

# Presentation to London Tech Advocates- Tuesday 13th 2022

**By Clive Gilbert – Policy Manager for Assistive and Accessible Technology at Policy Connect**

## Introduction

Hello, my name is Clive Gilbert. I'm Policy Manager for Assistive and Accessible Technology at the cross-party think tank Policy Connect. I would like to thank Marc, Tania and Marie-Claire for inviting me to speak today.

My talk will be divided into three sections. Firstly, I will tell you about my role at Policy Connect. Secondly, I will explain what I see as some of the key challenges confronting the assistive technology sector and why the government needs a new approach to dealing with them. In the third section, I will discuss our most recent smart homes and independent living Commission exploring how technology can help disabled and older people live healthy, independent and socially rewarding lives.

Before I dive into the detail on the commission, I would like to say a few words about Policy Connect. We are a cross-party public policy think tank that specialises in running parliamentary groups and commissions. We are set up as a social enterprise and are funded by a combination of regular annual membership subscriptions and time-limited partnerships.

We work across a number of policy areas and industries ranging from manufacturing and design to climate change.

My own role involves overseeing assistive technology policy. This means I work with government, parliament, industry frontline practitioners and fellow assistive technology users to advocate for better policy and practice around the way technology is used to support disabled and older people to lead fulfilling lives.

Advances in modern technology such as the smart phone, the internet of things, social media and Zoom hold just as much potential for disabled and older people as they do for everyone else. Over the past ten to fifteen years technology has gradually become more inclusive with brands such as

Microsoft, Apple and Amazon designing more accessibility features into their products. At the same time, technologies that might have been regarded as specialist assistive tech in the past such as word prediction and speech recognition are now used as non-disabled people as well.

But – as I’m sure everyone in this meeting is well aware – there are many areas where we are still falling short, particularly in the way public services for disabled and older people continue to struggle to take full advantage of technology.

My job is to persuade policy makers to adopt policy and legislation that will help create a more conducive environment for the development of inclusive technology products and services.

One of the ways we do this is by supporting the All-Party Parliamentary Group for Assistive Technology which has its secretariat at Policy Connect. Founded in 2017, the APPG for Assistive Technology is a cross-party group for MPs and Peers that share our interest in realising the potential of technology to build a more inclusive society for disabled and older people. The group is Chaired by Paul Maynard MP. The group’s parliamentary officers also include the Shadow Minister for Small Businesses and Consumers Seema Malhotra MP and former Home Secretary Lord Blunkett.

Our collaboration with parliamentarians allows us to get more traction among policy makers in Westminster and Whitehall. We have had some significant success in helping government understand assistive technology and the ways in which it can be employed to transform disabled and older people’s lives in the education system, the workplace and of course at home.

## Policy challenges

I would like to discuss why government needs a new approach to assistive technology. The first reason is that the sector has changed enormously in the past 50 years. The advent of the microprocessor has transformed parts of the sector and ushered new ones into being. Over the past ten to fifteen years technology has gradually become more inclusive with brands such as Microsoft, Apple and Amazon designing more accessibility features into their products and specialist assistive technology such as predictive text and voice recognition technology becoming more mainstream.

While the assistive technology sector has changed a great deal in recent decades, public services involved in providing AT are set in their ways. Too many public services rely heavily on bulk contracting with a narrow range of suppliers. This is not only antithetical to the trend of technological change where innovations are emerging all the time, from startup and mainstream technology companies as well as established AT providers. It also runs counter to the large body of

academic knowledge and practical experience that says assistive technology is most effective when solutions are tailored closely to the needs of the individual.

While the market has become an engine of innovation and creativity in many fields of assistive technology, there remain a raft of totemic issues facing the sector for which the private sector is unlikely to generate solutions on its own. One set of problems relate to areas in which the market seems have been slow to stimulate progress. I would argue that one such area is wheelchair design which has only advanced incrementally over a period of decades.

This is partly due to the market dominance of a handful of suppliers which means that companies have little incentive to innovate. As a consequence, wheelchairs have remained expensive to purchase and maintain and manufacturers have been slow to resolve common problems experienced by people who use them such as overheating caused by a lack of ventilation.

