# LIFETIME NEIGHBOURHOODS THAT CARE

#### **IAN SPERO**

Honorary Professor, UCL Bartlett School of Architecture Founder, Agile Ageing Alliance

Property Week
Later Living Conference
21st March 2024
County Hall London





Consolidated AAA research indicates the #1 driver older adults are looking for in retirement or later living is independence. In general, older people want to maintain their autonomy for as long as possible, even as they age. This includes having access to amenities and services, such as healthcare facilities, transportation options, social activities, and assistance with daily tasks if needed. Safety, comfort, and affordability are also important factors.



## In the Beginning

Launch of the AAA Pan-European

'Neighbourhoods of the Future' roadshow

**European Commission Brussels** 

- Funded by the European Commission
- DG Connect February 2016
- https://youtu.be/ekUpzSxbg2Q
- A Long-Term Care Revolution:
- https://youtu.be/Y12WVaaqbgU





### NEIGHBOURHOODS OF THE FUTURE



**Associated White Paper sponsored by McCarthy and Stone** 

"New forms of technology and 'big data' present possibilities for everyone, especially older adults. However, their impact on those in later life is relatively unexplored. This is of great interest to us, particularly how they can support this age group to live better at home.

We would like this report to serve as a valuable resource for all housing providers. To be 'open source' – for the benefit of everyone – and ultimately to facilitate the creation of new homes that will support happier, healthier and, hopefully, longer lives."

CEO McCarthy & Stone 2017



# PRESS RELEASE

13 February 2017

#### **HOME SMART HOME:**

THE SHAPE OF THINGS TO COME

- In-depth report commissioned by McCarthy & Stone, the UK's leading retirement housebuilder, predicts intelligent 'Cognitive Homes' of the future will be able to assess and manage our needs and desires in later life
- First research of its kind to look into how emerging smart technologies will revolutionise how older people live at home, and deliver transformative benefits to health and wellbeing.
- Power suits, robotic assistants, self-stocking fridges, intuitive health care
  and virtual GPs may all be provided in the comfort of the home just some of
  the 'out of this world' features to look forward to in our smart Neighbourhoods
  of the Future





# Smart Age-Friendly Housing in the European Silver Economy

- After the 2016 Roadshow -

Brussels 8/12/2016

**DG CONNECT H3 European Commission** 



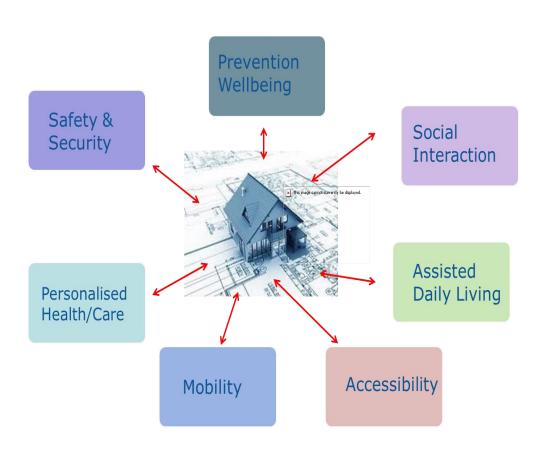
### **Smart Age-Friendly Housing**





### The value for collaboration

- Engage relevant stakeholders in development of solutions
- Build on Regional, National and European activities
- Mobilise policy initiatives, standardisation and investments
- Create scalable National, European (and global) markets





#### What we've learned

- •Don't isolate older adults. We need intergenerational innovation not ghettos for "the elderly".
- Don't lose the human touch.
- •Don't talk about 'end users in need of education'. Help older adults become *informed* buyers, with the power and responsibility to invest in solutions that best suit their changing needs.
- •This means making new product and service solutions not only technologically proficient, but they must also be *desirable*.
- •We must work harder to involve more financial institutions, construction companies and property developers in the conversation.
- Endeavor to identify best practice, quantify and scale success factors through standardisation.
- Stakeholders are looking for practical advice, opportunities for collaboration and knowledge exchange. There is no appetite for theoretical frameworks.
- Watch Neighbourhood of the Future roadshow with Microsoft Netherlands: <a href="https://youtu.be/0u42N3fn8Ag">https://youtu.be/0u42N3fn8Ag</a>











