Department of Health
An Roinn Sláinte
Männystrie O Poustie
www.health-ni.gov.uk

Northern Ireland Cancer Research Strategic Framework

Unlocking the potential for cancer research and innovation to deliver health and societal benefits for Northern Ireland

Table of Contents

Foreword

Delivering research excellence, and better outcomes for patients in a changing environment

Cancer is an increasing health burden in today's population, with the likelihood of an individual developing cancer in their lifetime now 1:2. At the same time, cancer survival rates in Northern Ireland have improved, with 71% of patients alive at one year, and 50% alive at five years following a cancer diagnosis. However, this is still lower than other countries with comparable health and social care systems.

It is often difficult to diagnose cancer at an early stage, due to a lack of obvious symptoms, or commonality of symptoms with a wide range of other illnesses. However, too many people are diagnosed through 'emergency presentation' and at an advanced stage, which is associated with poorer outcomes.

I am fully committed to improving cancer patients' outcomes. To do so, we need to improve our cancer research, encourage uptake of clinical trials and support our staff to deliver the best that they can.

While world-beating research is still being performed by Northern Ireland cancer researchers, there is an urgent need to reset the dial. I am therefore grateful that the Northern Ireland cancer research community have come together with the Public Health Agency (PHA) and my department to create this cancer research strategic framework to unlock the significant potential to deliver high quality cancer research and innovation in Northern Ireland.

There are a number of barriers that are hampering our cancer research community's ability to thrive and deliver cost-effective, impactful cancer research that yields both health and societal benefit. This Cancer Research Strategic Framework seeks to remove these barriers.

The priorities and actions presented here have been identified through engagement with academics, charitable and voluntary sectors, Health and Social Care (HSC), industry partners, and patients. They seek to create the optimum environment, not only for scientific and clinical excellence in cancer research (including the development of future research leaders), but to also translate this research to prevent cancer, promote early diagnosis and improve care at all stages following a patient's diagnosis. This Framework will also play a role in contributing to the commitment within the NI Health and Care Reset Plan to establish a world leading health and care research and innovation ecosystem in NI.

I am very grateful for the support to date and encouraged by the strong motivation and ambition to do even better. Going forward we will do just that, which will result in better outcomes for patients in Northern Ireland.

Mike Nesbitt
Minister for Health

A Cancer Research Strategic Framework

Why do we need to develop a Cancer Research Strategic Framework?

It is recognised, through Northern Ireland led Europe-wide research efforts, that patients who are treated in research active hospitals/institutions have better outcomes than those who are not. Thus, research is a necessity - not a luxury - and a critical component of 21st century cancer care.

While the Northern Ireland cancer community continues to deliver world class research and has many strengths, more can be done to support our ability to thrive and deliver impactful research and innovation that yields both health and societal benefit. Removing barriers that deter Northern Ireland cancer researchers will empower cancer research and innovation to flourish, help to improve patient outcomes.

Addressing the underlying causes of these barriers will help to create the optimum environment for scientific and clinical excellence in cancer research and innovation. Achieving this aim will also help to address Action 56 of the Cancer Strategy:

> *Increase the number of people taking part in clinical trials, including children and young people.*

Achieving this optimum environment is why a Cancer Research Strategic Framework has been created. The Framework aims to support a strong culture in Northern Ireland cancer research, and encourage collaborative working within the United Kingdom (UK), with Ireland and internationally. The cancer research ecosystem involves a complex network of research delivery bodies, private industry, academic research institutions and research-active charities. Working together to implement the actions that this Framework will define will improve cancer research in Northern Ireland.

This Cancer Research Strategic Framework identifies five key priorities. Implementing these priorities will enhance the parameters for cancer research in Northern Ireland and will improve the quality of the research undertaken, increase the number of clinical research studies performed and the number of patients enrolled in these studies.