Another totemic issue lies in the fact that we don't have a rigorous framework for evaluating assistive technology. This lack of fundamental understanding can make it harder for technology innovators to finance and develop new products and services. The dearth of information about the efficacy of new AT can also make it difficult for practitioners to recommend products to people who may benefit from them and result in equipment being purchased only to fall into disuse.

Finally, there aren't enough professionals with the levels of competence in assistive technology required to sustain high quality services. While the application of assistive technology has moved well beyond rehabilitation environments to helping disabled people participate in all forms of social, economic and cultural life, the most common formal route to becoming a trained assistive technologist is through a medical or engineering degree. The sector needs to incentivise people from a more diverse range professional and non-professional backgrounds to acquire AT skills.

## Opportunities

Having described how public services involved in assistive technology provision have become outdated in some respects, I now want to highlight opportunities for reform. In particular, I will discuss four areas in which government could be more responsive to the possibilities opened up by the changing technological landscape.

The four areas are personalisation of public services, helping to reshape the assistive technology workforce, research and development policy and promoting inclusive and accessible design in the mainstream technology sector.

Let's start with personalisation. As I've already outlined, the need for more nimble approaches to assistive technology procurement has been well demonstrated. Current practices often gravitate towards one-size-fits-all solutions that are simply inappropriate for many people.

I would like to see more experimentation with different types of procurement models. One proposal that has been floated has been the introduction of a personal technology budget which would give individuals direct control over the money used to fund their equipment. Personal technology budgets would be consistent with the aims of the 2014 Care Act which favours a more personalised approach to social care funding.

Another alternative model would be for local authorities to continue to contract out most of their assistive technology procurement but do so with a wider range of suppliers.

Of course, personalised service models have their downsides. At their best, they can put market supply in direct contact with consumer demand, helping to drive improvements in the quality of products and services while helping to push down prices. But this can only work if people are empowered to make informed choices with the assistance of impartial information and advice and access to expert assessments.

This brings me to my second area where the public sector should play a more leading role – workforce development.

The lack of alternative routes to assistive technology training and education has meant that everyone from local authority service to teachers and social workers don't have the necessary skills to support assistive technology users. The key to resolving this problem lies in recognising that not everyone who works with assistive technology needs to have a university qualification in the subject. This could be achieved by inserting compulsory technology elements into training courses for educational professionals and health and social care workers. Formal training might be supported by online resources and information to help with on-the-job learning.

As an employer of social workers, teachers and other practitioners whose jobs increasingly being disrupted by the latest waves of technological change, the state enjoys a huge amount of leverage to make this happen. The government should work with public service providers to carve out assistive technology roles in their organisations. Commissioners and care managers should set out their

expectations for care homes to support residents to use assistive technology in contracts and services agreements.

Interestingly, the Institution of Mechanical Engineering recently called for the creation of new assistive technology positions within NHS rehabilitation teams to help patients get make the most of AT when they move back into the community. This idea should be extended to other settings – such as local authority social services departments to schools.

In addition to non-specialist assistive technology training for generalists, we should also be developing a new generation of expert AT practitioners who can take on leadership roles across health and social care, education, employment and other settings. The University of Dundee has recently offered a model for more advanced professional AT education with its new Masters in Educational Assistive Technology. High-level courses like this one provide an excellent way for technology-minded specialists to hone their craft who can go on to support less experienced colleagues in their respective workplaces.

The third area in which government could make a real difference is in research and development.

While we wait for ministers to flesh out this pledge to add flesh to the bones of its commitment to support the creation of world class AT, I will suggest that a what works centre for AT would be great assert the UK's global leadership in assistive technology research. It should study how assistive technology contributes towards people's quality of life. It should also be charged with making the economic case for assistive technology to help support further investment and decision making.

The fourth area of policy interventions I want to discuss is around how government can influence the technology sector as a whole to be more inclusive. This could be achieved in a number of ways. Firstly, the public sector could use its considerable market influence as a consumer of technological goods and services. While existing public procurement regulations allow public bodies to consider accessibility criteria in their spending decisions, other factors such as cost often take precedence. Public organisations should be required to take accessibility into account and publish accessibility audits so everyone can check on their progress.

