

The Institute for Preventative Health Research (IPHR) – Proposal

What

An Institute for Preventative Health Research (IPHR), delivered through the Northern Health Science Alliance (NHSA) of NHS hospitals and northern universities with the northern mayoral combined authorities (MCAs), and in partnership with other key stakeholders such as industry partners, and the integrated care boards (ICBs).

The Institute is a pioneering agile collaboration hub that will bring together health research expertise in prevention across the North of England, connecting existing excellence in prevention-focussed research, innovation and delivery, enhancing the impact of existing work, and spreading benefits at pace and scale.

The Institute will be created through a co-investment model from a coalition of aligned organisations, alongside matched funding from Government, and additional investment from charity and industry partners.

How

The Institute will provide a mechanism to accelerate the growth of the northern health and life sciences sector, in an area of applied research that will directly help to improve the health of communities and close the UK health and productivity gap. By taking a system-level approach to drive the shift to a modern, prevention-led healthcare system, this new and agile Institute will achieve maximum impact in the near term while investing for the future, delivering beneficial health and economic outcomes for the UK. This will be achieved by connecting expertise across silos and providing independent leadership, thereby attracting and deepening further research collaborations and investment from industry, to improve patient outcomes and the economy in the region where intervention is most needed.

The Institute will set preventative healthcare missions that are ambitious and impactful, addressing the root causes of ill-health, and focussed on delivering both health and economic return on investment.

For example, achieving a long term mission to add five healthy years to UK life expectancy, reduce the health difference between the lowest and highest socio-economic groups by 30%, and achieve a 20% reduction in the incidence of cancer, cardiovascular disease, chronic respiratory illnesses, diabetes, mental-health and musculoskeletal disorders would add more than £33 billion per year to the UK economy and generate over £10 billion in savings through increased productivity, tax revenues and benefit payment savings^{1,2}.

Why is this needed?

To shift to a prevention-led model of healthcare, the UK needs to look beyond the NHS and take a system-level approach to tackling preventable ill-health. The Government has set out three shifts for the future of the NHS, to be detailed in a new 10 year health plan:

1. Moving care from hospitals to communities
2. Making better use of technology
3. Focusing on preventing sickness not just treating it

Achieving these shifts requires tackling complex, long term problems, at scale. The NHS, national and local government, industry and other actors need to work together to understand how to deliver interventions, reform, and new technologies that work to meet the needs of all our citizens, in the places they live. Policymakers and health leaders need confidence they are investing wisely while not allowing current standards of care to fall.

The North of England's population suffers from disproportionately poor health, with a third of the productivity gap between the North and the South due to worse health in the North – which costs £13.2bn a year in lost GVA¹. This clear health need has driven innovation in the North, with world-leading work such as the Born in Bradford research programme, Children growing up in Liverpool (C-GULL) study, and many others. Despite this, the North of England suffers from a huge disparity in clinical research

funding, £26 per person compared to £69 per person in the South East, and some research institutes in the South receive more funding than the entire North³. This disparity undermines health improvements and economic growth of the North – which is bad for the UK.

Operation

The Institute will set prevention missions, UN-style goals that will have a high impact in healthcare outcomes and economic return if achieved. Institute members will design their own programmes to achieve these goals, taking local intelligence into account.

The missions will:

1. Tackle long term, complex problems, that need lots of individuals and agencies working together
2. Look at common causes, but require local solutions
3. Have measurable outcomes, to track our progress as we shift from intervention to prevention
4. Be attainable goals, that can be delivered regionally, e.g. tackling child poverty has the same root cause, but will require different tactics in central Manchester than it will in coastal Teesside.

We have identified six initial themes upon which to focus:

1. Children's Health
2. Mental Health
3. Women's Health
4. Work and Health
5. Equity and Policy
6. Data and Innovation

With investment, existing infrastructure means the Institute can launch rapidly by mobilising the Northern Health Science Alliance (NHSa) core team, our pan-northern networks of research expertise, and our operational and governance structures, together with additional contributions from Institute member organisations.