Priority One: Increasing Access to Cancer Clinical Research

Discovery science, clinical trials and clinical research performed in Northern Ireland have led to many significant developments that have been incorporated into cancer services, yet the number of patients being offered the opportunity to take part, and participating, in cancer clinical trials and Real World Evidence (RWE) studies – which utilise data from routine clinical practice - remains below that of other UK regions. Access to cancer clinical trials is essential; it not only allows our patients to receive new or novel treatments, it also helps to attract, develop and retain a world class workforce, helps establish state-of-the-art facilities, and acts as a magnet to attract significant investment and support innovation that can drive economic benefit.

Current Position

Health and Social Care services in Northern Ireland are under significant pressure, creating an environment where clinical trials and research are often perceived as supplementary rather than integral to service delivery. This perspective diverges from international best practice, where research is embedded within healthcare systems to ensure patients benefit from the latest innovations. A cultural shift is needed to position research as a core function of care in Northern Ireland.

The process of opening cancer clinical trials in Northern Ireland is complex and often hindered by the complexity of associated governance. To improve patient outcomes, it is essential to streamline governance as much as possible while remaining compliant with UK-wide processes and providing an appropriate level of assurance. Other countries have successfully implemented more efficient approval mechanisms that accelerate access to cutting-edge treatments. Northern Ireland must learn from these models and adopt best practices to enhance its research infrastructure and ensure responsiveness to research and innovation opportunities.

Challenges

Under recruitment to cancer clinical trials is not unique to Northern Ireland; however, there are several key barriers which those seeking to open clinical trials in Northern Ireland face. Often, there are competing demands on the infrastructure required to support and facilitate clinical trials and RWE studies. There are pressures on some aspects of the infrastructure (e.g. imaging, medical physics, pathology), while the increasingly complex trials portfolio and patient follow-up requires appropriate resourcing to ensure that there is equity of access to clinical trial participation. This is particularly important in cancer clinical trials for children and young adults, which appear to have been disproportionately impacted by some of these pressures. Many of these issues are not unique, but need to be addressed. If we can provide an agile streamlined process so that clinical trial accrual can be improved, we will attract significant trial activity, RWE studies and infrastructural investment.

Innovation is another area which must be empowered to overcome challenges. While there are many examples of organisations and health care staff who are presenting innovative solutions to the challenges facing cancer services in Northern Ireland, translating this innovation into core HSC services has seen limited success. A culture of research and innovation must pervade all parts of the cancer research ecosystem in Northern Ireland, particularly in the hospital trusts. These can link to highly relevant new and emerging initiatives including iREACH-Health, Momentum One Zero and the Future Medicines' Institute.

Going forward, we will publish nationally agreed metrics related to clinical trial approval processes on an ongoing basis, so that progress in this area is open and transparent. This will help us to shorten approval times for cancer clinical trials and innovation projects. We will also establish a Cancer Research and Innovation Advisory Group, bringing together expertise from across Health and Social Care, academia, industry, and the charitable sector to perform a specific piece of work to identify limiting factors in the approval and governance processes for trials and RWE studies and to develop proposals to address these. This advisory group will also identify key skills gaps where clinical research training is required, making recommendations to ensure that staff have access to such training. It will seek to make recommendations and propose approaches that will streamline research governance, enhance workforce capability, and enable Northern Ireland to attract and deliver high-quality cancer research.

Action 1. Establish a Cancer Research and Innovation Advisory group who will perform a comprehensive review to identify barriers for research and make recommendations to improve the number of research studies and clinical trials and increase the number of patients recruited to them.

Action 2. The Advisory Group will conduct a review to identify skills gaps in clinical research and provide actions to ensure staff have access to relevant training.

Outcome: We expect that implementing Actions 1 and 2 will help to enhance cancer research quality, increase the number of cancer clinical trials in Northern Ireland and improve patient uptake of clinical trials and RWE studies.

