UKRI Healthy Ageing Challenge

Adding Life to Years

Achieving impact for healthier later lives

2019–2024 and beyond
This report marks the conclusion of UKRI’s ground-breaking investment in Healthy Ageing. Our five-year journey has energised a community of innovators and researchers from a wide range of industries and academic disciplines around a vision to enable people to remain active, productive, independent and socially connected across the generations for as long as possible. We set off knowing that there was no pre-prepared script. We recognised the need to catalyse interest right across the innovation pathway, from research and spin-out, through to scale up. On the way, recognising the need to unlock the creative potential of the UK.

Ageing populations remain today’s reality and tomorrow’s opportunity. The Healthy Ageing Challenge may be ending, however the mission to build the knowledge and innovation to make the most of this opportunity continues.

The following pages offer a glimpse of the impacts that have been achieved against a background of a global pandemic and cost of living crisis. Credit goes to all those involved, not just those featured, as well as the wise counsel from our Advisory Group and the fantastic support provided by our partners and assessors.
Seeking Impact

Our Vision
The aim of the Healthy Ageing Challenge was to enable businesses, including social enterprises, to develop and deliver products and services which support people as they age and the innovative business models that enable them to be adopted at scale. This will allow people to remain active, productive, independent and socially connected across generations for as long as possible.

Our Ambition
To impact the lives of millions of people within a decade. We recognised that to achieve this, the Challenge is acting as a catalyst and won’t achieve that impact on its own.

Our Impact
This report highlights the impact from a diverse portfolio of research and innovation projects, notably those relating to staying active, work, housing and care.

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Rising to the Opportunity

We don’t just want to live longer. We want to make the most of our longer lives.

In 2023, there were 11 million people over the age of 65 in England. Projections indicate by 2043 there will be an additional 3.5 million people.

While average life expectancy has risen to 81 years, average healthy life expectancy is much lower, at only 62 years.

Today, over 74% of people over 65 in England live with at least one long-term health condition, and a quarter of all adults have two or more long-term health conditions.

At the same time, life expectancy and healthy life expectancy vary starkly between different areas. Life expectancy for females in the most deprived areas is 78.3 years, which is 18 years less than that for those in the least deprived, and they will spend 10.8 more years in poorer health.

How can we address inequalities in healthy life expectancy and help people be happier and healthier in later life? The Healthy Ageing Challenge was designed to tackle exactly this question.

Average life expectancy is 81 years
for children born between 2020 and 2022

Average healthy life expectancy is 62 years

The Opportunity

Today, a 65-year-old can expect to live 18 more years. By 2040, over-50s will account for 63 pence in every pound of UK spending. Removing barriers to their spending such as poor design, lack of research and age discrimination could add 2% to UK GDP. That’s £47 billion.

By providing innovative and attractive solutions that people want and need, we can also provide access to the care, social support, work, housing and activities that will help people to thrive in later life.

Since it launched in 2019, the Healthy Ageing Challenge has been dedicated to the mission of adding life to years through carefully designed funding programmes and focused support for projects.
Novel Achievements

Approach
Affirmed the social and economic value of taking a mission-led approach to tackling the major challenge and opportunity an ageing population presents.

Employed an agile and responsive strategy, taking learning from earlier funding rounds to inform future competitions and reflect the ever-evolving needs of society.

Maximised impact by forging partnerships with both private investors and charities to raise the co-investment needed to bring more inspiring products and services to market.

Research
The first Innovate UK Challenge to engage a research director to drive strong evidence-based innovation and help businesses understand the opportunities emerging from healthy ageing.

Harness the very best of the UK’s creative talent, with our Catalyst programme opening a new route to impact for researchers from the arts, humanities and social sciences.

Our commitment to embed the views of people with lived experience across our entire programme, including within our governance, has helped shape a portfolio that is truly inclusive, diverse and supports levelling up on health inequalities.

Innovation
Created a new approach to embed inclusive design in innovation projects to ensure solutions were fit for market and further investment.

Provided support for social venture innovation projects, another first for Innovate UK, highlighting the potential for investments to have social as well as economic impact.

Focused on near-to-market innovations that involved technology at high readiness while developing sustainable business models with significant potential to scale and spread.
£161 Million total investment

£98 Million challenge investment

£63 Million co-investment from industry (exceeding the business case objective for £23M)

133 Publications reported from research projects by the end of the challenge

52+ Innovations came from research institutions

10 Projects led by large corporates

£19.8 Million follow-on private investment already secured by February 2024

80% of projects inclusive of lower income groups

242 Projects funded

126 SMEs funded of which 43 are social ventures

80% of projects reported the development or improvement of workforce technical skills/knowledge

4,000 Followers across social media

51 Universities engaged

2,200 Community of practice members

51 International events

234 Events including 4,000 followers of social media

Frac 80% of projects reported the development or improvement of workforce technical skills/knowledge

SMEs funded

Universities engaged

Projects funded

Events

Followers

Community of practice members

Technical skills/knowledge
"It’s about bringing together all the different elements – the academics, the innovators, the entrepreneurs and the investors, from across a wide range of sectors, so that they communicate and work together to deliver solutions that really change people’s lives."

Cynthia Bullock, Deputy Challenge Director

Workstreams

Delivering UK-Wide Impact

By catalysing innovation and investing in projects from right across the UK, we are delivering impact where it could make the biggest difference, helping to level up on inequalities, while providing widespread economic opportunity and stimulating growth.

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**Trailblazers**

Flagship collaborative projects with businesses across the UK to create new services and products that deliver sustainable impact at scale.

