



Date



# Digital Health & Care Innovation Centre

Joanne Boyle Head of Engagement  
Healthy Ageing Innovation Cluster Lead

# Scotland's national innovation centre for digital health and care



Based in the Inovo Building, with a Demonstration & Simulation facility in the TIC building, University of Strathclyde

[dhi-scotland.com](https://dhi-scotland.com)

# Who are we?



- Formerly the Digital Health & Care Institute
- A national resource
- One of Scotland's seven innovation centres
- Funded by the Scottish Government & the Scottish Funding Council
- We work with Public sector/ Civic organisations, Commercial industry (SMEs through to Enterprise level organisations), Academic institutions and Citizens
- Vision - innovation in digital health and care will help the people of Scotland live longer, healthier lives and provide sustainable and inclusive growth for our economies
- Partnered with Glasgow School of Design & Strathclyde University

# What we do – integrate innovation strands to enable adoption



DEMONSTRATING



Service model innovation



Technical/Digital innovation



Business model innovation

ACCEPTED  
SERVICE MODELS

READINESS TO  
ADOPT/ SCALE

# Our capabilities



- We offer a unique and valuable range of capabilities, with core knowledge and expertise built upon a foundation of experience in the health and care context
- We operate an effective partnership model, bringing together health and care practitioners, industry and academia to collaborate to solve key demand-led challenges
- For innovation to be successful we focus on three aspects – Service, Technical and Business



# 4 pillars for success





# Digital Citizen Delivery Plan

2021/2022

1. Addressing Inequalities and Promoting Inclusion
2. Engaging citizens, staff and services through Co-design and Participation
3. Redesigning Services – Improving Citizen Access/Promoting Wellbeing
4. Innovating to Support Transformation

# Typical process



## **Context mapping**

What helps and hinders achievement of outcomes?



## **Success stories**

What does success look like against the headings?



## **Outcome mapping**

Building on the first workshops to develop a theory of change



## **Data audit and planning**

What data exists and what will we need?



## **Analysis and reporting**

What can we conclude from the evidence we have reviewed?



# Mapping Outcomes

outnav.net/projects/850/outcomes

OutNav Digital Health and Care Innovation Ce... Digital Mental Health Innovation Clus... Joanne

Mapping Tracking Reporting

Map Outcomes Plot Pathways

Map outcomes ?

What we do	Who with	How they feel	What they learn and gain	What they do differently	What difference does this make?
Carry out research to identify examples of local and global innovation and good practice and explore potential for spread and scale	Advisory Group	Excited and motivated by the potential for innovation	Clear priorities for the Innovation cluster, informed by the perspectives of diverse cluster members	Cluster members work together to develop and adopt successful digital interventions for mental health	Effective digital interventions for mental health are adopted at scale
Bring clinicians, academics, policy makers, industry partners and other stakeholders together to identify priority areas for action	Cluster members	Part of something bigger than the sum of its parts	Cluster members gain new funding opportunities and trusted collaborative partners	Cluster members draw on insights from users as they develop and adopt digital solutions	Improved buy in across stakeholders
Establish our communication channels and recruit Innovation Cluster members	People who could benefit from the learning from this work	Welcomed, included and that I have a valuable contribution to make	Clinicians gain increased understanding of how digital innovation can enhance their work and how to get involved	The wider community draws on the learning from the cluster as they develop and adopt digital solutions	Better designed, safer and more effective approaches
Bring cluster members together face to face and virtually through events, meetings and an online network	Public and people with lived experience		Industry partners get timely insights and access to intelligence from clinicians, policy and people using services	Organisations develop and adopt new digital solutions in line with agreed priorities	Solutions which are feasible, can be adopted and implemented in systems
Share and promote the information and learning from the work through our website, social media and other channels			Cluster members better understand procurement and	The conditions for change are	

