



# EPSRC Place Based Impact Acceleration Account

## Tay Health Tech Grand Challenges: Call for applications

### 1. Background

The Place Based Impact Acceleration Account (PBIAA) is an EPSRC scheme which provides 4 years of funding to support a programme of activities within a research and innovation cluster. This PBIAA, Tay Health Tech, is based on a nascent cluster aiming to provide community health and care technologies for the Tayside region. Its mission is to support the translation of research into new health and care technologies closer to home. It is one of ten PBIAs awarded in the first round of the scheme (7 additional PBIAs were awarded in the second phase) and is co-led by Heriot-Watt University and the University of Dundee. The funding will support projects that accelerate impact from research along the transition pipeline and facilitate the early stages of commercialisation. **The funding will not support research projects per se.**

### 2. Funding Available

Bids can be made to any theme, under one of two options:

- Up to £175,000 for projects lasting up to two years
- Up to £50,000 for projects lasting up to six months

**Up to £175,000** can be applied to for larger technical development projects, to achieve commercially identified milestones. Projects must be under two years in duration, finishing before 31 May 2027. They should be co-developed with end users to demonstrate technical and commercial feasibility. Only projects that have proved the technical feasibility and market need are eligible for this funding option. Any collaboration partners should provide financial or in-kind support commensurate with the commercial opportunity. Outcomes should include evidence (e.g. preclinical evaluations of a technical prototype) to provide greater confidence for commercial investment. These projects must identify a well thought out R&D / product development plan and a clear proposed business model for future exploitation of the technology. Support and advice from the Tay Health Tech Translational Manager, and Patient & Public Involvement & Engagement Coordinator will be available to successful projects.

**Up to £50,000** can be applied to, for shorter projects up to six months in duration, funding activities to demonstrate the feasibility of a technology concept, initial

prototype development and testing, and ensuring a technology is designed to meet user demands. Engagement with diverse patient groups, representative of the whole target population, is expected. Support and advice from the Tay Health Tech Translational Manager, and Patient & Public Involvement & Engagement Coordinator will be available to successful projects.

The total pot available is £995,000, and we will take a portfolio approach to fund projects in as many themes as possible. The projects will be funded following an application and peer review process. The expectation is that most projects funded will be at TRL 4 or higher, with a view to moving beyond TRL 4 via this funding.

### 3. Unmet health and care needs

Five workshops have been held over the last few months to better understand the barriers to accessing healthcare for people in Tayside. The aim of the workshops was to gain insight into participants' experiences with health and care in Tayside and understand their proposed solutions related to medical technology.

Out of these five workshops, four workshops were held with members of the public in community spaces in Arbroath, Coupar Angus, Dundee and Perth. From these workshops, over 600 comments were analysed to identify the themes of importance to the public. The last and fifth workshop was run online for Health & Social Care practitioners. This workshop asked the same questions as was asked to the public, but additionally asked for their views on the identified themes of the first four workshops.

From these five workshops, the Tay Health Tech Steering Board have defined four Grand Challenges that we are looking to solve.

### 4. Grand Challenges

#### Hospital at Home

This is a distinct area of provision by the NHS and others to provide short-term, targeted interventions in people's homes to keep people out of hospital or return home from hospital sooner. For more information on how *Hospital at Home* works in Scotland, visit the [Healthcare Improvement Scotland information hub](#). *Hospital at Home* supports interventions for physical and mental health conditions. This theme has some overlap with Rehabilitation (below).

**Examples** (but not exclusively): an AI friend; use of IVs and oxygen; portable ECG; walking aids.

**Success criteria might include:** demonstration of a reduction in hospital attendances, hospital in-patient bed days, or care home use.

## Rehabilitation and prehabilitation

Enabling rehabilitation and recuperation at home supports a patient's mental wellbeing and their recovery. Supporting prehabilitation has also been shown to improve health and wellbeing prior to planned interventions. Devices to support those both pre- and post-intervention (e.g. surgery) or event (e.g. stroke) could provide monitoring of vitals, monitoring of progress, and supporting exercises for movement and strengthening. This theme could also include monitoring of, or support for, mental health.

**Examples** (but not exclusively): monitoring of blood pressure, heart rate and oxygen; physio-led devices; 'smart' wound dressings.

**Success criteria might include:** demonstration of reduction in hospital attendances, or hospital in-patient bed days, or care home use; demonstration of increased speed of recovery after interventions or events; demonstration of improved physical function or mental health.

## Testing

Being able to stay at home rather than needing to make an appointment at a clinic or GP practice, with the associated potential stress, delays and travel challenges, can have positive impacts on quality of life. This theme is looking for devices that allow patients to test themselves at home, that would flag or help the patient and/or carer understand when a result could be problematic and when to see a healthcare professional. This could lead to earlier diagnosis while also providing more efficient use of GP appointments.