## NEIGHBOURHOODS OF THE FUTURE

OPEN FOR INNOVATION - LONDON | MAY 10 & 11 2017

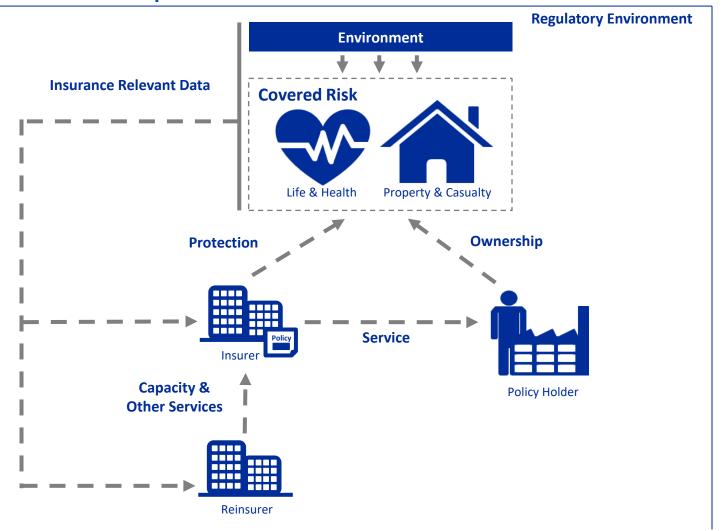


www.agileageing.org www.linkedin.com/in/agileageingalliance





## Today, the insurance value chain relies on data, but relatively little is captured and used



## Next generation of wearable devices Technology transforming our understanding of health



#### Complex stationary medical monitors

Full range of vital signs Sophisticated algorithms Restricted movement High accuracy High price



#### Simple portable medical monitors

Spot monitoring
Single vital sign
Moderate accuracy
Poor motion
tolerance



#### Simple wearable consumer monitors

Limited vital signs Ergonomic focus Low accuracy Limited motion tolerance



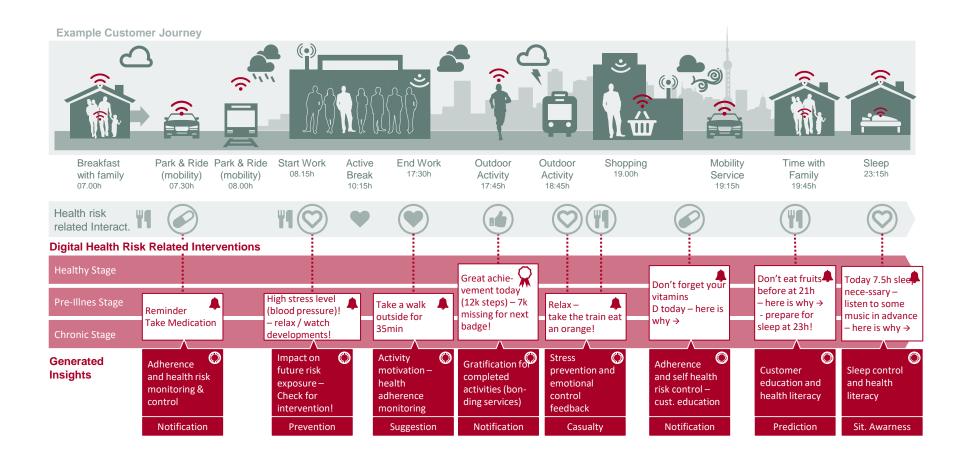
## Sophisticated, easy to use, wearable, accurate, motion tolerant multiple vital signs monitor

Multiple vital signs
Medical grade accuracy
Highly motion tolerant
Relatively low cost
Ergonometric/aesthetic
Data mgnt. ecosystem
Social media connectivity

Source: BioVotion



## How data insights can support interventions and promote behavioural change

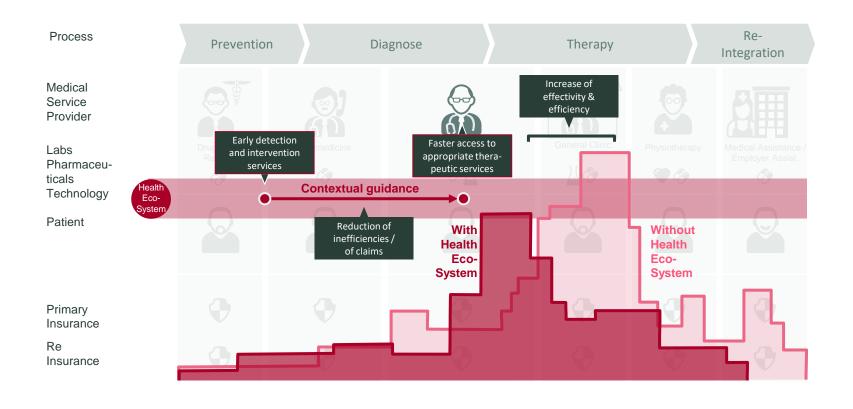




13

### Benefits of a health ecosystem

better outcomes through stronger engagement





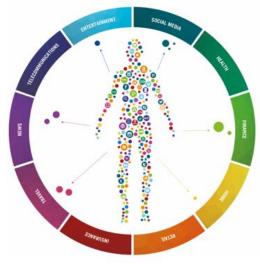
#### Better futures through the value of your data