£24 Million

**Designed for Ageing**

Harnessing the best of UK design talent and inclusive user engagement to fund near to market innovations that have potential to scale.

£20 Million

**Research**

Multi-disciplinary, evidence based research providing critical insights for business and social venture innovators.

£12.3 Million

**Investor Partnerships**

UKRI and private investment joining forces to fund SMEs bringing inspiring products and services to market.

£11 Million

**Catalysts**

Igniting university-based innovations with the potential to meet the needs of older people globally, delivered in partnership with Zinc.

£8.3 Million

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**Social Ventures**

Supporting social ventures’ ambitions to help people age well, delivered in partnership with UnLtd.

£7.1 Million

**Longitude Prize on Dementia**

Collaboration with the Alzheimer’s Society to fund breakthrough innovations for the care of people living with dementia using AI, delivered in partnership with Hesta.

£3.5 Million

**Community of Practice**

Bringing together organisations to build a community of shared learning.

£2 Million

**Design Pathfinders**

Supporting SMEs through collaboration with the Design Age Institute as well as opening up international markets in collaboration with the Northern Health Sciences Alliance.

£1.4 Million

**Covid Fast Response**

Agile, community-led responses to address Covid-19 related issues and fuel post-pandemic recovery.

£0.6 Million

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Plus additional flexible funding: enabling the Challenge to adapt in an agile way through investment. Includes Design Age Institute Pathfinders, the Housing Learning and Improvement Network (LIN), and UK-Canada AgeTech Innovation Exchange programme.
Galvanising the Domain

Shaping the future of healthy ageing through knowledge sharing and collaboration

Bringing the domain together

Five years ago, healthy ageing was still a nascent domain. Researchers and innovators were doing great work across the UK but often without the knowledge networks and connection opportunities that a well-established ecosystem can provide. The focus was on managing frailty and very old age.

The Challenge provided an opportunity to shift the focus to early prevention and achieve sustained impact by facilitating collaboration, not just across the funded investments, but across the wider healthy ageing ecosystem.

We established the Healthy Ageing Community of Practice to share insights and experience right across our community of entrepreneurs and researchers.

The community has grown to reach a truly diverse community of 2,200 people working across all aspects of the healthy ageing ecosystem.

We have hosted annual events that have attracted a growing national and international audience, providing opportunities for our community to showcase their work and win awards. Sharing experiences as well as knowledge has created collaborations and networks which will long outlive the Challenge.

The Healthy Ageing Conferences

Our annual conference exemplified how the domain has come together to collaborate since the Challenge began.

The Challenge’s final annual conference, Healthy Ageing 2023, attracted over a thousand delegates. Included was an exhibition area, innovation pitching zone, VR zone, and interactive music with dance workshops. The keynotes – internationally renowned designer, Dr Patricia Moore, and Chief Medical Officer, Professor Chris Whitty – were a particular highlight.

Focused collaboration and support

A network of fantastic partners has provided focused support and collaboration opportunities for specific cohorts of project workstreams. Some examples include:

• Social impact business accelerator, Zinc, worked to build the entrepreneurial ambitions of our 64 Catalyst projects. Zinc provided coaching, cohort get-togethers, pitching workshops and co-design sessions. They also ran several showcase events where the Catalysts pitched to a panel of investors.

• Social entrepreneur champions, UnLtd, worked with our social venture cohorts to provide one to one coaching and access to specialist advice so they could build their plans to scale, as well as cohort building activities to exchange knowledge and ideas with fellow social entrepreneurs.

“...a real milestone, I was really inspired by seeing and hearing such enthusiasm from people who are developing products and services to those carrying out research and I got a sense of a common purpose, which is about adding life to years.”

Helena Herklots CBE, Older People’s Commissioner for Wales and Healthy Ageing Challenge Advisory Group Chair

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"It’s been so brilliant to work alongside organisations where in other walks of life we would be ‘competitors’, we’re collaborators and peers. And we achieve so much, through shared learning, shared insight dissemination and peer-support and guidance. I’ve never experienced anything quite like it.”

Ben Wilkins, CEO Good Boost Wellbeing

The Healthy Ageing Conference showcases projects of NHS Confed, 2023

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Professor Judith Phillips, OBE speaking on the State of Ageing Research at Healthy Ageing 2023

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What was unique about the Healthy Ageing Challenge?

A new approach to maximise impact

The Challenge adopted an ecosystem approach, fostering collaboration between industry and academia to translate research into products and services, that together with innovative business models, help support widespread adoption and sustainability.

Unlike a medicalised approach that addresses disease and frailty related to ageing, focus was on enabling people to make the most of their later lives, using research from the arts, humanities and social sciences to ensure innovators designed solutions people really want.

Research

An impact-led approach

Collaboration is crucial to successful innovation. So, from the start, research projects needed to show how they were going to engage with businesses to create real impact, especially for those who would benefit most.

Social, behavioural and design research provides evidence, particularly around user needs, to help businesses create products and services fit for market and further investment. Businesses help research achieve impact, while policy makers and the third sector provide access to users for co-design, and some routes to funding and market.

Catalysts

Transforming research into impact

Our innovative Catalysts programme also followed a ‘research meets business’ approach.

Entrepreneurial researchers were funded to accelerate the translation of their research and were supported on their journey by a social venture accelerator, Zinc, who helped them build business know-how, hone their offer, and understand their route to impact.

Catalysts awardees are now going on to build businesses and social ventures, licence their innovations or stimulate social movements that will make a real difference. Those that were able to most clearly demonstrate a route to scale won further acceleration funding.

