

# Workshop on Developing Digital Surgical Pathways

## Background

NorthHFutures is a collaborative, people-powered research programme that brings together the expertise and resources of six universities in the North East and North Cumbria (NENC) region to provide opportunities for everyone to engage in digital health and health-tech initiatives. These universities are Newcastle, Cumbria, Durham, Northumbria, Sunderland, and Teesside. They lead the academic partners in the hub consortium.

The hub also involves global technology companies, small to medium-sized businesses, and other enterprises and initiatives that have funding to promote research and innovation. We also work with organisations in the Voluntary, Community, and Social Enterprise (VCSE) sector, with advocacy groups, and with citizens.

We are motivated to address healthcare needs in our region that are currently not being met, and work to reduce inequalities and digital exclusion.

## Research Collaborations

NorthHFutures will facilitate and fund new research collaborations. Collaborative teams will undertake a research project addressing specific themes:

- Promoting Health and Nutrition for Children and Young People;
- Developing Digital Surgical Pathways (about care before, during and following an operation);
- Supporting Mental Health and Wellbeing;
- Living and Ageing Well with Multiple Long-term Conditions.

Each team can bid for up to £50k, and the project can be up to 12 months in duration.

We aim to address health and care needs in our region that are currently not being met, and work to reduce inequalities and digital exclusion.

**To apply for our funding, you need to attend one of our upcoming workshops to form a collaborative team and develop a new research proposal.**

## Join a Workshop

The workshops will bring together people from different fields to connect, share ideas, and tackle real-world challenges. They will be professionally led, making them accessible for those who are new to research to take part.

All experience and expertise relating to the topic area will be valuable; there is no expectation around prior knowledge about research, or being an expert in the workshop topic. In addition to working with others to develop ideas into a proposal, there will be supportive guidance and mentoring from NorthHFutures researchers and collaborators - on hand at each workshop.

### What does taking part in a NorthHFutures workshop involve?

We will need participants to commit to being available for the full day of the workshop. Given the focus of the workshops on collaboration, everyone will be expected to engage with each other to develop and refine their ideas. Where relevant, there may be some suggested reading or videos provided before and during the workshops to help participants explore and benefit from relevant research or other literature.

### Who can join a workshop or project team?

Everyone can apply to take part. Our workshops will be focused so we're asking interested people to demonstrate enthusiasm and interest in cross-sector, collaborative research activities.

There are funding rules from EPSRC (Engineering and Physical Sciences Research Council) about who can lead a project team and how different organisations can receive funds from the award – find out more about this in the call guidance document, or get in touch with the NorthHFutures Hub Programme Manager Jen Wood: [jennifer.wood@newcastle.ac.uk](mailto:jennifer.wood@newcastle.ac.uk).

### After the Workshop: Application and Assessment Process

If you apply for funding from NorthHFutures, your application will be reviewed by our Research Board. This board includes representatives from the Health and Care sector, the VCSE sector, and academics from our six partner universities.

The board uses a juried process to review applications. This means that the board members will discuss each application together before making decisions about funding. They will use specific criteria to assess each bid.

### How to apply

To participate in the workshop, applicants need to show enthusiasm and interest in pursuing cross-sector, collaborative research.

We invite expressions of interest for workshops from those in:

- Academic roles - including researchers at any stage of their research career from all disciplines;
- Professional practitioner roles (non-academic) - including NHS, industry, VCSE, local government.

**Please complete the expression of interest form: <https://www.surveymonkey.com/r/V2ML6JV>.**

### Contact

If you have any questions about this Call for Participation, or about your eligibility to take part, please contact NorthHFutures Manager, Jen Wood: [jennifer.wood@ncl.ac.uk](mailto:jennifer.wood@ncl.ac.uk).

## Developing Digital Surgical Pathways: Theme Summary

[northfutures.org](http://northfutures.org)



Credit: SolStock

### What is a Digital Surgical Pathway?

The proportion of the population living with comorbidities who may be referred for surgery will be more susceptible to poorer outcomes. Digital solutions can enhance patient care, aid decision making and contribute to better surgical outcomes. These solutions, when developed with patient and public input, can also help address broader issues such as digital exclusion. Digital tools which support the delivery of the surgical pathway also need to be sustainable in terms of cost effectiveness and workforce acceptability.

This theme is focused on the surgical pathway and innovative digital solutions that can improve current practice. The scope is broad so it could encompass more technical aspects relating to surgical procedures as well as innovations that also improve patient care and education.

A digital surgical pathway could encompass primary care contexts, making decisions on surgery, preparing to have an operation, intraoperative care (during the operation), and different kinds of care following an operation and after being discharged home and organising follow-up appointments and patient-reported outcomes from the surgery. Research on digital surgical pathways could explore contexts such as these, as well as other topics like: patient perceptions, experiences and involvement; workforce issues; and digital inclusion.

## EPSRC Northern Health Futures Hub for the North East & North Cumbria

The perioperative pathway is defined as follows:

1. Primary Care;
2. Shared decision making and consent for surgery;
3. Prehabilitation (Preparing patients for surgery, so they are in a better place before an operation);
4. Perioperative patient education;
5. Preoperative assessment;
6. Intraoperative care;
7. Postoperative inpatient care;
8. Discharge care, Patient reported Outcome Measures (PROMS), and surgical virtual wards;
9. Surgical follow-up;
10. Patient perceptions, experiences, and involvement;
11. Workforce issues;
12. Digital Inclusion.

The NHS Transformation Directorate has a perioperative digital playbook [1], which includes several case studies demonstrating the range of digital solutions currently being assessed; these studies indicate how digital ways of working can improve outcomes for patients. The NICE Evidence Standards Framework for Digital Tech [2] indicates what good levels of evidence for health-tech looks like.

The North East and North Cumbria is a large geographical area with particular challenges relating to unmet needs in health and care, with both rural and urban socioeconomic deprivation. The recent Marmot report states that between 2010 – 2020, life expectancy in the UK stalled for the first time in 100 years, highlighting the seriousness of the situation and the need for pragmatic and sustainable solutions to improve population health.

The proportion of the population living with comorbidities who may be referred for surgery will be more susceptible to poorer outcomes. These could be mitigated by digital solutions which need to be developed with patient and public involvement to address any wider issues such as the digital exclusion regional agenda. Digital tools which support the delivery of the surgical pathway also need to be sustainable in terms of cost effectiveness and workforce acceptability.

### References [Accessed 01 July 2024]

1. <https://transform.england.nhs.uk/key-tools-and-info/digital-playbooks/perioperative-digital-playbook/>
2. <https://www.nice.org.uk/about/what-we-do/our-programmes/evidence-standards-framework-for-digital-health-technologies>

**Theme Leads:** Prof. Yitka Graham, University of Sunderland & Dr. Tim Donovan, University of Cumbria.

Contact Jen Wood [jennifer.wood@ncl.ac.uk](mailto:jennifer.wood@ncl.ac.uk) with all enquiries.

 [linkedin.com/showcase/northfutures](https://www.linkedin.com/showcase/northfutures)