# Aim: To accelerate digital innovation and Adoption in health and care.

## Create

Create a collective of shared interests, expertise and skills

## Share

Share information and support knowledge exchange

## Build

**Build Collaborations that are greater than the sum of their parts.**

## Seek & Solve

Seek and solve demand led challenges

## Opportunities

Identify funding/host challenge opportunities





UK Research  
and Innovation

# Designed for Ageing Competition

September 2021

Healthy Ageing Challenge





UK Research  
and Innovation

## The Designed for Ageing Competition

### Presents an opportunity to:

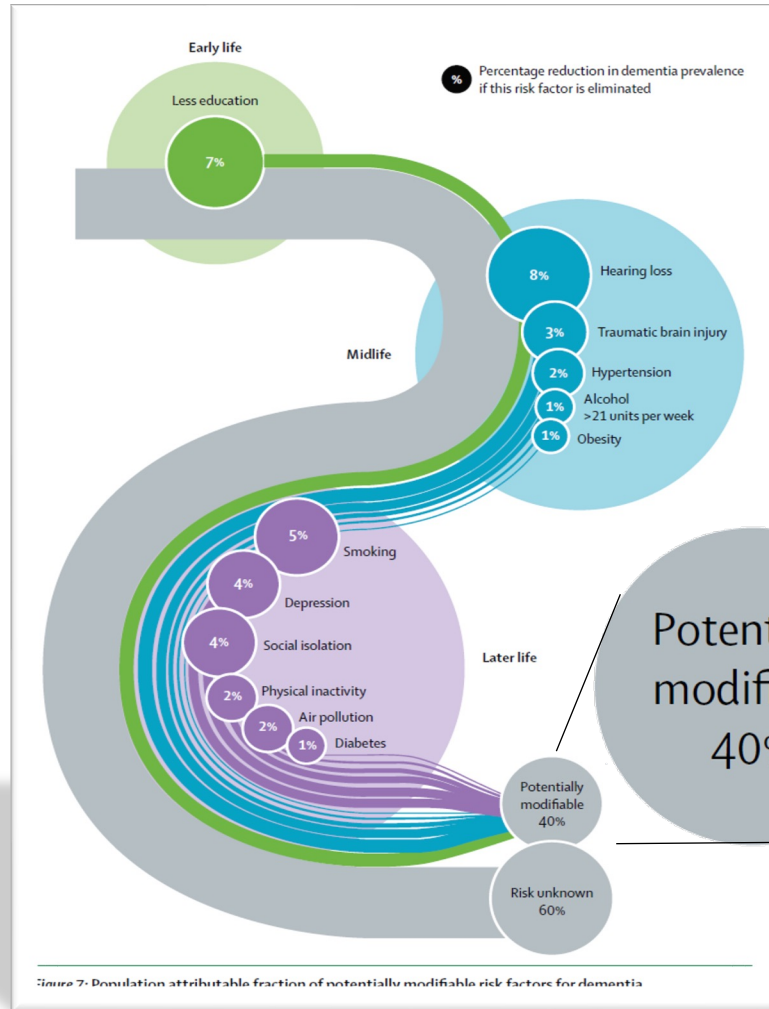
- Receive up to £2m in grant funding to advance your business
- Fund eligible project costs\* for up to two years
- Leverage the competition's unique design stage gate to make your organization more sustainable longer-term, and more likely to capture viable market share

Healthy Ageing Challenge





# Brain Health & Dementia Prevention



Livingston et al., 2020

The Lancet Commissions

Dementia prevention, intervention, and care: 2020 report of the Lancet Commission

*William Livingston, Jonathan Huntley, Andrew Sommerlad, David Ames, Clive Ballard, Sube Banerjee, Carol Brayne, Alistair Burns, Saskia Cohen-Mansfield, Claudia Cooper, Sergi G Costafreda, Amit Dias, Nick Fox, Laura N Gitlin, Robert Howard, Helen C Kales, Mika Kivimäki, Eric B Larson, Adesola Ogunniyi, Vasiliki Orgeta, Karen Ritchie, Kenneth Rockwood, Elizabeth L Sampson, Quincy Samus, Lon S Schneider, ...*