Here’s how the Catalyst projects are looking to achieve impact:

- 27% Social ventures
- 26% Commercial spin-out
- 11% Licensing
- 10% Commercial partnership
- 10% Consulting
- 8% Social partnership
- 5% Campaign
- 3% Publishing

Impact Investors and Charities

Sourcing finance with a social dimension

For many of the businesses in the Challenge portfolio, social impact objectives are as important as financial goals, so alongside traditional venture capital and angel investors, we also partnered with impact investors such as Nesta, the Social Tech Trust, Newable and Prostate Cancer Research – another first for Innovate UK.

This helped many scalable projects on their journey to impact and provided the runway to further investment in healthy age related products and services.

Social Ventures

Supercharging projects that are already embedded in communities

A first for Innovate UK and one of our proudest Challenge achievements has been to invest in the growth of Social Ventures – their work is crucial in supporting older people to stay active, connected and productive.

In doing so, with the support of UnLtd who have provided access to business support contacts and tailored mentorship, we are helping create sustainable businesses, address inequalities, and achieve impact directly in those communities set to benefit most.

168 collaborations between business, research, or third sector were reported in 2023 over and above formal project agreements
Co-design is critical for addressing inequalities and achieving market success. From the start, we made a commitment to involve people with lived experience in our decision-making. As a result, inclusive design thinking has been integral to the governance, design and delivery of the Challenge.

For example, citizen representatives took part in our interview panels for competition applications, ensuring lived experience directly influenced the decisions around which projects were awarded. Alongside this, only those projects that could demonstrate meaningful engagement with lived experience were successful in achieving funding. Projects needed to show a clear understanding of what users really wanted, through the involvement of people with lived experience in production and design.

Projects awarded grant funding from The Designed for Ageing competition had to pass a unique Design Stage Gate assessment. This was an interview conducted six months into their project designed to enforce rigor by asking three key questions: who have you engaged, what have you learned, and what are you changing as a result of what you now know?

Ensuring Market Adoption and Scale

Projects were required to demonstrate how they were embedding these dimensions into their initiative and they had to pass the Design Stage Gate to unlock further funding. The process put user engagement centre stage, encouraging all projects to grow their business by reaching as broad a market as possible.

“Lived experience informs teaching, it informs research, it informs the project.”

Ro Panghelli, Co-Researcher, DesHCA Project

“Older people as a group are often disadvantaged in society. We’re working with them throughout the project to co-design innovative products, services, and performances. Older people are at the centre of the design process. That’s the innovation. That’s the thing we want to find out more about and offer guidance to other people.”

Dr Helen Manchester, Principal Investigator, Connecting Through Culture As We Age, University of Bristol

“By taking part in interviews for UKRI’s Healthy Ageing Challenge, I was pleasantly surprised to find that contributions made by members of the public were seriously considered in deciding on the best applications. I felt like an equal part of a team which gave funding to the best projects with excellent and deliverable ideas.”

Sead Masic, Citizen Representative, Social Ventures Project Selection Panel and Member of Citizen Network VOICE
### UK-wide Investment Reach

We are playing a part in levelling up health, economic opportunity and growth across the UK. As this map illustrates, the Challenge funding has brought change where it is making the biggest difference.

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<thead>
<tr>
<th>Area</th>
<th>Funding</th>
<th>Notes</th>
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<tbody>
<tr>
<td>North West</td>
<td>£6.8 Million</td>
<td>Read more on page 29</td>
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<tr>
<td>Northern Ireland</td>
<td>£3.6 Million</td>
<td>Read more on page 29</td>
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<tr>
<td>West Midlands</td>
<td>£6 Million</td>
<td>Read more on page 31</td>
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<tr>
<td>Wales</td>
<td>£3.3 Million</td>
<td>Read more on page 35</td>
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<tr>
<td>South West</td>
<td>£6.3 Million</td>
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<tr>
<td>Scotland</td>
<td>£16 Million</td>
<td>Read more on page 34</td>
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<tr>
<td>North East</td>
<td>£4.3 Million</td>
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<td>East Midlands</td>
<td>£5.7 Million</td>
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<tr>
<td>East of England</td>
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<tr>
<td>London</td>
<td>£16.3 Million</td>
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<tr>
<td>South East</td>
<td>£5.5 Million</td>
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<tr>
<td>York &amp; Humber</td>
<td>£2.1 Million</td>
<td>Read more on page 41</td>
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<tr>
<td>Innerva</td>
<td>£2.1 Million</td>
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<tr>
<td>ENLIVEN</td>
<td>£6.3 Million</td>
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Map shading indicates the level of funding awarded relative to population in each area.
The £98 million investment by the Healthy Ageing Challenge resulted in the development of new products and services that have delivered both societal and economic impact on the most important issues that face older people today: providing support for them to stay active, healthy and connected to others, reducing hospital visits, providing better access to care, housing fit for independent living, and continued employment.

Innovation for societal benefit

The aim of Healthy Ageing Challenge was to enable businesses, including social enterprises, to develop and deliver products, services and business models that could be adopted at scale to support people as they age. The purpose of these initiatives was to allow people to remain active, productive, independent and socially connected across generations for as long as possible.

The societal impact of the projects funded by the Healthy Ageing Challenge has been widespread.

New products and services now help people:

- Live longer in their homes and have a better quality of life by by adapting housing to meet changing needs as they age.
- Find more attractive alternatives to residential care, such as co-housing.
- Connect with their communities and support wellbeing, boosting independence and quality of life.
- Stay active to prevent co-morbidities and support better mental health, to delay or prevent additional care and hospital stays.
- Stay in work for longer by extending employee wellbeing services to SMEs.
- Get back to work using their skills, whether that be in caring and odd-jobs, or through volunteering.
- Get access to products and services provided by their Local Authority that support healthy ageing, adding life to years.