**Examples** (but not exclusively): lateral flow test; pulse oximeter; weigh scales that identify nerve loss.

**Success criteria might include:** demonstration of reduction in primary care or hospital attendances, reduction in travel.

## Prevention & Prognostics

Preventing ill health, or 'health creation' means both healthy people reducing the future risk of ill health, and those already diagnosed being supported to maintain and/or improve their health condition. This theme could include elements from the previous themes such as monitoring (e.g. better control of blood sugar levels reduces longer term impacts), but also bespoke dietary plans, mental health support, substance use monitoring, smart devices.

**Examples** (but not exclusively): blood glucose sensor and pump; alcohol tag; smart medication dispenser; home ECG.

**Success criteria might include:** demonstration of reduction in primary care or hospital attendances; reduction in travel; evidenced-based projections of future health improvements based on improved health creation e.g. reduced drug spend.

## 5. Eligibility

### 5.1 Organisations

Staff and research students at the following organisations are eligible to apply:

- University of Dundee
- Edinburgh Napier University
- University of Glasgow
- Heriot-Watt University
- NHS Tayside
- University of St Andrews

### 5.2 Project eligibility

Applicants must be able to demonstrate the **benefit to and application in the Tayside region**. This could be through addressing an issue unique to Tayside, or common to the rest of Scotland or the UK, working with patients in Tayside, collaborating with business and/or industry in Tayside.

While we recognise that medtech for use in the health and social care system has the potential to impact more broadly than just Tayside, for projects to be eligible for this funding the impact in Tayside should be the primary benefit of the outcomes of the project, not secondary. If you have any questions regarding the eligibility of your project, please email [TayHealthTech@hw.ac.uk](mailto:TayHealthTech@hw.ac.uk).

A core aim of Tay Health Tech is to **reduce health inequalities**, and applicants should make clear how their project will contribute to this.

Projects are required to outline their approach to **Trusted Research and Responsible Research & Innovation**. In the first instance applicants should discuss this with their organisation's team for these. Signposting to further support is available in the FAQs.

Applicants will be asked to outline how they will ensure **diversity** in any data collection, how they will engage with patients and ensure the project is **accessible** and **inclusive** to them. Where an application is aimed at a singular demographic of patient applicants should provide the rationale (e.g. medtech to alleviate endometriosis symptoms). We would encourage applicants to reflect on:

- the non-homogenous nature of any patient engagement and results;
- the limitations of missing particular demographics;
- the importance of including sufficient data sets for effective conclusions.

## 6. Eligible Activities and Costs

Tay Health Tech cannot cover Full Economic Cost, but can cover:

- Salary costs for academic research staff (100%)
- NHS Tayside salary costs for sessions dedicated to the project, or backfill (100%)
- Consumables (100%)
- Travel, accommodation and subsistence (which must be booked and spent in line with your organisation's policies) (100%)
- Public and patient engagement and involvement activities (100%)
- Commissioning expert consultants to undertake specialist tasks e.g. market analysis, use of [SHARE](#).

Tay Health Tech can provide you with support with Patient & Public Involvement and Engagement (PPIE) from our dedicated PPIE Coordinator. We can also provide support with translational elements of your project from our dedicated Translational Manager.

Reasonable costs relating to considerations of equality, diversity and inclusion are eligible. This could be for example, childcare costs to enable attendance at a conference or meeting, or particular mode of travel required.

**The following are NOT eligible for funding:**

- Academic member of staff salary, NHS Consultant salary (i.e. Directly Allocated)
- External partner salaries
- Overhead costs
- New, fundamental research
- Academic publication costs
- Conference fees
- IP and patent costs, including but not limited to registering, maintaining and supporting patents and property rights
- PhD or studentship funding
- Standard desktop computing
- Contributions to KTPs
- Contributions towards the cost of purchasing equipment with a value over £10,000.

## 7. Timeline

**2 December 2024** – Call is launched

**17 February 2025, 13:00 GMT** – deadline

**20 February** – Steering Board receive applications for review

**6 March 2025** – Steering Board meet to make funding decisions

**Mid-March 2025** – Applicants receive decisions

## 8. Assessment of applications

Applications will be reviewed by the Steering Board, which includes representatives of all partners on the project including universities, NHS Tayside, further education and civic bodies. Applications should be written for a non-specialist audience and acronyms should be explained.

Applications will be judged equally on:

- Evidence of acceleration of impact
- The benefit to Tayside
- How the project addresses health inequalities
- Engagement with patients and the public
- Value for money
- The approach of the project regarding Equality, Diversity and Inclusion

## 9. Project reporting

Upon finishing your project, you will be required to submit a final report and a detailed spending report to Tay Health Tech as a condition of reimbursement of expenditure incurred in the project. Information on what is required in that report will be made available at the start of the funding.

We will report both to our funder and to the public a summary of projects funded and their outputs and engagement.

We will also report an anonymised summary of applicant and awardee data including sector and limited protected characteristics (e.g. gender identity, disability, ethnicity).