The second way government can influence the technology sector is through regulation. An example of this is the recently passed European Accessibility Act which aims to ensure products and services are more accessible for disabled people. The UK left the European Union before it could ratify the

Act. The government could make a bold statement about its intentions in relation to accessible technology by enshrining its own version in law.

Finally, the government can influence the next generation of technology designers through the education system. Inclusive design should be given a prominent place on the national curriculum so young people can be made more aware of how society can be made more accessible to everyone.

## Smart Homes and Independent Living Commission

I will now move to the final section of my talk today which is about our recent Smart Homes and Independent Living Commission. The Commission was chaired by the former leader of Kent County Council Councillor Sir Paul Carter. It was guided by an expert steering group including Liz Twist MP, leading academics in technology and social care, industry experts and people with lived experience. It was sponsored by Bournemouth University and Coventry University.

The purpose of our Commission was to make recommendations to government, local authorities and the wider social care and technology sectors on how disabled and older people can use smart homes and similar technologies to lead healthy, independent and socially rewarding domestic lives.

We published our report Smarter Homes for Independent Living in the House of Lords in April.

Before I discuss the report and its findings and recommendations, I would like to take a step back and talk about the broader context of the project.

Independent living means the ability to control where and how one lives. It's been a key tenet of the disability rights movement for decades. But, it has remained an elusive goal, due to a lack of appropriate services and support.

The campaign for the right to independent living dates back to the 1950s and 1960s. Those years saw a generation of disabled students in the United States began to protest that their ability to participate in society was being held back by a combination of environmental and social factors.

American universities - such as Berkeley in California and Illinois - led the way in encouraging students to be as independent as possible by physically adapting their premises and surrounding neighbourhood to make buildings more accessible for wheelchair users.

By the 1970s, the independent living movement had spread to the UK where disabled people demanded to leave the institutional care settings in which many had previously resided for most of their lives. Over the following thirty years, local authorities and central government were gradually persuaded to divert funding from care homes and cede control of the purse strings so individuals could determine how it should be spent.

The independent living movement calls for buildings, products and services to be accessible to all and provided on the basis of equal opportunity to enable disabled people to enjoy flexibility and genuine control over their daily lives. This requires that the built environment and transport are designed inclusively, people have access to personal assistants and assistive technology. The ultimate aim is to maximise flexibility in people's daily lives.

The home is foundational to disabled people's independence in other areas. Research has shown that disabled people who live in housing that meets their access needs tend to feel safer and report better social contact and improvements in their health and wellbeing. By contrast, disabled people living in inappropriate homes are four times more likely to be unemployed or not seeking work.

Today, the ageing population gives the call for independent living extra force. Across society expectations are growing that people should be able to exercise control over how and where they live throughout their lives, including having ownership of personal budgets.

But the failure of successive governments to fix the many problems facing the adult social care system in England has left many disabled and older people without the support they need to live independently in the community. Accessible housing is the cornerstone of independent living, but the Housing Made for Everyone (HoME) coalition estimates that some 400,000 wheelchair users are living in homes that are neither adapted nor accessible.

Assistive technology and telecare services have long been established fixtures of the local adult social services landscape. But they and health partners have often struggled to fully harness the potential of technology for the people they support and have failed to roll it out sufficiently.

We see an opportunity to advance this agenda. The increasing prevalence of smart homes presents new opportunities for people across the spectrum of impairments to enjoy unprecedented control over their surroundings at relatively low cost. The assistive technology sector is more vibrant and innovative than ever before. The analogue-to-digital switchover of the UK's telephone network due

to be completed in 2025 provides further impetus to ensure that everyone can benefit from the technological breakthroughs of the last few decades.

Policy Connect formed this Commission to explore how government and industry can help disabled and older people benefit from advances in smart home technology and related innovations to lead healthier and more independent and socially rewarding lives. Powered by AI, big data and the Internet of Things, smart technology offers disabled and older people a wide range of opportunities to take control of their lives.