Innovation for economic benefit

The Healthy Ageing Challenge has stimulated economic growth by supporting businesses that have the greatest potential to scale, ensuring research is working directly with businesses to capitalise on the economic opportunities of an ageing consumer base, and providing fresh commercial opportunities among entrepreneurial researchers working on innovative products and services.

Research projects funded by the Healthy Ageing Challenge have subsequently achieved £11.8 million of further funding that’s almost double the initial research funding.

£161 million total investment

£98 million Challenge investment

£63 million Industry investment

£161 million total investment

£98 million Challenge investment

£63 million Industry investment

Serving as a dynamic force for innovation, the Challenge’s projects are creating sustainable economic impact by:

- Supporting healthier working in later life, contributing to the national productivity agenda.
- Creating job opportunities within housing and the care economy.
- Creating services and products that are designed with users to enhance market adoption and unlock economic opportunity.
- Preventing hospital admissions and reducing lengths of stay through innovative approaches to community-based care and activity.
- Developing cutting-edge technologies to reduce the cost of NHS treatments and waiting lists.
“We live in an ageing society. Families are struggling to cope with the basic needs of their loved ones. We know that over a million older adults live in chronic loneliness. We see the struggles that creates for the NHS, but also for families who don’t have the resources or don’t live near their elderly parents to take care of them.”

Sanjay Lobo MBE, CEO, onHand

3.5 million older people in the UK need support to live safely at home. This figure is projected to rise to 5.9 million by 2040. Health and social care play a vital role in our communities, enabling older people to remain at home and thrive in an environment that is healthy, connected and safe. But the care sector is in crisis. Around one in ten carer posts now stand vacant, which is the highest level since records began in 2012/13.

More than half of the projects funded by the Healthy Ageing Challenge are related to health and social care. These projects are providing solutions from personal care at home and technology to support independent living, to products and services that enable older people to engage with their communities and live fulfilling lives.

By 2035 we are going to need an additional 480,000 social care staff in the UK just to keep pace with the rate at which the population is ageing.
BelleVie
Reinventing the future of homecare

BelleVie is building a society which values fulfilling careers in care, so every member of the care ecosystem is supported through meaningful, reciprocal relationships. Their innovation is a new model of care delivery inspired by the successful Buurtzorg model which has revolutionised community care in the Netherlands. Their self-managing teams of care workers are supported by an innovative Wellbeing Operating System technology platform.

Improving the lives of older people and care staff
The BelleVie way of working has a positive impact on the lives of both those giving and receiving care, with improved care worker recruitment and retention; 90% or more of their clients strongly recommending their services and winning the 'best in show' Gold Grand Prix Winner title at the 2024 UK Homecare Awards. They provide both state and privately funded care. They've also launched 'Thrive with BelleVie', a managed marketplace of vetted, trusted suppliers for the ageing population, and are expanding their software to include predictive analytics and AI to support more people to live their best lives at home.

"If I were to fall, [my wife] couldn’t pick me up... so she’d have me back in hospital. Well, I’m not going back in hospital."
Eric, Beneficiary of BelleVie

Tribe
Addressing inequalities in local and national care and community support

The mission of 'The Tribe Project' is to directly tackle national care inequality. Tribe provides a way to identify gaps in local care provision, then facilitates the upskilling of individuals via a digital platform and light touch regulatory framework to start and run their own 'Community Micro Enterprise'. These new businesses have an immediate impact on delays in local NHS hospital discharges through improved homecare capacity.

Founded as a not-for-profit initiative between Bronze Labs, Carers UK, Shared Lives Plus and Skills for Care, Tribe provides a scalable solution capable of generating high quality well paid employment in the form of home care provision and community nurses.

"Health inequalities are one of the major challenges of our time, and that’s what Tribe is entirely focused upon. Tribe is an opportunity to do things differently. It’s a message of hope."
Julia Derby, Head of Communities, the Tribe Project

Hear from Richard Howells, CEO & Founder, The Tribe Project, and some of the beneficiaries of Tribe here:
Innovative solutions for brain health

This may impact their ability to live independently, connect with others, and lead fulfilling lives. It may also impact the lives of the people who care for them. Social isolation and loneliness affect about a quarter of older people and are key risk factors for mental health conditions in later life.

Supporting social connection, positive mental health, and cognitive wellbeing are essential elements of effective care.

Here are four projects that form part of a care solution and demonstrate how Healthy Ageing Challenge initiatives are supporting brain health across the UK.

**ENLIVEN**

Making outdoor activity accessible for people with later life dementia

People with dementia and their families often highlight the benefits of interacting with nature – they feel more engaged, hopeful, resilient and better able to deal with challenges – but they experience many obstacles to getting outdoors and engaging in nature-based pursuits.

ENLIVEN worked with businesses and organisations that provide access to nature-based outdoor activities to make them more accessible to people living with dementia or other forms of cognitive impairment. Connecting these providers with people affected by dementia and researchers allowed them to co-create innovative ways of becoming more inclusive. A small grant scheme supported 11 demonstration projects across the UK, such as a 10-week programme of photography walks at the Living Museum of the North in Beamish, and a series of art and wellbeing workshops at Seaton Tramway in Devon. The team shared the learning from the demonstration projects in a set of guides for visitor economy businesses.