Our data is fragmented across the web and used by others who benefit from it



Bringing it together under our control unleashes its true potential



Exchanging it on agreed terms, create mutual benefits for all – users, businesses, society

AAA Inspiring Innovation. Watch the video: https://youtu.be/C2m2kwe0nO4

# Why Tata Steel? IT'S IN OUR DNA

#### 2018 Tata Steel sponsor new AAA report

#### On urban design -

"Be sure to lay wide streets planted with shady trees, every other of a quick-growing variety. Be sure that there is plenty of space for lawns and gardens. Reserve large areas for football, hockey and parks. Earmark areas for Hindu temples, Mohammedan mosques and Christian churches"



Jamshedi Tata, Founder

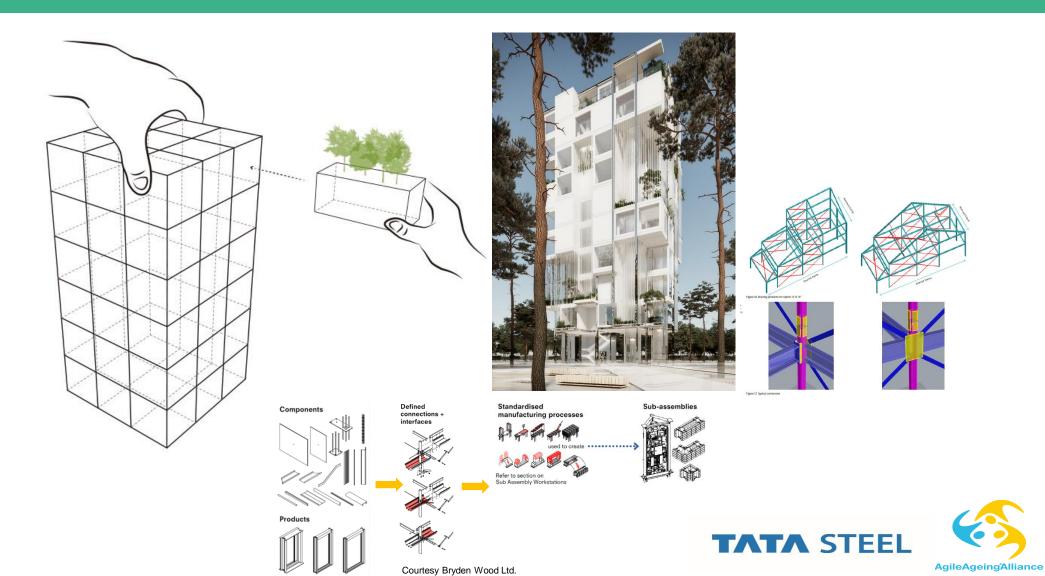
#### On business ethics -

"In a free enterprise, the community is not just another stakeholder in business, but is in fact the very purpose of its existence"





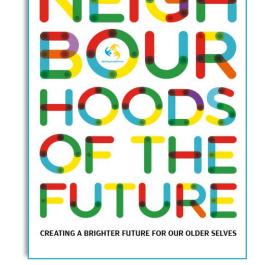
# A PLATFORM APPROACH



### BUILDING A SUPPORT NETWORK

#### A user-centred open innovation ecosystem:

- Help most promising science and technology to transfer from the lab to market;
- Foster collaboration and co-creation among universities, SMEs and industry;
- Help to scale up innovation and solutions;
- Promote knowledge exchange and best practice;
- Nurture ecosystem with content and thought leadership.







## A DYNAMIC ECOSYSTEM

Move the debate away from purely **emotive** to **pragmatic** 

Find the right people and organisations to become advocates for transformation

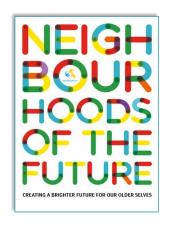
Engage a wider and younger audience to become part of the solution

Give our senior citizens a voice in their own story

Demonstrate the role of innovation in delivering change

Our strength as an active force watch video: <a href="https://youtu.be/NAWcjxWc5GE">https://youtu.be/NAWcjxWc5GE</a>











#### **National Building Museum**



#### 2018 and 2019

Washington DC and London: AAA, AARP and GMF coproduce a transatlantic convening of key thought leaders in housing, architecture, planning, and related fields. To explore best practice in the US and Europe.

