timeline

**2015**

**2015 Launch of ICBP phase 2**

Phase 2 begins, bringing together partners across 7 countries to investigate international differences in cancer survival, diagnosis, treatment, patient pathways and health systems.

**2018**

**2018 Development of the SURVMARK-2 benchmark**

Researchers compile and harmonise population-based cancer registry data from 3.9 million cancer cases across 21 jurisdictions to create the updated international survival benchmark.

**2018 Access to diagnostics research launched**

Comparative studies examine PET-CT scan availability and suspected cancer referral pathways, highlighting differences in access to key diagnostic services.

**2018 Health systems research programme began**

Researchers investigate cancer system capacity, leadership, governance and policy as potential drivers of international differences in cancer survival.

**2019**

**2019 Publication of the updated international benchmark**

The flagship Lancet Oncology study reports international trends in cancer survival, incidence and mortality between 1995 and 2014, providing the core evidence base for Phase 2.

**2019 Site-specific survival and stage analyses**

Studies report differences in stage distribution and survival by stage across Phase 2 cancer sites, deepening understanding of international variation.

**2020**

**2020 Ovarian cancer treatment comparisons published**

Research identifies international differences in treatment patterns for ovarian cancer and explores how these may contribute to differences in outcomes between countries.

**2020**

**2020 Access to diagnostics module outputs**

Studies on PET-CT scan provision and diagnostic pathways provide evidence on how access to investigations and referral systems may influence cancer outcomes.

**2022**

**2022 Health systems and cancer policy research published**

A series of papers examine the role of cancer leadership, service capacity and national cancer policies in influencing cancer survival across participating countries.

**2022 International consensus on improving lung cancer survival**

An international consensus, which emphasises a five-pillar approach to improving lung cancer survival is published.

**2023**

**2023 Launch of the SURVMARK-2 online data platform**

The interactive SURVMARK-2 platform is made available, enabling researchers, policymakers and stakeholders to explore international survival, incidence, mortality and stage data.

**2024**

**2024 Publication of pathway and treatment studies**

Major analyses of emergency presentations, radiotherapy use, chemotherapy use and time-to-treatment are published, completing the programme's examination of variation across cancer patient pathways.

## From evidence to impact

The ICBP is intentional about translating research publications into real-world impact, making evidence accessible to a broad range of audiences through different formats and channels. The partnership also shared learnings through conferences, workshops, stakeholder meetings and showcase events. The following sections provide examples of how ICBP evidence contributed to discussions, decision-making and practice across participating jurisdictions.

# Change in action: **Impact highlights**

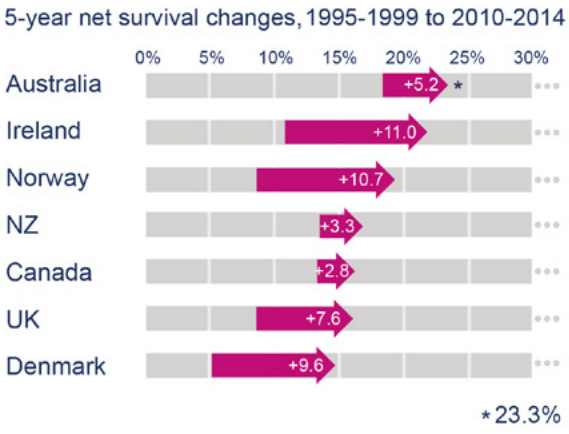
Phase 2 generated a range of impacts across jurisdictions. ICBP partners and decision-makers used the evidence to strengthen policy conversations, identify service gaps, support investment cases and enable partners to learn from one another.

## Keeping cancer at the top of the agenda

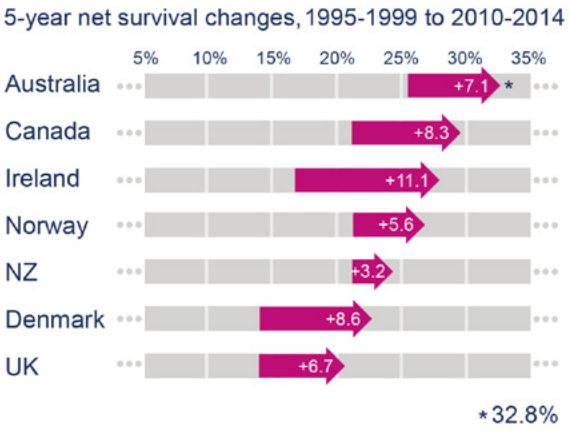
### How do jurisdictions compare?