**Music In Mind Remote**

Delivery of music therapy-based activities for people living with dementia

Co-founded by the University of Manchester and Manchester Camerata Orchestra, Music in Mind Remote (MIMR) is an award winning, research-based programme that has a transformative impact on people living with dementia, their carers and families. MIMR delivers music therapy-based activities to help people living with dementia express themselves and communicate with others, creating meaningful moments of connection in conversations without words. This project builds on ten years’ work in this field and evaluates impact in care homes and community groups. MIMR is increasing sector capacity by enabling care staff and volunteers to become “Music Champions” and deliver therapeutic music sessions for people living with dementia without the need for a trained musician on site.

“Everyone’s spirits, including mine, have been lifted. Whenever families say we’ve improved the quality of life of their loved one, the feeling we get is unbelievable.”

Carer, Trained in Music in Mind Remote, Rochdale Care Home
XR Therapeutics

Investor Partnerships SME, Mindset North East

XR Therapeutics, a spin out from the University of Newcastle, combines traditional Cognitive Behavioural Therapy (CBT) with graded exposure therapy to treat a wide variety of anxiety disorders, delivered using immersive technology to display life-like digital scenes in a custom and interactive space, for people over the age of 50. XR Therapeutics is already delivering impact by overcoming issues of social isolation and helping people start, resume and sustain active, independent and productive lives. Traditional CBT can take between 8 to 16 sessions to make an impact. The impact of XR Therapeutics treatment can be seen in under 1 hour, reducing waiting times and the strain on mental health resources, while increasing the capacity of mental health professionals to treat more patients.

XR Therapeutics has subsequently received further funding via Innovate UK’s Mindset Extended Reality Programme, to adapt their solution to suit a wider range of technological interfaces, such as VR headsets.

“It has been extraordinary to watch our intervention grow and develop thanks to Innovate UK’s support. We have really been able to turbocharge the technical development of our product and we are now proudly treating patients through NHS partnerships.”

Penny Day, COO, XR Therapeutics

Supporting people with brain-related visual impairment to read

Co-produced with people living with Posterior Cortical Atrophy, ReadClear is the only purpose-built and clinically proven assistive reader for people with brain-related visual impairment.

The beta version had more than 2,000 users in the first year from launch, which allowed the team to conduct market research and develop an updated version with personalised content and a new easy-to-use interface. The team is now looking for licensing partners to commercialise the app, find out more online at makingreadingreal.org.

After the Catalyst Award, ReadClear received follow up funding from the UK foundation of Social Entrepreneurs and the UKRI Catalyst Accelerator.
Cutting-edge housing solutions for a healthier future

As people age, their housing needs may change. The suitability of the home they live in and the housing stock available to them play a critical role in maintaining their health and wellbeing.

The government has categorised 3.5 million homes in the UK as posing a risk to residents’ health or life. Half of these are occupied by older people (aged 55 and over).

The UK’s ageing housing stock, one of the oldest in Europe, imposes a substantial cost on health and care services, with unsuitable housing leading to a £624 million burden on the NHS due to hazards and falls. In addition, there are large disparities in the distribution of non-decent homes across the UK. With regions in the north of England having almost double the number of non-decent older households than in London and the South East.

The Healthy Ageing Challenge has invested over £18 million in projects across the UK related to housing from designing age-friendly homes, to providing care technology and retrofitting existing housing stock to make it fit for purpose.

These housing solutions are enabling more older adults to stay in their own homes, live independently, and stay connected across generations.

More than 1 in 3 people of pension age in the private rented sector are living in relative poverty.
Peoplehood

Creating neighbourhoods for independent living

Blackwood Homes and Care are combining a new design of attractive, accessible housing with a range of place-making innovations that create vibrant neighbourhoods that people want to live in.

Taking a partnership approach, Peoplehood collaborates with residents based in Dundee, Glasgow and Buckie, along with local authorities, health providers, industry and academia. Designing homes like the Blackwood House that are beautiful, affordable, accessible, and adaptable as people age, enabling individuals to live independently and socially connected within their neighbourhood for longer.

Reaching further to deliver greater impact, Peoplehood also supports housing organisations by providing guidance on adapting existing homes to better support people as they age. An example is their CleverCogs™ digital system, a customisable tablet device designed to support people within the neighbourhood with a range of services and information linked to their health and wellbeing goals. Plus a Smart Meter linked to AI that monitors energy usage to establish patterns of behaviour that may predict when intervention is required to prevent a hospital admission.

Already delivering significant impact, residents across all tenure types are benefiting, including those with the greatest inequalities and poorest health outcomes.

“The investment has taken Blackwood into a new commercial position, the partners into a new commercial position, but ultimately the people of Charleston and the neighbourhoods into living more productively for the remainder of their years.”
Simon Fitzpatrick, Lead Development & Commercial Director, Blackwood Homes and Care

Bron Afon

Social Venture Bron Afon has created a senior co-housing model: a community of private homes, clustered around a shared space that enables people to ‘live together, apart’.

By bringing older people together into communities where they share facilities and decision-making, Bron Afon has provided a solution that enhances wellbeing, reduces loneliness and isolation, and promotes activity and engagement.

This project has created a model that helps older people age well, stay healthier for longer, and enjoy continued personal autonomy and independence while delaying the need for people to access costly health and social care interventions.
E.ON is delivering home improvements as an extension of their energy efficiency services to enable people to remain independent and living in their own homes for longer. By building on energy efficiency services and joining up existing and new innovations, E.ON has created a whole-house solution with inclusivity, dignity and independence in mind. This includes aesthetically pleasing home adaptations, that are dual purpose and non-stigmatising; the StairSteady, which provides support getting up and down the stairs, enabling exercise and encouraging mobility; the Pippa hob safety device to encourage people to continue to cook safely for themselves; an Amazon Echo that encourages people to connect with digital services as well as connect with loved ones; the Fitbit to encourage people to keep active by counting steps, reporting on sleep and helping people to reach even small goals.