Priority Two: Creating Research Capacity and Enhancing Research Culture

Supporting innovation to bring the latest developments in cancer research from the laboratory bench to the patient's bedside requires the appropriate infrastructure. This ‘translational research’ can be improved when multi-disciplinary teams work together in a shared environment, where a seamless flow of ideas, resources, data and a space to conduct clinical trials and real-world evidence studies can occur all under one roof.

Current Position

The main academic institutions conducting cancer research in Northern Ireland are Queen’s University Belfast, in particular through the world-renowned Johnston Cancer Research Centre, and Ulster University. Northern Ireland cancer researchers are co-leading four major all-island cancer research programmes: in precision oncology; digital health; molecular diagnostics (through the Shared Island Fund); and in oesophageal cancer (through charitable funding). Northern Ireland cancer researchers also play a leading role in the All-Island Cancer Research Institute (AICRI), which provides opportunities to perform team science on a cross-border basis.

In addition, clinical research is performed within the Health and Social Care Trusts. The Northern Ireland Cancer Centre and North-West Cancer Centre provide cancer treatment for patients throughout Northern Ireland (where cancer treatment cannot be provided at another Trust’s hospitals).

Researchers working within the specialism of cancer research in academia are largely dedicated to conducting research. However, for healthcare staff working within the Trusts, the day-to-day pressures of service delivery can create a barrier to participation in research activities. Both clinical and non-clinical researchers need to be supported, in particular to develop the research leaders of the future.

Within the HSC, many staff responsible for cancer research are appointed on fixed term contracts. While this may be appropriate for some cancer research including clinical trials, it also presents risks, with staff who have considerable expertise in particular research projects and/or clinical trials seeking new positions as their fixed term contract approaches its end. This leads to an unstable workforce which is not conducive to effective cancer research.

Challenges

Fostering a research-positive environment can significantly enhance clinical staff engagement in cancer research. To achieve this, a culture that values and promotes research must be embedded across all Health and Social Care Trusts, driven by leadership at senior management level.

There is now a substantial body of evidence which show that cancer patients treated in research-active hospitals experience better outcomes than those in non-research settings. This underscores a critical truth: cancer research is not a luxury, it is a fundamental component of modern, high-quality care. This principle must be reflected consistently throughout the HSC system, from frontline services to senior management level.

A key challenge lies in attracting biotech, pharmaceutical, and IT companies to invest in research and development facilities within Northern Ireland, an essential step toward accelerating innovation in cancer research. The potential for cross-sectoral collaboration is substantial.

Both iREACH-Health and Momentum One Zero (two of the Belfast Region City Deal Innovation Centres) have identified cancer research and innovation as strategic priorities. Notably, Momentum One Zero, a £70 million Innovation Centre, has recently secured £10 million through the Peace Plus 2 Call to establish a Digital One Health Hub, which includes a significant cancer research portfolio. This new hub will use cutting-edge artificial intelligence and digital technologies to tackle major health challenges by linking human, animal, and environmental health. It aims to improve public health outcomes, support local businesses, and create new jobs across Northern Ireland and the Republic of Ireland through collaborative research and innovation. These developments present a compelling opportunity to position

Northern Ireland as a hub for cutting-edge cancer research and industry collaboration.

Northern Ireland is a unique location to invest in due to access to both the UK and European Union (EU) markets, and greater emphasis should be placed on taking advantage of these benefits - but we need to ensure that administrative barriers and lengthy business processes do not discourage potential industry suitors.

Opportunities

In other jurisdictions the creation of comprehensive cancer centres, such as The Christie NHS Foundation Trust in Manchester, have facilitated world-leading research and clinical trials which helps improve patient outcomes. The Christie exemplifies excellence in delivering advanced treatments, facilitating clinical trials, and driving impactful cancer research.

The Christie is home to the UK’s largest chemotherapy unit and operates across multiple treatment sites, including facilities for radiotherapy and proton beam therapy. A key enabler of patient access to cutting-edge treatments is iMATCH (Innovate Manchester Advanced Therapy Centre Hub), which supports clinical trials through the Manchester Clinical Research Facility (CRF) at The Christie. Collaboration between the Manchester CRF with iREACH-Health would provide significant opportunities for collaborative investigator-led clinical trials and RWE studies.

