The Council's Offer of Assisted Living Technologies

Exploring our offer of Assisted Living Technologies for our residents

Photo taken from Middlesex University

A review by the Families, Health and Wellbeing Select Committee

Councillors on the Committee: Councillors Philip Corthorne (Chairman), Heena Makwana (Vice-Chairman), Judith Cooper, Becky Haggar, Kerri Prince (Opposition Lead), Paul Rodrigues and Jan Sweeting

Co-Opted Member-Tony Little, Roman Catholic Representative

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Chairman's Foreword

The Council's offer of Assisted Living Technologies

On behalf of the Families, Health and Wellbeing Select Committee, I am delighted to present the findings and recommendations of this review, which sought to examine the Council's offer of Assisted Living Technologies (ALT), technology innovation and potential opportunities to create a more tailored and beneficial service experience for our residents enabling them to maintain independent lives.

The Committee met with a wide range of stakeholders including different service providers, various technology providers and service users. Member discussions were informed by the observations made at the site visit to one of the Borough's extra care settings. The Committee was able to gain a real understanding into the thoughts and experiences of people that most relied on ALT such as people with learning disabilities, people with dementia and children and young people though its virtual headset session. As part of the review, a survey was sent to a variety of residents within Hillingdon ranging to people already in receipt of services to parents and carers in receipt of direct payments. The survey was extremely insightful and, most importantly, identified areas that worked well, areas of development and how support could be provided to our residents and their families and carers. The Committee was impressed by the candour of the officer team and the evident commitment to build on and apply existing good practice consistently across the range of relevant services.

Arising from this review, the Committee has made recommendations around strengthening collaborative working, developing training, improved communications and the development of a strategy. With these recommendations, it is hoped that there will be more opportunities available to support residents to live more independently and at home for longer.

Finally, I would like to take this opportunity to thank those officers and witnesses who have given up their time to help the Committee and commend them for their continued hard work in providing support, advice, and services to the residents of the Borough. Without them, we would not be where we are today.

Councillor Philip Corthorne
Chairman of the Families, Health and Wellbeing Select Committee

Summary of recommendations to Cabinet

Through the witnesses and evidence received during the detailed review by the Committee, Members have agreed the following recommendations to Cabinet:

1	That Cabinet welcomes the findings and recommendations from their review into the Council's offer of Assisted Living Technologies.

2 That Cabinet:

Tailoring to residents' changing needs

1. Commends the work undertaken through the Telecare line Service to support over 70's residents live more independent lives.

2. That, in developing and reviewing social care packages for individual residents, requests that officers implement a checklist in 2022 that takes into account both the current Assisted Living Technologies offer but also allows for future refinements should the need arise and as technology develops.

3. Agrees that officers develop a narrative to support communications to tackle misconceptions about Assisted Living Technologies and engender confidence in its usage on the part of service users and families; and that also identifies how barriers and costs to the take up to Assisted Living Technology may be managed.

4. Welcomes the feedback received as part of the Committee's review, and recommends that the Council continues to listen to the views of service users families and carers, rather than during periodic reviews of the service, as a means of increasing confidence in residents and improving the Assisted Living Technologies offer.

5. Agrees that officers conduct a training needs analysis in 2022 to identify relevant staff that may need to gain a greater understanding of Assisted Living Technologies and how it works for users, including use of the Virtual Reality headsets and other appropriate training.

3

That Cabinet:

Looking to the future

1. Reviews its approach to Assisted Living Technologies alongside the wider London Borough of Hillingdon's digital strategy and digital connectivity strategy, seeking out the future benefits to service users that full fibre, the "internet of things" and digital inclusion can offer.

2. Agrees that officers work with providers of Assisted Living Technologies to take a consistent approach in moving systems online to improve the effectiveness of service monitoring and delivery 'in sync' with health and social care partners.

3. Agrees to continued liaison with Brunel University and other sources of research and development to ensure the ongoing evolution of the Assisted Living Technologies strategy continues to be informed by emerging good practice.

4. Notes that Assisted Living Technologies can be an important preventative tool to a wider range of vulnerable residents, not only those in older years or with dementia.

5. Therefore, supports the principal that an Assisted Living Technologies offer should be a consideration at all relevant major resident contact points with the Council, including universal services (not solely social care) and asks officers to prepare an implementation plan for this during 2022, for consideration by the Cabinet Member.

6. Recognises that Assisted Living Technologies sits within a wide spectrum of services provided by LBH and partners. It forms an integral part of the broader support which is grounded in providing individual, personal-centred care, clearly tailored to the needs and preferences of the individual service user. Assisted Living Technologies is an option to enhance rather than directly replace existing services, improving efficiencies in the delivery of resident outcomes.

Background to the review

Assisted Living Technologies (ALT)

What is ALT?

ALT is used as an important facet in helping people to maintain independence and improve social care and health outcomes. It is utilised to promote independent living and support people in need of care to live longer at home, in homely environments and in their communities.

The types of ALT products available on the market varies and is developing every day to meet the changing needs to users. Products range from aid memoirs and gadgets to pendants to personal alarms.

It is important to establish what is meant by the terms Assisted Technology and Assisted Living Technologies.

Skills for Care, a charity with over 18 years experience in workforce development and working as a delivery partner for the Department of Health and Social Care, offer a definition of Assisted Technology as a broad term to describe:

> *"equipment that helps people to live independently and have greater control over their health and wellbeing, improving the quality of life for both users and their carers. It can include both simple and more complex systems and equipment."*

Skills for Care further define ALT as follows:

- *Telecare:* the use of technology, including monitors and sensors, to promote independent living and support to people in need of care to live longer at home, in homely environments and in their communities. This may include returning home after a period of illness.