5-year survival changes 1995-1999 to 2010-2014

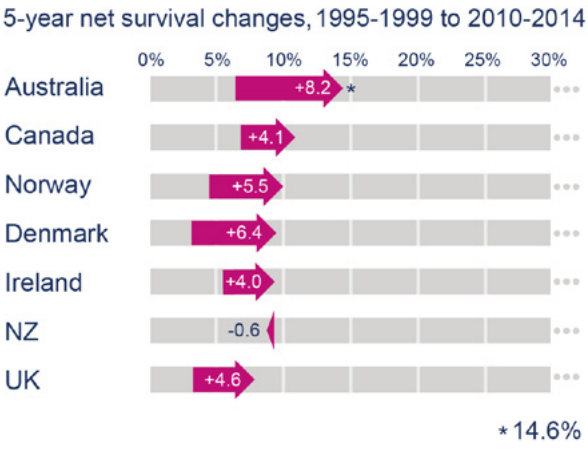
#### Oesophageal cancer



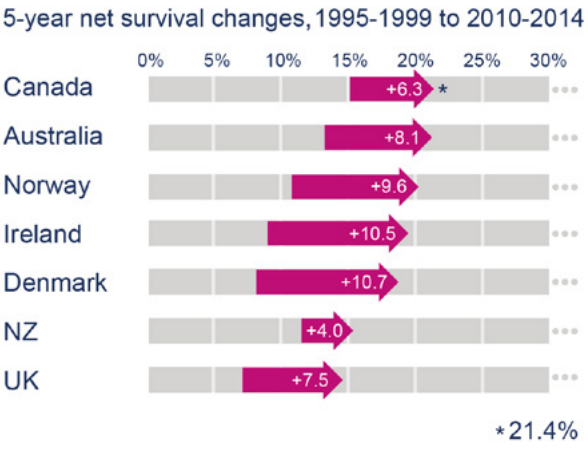

#### Stomach cancer




#### Pancreatic cancer




#### Lung cancer

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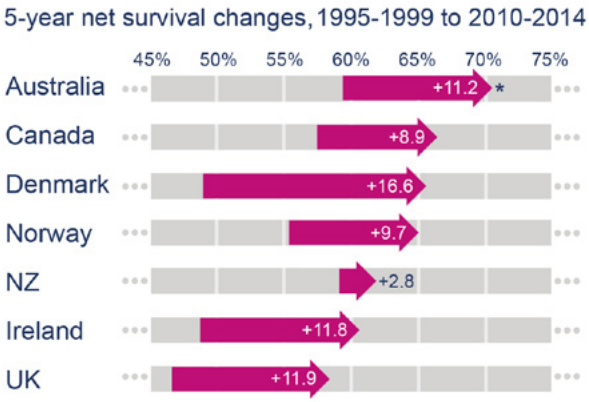
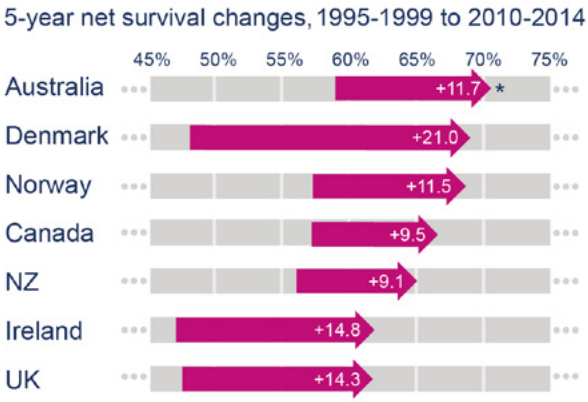
Survival rankings from the Phase 2 Benchmark (1), were seen as a powerful tool to inspire action. **ICBP stakeholders consistently highlighted the value of understanding how their jurisdiction's cancer survival outcomes compared with international peers**. These comparisons were described as an effective anchor for interpretation, helping to contextualise national performance beyond domestic trends alone.

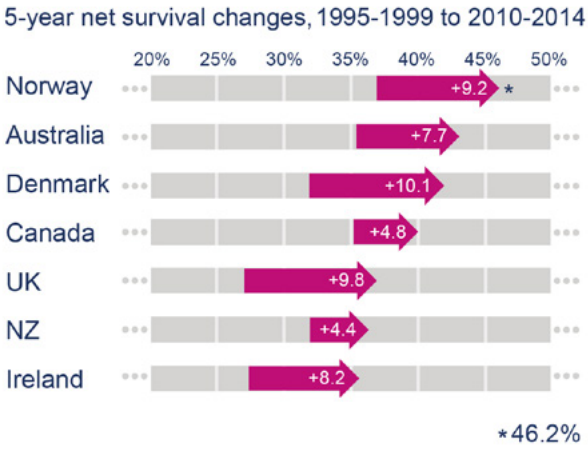
### Colon cancer




### Rectal cancer




### Ovarian cancer




**Notes**

| | |
|---|---|
| Australia: | New South Wales, Victoria, Western Australia |
| Canada: | Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, Saskatchewan |
| UK: | England, Nothern Ireland, Scotland, Wales |

Ireland (1995-2013)
New South Wales (1995-2012)
Prince Edward Island (small sample size)

* = Highest 2010-2014 survival

This visibility helped keep cancer high on political and policy agendas by providing decision-makers with a clear understanding of progress and remaining challenges. It enabled leaders to identify whether outcomes were broadly aligned with or lagging behind comparable countries, often prompting further investigation into underlying system drivers and opportunities for improvement.

> **"Phase 2 evidence gives a very good benchmark on how we're doing in Norway […] If you want to be one of the best countries, you need this international comparison."**
>
> Ole Alexander Opdalshei, Assistant Secretary General, Kreftforeningen, Norwegian Cancer Society

Stakeholders described international comparison as a powerful advocacy tool. **Placing national performance within a global context can strengthen the case for action and maintain political attention on cancer.** This was particularly evident in the UK.

> **"International comparisons are an incredibly powerful tool for influencing policymakers. Being able to articulate with a comparator how far the UK often finds itself lagging behind is a really powerful tool for building a burning platform for change."**
>
> Matt Sample, Senior Manager, Health Policy and Systems, Cancer Research UK

In some cases, the **increased visibility generated by international comparisons translated into broader system change**. Stakeholders in New Zealand reported that ICBP evidence helped raise the profile of cancer within national discussions and strengthen calls for reform. This advocacy was cited as an important factor supporting the establishment of Te Aho o Te Kahu, New Zealand's national Cancer Control Agency.

> **"We used ICBP to demonstrate an international gap between New Zealand's outcomes and other countries, and that got a lot of local attention. When we were able to cast New Zealand in a global context, that really did help with the advocacy piece – and that led to the establishment of the New Zealand national Cancer Control Agency."**
>
> Christopher Jackson, Consultant Medical Oncologist, Southern District Health Board & Mercy Cancer Care

**Phase 2 publications generated significant public and political attention, with wide media coverage and active use.** ICBP evidence was also showcased at several high-level events, with significant engagement through posters, presentations, conference sessions and key stakeholder meetings. Some of the conferences where ICBP evidence was presented include the World Cancer Congress 2024, the Cancer in Primary Care Research International Network 2024 and 2025, and the International Agency for Research on Cancer 2026.