The Christie’s research infrastructure is further strengthened by the CRUK Manchester Cancer Research Institute—one of the largest cancer research facilities in Europe—and strategic partnerships exist with Cancer Research UK, the Johnston Cancer Research Centre at Queen’s University Belfast, and the Manchester Cancer Research Centre. Notably, Queen’s and Manchester co-lead FAST-MAN, one of only two Movember Prostate Cancer Centres of Excellence in the UK.

Serving a population of approximately 3 million, The Christie offers a compelling blueprint for developing a similar centre model in Northern Ireland. Going forward, we will consider how the two cancer centres in Northern Ireland, the Belfast Cancer Centre and the North West Cancer Centre, and the Johnston Cancer Research

Centre can work together to establish a comprehensive cancer centre model. This will require close working between the two Trusts, the universities and other bodies and is likely to require a blended funding approach, incorporating peer review funding, charitable contributions, philanthropic support and private investment.

Action 3. Each HSC Trust must assign a named Trust Director to be responsible for cancer research and innovation.

Action 4. Each HSC Trust must ensure that cancer trials and RWE studies are promoted across their services and that the whole clinical team is supported and facilitated to participate in cancer research.

Action 5. Each Trust must ensure that research staff working within the HSC are predominantly appointed to permanent contracts.

Outcomes: Implementing actions 3-5 will remove cultural barriers to research by encouraging and supporting staff to participate and facilitate clinical trials and research. It will improve patient uptake in clinical trials which will ultimately improve patient outcomes.

Action 6. Belfast and Western HSC Trusts, and the Johnston Cancer Research Centre must work together with other relevant partners to bring forward proposals as to how the Belfast Cancer Centre, the North West Cancer Centre and the Johnston Cancer Research Centre could create a comprehensive cancer centre model for Northern Ireland.

Outcomes: A comprehensive cancer centre model is likely to improve local research and participation in cross jurisdictional research. It will also promote and improve cooperation across Northern Ireland and will increase the availability of cancer clinical trials and research. This will lead to improved patient outcomes.

Priority Three: Empowering the use of Data to enhance cancer research

Data is an essential component in enabling cancer research: improving diagnosis and treatment and enhancing patient outcomes. Artificial intelligence (AI) and digital health opportunities in the cancer domain are substantial. The roll-out of 'encompass' and the My Care app are defining moments for Northern Ireland.

Current Position

Traditionally, cancer data is collected on at least fifteen separate systems within the HSC in Northern Ireland. With encompass, we can deliver a radical transformation, so that data empowers research excellence and 21st century cancer care in Northern Ireland.

Challenges

The lack of speed and agility in relation to how data can be accessed is holding back research and health service improvement and making it difficult to attract the latest in cancer innovation to Northern Ireland. Lengthy, costly, and inconsistent data access processes are barriers to the effective and timely use of cancer data in cancer research.

Data infrastructure should allow data to 'flow' from one part of the system to another, so that data is collected once, and is then securely available to all those who need to access it. Ideally, having one source where data could be collated and stored would enable more streamlined access to the necessary data sets for approved health and social care research.

Cancer data collated in Northern Ireland tends to be centered around incidence, treatment, and mortality. There is a distinct lack of data on how patients are affected in other stages of their cancer journey, such as the impact of symptoms day-to-day, life after recovery and opinions on the care they have received.

Northern Ireland has a relatively small population; so, potential datasets will also be relatively small. Rare cancers and Children and Young Peoples' cancer require large amounts of data, but often there are not enough instances of the cancer in Northern Ireland for meaningful analysis.

We must have processes to facilitate the handling of data in a way that it can be shared outside the HSC appropriately, to allow engagement and participation in audits and research outside Northern Ireland.