# The Future of Age-Friendly Housing and Multigenerational Communities: A Transatlantic Leaders Forum







#### December 8<sup>th</sup> - December 10<sup>th</sup>, 2019 London, UK

This workshop is made possible by the support of AARP





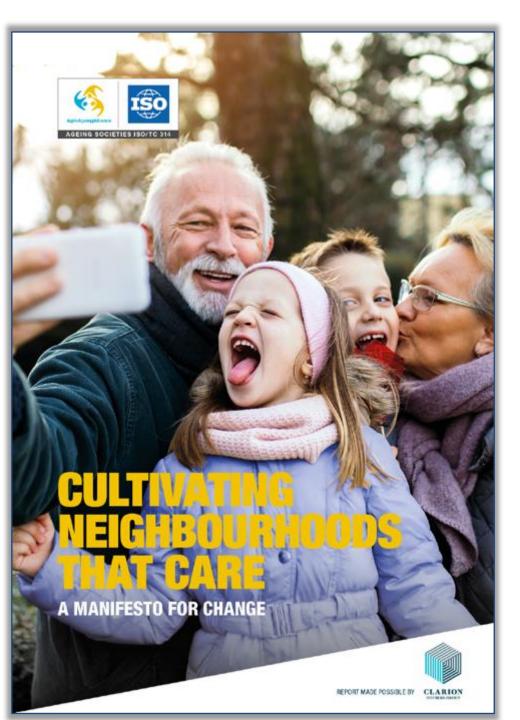


## 2020 through 2024

- Launch of Clarion sponsored report:
   'Cultivating Neighbourhoods that Care.'
- Launch of 'SHAPES' EU funded 21m €
   4-year largescale demonstrator.
- Development of 'ISO 25553 Smart
   Multigenerational Neighbourhoods'.