- *Digital Participation Services*: to educate, entertain and stimulate social interaction to enrich the lives of people in need of social support.

- *Wellness Services:* to encourage people to adopt and maintain a healthy lifestyle, to prevent or delay the need for support.

The Alzheimer's Society refer to Assisted Living Technologies as devices or systems that help maintain or improve a person's ability to do things in everyday life. These can assist with a range of difficulties, including problems with memory and mobility.

Telehealth & Telemedicine is the use of video technology and health related remote monitoring to enable GP's, specialists and consultants to support patients and other professionals remotely by making a diagnosis, flexing treatment plans and medications and recommending treatments.

The role of different technologies

ALT is seen as a way in which elderly people and their carers can remain confident that, should an accident happen, there is a simple and effective way in which they can call for help. Although elderly people make up a majority of those using ALT, these products can be used by a wide range of people for different reasons. Examples include an individual returning home after a period of illness and those living with chronic health conditions such as epilepsy. In fact, any resident with a need to be supported to remain independent could consider ALT which can include both simple and more complex systems and equipment.

Traditionally, equipment has conventionally utilised mobile and landline technology but in recent years there has been a steady shift in exploring ALT internet connectivity.

In the UK, the population of people over 85 years old is expected to double over the next 20 years (Officer of National Statistics 2017). With the Covid 19 pandemic resulting in the increase of people using ALT, society needs to be more aware of the types of technologies available and how it can be used to make people feel more connected to the community. By embracing new technologies, society can empower people to own their own care and transform the way that services can be delivered.

ALT in Hillingdon

The London Borough of Hillingdon has a range of ALT in place aimed at supporting residents in daily life and providing peace of mind to their families and carers.

It is important to monitor the population for Hillingdon and project figures for residents that may be in need of ALT in the future. The purpose of this is to plan for how care can be managed and take steps to ensure that sufficient resource can be put into place. Further, the promotion of independence of younger adults as part of lifelong care planning with technology supports the management of the social care budget by delaying the need for residential or high needs care.

The current population of Hillingdon is 309,300 and is estimated to increase by 2.2% (6,720) over the next 5 years (ONS Sub-National Population Projections, 2018-based).

There has been an increase of 56,300 (22.3%) in the population of Hillingdon since 2010/11. There are currently 42,102 people over the age of 65 and 6,142 people over the age of 85 in the Borough.

The number of people aged 18-24 predicted to have a long-standing health condition caused by a stroke, by age and gender, projected to 2040 is as follows:

Year	2020	2025	2030	2035	2040
People aged 18-44 predicted to have a long-standing health condition	59	57	56	55	55
People aged 45-64 predicted to have a long-standing health condition	469	500	516	522	518
Total population aged 18-64 predicted to have a long-standing health condition	528	557	572	578	573

Rates for men and women reporting strokes are as follows:

Age Range	% males	% females
16-44	0	0.1
45-64	0.8	0.5

Source: Projecting Adult Needs & Service Information (PANSI) - Institute of Public Care & Oxford Brookes University

People with Dementia in Hillingdon

The number of people aged 65 and over predicted to have dementia, by age and gender, projected to 2040 are set out below:

Year	2020	2025	2030	2035	2040
People aged 65-69 predicted to have dementia	190	223	256	263	262
People aged 70-74 predicted to have dementia	323	317	372	427	439
People aged 75-79 predicted to have dementia	456	558	557	653	748
People aged 80-84 predicted to have dementia	686	708	864	862	1,028
People aged 85-89 predicted to have dementia	706	792	812	1,009	1,039
People aged 90 and over predicted to have dementia	672	790	931	1,049	1,261
Total population aged 65 and over predicted to have dementia	**3,033**	**3,388**	**3,791**	**4,262**	**4,777**

Source: Projecting Older People Population Information System (POPPI) - Institute of Public Care & Oxford Brookes University

The impact of the Covid -19 pandemic

Throughout the Covid-19 pandemic, there have been various projects undertaken to support residents that relate to ALT. In December 2020, the Sport and Physical Activity Team began working with WeCareUK (an independent charitable organisation) to supply Amazon Alexa Show devices to residents living with dementia for a 6-9 month trial. The aim was to study the usefulness of such devices in supporting a person living with dementia. Each Alexa Show device had an 8-inch screen and a total of 10 devices were distributed to 6 residents and 4 professionals working in dementia support in the Borough.

From the project, several successes were noted including the use of video calling both by professionals and family members. The products proved to be helpful in assisting the person living with dementia to recognise who they were speaking to, which is difficult in a traditional phone call. Family members reported the benefits of the drop in call functionality, which allowed them to check on their loved ones without them needing to answer the call.

The products also included vocal reminders that could be tailored to meet individual needs such as setting reminders to take medication, drink water or exercise. Products could also be used as a reminder for other dates or appointments such as doctors or phoning the hairdresser. Photos can also be uploaded to the screen so it can be used as a frame, setting reminders for favourite music or TV shows to be played at set times throughout the day. This was found to be especially useful with 'sundowning' to help distract a person.

Evidence & Witness Testimony

Scoping the review

The aim of the Committee's review was to consider how the Council could improve its ALT offer by taking stock of the current for the benefit of residents. The review also intended to explore working practices to ensure the promotion of self-management, independence for the Council and the wider health system, and the management of demand on social care budgets.

The Terms of Reference for the review can be found at the end of the report. During its information gathering and call-for-evidence sessions, the Committee considered that it was important to take into account a range of views from both Council officers and external stakeholders to better understand how ALT impacted people on a day-to-day basis.