The NHSa manages 12 expert networks relating to health and life sciences, with over 700 members actively engaged in sharing best practice, developing innovations and co-ordinating funding bids. We have supported successful funding awards totalling almost £250 million in research income over the past five years (2020-25), with a predicted return on investment of £310 million by 2030⁴. High impact projects from the NHSa include delivery of Connected Health Cities, a £20 million programme to join up data across the North from 2015-2020, founding Health Equity North, a virtual research institute that delivers high quality research into the underlying causes of health inequalities, and our international programme, which attracted seven companies to invest over £3 million in clinical trials in the North in 2024.

The Institute for Preventative Health Research (IPHR) – Delivery

We propose an initial £100 million, five-year pilot phase for the Institute, to identify and scale up collaborations in key areas of research excellence, led by the North of England, driving national health improvement and economic impact.

A virtual coordinating hub, led by the NHSa, will work with existing teams in mayoral combined authorities, local authorities, universities and hospitals to develop the infrastructure needed to deliver research across the identified themes, creating links with institutions and industry across the UK and beyond. Health Equity North will provide health equity research, policy, public affairs and communications support.

During the pilot phase, we will work to secure the financial sustainability and longer-term success of the Institute, with the potential for both physical and virtual infrastructure supporting maturing collaborations.

Return on investment

- The NHSa has over a decade of experience in working across the North of England in an agile manner and delivered a return on investment of £49 to £1.
- Obesity and overweight conditions cost the UK Government the same as transport and defence did in 2022 (£98 billion)^{5,6}.
- The total cost of mental ill health in England reached £300 billion in 2022, equivalent to the economic impact of the COVID-19 pandemic, every year⁷. Mental ill health is now the most common cause of work-limiting conditions in those aged 44 and younger, overtaking musculoskeletal and chronic conditions.

³ NHSa Analysis of the UK Clinical Research Landscape in 2022, B Martyn, 2024

⁴ Internal NHSa figures, based on predicted spillover multiples from "Health research offers a big return on investment, A.Pollitt, Kings College London Policy Institute"

⁵ The Costs of Obesity: an update Institute for fiscal studies and University of Manchester 2023

⁶ Defence and Transport figures from Institute for fiscal studies tax lab data

⁷ The Economic and social costs of mental ill health F. Cardoso et al, March 2024

- A rise in economically inactive people on long term sick leave has increased government borrowing by £15.7 billion⁸. However, 75% of these people are not on any NHS waitlist and so will not benefit from a reduction in waitlist times. This is why prevention, and the nation's health are challenges that require solutions beyond the healthcare system.
- The institute will generate an economic return through research and innovation outputs. Every healthcare system in the world is currently grappling with the same challenge. This Institute will drive research and develop new innovations to put the UK at the forefront of preventative health measures, from public health interventions, through early diagnostics and screening, to the application of data and AI.
- Independent economic analysis commissioned by the NHTA in 2021 suggests that investing in R&D expertise to co-develop new Diagnostics and Medical Technologies with industry could grow the MedTech sector in the North from £4.0billion in 2019 to £7.8 billion by 2032⁹.
- Add five healthy years to UK life expectancy, reducing the health difference between the lowest and highest socio-economic groups by 30%, and achieving a 20% reduction in the incidence of cancer, cardiovascular disease, chronic respiratory illnesses, diabetes, mental-health and musculoskeletal disorders, would add more than £33 billion per year to the UK economy and generate over £10 billion in savings.

Consultation history

This proposal is backed by the steering group of the Convention of the North 2025, including the northern combined authority Metro Mayors. It will be announced at the Convention as one of five “game changers” across the North.

Over 100 people from 30 organisations have contributed to the development of the Institute including:

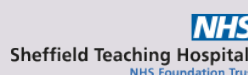
- Northern Mayors and NHTA leaders at a roundtable at the Convention of the North in 2024.
- Regular meetings with the NHTA board and council, the CEOs of 10 NHS hospital trusts and the deans of medicine/innovation at 10 universities.
- Roundtable at the Labour Party Conference led by Metro Mayor for South Yorkshire Oliver Coppard, representatives from Greater Manchester Combined Authority (GMCA), NHTA board and council, Tony Blair Institute, Cancer Research UK and others.
- Workshops with 65 attendees from 27 institutions including representatives from the NHTA and the MCAs.
- The Convention of the North 2025 steering group.