Action 60 of the Cancer Strategy calls for provisions on secondary use of data to allow benchmarking of Northern Ireland cancer outcomes with other parts of the UK. Northern Ireland and the Republic of Ireland also work closely together in the datasphere, especially through the eHealth Hub for Cancer. Its report entitled ***"Harnessing the Power of Data to Transform Cancer Research, Care and Innovation Across the Island of Ireland"*** provides a blueprint for data sharing and cancer data science going forward.

Participating in the International Cancer Benchmarking Partnership (ICBP), which is led from Northern Ireland, empowers a deeper understanding of the key factors that influence cancer outcomes, allowing best practice to be recognised and disseminated.

Northern Ireland and our neighbours each have different policies and legislation with regards to the use of health and social care data for secondary use purposes and we need to ensure that we have the ability to share data easily, securely, and lawfully with other jurisdictions.

Going forward, we will ensure that barriers relating to secondary use of data are addressed through appropriate mechanisms, and that Northern Ireland take part in all relevant audits, including ICBP.

Action 7. The Department will provide appropriate mechanisms to enable secure and timely secondary use of data for cancer research.

Action 8. The Department will encourage and support Northern Ireland involvement in pan-UK (e.g. DATA-CAN), all-island (e.g. eHealth Hub for

Cancer), European (e.g. European Cancer Pulse) and international (International Cancer Benchmarking Partnership (ICBP) cancer data research initiatives, empowered through activities such as the eHealth Hub for Cancer.

Outcomes: Implementing actions 7 and 8 will remove barriers of data sharing, will enhance clinical trials and research and improve uptake of cancer research and its clinical adoption. This will help use knowledge and skills across the world to improve cancer outcomes in Northern Ireland.

Priority Four: Enhancing Collaboration to drive team-based research

Current position

Cancer research is characterised by a collaborative, team-based, and cross-disciplinary approach that brings together diverse scientific and clinical expertise. In Northern Ireland, clinicians and researchers are actively partnering with diverse academic groups both locally and internationally.

Key examples include:

- The Johnston Cancer Research Centre (JCRC)
- The Ireland-Northern Ireland-US NCI Cancer Consortium
- The All-Island Cancer Research Institute (AICRI)
- Health Data Research UK (HDR UK) initiatives, such as:
  - DATA-CAN, the UK's Health Data Research Hub for Cancer, led by a Scientific Director from Northern Ireland
  - The Big Data for Complex Disease Driver Programme, co-led by Northern Ireland, with a strong focus on cancer
- The Belfast Experimental Cancer Medicine Centre
- CRUK initiatives such as Cancer Date Driven Detection Programme (CD3)
- C-TRIC (Clinical Translational Research and Innovation Centre)
- The development of iREACH Health, aiming to deliver an integrated clinical research centre in Belfast by 2027
- Momentum One Zero, a £70M Innovation Centre, which applies secure, connected intelligence to provide solutions to significant challenges in health and life sciences, with a particular emphasis on cancer.

In addition, there is a growing culture of collaboration within Northern Ireland's research-active community and voluntary sectors.

Challenges

Research teams are often competing for a limited pool of funding grants, to be the first to publish their findings in a peer-reviewed journal or for intellectual property (IP) rights on any new discoveries that may have a commercial value.

At times, there is a disconnect between how cancer research and innovation is performed in academic, public sector and private sector settings, with limited involvement of staff working within HSC Trusts. We have some excellent examples of how effectively this can work, but there needs to be greater emphasis on facilitating clinical staff, academic researchers, and industry partners to work together to share knowledge and create a safe space for networking and sharing of problems and solutions. Scientific endeavors to find new treatments for cancer can take years before the findings reach the clinic; likewise, the development of new screening and diagnostic methods and technologies can also take considerable time to come to fruition.

Opportunities

Northern Ireland is home to a wealth of talented cancer scientists and research groups across both academia and the biotechnology/pharmaceutical sectors. The Northern Ireland City Deals programme is designed to foster collaboration across key industries, including life and health sciences. It provides vital funding and facilitates partnerships between academia, the public sector, and private enterprise—many of which have a strong cancer research focus.