The following sections will outline the evidence received and these witness testimonies.

Where Are We Now?

At the onset of the review, the Committee heard from the Head of Business Delivery & Support and the Community Development Manager who helped set the scene and established an understanding of current ALT local picture in Hillingdon.

The Committee was advised that Hillingdon had a solid core offer of Telecare and associated products for the remote monitoring of resident well-being. Alongside this, the Council provided a responder service 24 hours per day, 7 days a week for those who do did not have a suitable contact if they needed assistance. This core offer included pendants/call buttons, sensors for movement, gas & fire sensors free burglar alarms and GPS tracking technology.

Current Offering in Hillingdon - Telecare

It was reported that in Hillingdon, the Telecareline was a key service for residents to have access to remote monitoring allowing people to get the right support at the right time. This also gave family members peace of mind that support was available if there was a need. The service was offered free of charge to residents aged 75 and over.

Further, it was noted that Telecareline was the core offer to any resident being assessed for social care needs on discharge from hospital.

Members were advised that the number of Telecareline users was 6,835 as at 31 May 2021 and the breakdown of levels of support and users was as follows:

LEVEL	Description	Users
Level 1	Level 1 - is the standard service comprising of a lifeline unit and pendant, smoke detector and bogus caller alarm, the resident must have 2 named responders who hold a key and agree to respond to an emergency any time (£1.13 per week)	2885
Level 2	Level 2 - In addition to Level 1 support this also includes access to a mobile response service for those residents who do not have named responders (£5.00 per week)	3291
Level 3	Level 3 - In addition to the Level 1 service, the resident would also have access to a range of additional detectors and/or sensors appropriate to their assessed need (£8.50 per week)	153
Level 4	Level 4 - This level of service would include access to the full range of TeleCareLine sensors and detectors to address needs, including safer wandering equipment and also the Mobile Response Service (£12.00 per week)	105

The Committee received details regarding the Telecareline emergency call alarm system and noted that the answering system was outsourced to a provider named Anchor OnCall.

It was noted that Anchor OnCall provided 24/7 support and escalated calls to either a named responder, the Council's own Mobile Response team or the relevant emergency services. During April 2020 to March 2021, there had been a total of 86,230 inbound calls/alerts to the monitoring centre for Telecareline customers. 76,731 of these were from customers and 9,499 from communal areas within sheltered or extra care schemes. On average 98.4% of telecare alarm calls were answered within 60 seconds and were then triaged as appropriate for a response.

Social Care - Care Homes, Supported Living Schemes and Day Care Settings

It was explained to the Committee that care homes had not been big users of ALT as they usually had staffing. However, during the Covid – 19 pandemic, restrictions on visiting in care homes had promoted the use of devices for communication with both relatives, GP's and community matrons. Virtual ward rounds of the care homes had also taken place with the use of ipads and facetime.

The Committee was informed that one supported living provider for people with learning disabilities contracted by the Council had developed their own range of monitoring equipment to assist in the compliance and quality monitoring services. Areas of compliance and monitoring included, the administration of medication, completion of care tasks and the remote oversight of the environment.

Current Offering - Digital Participation Services and Wellbeing Services

The Committee learnt of good examples of encouraging and enabling social interaction were the Magic tables in 7 of the Borough's libraries, including Botwell Green, Uxbridge, Ruislip Manor and Northwood Hills, as well as Grassy Meadow Court, Park View Court and Queens Walk Resource centre. This service increased social interaction and day to day life skills.

Digitisation

Throughout the review, the Committee was aware that the UK's telephone network was currently being upgraded from traditional analogue lines to digital lines. This was a national project, not just in Hillingdon.

The Committee was advised that digitalisation was being considered as a wider project across each service area in the Council as part of the Council's digital connectivity strategy. This included ensuring all areas of the Borough had adequate internet connectivity, residents had access to the internet and residents had the skills to use it.

In line with this, it was noted that the Council was currently undertaking a rolling project to ensure that all Telecareline equipment installed in residents' homes was up to date and compatible with the new digital lines. The 6000+ residents who benefited from the Telecareline service were being contacted and where applicable, new equipment was being installed.

It was reported to the Committee that the Council was continuously reviewing the latest equipment available on the market which included a Smart Hub, containing a roaming sim card, should the digital lines go down.

Site Visit to Park View Court, Hillingdon

Throughout the course of the evidence stage, the Committee heard that Extra Care housing was designed specifically for people aged 55+ with additional care needs, that enabled people to live independently, whilst providing reassurance to friends and family peace of mind.

Members were advised that the Council's Extra Care settings at Grassy Meadow, Park View Court, Triscott House and Cottesmore House all had a range of technologies in place. All flats and communal areas had Tunstall alarms available should a resident require support. Door sensors were fitted as well as smoke alarms to ensure residents felt and were safe.
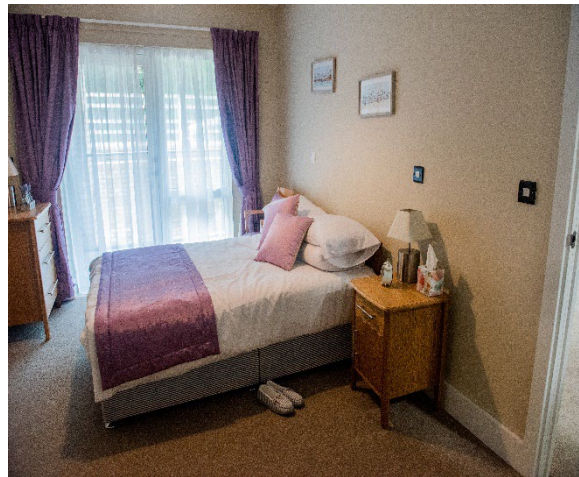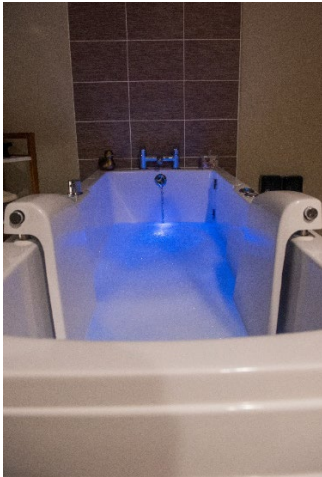
Photos of Park View Court