The NHTA

The Northern Health Science Alliance is a growing health research and life sciences membership organisation of 10 universities and 10 NHS hospital trusts across the North of England.

It has an impressive track record in delivering pan-northern health research projects, from the £20m Connected Health Cities project to international business engagement programmes and the impactful Health Equity North Institute.

Its membership includes: Newcastle University, Durham University, University of York, University of Liverpool, University of Manchester, Lancaster University, University of Central Lancashire, University of Sheffield, University of Leeds, Teesside University, The Newcastle Upon Tyne Hospitals NHS Trust, South Tees Hospitals NHS Trust, Leeds Teaching Hospitals, Sheffield Teaching Hospitals, Manchester University NHS Foundation Trust, University Hospitals of Liverpool Group, Hull and East Yorkshire Hospitals, Lancashire Teaching Hospitals, Alder Hey Children's Hospital Trust, and Mersey Care NHS Foundation Trust.



The Institute for Preventative Health Research (IPHR) - Delivery

The Institute for Preventative Health Research, (IPHR) is a pioneering virtual collaboration hub dedicated to transforming healthcare through a shift to a prevention-led health system. Coordinated by the Northern Health Science Alliance (NHSA), this multi-disciplinary Institute will unite all the key stakeholder organisations in a shared mission to advance preventative healthcare research and implementation.

Vision

- **To transform the UK by securing good health for all, at all ages and in all places.**

Mission

- **To become the UK's leading collaborative research network for preventative healthcare innovation.**
- **To accelerate the development, evaluation, and implementation of preventative healthcare strategies through virtual collaboration across disciplines and institutions.**

Objectives

- **Establish an agile research infrastructure connecting academic, healthcare and civic institutions.**
- **Develop and validate innovative preventative healthcare measures.**
- **Translate research findings into implementable preventative care protocols.**
- **Foster knowledge exchange between academic institutions, healthcare providers, and regional authorities.**
- **Build capacity for preventative healthcare research across member organisations.**

Institute Structure

The Institute will be created through a co-investment model from a coalition of aligned organisations, alongside matched funding from government, and additional investment from charity and industry partners.

The Institute will consist of a central co-ordinating hub, managed by the NHSA, research theme working groups, and project groups.

The central co-ordinating hub is responsible for the operation of the Institute and will report to the Institute board of directors and utilise the existing NHSA governance structures to provide oversight.

Each research theme selected by the hub (initially we propose child health, women's health, mental health, work, data, innovation and health equity) will have a theme lead and working group. Each Theme will define a set of preventative healthcare missions. Ambitious targets to have a significant impact in health and economic return.

The role of the working groups will be to develop project proposals, co-ordinate the implementation of projects and provide oversight and reporting back to the co-ordinating hub, who report back to the board of directors, and the institute funders.

Role of the Central Co-ordinating Hub

The central co-ordinating hub will provide operational support for the Institute. This includes the governance, administrative, communications, public affairs, programme and project management support.

Additionally, it will provide supporting workstreams to build community and partnerships between the Institute members and external partners; attract sustainable funding; and enhance the impact of the programmes of work in each research theme. Community building and knowledge exchange; The hub will host community building and knowledge exchange events including an annual conference for all researchers involved. It will provide opportunities to support talent development and build a sense of identity and purpose.

Securing financial sustainability; Working to secure the financial longevity and success of the Institute, engaging with external partners, identifying funding sources and planning for future sustainability.

Enhancing impact; The hub will enhance the impact of the work undertaken by the members in this space by engaging with policymakers, healthcare leaders and other key stakeholders to translate research into policy. It will also attend conferences, make industry and international partnerships to spread the outputs of its work programmes.

The initial pilot phase will focus on establishing the Institute's structure, governance and operational teams. This can be done rapidly by utilising the existing staff and networks of the NHSA, HEN and Institute members.