E.ON delivered over 5,000 measures to 2,500 homes. Their partners at Newcastle University, who developed the evaluation of the programme, have shared the results. There has been a positive improvement in mental health, increase in mobility around the house, and people who were completely dependent now being completely independent. This brings a huge potential cost saving on social care.

DesHCA worked with older people experiencing cognitive change and those who design and develop housing to identify scalable and sustainable design improvements that support healthy cognitive ageing, enabling people to live better in their homes for longer. By providing guidance that goes beyond narrow conceptions of ‘age and dementia-friendly design’ into a more expansive and inclusive approach to housing innovation, DesHCA helps developers and house builders as well as local authorities and the third sector understand how to make designs age and dementia inclusive in an attractive and affordable way to future-proof homes.

Their guidance encompasses the designing of new builds and the retrofitting of existing homes, along with evidence-based information on housing needs. There are many things we can do to the home to adjust it, from the very small, to having a plug in a certain place, to the very large, adjusting door frames.

Find out more about how DesHCA is supporting housing innovation.
Staying active is the cornerstone for a healthier, longer life. Yet for some older age is a time of great difficulty, with dignity impaired, independence curtailed and encroaching frailty, discomfort and loneliness. Ill health and disability in older age, however, is not inevitable. Eminent doctors talk about exercise as a miracle cure. For instance, staying active helps to maintain muscle mass and bone density, the loss of which can affect strength and balance leading to a loss of self-confidence and the ability to engage with others which in turn can impact on mental health. Exercise is also used to help people escape from arthritic pain, yet 25% of all adults are physically inactive and inactivity levels increase significantly as people age. Over 71 of the 242 investments in research and innovation made by the UKRI Healthy Ageing Challenge enable older adults to stay active and engaged in their communities. This amounts to a total of £27.3 million.

Inactivity levels by age:

- 29% of people aged between 65-74 are physically inactive
- 47% of people aged between 75-84 are physically inactive
- 70% of people aged over 85 are physically inactive

Many older people are ‘physically inactive’ according to the government definition, which means they do less than 30 minutes of moderate intensity activity per week. Regular physical activity reduces the risk of hip and knee osteoarthritis pain by 6%, depression by up to 30%, and falls by 76%.
Active Families offers a diverse range of programmes in community venues successfully breaking down barriers to activity and engagement for vulnerable and older individuals. The impact of the programmes is widespread, improving the physical health of participants and offering them the opportunity to socialise, alleviating loneliness and helping them feel part of their community.

Their Mission 2 Mobility programme has helped many older people with strength, balance and mobility issues get active, as well as people who have had a physical or neurological injury or ongoing health issues.

Their Well Bean Machines are taking exercise programmes directly to hard-to-reach audiences in neighbourhoods with high densities of vulnerable older people, many of whom are living in poverty, are socially isolated and are inactive. They are fitted out with equipment and fold up seats to deliver low intensity exercises, health assessment tools, wellbeing information packs and tea/coffee dispensing machines. They activate local communities by proactively knocking on doors as well as providing exercise information and aids so older people can stay active in their own homes. In summary, Active Families takes exercise and activity to people.

Helping older people improve and sustain physical and social activity contributes to a positive impact on their health and wellbeing. Serving refreshments from the vans before and after the sessions helps them develop the social bonds that maintain ongoing commitments to exercise. Active Families is now scaling up to roll out services across the UK.

"Over the last two years we have worked across three local authorities in Sunderland, Gateshead & Tyneside, engaging with over 20,000 ageing well residents and encouraging them to participate. We take activity to people, and we make every connection count."

Kelly Brougham, Co-founder & Operational Director, Active Families North East

See Active Families in action:
Musculoskeletal disorders (MSKDs) disproportionately affect older adults, with over 13 million people aged 55+ living with MSKDs. Multi-award winning Good Boost is a rapidly growing UK SME delivering pioneering medical technology across the UK. It’s helping older adults with MSKDs and related disabilities enhance and preserve their strength and mobility, reducing pain, improving their quality of life, while alleviating the strain and even the need for surgery on the NHS. This could save the NHS £200 million by 2030. An AI-driven software solution transforms leisure centres and community swimming pools into community hubs for supported self-management. Good Boost’s solution delivers personalised exercise routines and condition self-management education, facilitated by trained centre staff and supplemented by an at-home therapeutic exercise experience which incorporates gamification features and peer-support to maximise motivation.

With 82% of the UK population living within two miles of a public swimming pool, Good Boost’s solution is highly accessible and inclusive, supporting a diverse population to engage in supported self-management for MSKDs, effectively addressing health inequalities. Good Boost is already successfully scaling up in leisure centres and gyms across the UK and internationally.

“Good Boost has changed my life over the last year. I had gone through a series of operations, which had left me unable to walk. But Good Boost helped me to regain my independence and confidence.”

Linda, Good Boost Beneficiary

The WeWALK Smart Cane enables sight-impaired people to travel more safely and confidently, reducing barriers and contributing to more inclusive and accessible urban environments. Unlike a standard cane, it detects obstacles both above and below the waist to help the user navigate safely.

The WeWALK Smart Cane is linked to a smartphone app that offers an accessible solution for reliable turn-by-turn walking and public transport navigation to support way-finding. The WeWALK Smart Cane is helping visually impaired people get their independence back, be with others more easily, and lead more fulfilling lives.