Park View Court and Grassy Meadow Court had interactive bathrooms available set up with special lighting and Bluetooth connectivity so music could be played whilst they were being used. Both schemes had a Tovertafel (Magic Table) situated in the communal lounge to encourage interaction, reminiscence and relaxation for people with dementia. The combination of light and sound provided physical and mental stimulation and was reported to encourage movement, eye contact, focus and social engagement. This was a great example of interactive technology within the Council's schemes which was used by residents or the wider community by appointment.

It was highlighted to the Committee that Grassy Meadow Court had been built to Gold Stirling Standard and was awarded Gold Status in 2019. It also won second place in the Pinder Awards in the same year.

Members were provided with examples of other devices and systems including:

• Everon GPS watches – used to enable people with dementia or other cognitive impairment to live a more active, safer and freer life. 'Safe' zones could be configured on the watch and position alerts were sent on a regular basis making it easy for family members, carers or emergency services to follow or locate the wearer via computer, smartphone or tablet.

• Just Checking technology – consisted of small wireless movement sensors which were discreetly placed around the home, gathering data on the activity of the person living there. It identified what rooms had been visited and for how long. It included door sensors on internal and external doors to see when they were opened and for how long.

As part of the Committee's investigation stage, Members requested whether it was possible to undertake site visits to see some of the ALT in a practical setting.

A site visit was arranged to visit one of the Borough's extra care settings, Park View Court. Due to the Covid – 19 pandemic only a few Members were selected to minimise the risk of any infections at the setting.

Members were provided with an in-depth explanation of the processes in places, current challenges, and how ALT were working in practice.

It was found to be an extremely insightful session allowing Members to meet with service users and observe how ALT worked on a day-to-day basis.

Meeting with Service Providers

At the request of Members, a witness session with service providers and users was arranged outside of the usual Committee meetings to create an informal environment to hear about the challenges and what was working well in ALT.

A number of organisations attended including representatives from Hillingdon MIND, H4All, Alzheimer's Society, Carers Trust, Hillingdon Autistic Care Services (HACS), Hillingdon Carers Partnership and Comfort Care Services. Attendees at the informal session were then split into two groups to facilitate a more open discussion on the topic, before reconvening to the whole group at the end of the meeting.

Members heard that there were many benefits to using technology to assist independence and care. It was echoed that technologies like pendants and Alexas were beneficial. It was however noted that it was difficult for service providers to keep up with the many new developments in ALT. A major strand of discussion for both groups was the concern that some service users were left behind by the move to more technologically based care and assistance. Several barriers to service user take up of ALT were noted, including a lack of access to wifi or the lack of know-how or confidence to be able to use ALT effectively. Mental health issues could also inhibit service users' take up of ALT. Paranoia about online fraud and person data theft could make the use of the internet triggering for service users.

Members were mindful that many people had a general resistance to change, and that this could

be an impediment to the take up of ALT. This problem was not just related to the service users themselves; often it was family members who were most resistant to changes in services due to technology. For example, family members might be used to their relative having four calls from a carer per day and would be upset if this were to be reduced and replaced by remote meetings through technology.

The Voice of Service Users

The Committee questioned what more could be done to support service users and education was posited as one solution to breaking down the barriers for those who lacked the technological literacy to use ALT. It was emphasised that, as more services returned to in person delivery following the Covid – 19 pandemic, IT literacy help schemes also needed to return in-person as many found users online schemes insufficient. It was highlighted that a scheme that worked well pre pandemic was a scheme delivered by Brunel students at the Borough's libraries. At these schemes, students volunteered to sit with residents to help them use the computers.

Following its meeting with services users a number of themes and barriers were identified:

- Providers could not afford the costs associated fund assisted living technologies.
- Lack of awareness of ALT and the available products on the market.
- Staff and providers were unsure how to use ALT.
- Lack of available training in ALT.
- Family members had concerns over support being provided by technology and not in person.

Members found this evidence to be crucial and bore it in mind at the next stage of the investigation process. There was a real concern at this point that some individual could slip through the net.

Technology Demonstration – a Real Eye Opener

The Committee was informed that the Council had recently purchased 24 virtual reality headsets from The Cornerstone Partnership. The headsets provided the user with immersive experiences in a range of situations including childhood trauma, domestic violence, drug and alcohol abuse, child criminal & sexual exploitation, as well as autism and dementia.

Staff within social care teams were being accredited to use the technology. It was confirmed that there would be roll out across the different teams, care providers, voluntary organisations and the public. The training was intended to enable staff to be able to have an empathetic view from the service users perspective on why they behaved in certain ways and how changes could be adopted to improve services to residents.

