

# Smart Homes & Independent Living Commission

## Outcomes Briefing

### Roundtable 3: Market Shaping

July 2021

#### Overview

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On 7<sup>th</sup> July 2021, the Smart Homes & Independent Living Commission held its second evidence session, focusing on the role market shaping policies at the local and national levels can have on improving availability of, and access to, independent living technologies.

This briefing captures the main insights from the session, which will inform the findings and recommendations of the Commission's final report.

#### Key Findings

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### **The independent living technology market tends to disempower disabled and older people as consumers of products and services**

*"It's really important to think about the end-user and make sure that they're central to the process"*  
Professor Nigel Harris, West of England Academic Health Science Network

- The adoption of smart technologies and assistive technology to support independent living is constrained by a lack of choice for end users – particularly when products are provided by public services – and the stigma associated with their use.
- Local authorities and community equipment services often only offer a limited range of items designed to reduce the need for hospital care – rather than inspire people's confidence about leading independent lives.
- Social services are sometimes reluctant to issue advice to people without first conducting a detailed assessment of their needs, which can make it harder to access basic information.
- The discussion around the future development of the independent living technology market would benefit from greater clarity around the roles and responsibilities of commissioners and other professionals involved in procuring technology on behalf of disabled and older people.

- Reforming the independent living technology market is likely to require new forms of physical and virtual marketplaces for buying and selling products and services to be developed. Designers of such marketplaces would need to consider a range of factors such as:
  - The impact design decisions will have on the behaviour of buyers and sellers
  - How products and services should be regulated, accredited and reviewed
  - How to ensure equal access to the latest technology across different demographic groups
  - How marketplaces should cater for the different needs of public sector procurement professionals private consumers and other purchasers

## **The West Midlands AT Home campaign helped older adults to become confident users of assistive technology**

*“[AT Home helped] people who perhaps didn't want to be dragged into local authorities or the health system to get information and to understand what was available, how it worked, the outcomes it could support and how readily available it was”*

Jim Ellam, Staffordshire County Council (Retired)

- Market shaping initiatives can play a pivotal role in helping people who might never encounter health and social services understand how technology can help them retain their independence in later life
- The AT Home campaign<sup>1</sup> in 2015 was a regional programme in the West Midlands that aimed to encourage people over the age of 50 to consider how independent living and mobility equipment might help them stay safe and well at home.
- The main elements of the campaign were:
  - A website offering user case studies, video demonstration guides, and sign posting to other resources, including the DLF's helpline and AskSARA self-assessment tool.<sup>2</sup>
  - A specially-curated 'Box of Trix' - a collection of devices such as a wireless doorbell and remote-control socket plugs that was shared with participating organisations to demonstrate to members of the public
  - The circulation of informational leaflets

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<sup>1</sup> <http://www.athome.uk.com/>

<sup>2</sup> <https://asksara.livingmadeeasy.org.uk/selector>

- Building on earlier initiatives that had also promoted assistive technology across the West Midlands, the campaign brought together a group of around 80 lead commissioners and providers from across the region to oversee the programme
- AT Home had its own unique branding and offered a common message that could be shared with residents to throughout the region
- Fourteen local authorities took part in scheme, which was supported by Naidex and the West Midlands Association of Directors of Adult Social Services (WMADASS).

## Voluntary and community organisations are a vital source of agency and innovation for the independent living technology sector

*“I wanted to flag up the really important work of VCSE's and independent groups who do work really closely with end-users and can be a really effective voice for them.”*

Professor Nigel Harris, West of England Academic Health Science Network

- The voluntary and community sector can play an important role in amplifying the voices of disabled and older consumers through both their advocacy work and broader service provision.
- However, potentially valuable services such as independent living centres where people can visit to try out technology have been forced to close across the county due to underfunding.
- Examples of projects in which the needs of disabled and older people have been met in creative manner include:
  - **Age UK Calderdale and Kirklees** has set up a peer support programme to help older people use technology and access digital services during the pandemic. The charity purchased tablet computers to give to local residents and organised a group of voluntary peer mentors to provide support
  - **The Chocolate Quarter Retirement Village**<sup>3</sup> developed by the **St Monica's Trust** in Bristol offers accessible housing that is marketed as luxury accommodation
  - **National Star College's Bradbury Gardens**<sup>4</sup> accommodation provides environmental control systems to maximise the independence of disabled young people

<sup>3</sup> <https://www.stmonicatrust.org.uk/retirement-villages/the-chocolate-quarter>