“We don’t want an improvement in efficiency or simple optimisation. We want our users to do things that they’ve never done before.”

Dr. Jean Marc Feghali, Head of R&D, WeWALK
Innerva has developed an innovative and intelligent seated exercise programme centred around an ergonomic, power-assisted exercise machine delivered in leisure centres, community venues and health settings. This solution caters specifically to individuals who find conventional exercise challenging and is particularly helpful for people who live with pain, have restricted movement or low confidence in their physical ability; helping them to enhance their strength and flexibility through assisted movements, while encouraging long-term participation through progress tracking and gamification.

Breaking down barriers to exercise participation in underserved groups, the machines have been made physically and digitally accessible to ensure ease of use; and specifically designed to look like standard gym equipment, so there’s no stigma to using them.

Here are a few facts reported by Innerva users:

- 90% of users report a positive impact on their mental health, feeling more relaxed and less stressed.
- 70% of users say they can move better in their daily lives.
- 100% of operators report attracting a new market to their centre.

“The world’s population is ageing fast - for the first time in history people aged 60 years or over outnumber children under five years. By 2050, people aged 60 years or over will also outnumber 15-24 year olds. We believe everyone has the right to healthy ageing, which is why we will continue to partner with academics and invest in new technology and digital innovations that assist with active ageing.”

Jon Hymus, Innerva MD
Two decades of improvement in the employment rate of older age groups was stalled by the pandemic.21

Since the pandemic, employment rates among people in their 50s and 60s have declined. Many are not working or even looking for work because they have left employment early, mainly due to ill health.

There’s a disparity according to wealth and gender. People aged 45-65 on lower incomes are often forced to leave paid work early due to health issues, while those with higher incomes are much more likely to leave by choice. Women aged 45-60 are much more likely than men to have left or be thinking about leaving work before retirement age to care for grandchildren or parents.26

Fulfilling employment offers older people a continued sense of purpose and value, benefitting their health and financial wellbeing. Older people have expertise and experience to bring to an inter-generational workplace where the young can learn from older colleagues and vice versa. Having more older people in work also benefits the economy as they continue to contribute to tax and pensions and have more disposable income.

Through the UKRI Healthy Ageing Challenge, around £16.5 million has been invested in projects related to work.

1 in 3 workers in the UK is aged 50 or over.20

Business Health Matters

Early intervention to head off employee health problems

Business Health Matters (BHM) is a collaboration involving 15 partners. The core partners are Active Lancashire, University of Central Lancashire, Lancashire Mind, and ukactive, with the other 11 acting as a delivery network for health checks. The collaboration offers a new form of workplace health screening, targeted exclusively at SMEs which generate a large proportion of UK employment yet rarely offer workplace support due to lack of time, money and resources.

Starting in Lancashire, which reports some of the greatest health inequalities and lowest healthy life expectancies in the UK, trained fitness and leisure centre teams deliver health checks in the workplace helping to create a community-centric solution that addresses both physical and mental health needs. This initiative is helping prevent major health issues, while reducing absenteeism and presenteeism. Beneficiaries describe how effective the service is, how cared for they feel and how useful it is to potentially share data directly with their GPs to help improve health outcomes.

“It’s been a great experience so far. Very easy. Throughout the whole of the UK more people are employed in SMEs than in the larger corporations. So it’s great that we’re now able to target more of the population with programmes like this. And it’s really important that the government supports small businesses to help their staff.”

David Walker, Managing Director, +24 Marketing (SME using the BHM service to benefit their staff)
**OnHand**

**Uber for volunteering**

OnHand is the world’s first on-demand impact platform, giving employees a simple way to do good. Its location-based matching technology lets users see who they can help in their local communities, provides opportunities to help remotely, and also offers sustainability lifestyle pledges with tracked CO₂e reporting.

In 2023, OnHand users completed 1.2 million social and eco actions, fulfilled more than 45,000 minutes on befriending phone calls to older and isolated people, donated over 100,000 items to charity, and reduced 696 metric tonnes of CO₂e.

Set up in collaboration with some of the UK’s leading charities (including The Red Cross, Royal National Institute of Blind People, Guide Dogs, Water Aid, and the British Heart Foundation), the platform operates worldwide and supports a number of causes including elderly & isolated help, poverty, homelessness, crisis response, and environmental and climate action.

OnHand has won multiple awards, most recently being placed at #13 in the Startups 100, for the most innovative companies in 2024 (previous alumni including Deliveroo, Monzo, and HelloFresh) and was named as a Global CSR Leader in G2’s Winter 2024 report. OnHand became B Corp certified in January 2024.

"What I love most about the OnHand app is how it ignites a passion in you to help out, whether that involves undertaking volunteering projects, leading a more eco conscious lifestyle or becoming better informed about the key issues at the heart of our society!" - Imran, OnHand Volunteer

Learn more about OnHand from CEO Sanjay Lobo MBE and OnHand volunteers here:

**Local Treasures**

**Kick starting local economies**

Local Treasures is a fully automated matching platform that uses a ‘totally tailored technology’ approach to connect customers who need help with a skilled workforce of over 50s.

Enabling older workers to maintain work in later life, to date 700 Treasures have been onboarded and 565 of them have found work helping people in their communities. A plug and play model has been developed to enable Local Treasures to be operated from anywhere in the UK.

Trialled in Gloucester, this is now being rolled out across the UK as a franchise operation, championing older people as Local Treasures workers and as franchisees.
By 2030, one in six people, or 1.4 billion, in the world will be aged 60 or over.\(^3\) By 2050, the proportion of the world’s population aged over 60 will be 22%.\(^4\) Despite what we know about our ageing global population and the lessons learned in the pandemic, the world is not prepared, but that also gives room for opportunity.

