



## Summary

The **NorthHFutures** Hub is envisioned as a world-leading **innovation ecosystem** that will facilitate the research, development, and acceleration of responsibly designed, human-centred, and data-rich healthcare technologies (health-tech) to cultivate an entrepreneurial and vibrant community **that addresses unmet needs and promotes global leadership in Digital Health**. NorthHFutures is funded by UKRI for three years from 1st November 2023 as part of a pilot scheme led by Directors Abigail Durrant (Newcastle University) and Naeem Soomro (The Newcastle Hospitals NHS Foundation Trust): <https://www.ukri.org/news/innovative-healthcare-tech-could-transform-medical-treatments/>.

**NorthHFutures** will address unmet healthcare needs and inequalities by:

- Connecting stakeholders in health-tech Research and Innovation (R&I);
- Facilitating digital skills sharing and the training of future health-tech leaders;
- Funding cross-sector research collaborations and entrepreneurship in health-tech;
- Guiding the inclusive design of useable and useful technology for all.

## Addressing Unmet Health and Care Needs

Based in the North East and North Cumbria (NENC), with national and global reach, NorthHFutures will address unmet regional health and care needs and inequalities. In the pilot phase, translational research collaborations will be mobilised around the following themes:

- Promoting Health and Nutrition for Children and Young People;
- Developing Digital Surgical Pathways;
- Supporting Mental Health and Wellbeing;
- Living and Ageing Well with Multiple Long-term Conditions.

NorthHFutures will run workshops open to all, which will: facilitate the development of new collaborative study teams; and fund studies that deliver evidence-based insight to guide innovation.

## Humanising Health-tech: We are more than data collected about us

NorthHFutures builds upon the joined-up NENC approach to people-powered digital health innovation, as our regional Integrated Care Board (ICB) involves local authorities, communities, and citizens in the Integrated Care Partnership (ICP). NorthHFutures consortium members have a track record of practicing stakeholder-involved and community-engaged research, bringing specialist expertise for understanding health inequalities from medical, social, and design perspectives, and identifying opportunities for enrichment and enablement related to: healthy longevity; connecting rural, coastal and urban populations; and pioneering useable and ethical applications of Data Science, Artificial Intelligence (AI), and sensor-based technologies. Through an integrated approach, we unite to build enabling mechanisms to stimulate socio-economic and cultural growth for all.

Contact Hub Manager Jen Wood to get involved: [jennifer.wood@newcastle.ac.uk](mailto:jennifer.wood@newcastle.ac.uk).



## #NorthHFutures Consortium

We combine the strengths and resources of six universities (Newcastle, Cumbria, Durham, Northumbria, Sunderland and Teesside), and bring regional investment in NIHR services, facilities and an Applied Research Collaboration (ARC-NENC), plus National Innovation Centres for Ageing (NICA), Data (NICD) and Rural Enterprise (NICRE), National Horizons Centre (NHC), EPSRC Digital Economy programmes in data and digital citizens, and Health Data Research UK, the UK's national institute for health data science. University offers combine with an extensive, cross-sector partner network, including: ICB-NENC, regional NHS Trusts, NHS Business Services Authority, Department of Health and Social Care, NHS England Education; industry partners - from SMEs to global tech giants; civic bodies including Local Authorities, and Voluntary Community and Social Enterprise (VCSE) organisations – delivering community-based services; existing health research networks (incl. Health Innovation NENC, Newcastle Health Innovation Partnership); innovation accelerators (including Innovation SuperNetwork), advocacy groups, communities and citizens. Please see <https://northfutures.org/> to find out more about the growing partner network and how to connect.

## What will NorthHFutures do?

### Deliver Digital Technologies and Data Science Skills Training

- We will work with partners to support a diverse and inclusive training programme.
- We will responsively fund new training offers to meet emerging needs.

### Develop Supportive Community Infrastructure

- We will **co-design and evaluate a digital brokerage service**. This will interconnect and amplify partners' valued work and existing skills hubs, directories and networks, to offer and consume expertise, services and facilities, and to support the acceleration of health-tech companies at differing tech-readiness levels.
- Adopting a case study approach, we will study the design and development of data architectures and user interfaces to secure health data environments for our region, to **understand the access and literacy needs of diverse stakeholders** and end users.
- We will invest in eXtended Reality (XR) pilots, to **open up new technical and co-creative possibilities** for training in clinical practice, service delivery and spaces for collaboration.

### Facilitate Connections, Collaborations and Research Seed Funding

- We will deliver networking events to bring hub members together for interdisciplinary and cross-sector knowledge exchange, collaboration, and cross-sector consortium-building.
- We will resource industry-academia secondments and exchanges, run workshops, and facilitate bid development, coordinate access to experts in impact acceleration and tech transfer.