<sup>4</sup> <https://www.nationalstar.org/accommodation/long-term-living/bradbury-gardens/>

- **The Seashell Trust**<sup>5</sup> in Greater Manchester provides specialist personalised accommodation for children and young people with complex learning disabilities and additional communication needs

### **Building a human rights-based framework of regulations, standards and training is critical to reducing the safeguarding and ethical risks posed by smart devices**

*“What we found is the professional ethics behind all of this is very much in its infancy, as the devices are. We work with our local university, we work with professionals at health and social care, we try to educate them around professional ethics and the dilemmas of putting this technology in people's homes.”*

Wayne Scott, Sunderland City Council

- The use of smart technology to support independent living presents safeguarding and ethical challenges for professionals that are made more acute by the fact that this is a relatively new field.
- Risks include:
  - Failing to secure the fully-informed consent of service users
  - The fact that families, carers and professionals may infringe on a disabled or older person's human right in relation to the deprivation of liberty – through ignorance or otherwise
  - The reliability of consumer technologies, which may rely on a mains house supply or a stable internet connection to function, or be built on third-party software that may be susceptible to faults
- These ethical considerations should be addressed through a combination of education and training for professionals, standards for designing technology products and services and regulations – for example, to ensure fail safes are built into devices.

### **Development funding, clearer information to drive decisions among both innovators and consumers, and better Internet access across the country would help smart homes and other emerging independent living technologies reach maturity**

*“There needs to be more evidence of, 'This will do this for you'.”*

Philippa Hedley-Takhar, Devices for Dignity

- Smart homes and others novel independent living technologies are being stifled by a series of constraints on markets.

<sup>5</sup> <https://www.seashelltrust.org.uk/our-homes/>

- Limited broadband or 4G Internet around the country is an increasingly significant block to technologies that work best when households can get online. This applies not only to smart home products but also other upcoming innovations - for example, the Bristol Robotics Laboratory<sup>6</sup> has demonstrated the potential for the robots such as Pepper to help provide support in day-to-tasks and companionship to disabled and older people.
- A lack of central funding - in the form of ring-fenced budgets, innovation grants and pump-priming fund - is preventing new technologies and business models from scaling and offering more choice to disabled and older consumers.
- Insufficient information for consumers about what technologies tend to work best for whom to in certain circumstances or to achieve particular outcomes.
- There is a need for better evidence of demand among private consumers to help incentivise and drive the supply of independent living technology.
- There are a few examples initiatives that may help eliminate some of these barriers to innovations:
  - **CECOPS**<sup>7</sup> is a not-for-profit certification and standards body that provides a range of self-assessment tools for assistive technology manufacturers and service providers
  - **The West of England Forever Homes Consortium** brought together academics, charities, third sector housing and care companies to create better homes for the older people by funding the development user centred designs, products, technology and care services
  - **The Association of Directors of Adult Social Services (ADASS)** Digital Innovation Challenge<sup>8</sup> aims to advance and showcase the innovative work with new technologies that councils are developing with local people and partners, supported by experts from Microsoft
  - **The Devices for Dignity** and the **University of Coventry** are developing an impact toolkit to help identify the outcomes associated with particular products

## Independent living technology is overlooked by education and training syllabuses for health and social care and technology professionals

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<sup>6</sup> <https://info.uwe.ac.uk/news/UWENews/news.aspx?id=4068>

<sup>7</sup> <http://www.cecops.org.uk/>

<sup>8</sup> <https://www.adass.org.uk/digital-innovation-challenge-2021>

*“I think the curricula that exist with respect to social care professionals, medical professionals, occupational therapists and others, those curricula need badly updating to encourage them to engage with technology. Because what you don't know, you don't engage with.”*

Professor Roy Sandbach OBE

- The lack of knowledge and understanding about the independent living market among professionals across the health and social care and technology sectors is a significant barrier to the development of the market. For example:
  - Occupational therapists and speech and language therapists may not learn about independent living technology until after they have qualified
  - Some home improvement agencies are reluctant to move away from traditional adaptations
  - Many electrical contractors do not have the necessary skills to install the infrastructure required for smart home technology
- Initial education and training and continuing professional development opportunities must be updated to reflect the growing importance of independent living technology across the health and social care, housing, engineering and technology sectors.
- Possible strategies for improving technology training include:
  - Developing more multidisciplinary courses that encompass a variety of different industries
  - Offering greater flexibility in the choice of modules in degree courses and other qualifications - for example, by adopting US style major-minor degree structures
  - Setting industry standards for independent living technology education and training
  - Using national and local economic and industrial policy to drive skills development - for example, offering funding to Local Enterprise Partnerships to develop the capabilities electrical contractors to fit smart home technology