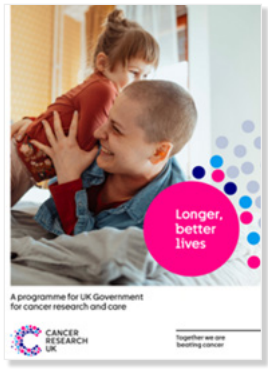
Dissemination at this level facilitated the transfer of key evidence to decision-makers, equipping them with the necessary evidence to continue driving change and improving cancer outcomes. ICBP evidence was also cited in various policy engagement and advocacy publications, signalling its credibility and influence within high-level processes. A selection of these publications can be seen below:














Australian Government Department of Health, Disability and Ageing: Australian National Lung Cancer Screening Program Guidelines. (2) Institute of Economic Affairs: Wizards of Oz? What the UK can learn from Australia's healthcare system. (3) Canada's Drug Agency: Canadian Medical Imaging Inventory Service Report PET-CT Exam Volumes: Comparison of Canada with Other countries. (4) Organisation for Economic Co-operation and Development (OECD): Tackling the Impact of Cancer on Health, the Economy and Society. (5) OECD: Delivering High Value Cancer Care: European Cancer Inequalities Registry Analytical Report. (6) Scientific Advice Mechanism: Improving Cancer Screening in the European Union. (7) Institute for Public Policy Research: Our greatest asset: the final report of the Institute for Public Policy Research commission on health and prosperity. (8) NHS Fit for the Future: 10 Year Health Plan for England. (9) Cancer Research UK 2023 manifesto. Longer, better lives: A programme for the UK government for cancer research and care. (10) Canadian Partnership Against Cancer: Road to recovery: Cancer in the COVID-19 era. (11) Wales Cancer Alliance: Fixing the foundations: Building a better future for cancer care in Wales. (12) Cancer Research UK: Cancer Won't Wait - Moving investment beyond the immediate needs of COVID – Cancer Research UK representation to the Comprehensive Spending 2021 Review. (13)

# Influencing national cancer policy and strategy development

In Canada, stakeholders noted that Phase 2 contributed to the evidence base for developing the Canadian Strategy for Cancer Control 2019-2029. (14) It also informed discussions on earlier diagnosis, including lung cancer screening, and helped identify priorities for further research and analysis in Canada.

> **"Understanding how Canada compares internationally in cancer survival is essential to improving outcomes and advancing the Canadian Strategy for Cancer Control. Data from the ICBP enables cancer systems to learn from one another and translate global evidence into local impact. In Canada, it has informed new screening programmes and guided modernisation of the data ecosystem. ICBP data strengthens accountability, sharpens policy decisions and highlights where action is needed to ensure equitable, high-quality cancer care for all."**
>
> Dr Craig Earle, CEO, Canadian Partnership Against Cancer

Beyond Canada, ICBP evidence informed the development and implementation of cancer plans and strategies across multiple jurisdictions. Stakeholders reported that the programme helped shape priorities relating to equity, early diagnosis, system performance, treatment timeliness, emergency presentations and long-term cancer control.

| Jurisdiction | Strategy or plan | Contribution of ICBP evidence |
|---|---|---|
| **Canada** | Canadian Strategy for Cancer Control 2019-2029 (14) | Highlighted differences in cancer outcomes across jurisdictions and reinforced the importance of reducing inequities in cancer care and outcomes. |
| **Australia** | Australian Cancer Plan 2023-2033 (15) | Provided an international benchmarking perspective that supported evidence-based planning, performance monitoring and ongoing improvement of cancer outcomes. |
| **New South Wales (NSW)** | NSW Cancer Plan 2022-2027 (16) | Cited as part of the evidence base supporting cancer system planning and service improvement. |

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| Jurisdiction | Strategy or plan | Contribution of ICBP evidence |
|---|---|---|
| **Western Australia** | Western Australia Cancer Strategy 2020-2025 (17) | Contributed to data-driven cancer control and ongoing assessment of cancer system performance. |
| **New Zealand** | New Zealand Cancer Action Plan 2026-2029 (18) | Cited within the national strategy and supported broader efforts to strengthen national cancer leadership and oversight. |
| **Scotland** | Scotland Cancer Strategy 2023-2033 (19) | Informed thinking on treatment timeliness, emergency presentations and the use of international benchmarking to assess performance. |
| **Northern Ireland** | Northern Ireland Cancer Strategy 2022-2032 (20) | Helped define international best practice and reinforced the importance of sustained investment, implementation and strategy renewal. |
| **Wales** | Wales Cancer Improvement Plan 2023-2026 (21) | Helped shape priorities relating to system performance, diagnostic pathways and variation in cancer outcomes across comparable health systems. |
| **England** | National Cancer Plan for England (22) | Helped advocate for the importance of the national cancer plan, published in February 2026 and supported the continuation and expansion of the national cancer audits. |

One of the most influential exploratory research publications from Phase 2 was **Exploring the link between cancer policies and cancer survival: *a comparison of International Cancer Benchmarking Partnership countries. (23)*** It demonstrated a relationship between sustained, well-implemented cancer strategies and improved cancer survival.

Stakeholders noted that the findings in this publication reinforced **the need for successive national cancer strategies to be fully implemented, evaluated and adequately financed.** The study made **the relationship between policy decisions and patient outcomes explicit,** providing cancer leaders and decision-makers with evidence to advocate for continuous strategy renewal and sustained investment.