The Select Committee also took part in a virtual headset demonstration, where Members were guided through a range of experiences, had an opportunity to use the headsets and gain an insight into what a person with dementia and autism experiences. Members found the session to be powerful and insightful, giving a real flavour of what went on.

Input from Technology Providers

Representatives from different technology providers in attendance advised the Committee that there had been a significant rise in available technology to promote self-help. This now gave a range of opportunities to support lifelong care planning from children through to adulthood.

It was noted that the range of equipment being used by the general population for commercial use such as smart hubs, with voice activated light bulbs, door bells with video, text activated or time activated options on kitchen equipment, heating etc now make it significantly easier for those with additional needs to be supported to self-care.

The Committee received detailed presentations from the following ALT providers who spoke about the different products they had on the market and work being developed. The common objective between all the companies was to increase confidence in individuals to allow them stay at home for longer.

Tunstall

Members first heard from Tunstall which was a technology company that used technology to support people requiring care and health intervention to live independently in their chosen home setting. Solutions enabled independent living by defining new models of care and creating globally connected healthcare solutions. Tunstall's vision was to give people the freedom to live their lives so that people could stay at home for as long as possible.

The Committee heard about the different products available including the Tunstall Go, Connect Wellbeing App and Group Living Solutions. The future involved an emphasis on cognitive care by increasing the level of personalisation in care and health systems.

Following Member questions, it was confirmed that only the necessary data was held for users and this was not shared with third parties. In terms of obstacles to using Assisted Living Technologies, there was no specific cohort that encountered obstacles, however generally mental health during and post lockdown had impacted this area significantly. Although there had initially been a weariness of technology, this position had changed during lockdown as many people had become more familiar with IT devices. The pendant worked well as an option for elderly people prone to falls. There were several products available for the future however these were still in the testing stage and the aim was to have equipment that was compatible with all types of other equipment.

Buddi

Members then heard from Buddi which was a technology company that focussed on providing peace of mind by enabling people to live independently in their own homes for longer.

The Committee heard about the different products available including the Buddi Mini, Buddi Clip, Buddi Clip and Connect Wristband and the Buddi Hub. Members welcomed the different case studies involving other local authorities where products had assisted with travel training. These products had also assisted with dementia and falls risks enabling residents to continue to live in their own homes, whilst managing risks around seizures.

Following Member questions, it was noted that although the battery life for specific products was 24 hours, various alerts could be set up to act as charging reminders. There were alternative options available for services who were prone to losing their devices and an example of this included cello taping the device to zimmer frames. The devices were numbered personally so were easily identifiable and there was also an option to disable tracking information. There were a number of products available for the future that were in the process of being completed.

Apello

Members lastly heard from Apello which was technology company that had developed products such as a monitored personal emergency alarm to enable people to lead independent and fulfilled lives.

The Committee heard about the different products available and the significance of everything now being digital. The Smart Living Solution was the main system and there were a range of cloud services including the digital bridge. The Committee watched a video on the digital transition. It was noted that Apello had also been awarded the best use of technology for housing.

In response to Member questions regarding response times, it was confirmed that as soon as the call was initiated a response would be almost instant, irrespective of the client base size. It was noted that all products were digitally designed and future proofed.

Grandcare

A final virtual witness session with arranged with Grandcare to allow Members to focus on what the service user could expect to experience and the benefits to the end user.

The Committee heard about the services provided by Grandcare and the types of products available for their service users. The system, including an app, a portal had been designed to empower people to become more independent. The service users were accessible by all service users, carers and their families. The Committee was informed of the process of providing care for service users and the different stages involved including triage and implementation. A demonstration was also provided.

In terms of engendering confidence and capability with service users and families, it was reported that work was carried with a wide range of stakeholders including community, social workers and partners and CCGs. Work with Shropshire and York had been a success. The implementation team worked closely with care providers and users of the system, and going to the training performances. Training was generally completed very quickly and were many video contents available to support people.

Results from Surveys

Online Feedback from service users and their families, parents and carers

The Committee was provided with the results of an online survey of 101 responses. The survey was sent out to a variety of residents within Hillingdon, which included people already in receipt of the TeleCareLine service, people living within Extra Care, Supported Living, Sheltered Housing and Residential Care units, service users, parents and carers in receipt of Direct Payments. This included children, young people, adults and older people using a variety of services including supported living for people with learning disabilities, for those using mental health services and people with physical disabilities and extra care needs.

The questions in the survey were centred around the user experience of ALT focussing on the type of equipment already in use, what users would like to have and how the experience could be improved. Full results from the survey can be found at Appendix A.

The Committee noted the key points from the survey as detailed below:

ALT Already in Place

The results from the survey found that a wide range of ALT was already in place, with the majority (70%) being supplied by the Council, 17% being sourced by the resident themselves and 14% being sourced by a family member, carer or friend.

Satisfaction with the equipment was generally good, with 68% loving or liking the equipment, 31% not minding it and only 1% not liking it. 1% said they didn't use it.