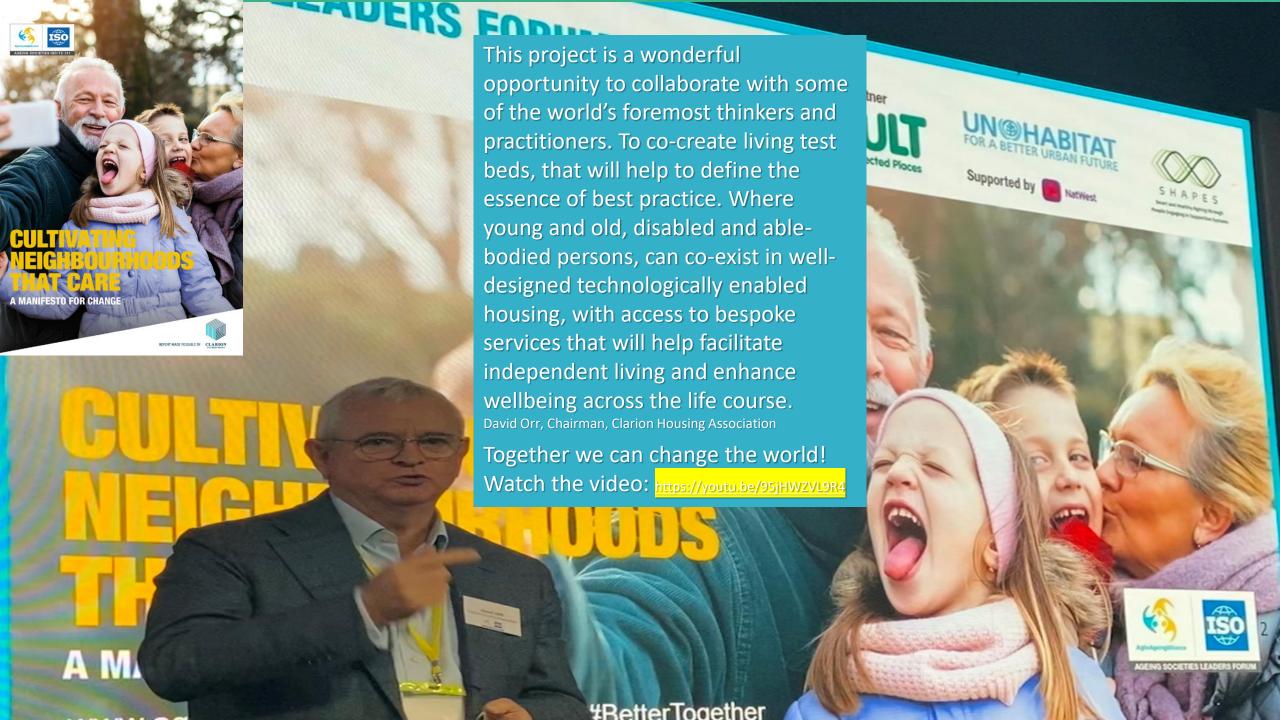


"Clarion is using its regeneration programmes to extend its understanding of and ability to offer homes and communities based on the principles of multigenerational living.

We wish to avoid communities segregated by age and/or ability; or neighbourhoods and homes which have not been designed to anticipate people's changing needs throughout their lifetime.

We want to deliver homes and communities which:

- Reflect society as a whole, including the demographic changes underway
- Cater for people of all abilities and ages
- Help Clarion push the boundaries on models for multigenerational living"

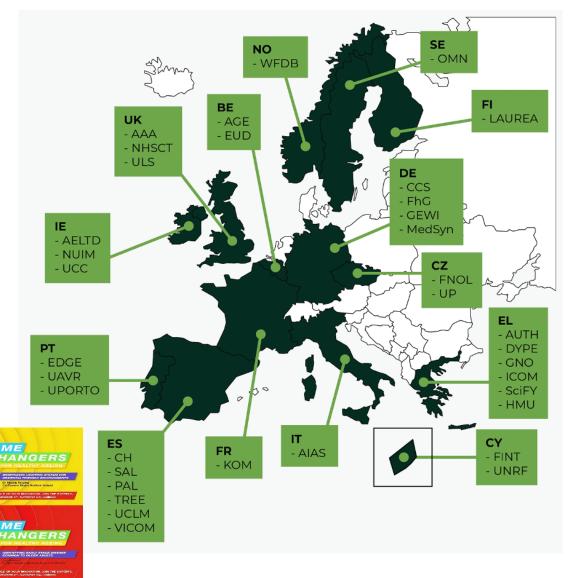




# Smart and Healthy Ageing through People Engaging in supportive Systems

\*\*\*\* \* \* \*\*\*

- Led by the Assisting Living and Learning (ALL)
   Institute at Maynooth University, Ireland
- Consortium of circa 210 people, 36 partners,
   14 European Countries, 21m Euro
- Engages with more than 2000 older people
- AAA looking at: The life course of older adults at home and in the built environment.
   Ecosystem building. Standardisation. And, an Open Innovation Call, supporting potentially gamechanging solutions.





standard of life.

### **ABOUT SHAPES**



The integration of a broad range of technological, organisational, clinical, educational and societal solutions seeks to facilitate long-term healthy and active ageing and the maintenance of a high-quality



SHAPES Digital Solutions: Include assistive robots, eHealth sensors and wearables, Internet of Things (IoT)-enabled devices and mobile applications.



SHAPES Ecosystem: A network of relevant users and key stakeholders working together to scale-up Platform and digital solutions.



SHAPES Marketplace: Seeks to connect demand and supply across H&C delivery, and to facilitate the co-creation of affordable, effective and trustworthy solutions.



SHAPES Recommendations: Provide guidelines, a roadmap and an action plan, including a set of priorities dedicated to standardisation, to support key EU stakeholders to foster the large-scale deployment and adoption of digital solutions and new integrated car services in Europe.





Smart and Health Ageing through People Engaging in supportive Systems



What are the needs of the SHAPES users?

Use Case Development

How can SHAPES

help?

Phase 1: Plan, Design & KPIs

Does SHAPES

work here?

Phase 2: Mockup or prototype validation

What are your first

impressions?

Phase 3: Hands on Experiments

What do you

think?

Phase 4: Deplyment in small enviornemnt

Is everything

working as it

should?

Will SHAPES help improve the daily health and wellbeing of older people

Phase 5: Deployment in real life

The SHAPES team will interview older people across
Europe along with experts and focus groups. From these results they will design 'personas'

Persona Developmet

Personas are fictious characters (based off research) that will help the designers understand the needs of SHAPES users

On the basis of the personas the SHAPES team will examine how the technology in SHAPES can address the needs of the users.

This is often referred to as Use Case Development

We will then move on to begin piloting SHAPES.