In Ireland and Northern Ireland, stakeholders highlighted the value of the publication.

> **"The publication was very useful in Ireland to demonstrate that to improve cancer outcomes, countries need to continually update, finance, implement and advance their cancer strategies."**
>
> Deirdre Murray, Director, Professor of Cancer Epidemiology, National Cancer Registry Ireland

Denmark provides a compelling example of the relationship between sustained cancer planning and improved outcomes. Over the past two decades, the country has implemented five successive national cancer plans, each building on the previous one and supported by sustained investment and implementation. **As a result, Denmark had the highest cancer policy consistency score of all participating jurisdictions.**

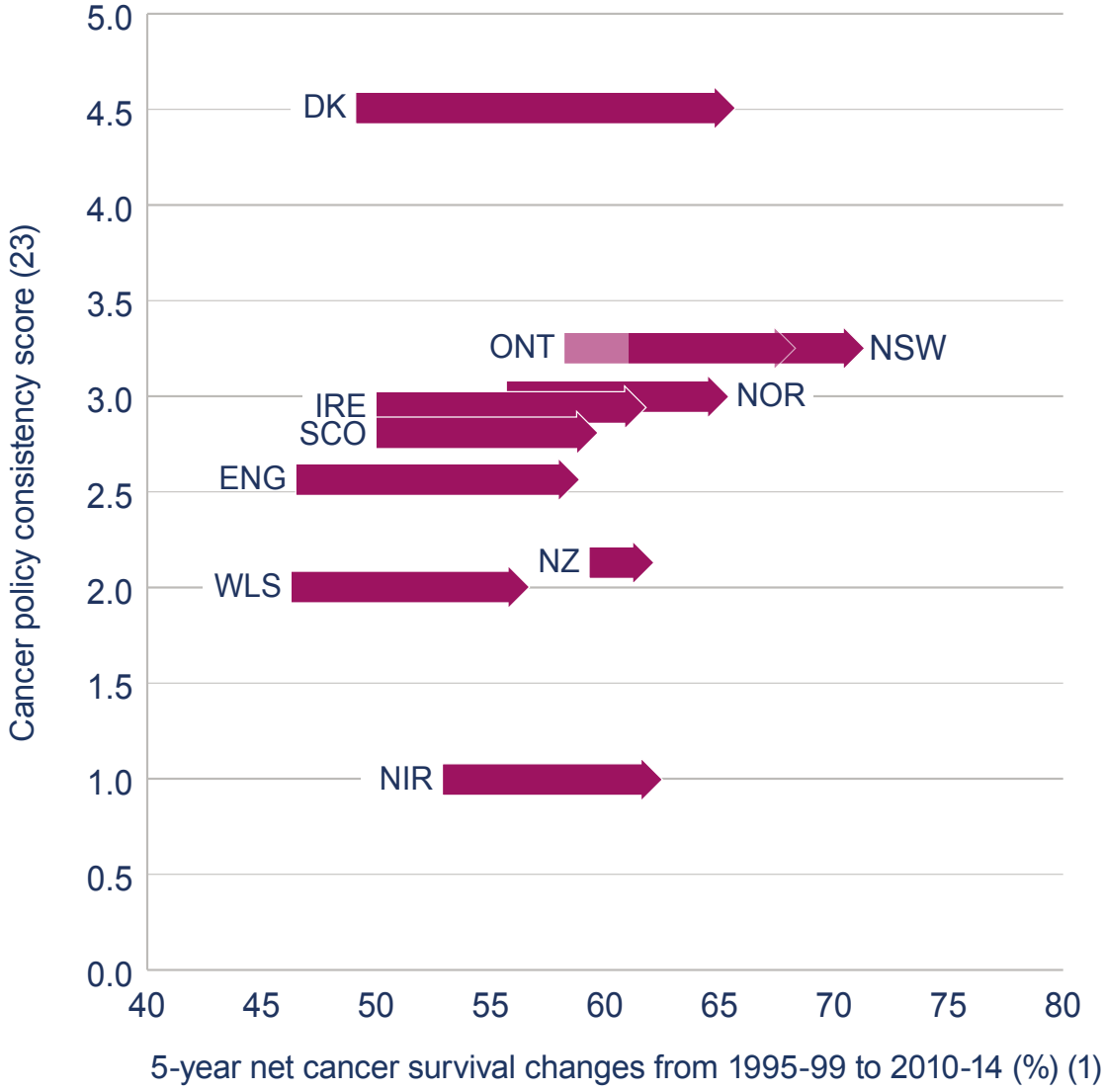
Denmark also achieved some of the largest improvements in cancer survival over the study period, reinforcing confidence that its reforms were contributing to improved outcomes. This experience subsequently became an important source of learning for other ICBP stakeholders (see the Denmark case study on page 26).

> **"The cancer plans brought cancer clinicians together and made national collaboration happen [...] The Ellen Nolte publication and SURVMARK-2 benchmark were the proof that it actually made a difference."**
>
> Susanne Oksbjerg Dalton, Senior Researcher, Danish Cancer Society

## Colon cancer:
Survival changes and cancer policy consistency score

### Factors impacting policy consistency score over time

1. Dedicated institute or oversight group
2. Cancer plan accompanied by action or implementation plan/s
3. Cancer plan including explicit budget for implementation
4. Successive cancer plans, which build upon each other
5. Regular evaluation and progress reports on cancer plan



**Case study:**

### Providing evidence for the National Cancer Plan in England


In 2021, ICBP submitted a response to the UK Parliament's Cancer Services inquiry, which explored why cancer outcomes in England continue to lag behind those in comparable countries internationally. (24) In January 2024, the former ICBP chair, Professor Mark Lawler, presented oral evidence to the Health and Social Care Select Committee's Future of Cancer inquiry, which was ordered by the UK House of Commons to comprehensively evaluate the UK's cancer care services.