Our report is the product of three round tables, a call for evidence and survey of disabled and older people, a focus group with Bournemouth University's Dementia Coffee Morning Group and dozens of individual interviews with professionals across the health and social care and technology sectors. We explore three key areas.

The first area explored how policy makers and service managers in local authorities and the NHS deploy technology in care and support. Secondly, we looked at how health and social care providers and their staff use technology to support the independence of the people they serve. Lastly, we looked at the market for independent living technology.

In each case, we asked how we can make it easier for disabled and older people to acquire and use technology to have greater choice and control over their lives. This might be with the help of a service provider or as a private consumer.

We heard from frontline health and social care professionals, local service managers and commissioners, technology developers and suppliers as well as disabled and older people and their carers. Pat, a respondent to our survey of disabled and older people, sums up many of our findings when recounting a visit from an occupational therapist before a hip replacement. 'They didn't seem to know much about smart gadgets and were amazed when I showed them mine in action,' Pat said.

The health and care social system tends to view technology as a way of managing people's care needs. The system overlooks how people can use technology to gain more choice and control in their lives. Even services that are designed to promote independence are often bureaucratic and inflexible. Meanwhile the consumer market in independent living products can be difficult for both disabled and older consumers and professionals to navigate. Innovators and suppliers are not always incentivised to deliver products and services that match people's day to day needs and preferences.



Our Commission shows how technology can be used not just as a tool for keeping people safe and well, but as a way of empowering people to lead the lives they wish to lead.

The Commission uncovered examples of excellence across the county. Some local authorities are working hard to break down siloes by pooling resources and linking teams so people's needs don't fall between bureaucratic divides. We have spoken to care providers and housing associations committed to helping the people they serve use technology in a way that enriches their daily lives. And we heard from technology companies that proactively seek to involve disabled and older people in product development cycles to make sure that their technologies make a difference.

Our Commission believes that with more leadership from policymakers and industry these pockets of good practice could become the norm.

In last December's Adult Social Care Reform White Paper, the government announced a new 10-year Vision for care in England with an injection of new spending. This includes an initial £150 million on technology for preventative care and independent living to be invested over the next three years.

I'm pleased to say that the government's new guidance on home adaptations through the Disabled Facilities Grant has already put one of our early recommendations into action. By including a new chapter in the guidance dedicated to assistive technology, the thousands of people who receive DFG funding every year will be able to access life-enhancing technology.

However, our report calls on the government to go further. December's white paper recognised that people should be able to purchase and use technology easily to support their goals. Our findings show this can only be achieved by a package of reforms – outlined in detail in the report – that will put disabled and older people in control of their lives. National and local government must reform the commissioning of technology to enshrine independent living at the heart of health and social care policy and practice.

Among our recommendations is a call for government to support councils, the NHS and other local and regional partners to set up new independent living technology services. Another would support health and social care staff to unite around the shared mission of giving people more choice and control. A third recommendation looks to make disabled and older people equal partners in the delivery of care.

Putting people in control of their lives requires restoring their ability to act for themselves. A key theme of the report is that disabled and older people must not be viewed as passive recipients of public goods. We need to stimulate a consumer market in technology for independent living. However, many people don't have the financial resources to buy technology and those who do may not know what to buy. As a result, they may have less experience using technology and have low levels of confidence and digital skills.

To break down this barrier, we have recommended that the government to launch a national pilot of a new Independent Living Technology Grant. We believe even a modest Grant would allow consumers to buy low-cost technology and help pay for ongoing costs such as subscription fees and maintenance and support charges - offering much greater flexibility than existing one-time allowances, such as the Disabled Facilities Grant.

These are just some headline proposals in a package of recommendations designed to deal with a multifaceted challenge. I invite you to look at the full set of proposals in the report which reflects the wide range of exciting opportunities to use technology to give people more choice and control in their lives.

Last year's Adult Social Care White Paper correctly identified the importance of technology to giving people control over their lives. It made improving access to technology a government priority. Our report sets out a plan of action for achieving this.

Thank you