## **Government can help shape the UK's smart home sector to facilitate new and emerging independent living technologies for all**

*“There are already regulations in place for a home to accommodate certain needs. It only makes sense for this to be extended to digital infrastructure”*

Aneta Armova-Levin, CEDIA

- The growth of the smart home industry has been hindered by a range of factors:

- A lack of consensus on what exactly constitutes a smart home, creating a barrier to widely forming a set of authoritative industry standards
- The electrical contractor workforce does not have the necessary technical education to work with smart home technology
- Inadequate digital infrastructure across the UK housing stock
- Government could address the high cost of broadband and smart home connectivity by:
  - Specifying a mandatory digital standard for all new homes to ensure every property is smart home ready
  - Providing disabled and older people on means tested benefits with free broadband
  - Working with the key decision makers in the housebuilding and financial services sectors to make accessibility and technology priority for construction firms
- A long-term solution to the accessible housing shortage should address the technological, as well as physical environment, and look to offer a range of different types of accommodation that can be tailored to individual needs.
- Housing must be adaptable so homes can sustain people's needs throughout their lives.
  - The Lifetime Homes Standard<sup>9</sup> - has been broadly adopted in the optional M4(2) accessible and adaptable dwellings regulations<sup>1011</sup> - can save significant amounts of time and expense by making sure accommodation can meet the needs of different individuals and types of households

## Attendee List

Name	Position	Organisation
<b>ClIr Sir Paul Carter CBE</b>	Chair of the Commission	Former Leader of Kent County Council
<b>Liz Twist MP</b>	MP for Blaydon	Labour
<b>Philip Bridges</b>	Business Development Manager	Oysta
<b>Prof. Lee-Ann Fenge</b>	Professor of Social Care	Bournemouth University
<b>Steve Tyler</b>	Director of Assistive Technology	Leonard Cheshire Disability
<b>James Lampert</b>	Head of Tech-Enabled Care	NRS Healthcare

<sup>9</sup> [https://www.designingbuildings.co.uk/wiki/Lifetime\\_homes](https://www.designingbuildings.co.uk/wiki/Lifetime_homes)

<sup>10</sup>

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/540330/BR\\_PDF\\_AD\\_M1\\_2015\\_with\\_2016\\_amendments\\_V3.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/540330/BR_PDF_AD_M1_2015_with_2016_amendments_V3.pdf)

<sup>11</sup> The government is due to respond to a consultation conducted in late 2020 that considered making M(2) mandatory for all new homes

<b>Claire Sutton</b>	Digital Transformation Lead	National Care Forum
<b>Melanie Poyser</b>	Partnerships Manager	DLF
<b>Dr Hannah Marston</b>	Research Fellow	Open University
<b>Kush Kanodia</b>	Governor	Chelsea and Westminster Hospital NHS Foundation Trust
<b>Aneta Armova-Levin</b>	Education Manager	CEDIA
<b>David Godfrey</b>	Policy Adviser	Kent County Council
<b>John Stacey</b>	Sales and Marketing Manager	Pretorian
<b>Jim Ellam</b>	Former Commissioning Manager	Staffordshire County Council
<b>Prof. Nigel Harris</b>	Director of Innovation and Growth	West of England Academic Health Science Network
<b>Rohan Slaughter</b>	Senior Lecturer in Educational Assistive Technology	University of Dundee
<b>Alyson Scurfield</b>	Chief Executive	TSA
<b>Rob Gregory</b>	Sales Manager UK/Eire	Tobii Dynavox
<b>Paul Foulkes</b>	President	KNX UK
<b>Prof. Roy Sandbach OBE</b>	Former Director	National Innovation Centre for Ageing
<b>Sarah Abdi</b>	PhD Researcher	University of Sheffield
<b>Phillipa Hedley-Takhar</b>	Business Development Manager	Devices for Dignity
<b>Andy Speake</b>	National Technical Manager	Aico
<b>Wayne Scott</b>	CEO	Moral Hazard
<b>Prof. Louise Moody</b>	Professor of Health Design and Human Factors	Coventry University
<b>Prof. Hamid Bouchachia</b>	Data Science & Intel Systems	Bournemouth University
<b>Matt Nimmons</b>	Managing Director	CEDIA
<b>Jonathan Shaw</b>	CEO	Policy Connect

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