The committee's interim findings, based partially on Professor Lawler's testimony, explicitly called the abandonment of a specific 10-year cancer plan a "mistake". (25) The evidence provided is widely cited by key decision-makers in the UK as the crucial tipping point that influenced the subsequent commitment to restore a dedicated National Cancer Plan for England. (25) In February 2026, England launched its 10-year National Cancer Plan. (22)

# Driving international focus on emergency cancer diagnosis

The publication ***Risk factors and prognostic implications of diagnosis of cancer within 30 days after an emergency hospital admission (emergency presentation)*** provided the **first large-scale international comparison of emergency cancer diagnosis.** (26) It also marked the first time that linked cancer registry and hospital data systems were used for this purpose in all participating jurisdictions except England. **The findings demonstrated emergency diagnosis as an important marker of diagnostic delay, system performance and inequality.** This made a significant contribution to an increased focus on earlier diagnosis and timely access to care internationally.

Using the paper as a catalyst, several jurisdictions explored emergency cancer diagnoses, often using the same analytical approach as the paper's authors. ICBP stakeholders shared how the findings influenced cancer intelligence, performance monitoring and research, prompting policymakers and researchers to examine routes to diagnosis in greater detail and identify opportunities for improvement. Examples can be seen across ICBP jurisdictions in post-2021 publications, many of which emerged in 2024.*[1] Collectively, these publications suggest a rapidly expanding field of research aligned with emergency cancer diagnosis, one of Phase 2's themes.

In several jurisdictions, emergency presentation became a more prominent measure of cancer system performance. Inspired by the publication, Ireland incorporated it into routine registry reporting and performance monitoring, while Northern Ireland strengthened its use in routes-to-diagnosis analyses. Public Health Scotland published an ***analysis of emergency cancer presentations,*** (27) which explicitly drew on the ICBP emergency presentation research and demonstrated a clear line of influence from Phase 2 outputs into national analysis work.

*[1] Northern Ireland (40), (41,42), Denmark, (43–46) and Scotland. (47) Further related research has also been undertaken in New Zealand and New South Wales (48–51) and in the broader international literature, including work in the United States (52–54) and Canada. (55)

Case study:

## Using ICBP evidence to address inequities in emergency cancer diagnosis in New Zealand

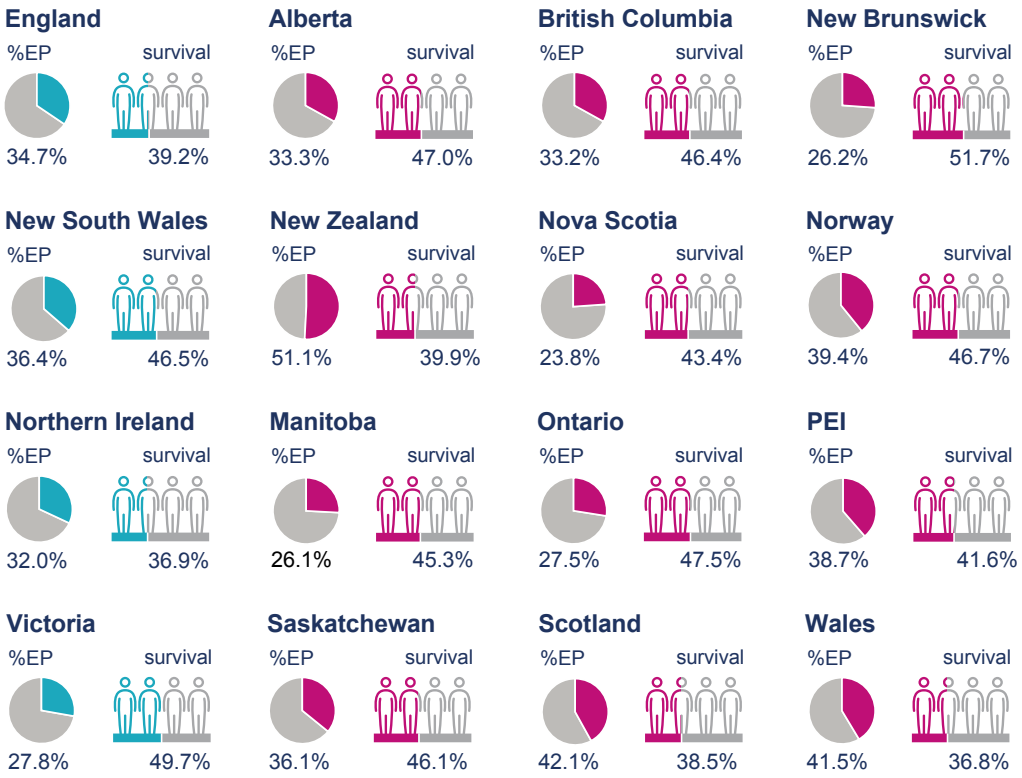

New Zealand recorded some of the highest rates of emergency presentation in the ICBP Phase 2 findings, prompting national reflection on diagnostic pathways and opportunities to improve earlier cancer detection. The results served as a catalyst for leaders to critically examine outcome variation and consider how system change could reduce avoidable emergency diagnoses.

In response, Te Aho o Te Kahu developed a national routes-to-diagnosis indicator report, (28) applying the same methodological approach used in the ICBP emergency presentation analysis. This marked an important example of direct methodological translation from international benchmarking into national analytical practice, strengthening domestic capability in cancer intelligence.