Although only 2% stated they were "not liking" or "not using it", the main reasons for this were stated as:

- *I don't like wearing it/using it*
- *I forget to wear or use it*
- *I don't like how it looks/feels*
- *It makes me feel old/vulnerable*
- *I don't like/trust technology*
- *I feel like it's tracking me or keeping tabs on me*

Emergency Situations

The Committee was interested to know that 54% of people had used the equipment in an emergency and the outcomes were positive with 18% reporting that a family member, carer or friend was called, 17% had emergency services called and 14% said the person who answered the call had reassured them. Only 2% said the person who answered the call was unhelpful.
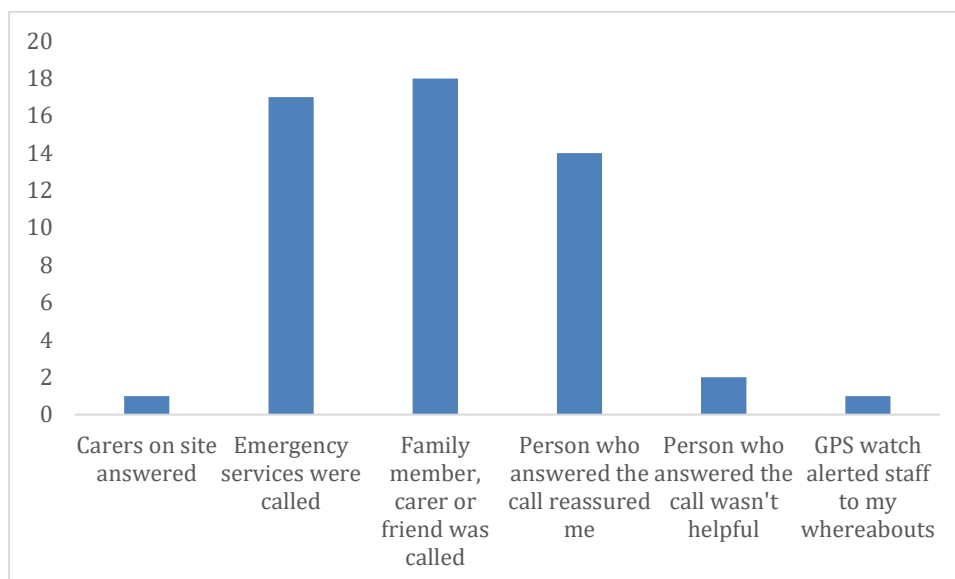
Technology as a barrier

The Committee heard that the number of people wanting more equipment or technology to help them remain safe and independent at home stood at 21%.

The reasons for the majority of people not wanting further equipment were:

- *I don't like technology, it scares me*
- *Emergency cord and Alexa device is enough for me*
- *I am ok at the moment & independent*
- *I am severely disabled and I am not sure that there is anything else that can help my condition*
- *I don't know what else is available*
- *I don't need anything else*
- *I don't need anything else other than my pull cords pendant and daily check call from scheme manager*
- *I feel safe with the equipment I have*
- *I think I have most things*
- *I think the council have given me everything they can*
- *I'm not interested in anything else*

The Committee was also drawn to the fact that out of the 101 people who responded to the survey, 67% had a mobile phone and 57% of people said they used it. Only 38% said they had a computer, laptop or mobile device and 36% said they used it.

Reasons for	Reasons against
Alarms for medication Calendar, checking bills Checking sports results Crosswords, puzzles, scrabble, solitaire Education and leisure Exercise classes FaceBook FaceTime with family Internet shopping, Youtube, watching the news Keeping in touch with loved ones Listening to music and reading the news Ordering prescriptions Photos of family and friends	Because I can't use both my hands Can't afford it Can't get a good signal I don't have the mental capacity I don't like it, can't remember how to use it The device belongs to a family member so I have limited access to it Unable to use due to physical or learning disability and need support

Further Training

The Committee noted that Only 21% were interested in having training on using more equipment or technology, 46% said no and 34% said maybe.

Question 21: Would you be interested in having training on using more equipment or technology?

🔵 Yes		21
🟠 No		46
🟢 Maybe		34

Considering the information received, the Committee considered what further could be done to assist with barriers to technology, such as changes in approach to the provision of information, training and communications and the broader digital inclusion agenda.

Direct feedback from residents and staff

As part of the review, the Committee had regard to more direct feedback from residents and staff, noting that ALT was being used within the Council's own residential care homes for people with physical and learning disabilities. Staff have advised that equipment such as bed sensors are an excellent product, providing an immediate alert if a resident is having an epileptic seizure. This enables them to respond immediately with the necessary care or medication if required. Mattress sensors are also used to support residents' independence and alert staff if a residents gets out of bed and requires support during the night.

Residents in supported living accommodation were supported to complete online training during the pandemic, as well as keep in touch with family and friends using virtual calls.

Telecareline equipment was installed at a resident's home and 2 days later, she had a fall and was able to activate her alarm and request help. Mobile responders attended and an ambulance was called and the resident was admitted to hospital. Without the equipment, this could have had a very different outcome.

Compliments from Telecareline Users

I just want to say thank you for my new Telecare button. The young man who fitted it was delightful and everyone has been so helpful. My best wishes and thanks. I hope I will never have to use it, but it is good to know I can if I need it.

Thank you to all your colleagues for all you do and have done helping people and listening to them and caring for them. You are all very much appreciated. We hope you are all healthy, happy and coping during these unusual and unpleasant times.

Best practice in other Local Authorities

The Committee thought that it would hear from other Local Authorities during the investigation process as stated in the review's Terms of Reference. This was not possible. Although this was disappointing, Members welcomed the case studies from different authorities.

It was highlighted to the Committee that the London Borough of Hammersmith & Fulham had used ALT to give freedom, independence and reassurance to a resident with epilepsy, see Appendix B.

Members were also told that Stockton on Tees council currently used ALT to enable people to remain at home and live independently whilst avoiding high cost residential care home placements. During the Covid-19 pandemic, this equipment played a vital role in ensuring that not only services users were kept safe but that their families are able to see for themselves that their loved one was safe. Full details can be found at Appendix C.

The Committee concluded that despite the lack of witnesses, based upon case studies, discussions with council officers, providers and service users, it was clear that LBH was providing a first class ALT offer. It would have been helpful to hear from other authorities however the case studies provided some insight and set the scene.