Promoting collaboration at both national and international levels is essential to accelerating discovery and translating research into clinical practice. Strengthening partnerships between academic researchers and industry will help ensure that innovative cancer research is effectively implemented to benefit patients.

The Department is committed to championing this collaborative approach, encouraging researchers across academia, healthcare, and industry to adopt these principles and work together to deliver world-class cancer research. In parallel, there is a need to expand public engagement initiatives that bring together scientists, clinicians, patients, and industry partners. Regular forums for sharing research and ideas will help spark new collaborations and ensure that research remains patient-centred and impactful.

Going forward, we will ask the HSC to analyse cancer research activity, collaboration, and funding. HSC must report and publish on cancer research activities annually. The established research networks must foster collaboration in research.

Action 9. HSC must evaluate active cancer research activities and publish a yearly report outlining current activities. HSC must, through the established research networks encourage and support collaborative cancer research.

Outcomes: By understanding existing research activities, researchers will easier understand gaps in research and where opportunities exist. By working better together, available resources can be maximised. By establishing a Cancer Research and Innovation Advisory Group, we can empower a culture of research and innovation in Northern Ireland and deliver advances that drive health, economic and societal benefit. These collaborative approaches will lead to increase in the number and quality of cancer research studies in Northern Ireland.

Priority Five: Funding

Research, including clinical trials, play a key role in discovery science, prevention, diagnosis and treatment of cancer. Funding allocated to support cancer research has saved millions of lives worldwide, and in some cases, now means that certain forms of cancer can be cured or managed in such a way as to allow those affected by cancer to live long, productive lives with cancer. However, due to its very nature, funding that is allocated to support cancer research may not see any benefits for many years. In a society which often looks for immediate results, it is essential that cancer research is appropriately funded.

Funding for cancer research may be thought of in two parts:

1. Core funding that is necessary to ensure that appropriate research infrastructure is available to facilitate cancer research. Examples of this include the funding that is available to support the HSC R&D Division, the Medical Physics Agency, Northern Ireland Cancer Registry, Northern Ireland Cancer Trials Network, Northern Ireland Biobank and other organisations who have a key role in facilitating cancer research and clinical trials.
2. Costs associated with individual research projects/programmes or clinical trials. This funding is often time limited and may come from a wide range of different sectors.

Current position

Core research infrastructure is funded by the HSC R&D Division in the PHA. Cancer research conducted through the HSC Trusts can also receive funding via the HSC R&D division. Current investment by HSC R&D into the Northern Ireland Cancer Research Network amounts to £4.1m annually, equating to 18-20% of the total R&D budget.

However, the most significant funding of cancer research in Northern Ireland is in the form of research grants provided by national government funders in the UK and Ireland, charities, philanthropic or private sector organisations, or commercial partners. Funding is also available through the European Commissions' 'Horizon Europe' programme.

While the core aim of cancer research is to provide better outcomes for patients, the economic potential of this sector should not be ignored. The recently published *Landscape Review and Economic Potential of the Oncology and Allied Digital Health Sector on the Island of Ireland,* highlights the need for greater North-South collaboration in cancer research and innovation. The report noted that the cancer research market is expected to reach $690.4bn globally by 2032. Economic growth in the sector can attract the best researchers, healthcare professionals and private industry investment to the benefit of Northern Ireland, Republic of Ireland and beyond.

Challenges

Most funding, especially to academic institutions, is through research funding bodies (e.g. UKRI), charitable organisations (e.g. Cancer Research UK (CRUK)) and philanthropy. The UK government pledged £22 million in funding towards cancer research as part of their 'Cancer Mission' announced in 2022. This boost in funding from central government is welcome and much needed for cancer research. Northern Ireland needs to look at opportunities to access funding such as this to support cancer research in this region.