**Lung cancer:** Emergency presentation proportion vs 1-year net survival


narrow definition

broad definition




Emergency presentation (broad) - emergency hospital admission in the 30 days before the date of cancer diagnosis (used in Canadian provinces, Norway, New Zealand, Wales, Scotland)

Emergency presentation (narrow) - additionally requiring that emergency hospitalisations (in the 30-days pre-diagnosis of cancer) occurred without an intervening elective (used in Denmark, England, Northern Ireland, New South Wales, Victoria)

Continued on the next page

The analysis identified significant inequities for Māori and Pacific populations, and it informed national efforts to improve early detection, screening participation and diagnostic pathways.

**"The publication on emergency presentations probably had the biggest impact, even more than the SURVMARK-2 publication, in terms of the whole system absorption and thinking about what it means. We developed our own measures internally and showed significant inequities with Māori and Pacific populations."**

Rami Rahal, ICBP Chair and former Chief Executive, Te Aho o Te Kahu

# Strengthening data quality and international comparability

Improvements in data quality and comparability were one of the most consistently reported impacts of the Phase 2 programme. Stakeholders described how requirements to use comparable, population-based registry data in ICBP research elevated the standard and visibility of cancer data. As a result, **involvement with the ICBP resulted in strengthened registry practices and improved confidence in international comparisons, and it exposed critical gaps in existing data systems**. Several methodological publications directly contributed to this work. (29, 30)

The programme also shifted how data were used. **Stakeholders consistently reported a move away from purely descriptive reporting towards more meaningful analysis of variation, outcomes and system performance.** This was reinforced by the ability to compare like-for-like populations internationally, which increased confidence in interpreting survival differences and reduced uncertainty about whether variations reflected real differences or data artefacts.

**Canada:** informed the Pan-Canadian Cancer Data Strategy (31) and strengthened the policy case for improving comparative cancer intelligence.

**Western Australia:** supported advances in population-based staging through the Western Australia Cancer Staging Project. (32)

**Scotland:** reinforced a shift towards using routine data to understand outcomes rather than activity alone.

**Ireland:** helped clarify that the observed survival differences were genuine and not simply a function of variation in data quality, while also prompting deeper interrogation of the drivers of improvement.

Across multiple jurisdictions, ICBP evidence directly informed national data strategies and system developments. In Canada, ICBP highlighted the value of comparative data and international benchmarking in ongoing efforts to modernise the country's cancer data ecosystem. Stakeholders from other jurisdictions described a common outcome: **ICBP strengthened the credibility, comparability and policy relevance of cancer data,** while also driving greater harmonisation among registries within both national and international cancer intelligence systems.

> **"The Phase 2 Benchmark publication was fantastic for the National Cancer Control Programme in Ireland because it demonstrated key areas where Ireland was making progress and areas for improvement that couldn't be highlighted using national data only."**
>
> Deirdre Murray, Director, Professor of Cancer Epidemiology, National Cancer Registry Ireland

# Informing investments in cancer diagnostics

Impacts across diagnostics were informed by two key publications: ***A comparative analysis: international variation in PET-CT service provision in oncology*** and ***Variation in suspected cancer referral pathways across the International Cancer Benchmarking Partnership***. (33, 34) These highlighted substantial variation in diagnostic capacity and referral processes between countries and informed actions to improve access to diagnostics in ICBP jurisdictions. For example, stakeholders in New Zealand noted that the ICBP findings shared with health ministers in 2024 and 2025 contributed to an investment of NZ$50 million to improve access to PET-CT scans and radiology more broadly, including the launch of a National PET-CT Indication List and Criteria, which aims to increase access to PET-CT scans. (35–37)

**Case study:**

## Investment in PET-CTs in Wales


In Wales, ICBP evidence contributed to a wider focus on improving diagnostic access and shifting cancer care towards earlier diagnosis and intervention. The Phase 2 comparative evidence on diagnostic pathways and international variation helped highlight how differences in access to diagnostic tools and referral routes can affect cancer outcomes. This evidence supported ongoing discussions about the need to strengthen diagnostic capacity and ensure patients with suspected cancer can move through the pathway more quickly and appropriately.

One important example is the use of ICBP evidence on the ***international variation in PET-CT service provision in oncology*** (33) to support the business case for PET-CT scan expansion in Wales. The evidence helped demonstrate that access to advanced diagnostic imaging is a key component of timely staging, treatment planning and improved outcomes. By situating the diagnostic capacity within an international benchmarking context, ICBP provided an external evidence base to support investment decisions and strengthen the case for service development.

This experience illustrates how ICBP evidence can support practical system improvement. Its value was not only in identifying differences between countries, but in helping translate those differences into local questions about capacity, access and investment. This contributed to the development of the ***business case for PET-CT scan expansion*** (38) in Wales and the development of wider diagnostic services, supporting efforts to achieve timelier and earlier diagnosis and ultimately improve cancer outcomes. Following engagement with decision-makers, in 2021 the Welsh Government committed to invest nearly £25 million in four new digital scanners to reduce waiting times and meet service demand. (39)

# Driving international learning and knowledge exchange

**Accelerating international knowledge exchange is one of the strongest cross-cutting impacts of the Phase 2 programme.** Across partner countries, stakeholders consistently value benchmarking against comparable health systems, enabling learning from better-performing jurisdictions. **The ICBP provided a trusted forum for sharing evidence, experiences and approaches to cancer control, complementing existing national and regional collaborations.**

Stakeholders from Canada, Ireland, Norway and Scotland emphasised that comparisons with countries that have similar health systems, population characteristics and high-quality registry data were particularly valuable. In Scotland, ICBP was described as one of the strongest sources of international benchmarking evidence available to cancer leaders, helping to sustain a culture of using international comparisons to understand variation in outcomes and system performance.