In this phase the SHAPES experts will examine how the SHAPES solutions fit into each Eurpoean country SHAPES experts will ask for your intial opinion of the digital solutions. You will be shown how to use the SHAPES digital solutions and to try them out The technology will be tested with a small group of people to see how it works In the final stage the SHAPES solutions will be tested on a large group of people across all the 15 European sites

## A Manifesto for Change

- A growing body of research shows that multigenerational interaction is beneficial for people of all ages.
- Lack of evidence as to **what good looks like** makes it hard for local government, developers, business and procurers of related products and services, to plan with confidence.
- A new **ISO global standard framework**, 'ISO 25553' aims to drive the delivery of multigenerational living worldwide.
- In scoping out ISO 25553 we aim to normalise the creation of **Smart Multigenerational Neighbourhoods** where putting people and the planet's needs as a priority can combat loneliness and mental health issues, while easing the associated burden on health and social care systems.
- The SHAPE of things to come. Watch the video: https://youtu.be/CKKO4V5U1vg





## ISO 25553 'Ageing Societies' Smart Multigenerational Neighbourhoods



#### **Stakeholder benefits**

- Older persons and their families
- Service providers
- Product manufacturers
- Research bodies
- Healthcare specialists
- Carers
- Organizations
- Governments
- Communities

# Smart Multigenerational Neighbourhoods ISO 25553 aims to:

- Improve the capacity for older adults to live well and thrive in "blended" multigenerational communities, incorporating technologically enabled person-centric care
- Involve older adults in the neighbourhood design process and co-creation of digital solutions that will improve health/care, support independent living and wellbeing; help them identify new interests, establish friendships, develop and extend talents and enjoy a more agile lifestyle
- Define guidelines for digital infrastructure so that smart technologies can be easily and invisibly weaved into new neighbourhood schemes, including a new breed of health + social care facilities
- Give due consideration to retrofitting and remodelling existing housing stock
- Generate evidence-based guidance to inform public sector and industry
- Establish new business, service & financial models; taking account of ethics, privacy, security, and governance related issues
- Be equitable and inclusive; benefitting high, and low-income regions, countries and communities alike



## Together with UN-Habitat

UN-Habitat and AAA collaborate to pursue the Sustainable Development Goals and the New Urban Agenda value proposition and desired outcomes





SDGs that relate directly to ageing societies









**Sub-goals and targets** 

3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

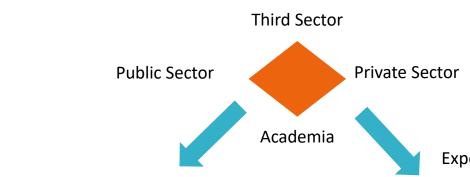
10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

### Autumn 2024 our next milestone

# Centre of Excellence/Innovation Hub I M P E R I A L AgileAgeing Alliance

- By integrating applied research, social sciences, and humanities perspectives, the Centre aims to provide a comprehensive understanding of the complex interactions between technology and the built environment. This multidisciplinary approach is crucial for addressing the diverse needs and challenges of modern societies.
- Our Centre will drive innovation, foster collaboration between academia and industry, and facilitate the development of sustainable and human-centric solutions for the built environment. Serving as a hub for knowledge exchange, interdisciplinary research, and practical applications, ultimately contributing to the advancement of urban development and societal well-being.
- Founding Partners: AAA. UCL Bartlett, ranked #1 in the world for Architecture and the Built Environment. ICL Department of Civil and Environmental Engineering, ranked #1 UK civil engineering university. CMS, the world's 5th largest law firm including CMS equIP startup accelerator.



Relevant law, Policy & Regulation







#### Expertise

**Empirical Testing** 

Theoretical Thinking **Practical Experience** 



- Knowledge
- Insight
- Open calls
- Evidence
- **Abilities**
- Talent
- Validated solutions
- Delivery capabilities
- Satellite Hubs, worldwide
- Code of Conduct
- Leadership





#### **Storing**

Knowledge & Experience:

- What works well?
- What failed to work?
- What were the surprises?



**New Codes and Standards** 



**Promotes Scale and Sustainability** 

Ideas

**Exchanging** 

- Experience
- Product related
- Service related
- Policy & regulation related





"We must learn to blend creativity and ingenuity with technology to create spaces that can withstand the test of time and positively impact the lives of people living today and in the future."

RIBA President Muyiwa Oki

### **Get Involved**



www.AgileAgeing.org
For further information:
info@agileageing.org