It is important that a clear funding strategy is in place to ensure that effective cancer research can be conducted in Northern Ireland. This funding must consider the infrastructure that is required to facilitate and enable cancer research and clinical trials. It must also consider costs associated with translating new discoveries into new services which can improve outcomes for cancer patients.

Opportunities

Cancer researchers in Northern Ireland can apply for funding from a multitude of sources, including government agencies and research councils, charitable funds, philanthropic organisations, all-Island funding, European funding and industry. With a small population and geographical area, together with very strong academic institutions with close links to HSC Trusts, and our digital health transformation through encompass, there are significant opportunities to establish Northern Ireland as a prime location for cancer research, clinical trials and testing innovation. We must establish an environment where cancer research translates to new and innovative cancer diagnostics and treatments for patients in Northern Ireland, Ireland, the UK and beyond.

Going forward we will highlight available funding to encourage increased uptake of cancer research across Northern Ireland.

Action 10. The HSC R&D Division will regularly publish reports on funding opportunities for cancer research activities and consider how to maximise the use of the funding across the HSC.

Action 11. The Advisory Group will evaluate cancer research funding opportunities across the UK and Ireland and explore potential for attracting external/cross-sectoral investment into cancer research and innovation in Northern Ireland.

Action 12. The Advisory Group will identify the core infrastructure gaps, which, if filled, would facilitate increased cancer research in Northern Ireland.

Outcomes: A clear understanding of funding available will help those wanting to explore research opportunities find the appropriate funding mechanism. This will lead to increased numbers of funding applications and an increase in the number of cancer research studies carried out across Northern Ireland.

Next Steps

Cancer research, clinical trials and innovation are key to improving patient outcomes across Northern Ireland. This Strategic Framework outlines actions to remove the barriers for effective cancer research and provides a roadmap how to support more research and a higher uptake in clinical trials among cancer patients.

Implementation of the Strategic Framework is largely for the HSC, working with key strategic partners from the academic and charitable sectors. Most actions will be led by the HSC Trusts or other parts of the HSC. The Department will provide an oversight and monitoring role of implementation and will publish regular updates on progress.

It is expected that some actions can either fully or in part be implemented without new funding, or with only small non-recurrent investment. Implementation of the Strategic Framework should, however, remove barriers to enable more effective use of existing resource and enable greater investment from other sources.

Where investment is required to carry out actions, the Department will consider such asks in line with all normal processes. It is, however, important that we acknowledge the difficult financial context in which this Strategic Framework is being published. At the time of publication, no immediate funding has been identified.

For the delivery of the Strategic Framework to be successful, collaboration and co-production will be crucial. This will involve maintaining and building on the many successful developments implemented over the past years across cancer delivery and across existing research. Collaboration between HSC organisations, across sectors, with charities and others will be a key enabler to affecting meaningful change.

Actions

Glossary of Terms

COSD	Cancer Outcomes and Services Data
CRF	Manchester Clinical Research Facility
CRUK	Cancer Research UK
C-TRIC	Clinical Translational Research & Innovation Centre
DoH	Department of Health (Northern Ireland)
ECMC	Experimental Cancer Medicine Centre
EU	European Union
GDPR	General Data Protection Regulation
HBS	Honest Broker Service
HSC	Health and Social Care (Northern Ireland)
HSC R&D	HSC Research and Development
HSCDI	Health and Social Care Data Institute
ICBP	International Cancer Benchmarking Partnership
iMATCH	Innovate Manchester Advanced Therapy Centre Hub
IP	Intellectual Property
iREACH	Institute for Research Excellence in Advanced Clinical Healthcare
MPE	Medical Physics Expert
MRC	Medical Research Council
NCI	National Cancer Institute
NI	Northern Ireland
NICR	Northern Ireland Cancer Registry
NICTN	Northern Ireland Clinical Trials Network
NIHAP	Northern Ireland Health Analytics Platform
NITRE	Northern Ireland Trusted Research Environment
PHA	Public Health Agency (Northern Ireland)
R&D	Research and Development
UK	United Kingdom