Future Planning

Towards the end of the review, Members were informed about plans to develop an overall strategy for ALT within the Borough that would ensure that:

- Care and support would be personalised and prevent, delay and reduce the need for long term care.
- Residents would be enabled to live independent and fulfilled lives, supported within and by their local networks wherever possible.

It was explained that the ALT today was a significant move away from 'mobility aids and adaptations approaches' of the early 2000's and this provided timely opportunity to tailor the approach, making the broader offer of Telecare line part of all initial social care assessments including the younger population, enabling parents to be supported to care for children with disabilities, young people with autism to be independent as well as older adults to maintain good health and well being.

A strategy to be developed on the key themes were noted below for consideration by the Committee.

- A technology support strategy for assisted living is developed by March 2022
- The strategy is intrinsically linked to digitisation and identifies where there are infrastructural needs across the borough and across organisations to ensure that all areas have equality of access to equipment, support and monitoring
- The strategy is both a Universal offer to all residents and a targeted social care offer
- The strategy would cover assisted technology availability and a core offer from 0-105 years of age, cradle to grave following an assessment.
- The assessed fees and charges associated with Telecare Line continue to be fair and equitable
- A training programme of all aids, adaptations and availability is set up for all adults and children's social workers to ensure that assisted living technology is prioritised as a core offer.
- A specific identification of support technology for these groups, who do not traditionally use it – Children with disabilities, children & young people with autism, SEND, Adults with Autism
- An assessment of the equipment and a core offer that is available to create a 'catalogue' option for those prescribing and assessing to be able to offer from.
- The strategy will feature the projected health needs and demand data from the JSNA and establish how technology can assist and how the demand for social care and health services can be managed with best practice & technology availability to drive excellent outcomes for residents over the next 5 years.

A review of the equipment, suppliers and process for assessment and installation would also due to take place.

Members were advised that the anticipated timeline was that the final strategy would be in place by 31 March 2022 and would cover a 3-5year period with clearly identified milestones. Resource requirements would also be identified and prioritised in accordance with availability and expected outcomes.

The Committee's Findings

General Conclusions

Having considered a range of evidence from a variety of appropriate sources, the Committee has offered the following practical, feasible and supportive recommendations to promote independent for elderly and vulnerable residents.

Throughout, the Committee was mindful that any recommendations needed to be Specific, Measurable, Achievable, Relevant and Time-bound considering both offer and budgetary constraints.

The Committee went back to its terms of reference and questioned whether it had fulfilled its objectives. Members had heard about the current offer, national setting, work across the Council, Telecare and future planning. Through the survey and chat with stakeholders, a real and honest account was provided on the take up of service and limitations residents encountered when accessing ALT. Although it was disappointing to not hear from other local authorities, the case studies were helpful in providing examples and context of the work in other authorities.

It was clear that there was a benefit to being able to support people remotely and whilst this was unlikely to be a significant cost saving, ALT could support individuals to be monitored, to communicate and to aid social interaction and prevent isolation with larger numbers of people being supported at the point in time of need.

Further, there was no doubt that there was a willingness of Hillingdon residents to engage in self support, enhanced support and keeping themselves independent for longer. At a time when social care and health services were under significant pressure it was crucial for the Council to support people to remain well, stay at home and lead as independent a life as they desired.

Following consideration of all available information including that contributed by officers, together with feedback from residents both in-person and via online, the Committee accepted that the Council had an opportunity to make improvements to enhance residents experience of ALT, as well as promoting self-management and independence. Members were therefore pleased to recommend:

1	That Cabinet welcomes the findings and recommendations from their review into the Council's offer of Assisted Living Technologies

Meeting the Changing Needs of Residents

From the evidence provided, it was clear to Members that the technology word was developing rapidly and the scope of products available on the market was varied. The Committee reminded itself of the evidence it had heard in relation to Telecare and smart products were being developed every day. It was questioned whether residents particularly the vulnerable and elderly would be able to keep up with this and how the Council could support this process. Afterall the aim of ALT was to support and encourage independence rather than leaving residents feeling fearful and overwhelmed.

Through, the Covid-19 pandemic, the Council had seen how ALT was used as utilised as an important mechanism to support older and vulnerable people regaining that confidence and maintain connection with the community.

The Committee had regard to all the evidence it had received about different products and the positive feedback on the Telecareline Serivce. It balanced this against the evidence it heard that there were difficulties in accessing ALT and considered that these barriers needed to be explored further. Whether this be done by further training or some form of assessment as soon any residents were identified for social care needs on discharge from hospital just to ensure that the Council was doing its best to meet the resident needs.

The Committee bore in mind some of the issues when dealing with ALT including how residents were not sure of how to access technology, did not know how to use or had a lack of awareness. The key was to engage with residents to increase awareness and understanding to promote independence. It was important to listen to those affected by the services and those in direct use ranging from staff to providers to the actual end user. The Committee therefore suggested that ways be explored to increase confidence in the services available with both service users and their families and carers.

On that basis, it is recommended that:

2	That Cabinet: **Tailoring to residents' changing needs** 1. Commends the work undertaken through the Telecare line Service to support over 70's residents live more independent lives. 3. That, in developing and reviewing social care packages for individual residents, requests that officers implement a checklist in 2022 that takes into account both the current Assisted Living Technologies offer but also allows for future refinements should the need arise and as technology develops.