> **"The cancer plans are robust, but when it comes to budget, they are often expected to be implemented within normal healthcare budgets. Denmark is a good example – they put dedicated funding behind the plans, and you can see that cancer survival improves."**
>
> Ole Alexander Opdalshei, Assistant Secretary General, Kreftforeningen, Norwegian Cancer Society

**ICBP also facilitated practical learning between jurisdictions.** Stakeholders from Cancer Research UK, Australia and New Zealand collaborated to run sessions at the 2024 Cancer and Primary Care Research International conference. Also, the relationships that New Zealand formed via the ICBP supported international engagement and informed its 2026 Cancer Strategy. Wales drew on ICBP evidence to identify and adapt effective approaches from other health systems to support local service redesign, while Northern Ireland benefited from access to pooled international datasets and learning from other jurisdictions, including evidence that informed discussions on routes to diagnosis and Rapid Diagnostic Centres.

> **"For New South Wales, the value of ICBP has been less about building reporting capability and more about learning from comparable jurisdictions. It has provided a trusted forum to benchmark ideas, understand shared challenges, and identify opportunities to improve cancer outcomes through international collaboration"**
>
> Professor Tracey O'Brien AM, New South Wales Chief Cancer Officer and CEO, Cancer Institute NSW

**“There was a recommendation in the Northern Ireland Cancer Strategy to implement routes to diagnosis, and some of the push on the need for more Rapid Diagnostic Centres in Northern Ireland was based on evidence of good practices in Denmark following the publication of ICBP evidence and the publicity around that.”**

Damien Bennett, Director, Northern Ireland Cancer Registry

**Case study:**

## How Denmark is sharing lessons learned internationally


Denmark provides a strong example of how ICBP has supported international knowledge sharing. Benchmark data showed significant progress in cancer outcomes for Denmark over the past 20 years, which has largely been attributed to cancer strategies and reforms. ICBP stakeholders want to learn as much as possible from Denmark’s experience to inspire similar change in their own jurisdictions. Through Phase 2 networks, partner countries were able to observe, discuss and adapt elements of Denmark’s approach to their own health systems. For example:

- Denmark shared lessons with England that contributed to the push to develop the 2026 National Cancer Plan for England. Through the ICBP, Cancer Research UK engaged directly with experts to explore Denmark’s strategic approach to improving cancer outcomes. This engagement also facilitated a visit by a health minister to Denmark to learn more about their national cancer strategy and its implementation.
- Denmark’s experience on cancer reforms and the introduction of standardised patient pathways was actively used as an example in discussions in Norway, particularly to demonstrate that sustained investment and well-funded plans can improve survival. The ICBP supported advocacy arguments around the importance of cancer plans, even where funding remained a challenge.
- Wales leveraged the ICBP findings to learn from Denmark’s rapid diagnostic model, which helped inform the development of Rapid Diagnostic Centres and a vague symptom pathway.
- Northern Ireland also drew on learning from Denmark when considering the implementation of routes-to-diagnosis data.

Denmark’s experience also shows that international collaboration enabled by the ICBP is bidirectional. While the country provided a source of learning and informed improvement efforts elsewhere, Denmark also benefited from benchmarking itself against other countries to assess its own performance.

# Catalysing further research

Across partner countries, the Phase 2 programme helped identify new research priorities by revealing gaps and opportunities for deeper analysis. This has stimulated further research across the cancer research community at a national and international level.

Stakeholders highlighted how Phase 2 findings informed further research on topics including cancers with lower survival, diagnostic delays, treatment pathways, cancer prevention and health system performance. In Ireland, the benchmark findings prompted further exploration of the factors underpinning improvements in cancer outcomes, and in Northern Ireland, the programme enabled additional analyses using comparable international datasets. In Canada, the 2022 funding calls for the Canadian Institutes of Health Research and Canadian Cancer Society breakthrough grants closely aligned with the gaps identified in the Phase 2 findings.

**"Our collaborative Phase-2 work highlighted that emergency diagnosis is an international challenge for cancer control, not confined to individual countries. We found consistent links with cancer type and age, as well as poorer patient outcomes, highlighting the need for action from policymakers and researchers. Since publication, global interest in this area has grown substantially, with the number of population-based studies tripling and evidence now available from eight additional countries. We continue our efforts to raise awareness of this important new metric for cancer control and a promising target for policy initiatives through dissemination in international conferences and the expansion of the work during Phase-3"**

Yoryos Lyratzopoulos, Professor of Cancer Epidemiology, University College London

# Discussion

The Phase 2 programme generated impacts across policy, practice, data systems and research. Beyond the findings of individual studies, its greatest contribution was the creation of a framework for international comparison and collaborative learning. **By bringing together comparable cancer registry data, research expertise and policy stakeholders, the programme enabled jurisdictions to better understand their performance, identify opportunities for improvement and learn from the experiences of others.**

The evidence generated through the programme was used in different ways across jurisdictions depending on local priorities and starting points. In some cases, it informed cancer strategies and policy development, while in others it strengthened cancer intelligence systems, supported investment decisions and generated new research questions. This flexibility reflects one of the programme's key strengths: providing evidence that is both internationally comparable and locally relevant.

The programme also demonstrated the value of sustained international collaboration. Rather than acting solely as a benchmarking exercise, the ICBP functioned as a platform for knowledge exchange, enabling jurisdictions to share experience, validate reforms and adapt successful approaches from elsewhere.

**Synthesising and mobilising knowledge into action continues to be at the core of the ICBP's mission.** The Phase 2 programme highlighted some barriers to this activity. The ICBP is effective at identifying variation in survival and highlighting areas for action. However, the pathway from publishing evidence to implementing interventions is often constrained by delays in policy uptake, time lag between data availability and decision-making, variation in resource availability and the multifactorial nature of cancer outcomes.

Translation is further shaped by political and implementation realities, and by the fact that ICBP evidence is often embedded within wider evidence ecosystems, meaning its influence is not always explicitly cited. In addition, some impacts are indirect or difficult to measure, occurring through professional networks, iterative guideline development and ongoing knowledge exchange.