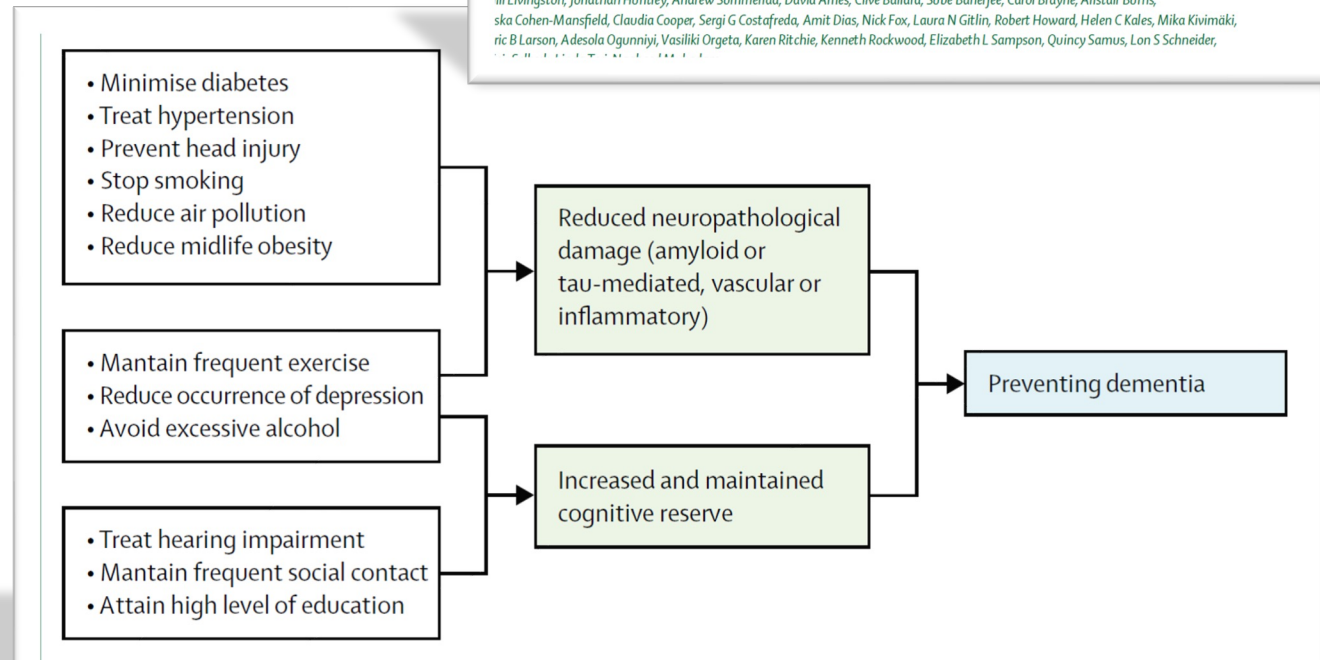


Figure 2: Possible brain mechanisms for enhancing or maintaining cognitive reserve and risk reduction of potentially modifiable risk factors in dementia



Scottish Dementia  
Research Consortium



Digital Health & Care  
Innovation Centre

## Brain Health & Dementia



**Brain Health** is an emerging and growing concept that encompasses neural development, plasticity, functioning, and recovery across the life course.

Good brain health is a state in which every individual can realize their own abilities and optimize their cognitive, emotional, psychological and behavioural functioning to cope with life situations.

1. It involves interconnected social and biological determinants
2. It creates opportunities for promotion and prevention strategies across the life course.
3. They require multisectoral and interdisciplinary collaborations with a holistic person-centred approach
4. They need to involve/engage people with lived experiences, their families, and carers



---

We are all researchers

---

# Scottish Brain Health & Dementia Research Strategy

[sdrc.scot/researchstrategy](https://sdrc.scot/researchstrategy)







Scottish Dementia  
Research Consortium



Digital Health & Care  
Innovation Centre

# Technologies for Brain Health and Dementia Prevention

June 2022

## Technologies for Brain Health and Dementia Prevention Workshop

The Scottish Dementia Research Consortium (SDRC) and the Digital Health & Care Innovation Centre (DHI) hosted a two-day event that encapsulated keynote speakers and interactive workshop sessions, which focused on [technologies for brain health and dementia prevention](#).