Pilot Phase Activity Outline

- 1. Establish the co-ordination hub:** The Institute hub can be operationalised quickly by utilising the existing NHSA staff and governance structure.
- 2. Build collaborative networks:** Utilising existing NHSA networks as the starting point these can be developed rapidly
- 3. Set Preventative Healthcare Missions for each theme:** Taking input from clinical, academic, funder and mayoral stakeholders, the Institute will set an ambitious target in each theme area for the Institute to progress towards. Baseline data sets to measure and progress against these missions is how the Institute will be judged.
- 4. Run a non-competitive bidding process:** Each theme working group must submit one application for a five-year programme of activity that will progress towards the Preventative Healthcare Missions set by the Institute. This allows each region to consider local factors and build on regional excellence that complements across the North
- 5. Award funding:** Each application will be reviewed by an independent review panel, co-developed and then awarded funding from the Institute.
- 6. Programme delivery:** Each theme will deliver the projects within its portfolio, with staff and resources hosted by the core member institutions. This will allow the Institute to leverage existing infrastructure and get up and running with pace and scale while minimising the amount of new structures needed. In this way, each programme can deliver projects that are tailored to real need and highest impact.

Resource Requirements

Financial resources will include:

Initial set-up costs, ongoing operational costs, research project funding and infrastructure development investment. Ringfenced funding to allocate to research themes.

Human Resources

The Institute will require a dedicated team to run, however, we can leverage existing functions such as governance, finance, HR etc from the NHSA and the Institute's core members, through a combination of new funding and in-kind contributions to enable faster setup.

Executive leadership team for the hub

- Institute Director and Deputy Director
- Chief Operating Officer
- Chief Financial Officer
- Head of Partnerships and Engagement
- Head of Public Affairs
- Head of Communications

Operational Staff

- Theme Lead for each core research area: children's health, women's health, mental health and Work and Health
- Theme lead for each cross-cutting area: data, innovation and health equity
- Communications and public affairs team
- Project Co-ordinator
- Admin and HR

Predicted Outcomes and Impacts

The Institute will deliver outcomes and have impact in three areas: research and innovation, healthcare improvements and economic benefits.

Research Outcomes

The Institute will output peer-reviewed publications, prevention policy recommendations, clinical best practice and regional implementation frameworks.

All these will have an impact, as well as supporting the Research Excellence Framework (REF), Knowledge Exchange Framework (KEF) and research outcome reporting measures for the university and NHS members, which in turn attracts further funding and helps retain talent.

Healthcare Outcomes

By developing a new body of research into best practice for equitable prevention strategies, we hope to reduce service demand and improve health outcomes for our citizens.

Economic Outcomes

The Institute will provide economic outcomes by reducing healthcare costs, improving workforce productivity, healthcare system efficiency gains, and working with industry to develop new products and services.

Funding Model

To fund the Institute, we propose an initial pilot phase, funded by co-investment from government and member contributions (financial and in-kind). A core objective for the central hub will be to secure financial sustainability for the Institute beyond the pilot phase. To do this we will explore a mixed model of core government funding, on-going member contributions, research council grants, industry partnerships, and philanthropy and/or other investment.

Conclusion

This proposal for a five-year pilot phase of a national Institute for Preventative Health Research is led out of and builds on the expertise and assets for preventative health research across the North of England.

Co-ordinated by the Northern Health Science Alliance (NHSA) as the long-established and trusted delivery partner for the member institutions, this multi-disciplinary Institute will unite universities, NHS trusts, mayoral combined authorities, industry and other stakeholders in a shared mission to advance preventative healthcare research and implementation for the nation.

In this pilot phase, we will start on the journey to becoming the UK's leading collaborative research network for preventative healthcare innovation, to improve the national economy and health outcomes. To do so, we will connect the buildable assets across the North of England to accelerate the development, evaluation, and implementation of preventative healthcare strategies through virtual collaboration across disciplines and member institutions.

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Liverpool University Hospitals NHS FT
Manchester University NHS FT
Mersey Care NHS FT
Middleborough Council
Newcastle University
Newcastle upon Tyne Hospitals NHS Foundation Trust (NUTH)
NIHR Devices 4 Dignity
NIHR Health Tech Research Centre Network

NIHR Manchester Biomedical Research Centre (BRC)
NorthFutures Digital Health Hub for the North East and North Cumbria
Public Health South Tees
Sheffield Hallam University
Sheffield Teaching Hospitals NHS FT
South Tees Hospitals NHS FT
South Yorkshire Digital Health Hub
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