There is a vast global market opportunity in ageing populations for innovative products and services tailored to meet the needs of this demographic. When you compare countries across the G20, those that invest more in health and in preventative health see people working, volunteering and caring for longer.

The Challenge has worked with the Department of Business and Trade, the Foreign, Commonwealth and Development Office, International Longevity Centre, and other partners to showcase research and innovation from the UK to the rest of the world. Over the last five years the UKRI team has promoted the work of the Challenge at 57 international events around the world, including international missions and online participation in conferences.

The international reach of the Challenge:

- Delegates from 42 countries and 5 continents joined our annual conference in November 2023.
- A delegation to the AgeingFit 2023 conference in Lille, France where Challenge projects were winners of the Gold, Silver and Bronze Innovation Pitch competition awards, with the first-place winner, Good Boost, being recognised as the most innovative project in Europe.
- A showcase of UK companies at the Global Ageing Conference in Glasgow 2023.
- Representation of the Challenge and showcasing of its projects at the Independent Ageing 2023 conference in Japan.
- The Challenge Research Director led delegations of early career researchers to both Canada and Sweden to connect with the international ageing research community and develop opportunities in ageing research.

Opening up opportunities in the Canadian AgeTech Market

This UK-Canada AgeTech Innovation Exchange programme was run in partnership with the Northern Health Sciences Alliance in the UK as a collaboration with AgeWell and the Centre for Ageing + Brain Health Innovation in Canada. It supported an in-person exchange visit involving eight UK and five Canadian companies.

The programme also supported a virtual exchange for over 50 UK and Canadian companies. All companies reported that they had made at least five leads as a result of the activity they planned to pursue, and all respondents said they would recommend the programme to others.

As part of their visit, UK delegates attended COLLISION, a global tech conference in Toronto.

"Canada spends approximately 6% of its health budget on prevention. As a result, it has seen an increase in life expectancy from 79.1 to 82.2 years between 2000–2019."

International Longevity Centre (ILC)

"We secured angel investment from people we met as a direct result of the conference. We have since been introduced, and have now signed a pilot with a government department in Canada, and we’ve just agreed a pilot with a 300 bed dementia ward."

Bruce Elliott, Memory Lane Games (UK delegate on the UK-Canada AgeTech Innovation Exchange)
A collaboration connecting projects to a global movement

In 2019, the Challenge set up a global collaboration with the National Academy of Medicine (NAM) in the USA. This enabled our Catalyst projects to join a global cohort of Catalyst awardees and gain access to worldwide networks and opportunities. It also enabled Catalysts to take part in the Healthy Longevity Global Grand Challenge, a global competition to comprehensively address the challenges and opportunities presented by worldwide population ageing.

Many of our project investments are already achieving global impact and reach:

- **Social Venture, Good Boost** is launching its AI-personalised exercise programmes for older adults living with musculoskeletal disorders in New Zealand, and Australia is next on the list!
- **Designed for Ageing project, Innerva**, is launching its assisted exercise programmes in gyms across Scandinavia, the Benelux, France and Ireland.
- **Research Project SPACE** (supportive environments for physical and social activity, healthy ageing and cognitive health) is achieving international impact through its collaboration with the University of Southern California as part of the Gateway to Global Ageing Data Study. Project Lead, Professor Ruth Hunter is also the Director of the WHO Collaborating Centre for research and training on complex systems and network science.

More than 1 in 10 people in Japan are now aged 80+

Japan consistently rates as having the world’s oldest population

Learning from Japan

People aged 65 or over accounted for 13.6% of the total labour force in Japan in 2021, compared to just 3.8% in the UK in the same year. The Healthy Ageing mission to Japan in 2023 was tasked with learning from their experience and understanding the possibilities that may exist for our ageing population in the UK.

What’s Next?

The social and economic impacts of the Healthy Ageing Challenge have already been felt across the UK: in the communities our innovators have reached, in the businesses we have touched and through the research providing fresh insights to guide the next stage of the journey.

The mission-led approach has worked, opening up new avenues for collaboration between innovators and academics from the arts, humanities and social sciences. It has also fostered novel routes to support entrepreneurial researchers to translate their passion into societal impact.

The objectives of the Healthy Ageing Challenge remain as pertinent today as when the Challenge was first conceived in 2017. Our society continues to age and the opportunities this presents are growing with it.

There is more work to do. Many of our projects are still on their journey to scale and spread to realise their full potential. They will continue to benefit from the support of investors who recognise their value, and ultimately from customers in both the private and public sectors who understand the potential that innovation offers.

The work of the Challenge has helped to galvanise the nascent healthy ageing domain that spans many sectors, and catalyse a movement needed to transform all aspects of society, including how we live, work and relate to one another. In this UN Decade of Healthy Ageing, it’s encouraging to see that adding life to years remains a priority in the UK and globally.

“Population ageing is poised to become one of the most significant social transformations of the twenty-first century, with implications for nearly all sectors of society.”

United Nations Global Issues: Ageing

Health, Ageing and Wellbeing is embedded as a priority theme in UK Research and Innovation’s strategy. This continues to connect interests from across all disciplines, and ensure that our research and innovation activities align with work towards other global mega-trends including climate change and the advance of artificial intelligence.
Healthy ageing is not just a moral imperative, it makes economic sense too. Living for an extra year in better health is estimated to be worth, in present value terms, around £5 trillion to the UK economy.\(^3\)

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With thanks
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