### Aims

- 1) To provide a space wherein the relevant community could discuss ideas and interests.
- 2) To set up Special Interest Groups (SIG) that works collaboratively with the SDRC.
- 3) To co-produce a white paper (technologies for brain health and dementia prevention in Scotland).





## Technologies for Brain Health and Dementia Prevention Workshop

<b>Exercise 1:</b> Discovering insights	<b>Exercise 2:</b> Opportunities and Impediments	<b>Exercise 3:</b> Mind Mapping Opportunities	<b>Exercise 4:</b> Developing Ideas
---	--	---	-------------------------------------



### Aims



To co-produce a white paper that will pave the way towards future technologies for brain health and dementia prevention in Scotland.



# The Data Lab...

is Scotland's **innovation centre for data and AI**

Our mission is to help Scotland **maximise value from data and lead the world to a data-powered future**

[www.thedatalab.com](http://www.thedatalab.com)



thedatalab.com  
@datalabscotland

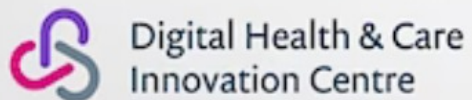


# Brain Health Technology & Data Challenge

part of

## DATAFEST2022

in partnership with





Scottish Dementia  
Research Consortium



Digital Health & Care  
Innovation Centre

## Technologies for Brain Health and Dementia Prevention

**Theme 1: Technologies to enhance brain health.** The advent of VR/AR, Wearables/Sensors, Cognitive Prosthetics, Reminiscence Technologies, and other technologies is creating unprecedented opportunities to move assessments and interventions from the lab to the real world.

**Theme 2: Adaptive technologies, precision medicine and interventions.** This theme focuses on technologies that hold to potential to adapt to the changing needs of those affected by neuro-progressive diseases. These are essential for person-centred assessments and interventions.

**Theme 3: Assistive technologies.** There is a growing interest in technologies that can support people with disabilities to live safely and independently whether at home or in care facilities. We are witnessing a rapid growth of Ambient Assisted Living, Smart Environments, Living Labs, Tele-presence and Tele-care, Cognitive Robotics, just to mention some key examples.

**Theme 4: Co-design and co-production for brain health technologies.** The Scottish Brain Health and Dementia Research Strategy aims to encourage a paradigm shift whereby researchers and members of the public come together to become co-designers, co-producers and co-beneficiaries of research.



Scottish Dementia  
Research Consortium



Digital Health & Care  
Innovation Centre



## Next Steps

Home About ▾ Research ▾ Events ▾ News & Blogs Become a Member

### Special Interest Group Technologies for Brain Health and Dementia Prevention

Innovative technologies to enhance brain health and support people affected by dementia and their caregivers are growing as fast as their rapidly changing needs. Scotland is a hub of technological innovation. We therefore have the knowledge, experience, and expertise among us to leverage this wealth of innovation to support those affected by dementia or are at risk of developing the condition.

**This Special Interest Group will bring together stakeholders from a range of experiences to share their knowledge and expertise to discuss innovations to support people living with dementia and those who care for them.**

[Click here to find out more about the Special Interest Group's recent activity](#)

**[Join our Special Interest Group](https://www.sdrc.scot/technologies-sig)**  
**<https://www.sdrc.scot/technologies-sig>**

### Latest News

#### Attend first SIG Meeting

The first formal meeting of this Special Interest Group will take place in Edinburgh on 25th November 2022.

[Register now](#)

This Special Interest Group is proud to be supported by:



Digital Health & Care  
Innovation Centre



Scottish Dementia  
Research Consortium

# Join our digital health and care network

- Scan the QR code →

Or

- Enter:

[www.dhi-scotland.com/join-our-network](http://www.dhi-scotland.com/join-our-network)



# Visit our HAIC webpage

- Scan the QR code →

Or

[www.dhi-scotland.com/innovation/innovation-clusters/healthy-ageing/](http://www.dhi-scotland.com/innovation/innovation-clusters/healthy-ageing/)





# Join our private LinkedIn HAIC Group

- Scan the QR code →

Or

- Enter:

[www.linkedin.com/groups/12496744/](https://www.linkedin.com/groups/12496744/)