As a result, **impact is strongest where clear policy levers exist, such as strategy development, diagnostics and data systems, and more limited where causal pathways are complex or interventions are less clearly defined.** The ICBP is actively working to address these challenges where possible through strengthened knowledge mobilisation, stakeholder engagement and closer alignment with policy cycles.

# Close

As we conclude this Phase 2 impact report, the ICBP continues to demonstrate the value of trusted comparative evidence and purposeful collaboration. Across jurisdictions, Phase 2 has shown that when health systems commit to learning from one another, evidence can translate into meaningful and sustained improvements in cancer outcomes. The impacts captured here, from strengthened national cancer strategies to improved diagnostic pathways, enhanced data systems and deeper understanding of emergency cancer diagnosis, reflect the collective effort of partners who believe that better outcomes are both possible and necessary.

Phase 2 also reminded us that equity must remain central to cancer system performance. While survival has improved across all participating countries, overall averages often mask substantial disparities within jurisdictions. Findings from New Zealand, for example, revealed significant inequities in emergency presentations for Māori and Pacific populations prompting national action to strengthen early detection and diagnostic pathways. These examples reinforce that benchmarking is not simply about comparison; it is about accountability and ensuring that improvements reach all populations, not only those who are already well served. As we move into Phase 3, expanding our ability to measure inequalities within countries will be essential.

A recurring theme throughout Phase 2 was the importance of translating research evidence into language that is compelling and accessible for policymakers. The ICBP is a research-to-policy initiative, with the use of evidence to drive improvements in outcomes at its core. Partners consistently emphasised that clear, timely and policy-relevant communication is critical to ensuring that evidence informs decisions. The influence of Phase 2 on national cancer strategies demonstrates what is possible when research is communicated in ways that resonate with decision-makers. Strengthening this translation function will remain a priority as we move forward.

We also recognise the time lags inherent in international benchmarking, which can limit the immediacy of policy impact. Phase 2 relied on data up to 2014, reflecting the realities of registry linkage, harmonisation and international comparability. In Phase 3, we have made significant progress in reducing these delays. For some jurisdictions, we will have benchmark data available for patients diagnosed up to 2024, which is a major step toward more timely insights and more responsive policy conversations. Continued investment in data infrastructure and registry capability will be essential to sustain this progress.

**“Our shared commitment to learning, transparency and improving outcomes for all people affected by cancer remains the foundation of this partnership.”**

Rami Rahal

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At the same time, Phase 2 strengthened the foundations on which future improvements depend. The programme elevated data quality and comparability across registries, increased confidence in interpreting variation and shifted analysis toward system-level performance. The expansion of emergency presentation metrics into routine reporting reflects a growing commitment to understanding diagnostic pathways more deeply. And the broad engagement with Phase 2 publications across media, conferences and policy forums underscores the value of trusted international evidence in keeping cancer high on political and policy agendas.

Looking ahead, Phase 3 offers an opportunity to build on this momentum. We've broadened the cancer sites included and welcomed more partners. And as we modernise data systems, strengthen diagnostic and treatment pathways, deepen our focus on equity and continue to reduce benchmarking time lags, the ICBP's role as a convenor, catalyst and source of trusted comparative evidence will be more important than ever. Our shared commitment to learning, transparency and improving outcomes for all people affected by cancer remains the foundation of this partnership.

I want to thank every partner, registry, researcher, clinician, policymaker and member of the programme team who contributed to Phase 2. Your work has shaped policy, informed investment, strengthened systems and advanced understanding across the cancer pathway. Most importantly, it has helped ensure that evidence continues to drive action.

The ICBP entered its next phase with clarity of purpose and confidence in what collaboration can achieve. Together, we will continue to turn comparative evidence into meaningful, equitable improvements in cancer outcomes across our jurisdictions.

**Rami Rahal**
ICBP Chair and former Chief Executive, Te Aho o Te Kahu

# Appendices

## Appendix 1: Acknowledgements and contributors

### Acknowledgements

This report is produced by members of the ICBP Programme Management Team: Samantha Harrison, ICBP Lead and Head of Strategic Evidence; Kate Green, Senior Manager, International Evidence and Research; MaryJane Nweje, Senior Policy and Communications Officer; and Paul Cranston, Programme Officer. The Cancer Research UK creative team designed the report.

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# Appendix 2: Methods

This report assessed the impact of Phase 2 of the ICBP using a mixed-methods approach.

## Desk review

A structured review of ICBP evidence was undertaken. This included peer-reviewed publications, project reports, policy briefings, presentations, communication materials, website content and other outputs produced throughout the programme.

## Citation analysis

Citation analysis was conducted on Phase 2 publications to assess the research's academic reach and influence. Citation data were collated across the publication portfolio to examine the extent to which ICBP research has been referenced within wider scientific literature.

## Stakeholder interviews

Interviews were conducted with key stakeholders from across ICBP jurisdictions and partner organisations. A semi-structured interview guide was developed to ensure consistency, while allowing flexibility to explore topics relevant to the experiences and areas of expertise of individual participants.

## Thematic analysis

Interview transcripts were analysed using an inductive and deductive thematic approach to identify recurring patterns. Themes were developed iteratively and refined through discussion within the ICBP Programme Management Team. The analysis focused on identifying common experiences across jurisdictions and highlighting notable examples of influence and learning.

## Interpretation of findings

Findings from the desk review, citation analysis and stakeholder interviews were considered together to develop a holistic understanding of Phase 2's impact. This process of triangulation allowed evidence from different sources to be compared and used to strengthen conclusions where findings were consistent.

To access the ICBP Phase 2 publications, email **ICBP@cancer.org.uk**

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