	4. Agrees that officers develop a narrative to support communications to tackle misconceptions about Assisted Living Technologies and engender confidence in its usage on the part of service users and families; and that also identifies how barriers and costs to the take up to Assisted Living Technology may be managed.
	5. Welcomes the feedback received as part of the Committee's review, and recommends that the Council continues to listen to the views of service users families and carers, rather than during periodic reviews of the service, as a means of increasing confidence in residents and improving the Assisted Living Technologies offer.
	6. Agrees that officers conduct a training needs analysis in 2022 to identify relevant staff that may need to gain a greater understanding of Assisted Living Technologies and how it works for users, including use of the Virtual Reality headsets and other appropriate training.

Looking to the Future

In terms of looking to the future and the Council's vision around digital connectivity – the Committee very much welcomed this. There was no doubt that ALT was a crucial preventative measure to elderly and vulnerable residents and supported independent living. Members expressed particular interest in continued collaboration with stakeholders throughout the strategy development to provide further support to residents. The strategy needed to take into account the planned digitalisation plans and it was important Hillingdon kept up to date with technological changes for the benefit of its residents. To this end, the Committee recommend the following:

On that basis, it is recommended that:

3	That Cabinet: **Looking to the future** 1. Reviews its approach to Assisted Living Technologies alongside the wider London Borough of Hillingdon's digital strategy and digital connectivity strategy, seeking out the future benefits to service users that full fibre, the "internet of things" and digital inclusion can offer. 2. Agrees that officers work with providers of Assisted Living Technologies to take a consistent approach in moving systems online to improve the effectiveness of service monitoring and delivery 'in sync' with health and social care partners.

3. Agrees to continued liaison with Brunel University and other sources of research and development to ensure the ongoing evolution of the Assisted Living Technologies strategy continues to be informed by emerging good practice.

4. Notes that Assisted Living Technologies can be an important preventative tool to a wider range of vulnerable residents, not only those in older years or with dementia.

5. Therefore, supports the principal that an Assisted Living Technologies offer should be a consideration at all relevant major resident contact points with the Council, including universal services (not solely social care) and asks officers to prepare an implementation plan for this during 2022, for consideration by the Cabinet Member.

6. Recognises that Assisted Living Technologies sits within a wide spectrum of services provided by LBH and partners. It forms an integral part of the broader support which is grounded in providing individual, personal-centred care, clearly tailored to the needs and preferences of the individual service user. Assisted Living Technologies is an option to enhance rather than directly replace existing services, improving efficiencies in the delivery of resident outcomes.

About the review - witnesses and activity

The following Terms of Reference were agreed by the Committee from the outset of the review:

1. To understand the Council's current offer with regard to Assisted Living Technologies;
2. To understand the demand and take up of services and explore the limitations residents encounter in accessing Assisted Living Technologies;
3. To explore the national setting and best practice around the implementation of ALT within local authorities and amongst the care sector;
4. To assess the ALT work that is currently taking place across Adult Social Care and to explore possible areas for improvement and future development by both inhouse and external care providers;
5. To review how the current Telecare Line service works from end to end and suggest ways by which the installation and repairs process could be streamlined;
6. To explore any lessons that may have been learnt in relation to ALT following the Covid-19 pandemic;
7. To influence or propose any emerging Council plans, guidance or policies with respect to the use of ALT;
8. Subject to the Committee's findings, to make any conclusions, propose actions, service and policy recommendations to the decision-making Cabinet.

The Committee received evidence from the following sources and witnesses:

Witness Session 1	The Head of Business Delivery & Support The Community Development Manager
Witness Session 2	Site visit to Park View Court
Witness Session 3	Representatives from : • Hillingdon MIND • H4All • Alzheimer's Society • Carers Trust • Hillingdon Autistic Care Services (HACS) • Hillingdon Carers Partnership • Comfort Care Services
Witness Session 4	Virtual headset reality session
Witness Session 5	Representatives from technology providers companies including: Buddi – a technology company that focusses on providing peace of mind by enabling people to live independently in their own homes for longer. Apello – technology company that has developed products such as a monitored personal emergency alarm to enable people to lead independent and fulfilled lives. Tunstall – technology company that uses technology to support those requiring care and health intervention to live independently in their chosen home setting. Solutions enable independent living by defining new models of care and creating globally connected healthcare solutions.
Witness session 6	Representatives from Grandcare Results from the surveys

References

TIHM - Technology Integrated Health Management for Dementia (Accessed on 29 December 2021)

Assisted living technology (skillsforcare.org.uk) (Accessed on 29 December 2021)

(Connecting Services, Transforming Lives - The Benefits of Technology-Enabled Care Services (tunstall.co.uk)) (Accessed on 29 December 2021)

(Source – Joint Strategic Needs Assessment [JNSA] Populations Statistics 2020) published by LBH BPT in April 2020) (Accessed on 25 January 2022)

https://www.skillsforcare.org.uk/About/About-us.aspx (Accessed on 11 January 22)

https://www.buildingbetterhealthcare.com/news/article_page/Innovative_dementia_care_home_achieves_Stirling_Gold_Standard/113111#:~:text=Stirling%20University%27s%20%27Gold%20Standard%27%20is,exacting%20standards%20in%20dementia%20care. (Accessed on 11 January 2022)

TCES – Community Equipment Services Home - TCES Community, Your Community Equipment Software Solution) (Accessed on 11 January 2022)

Telecare Services Association – The voice of Technology Enable Care https://www.tsa-voice.org.uk/(Accessed on 6 January 2022)

Technology Integrated Health Management for Dementia – Surrey and Border Partnership NHS Foundation Trust TIHM (sabp.nhs.uk) (Accessed on 3 January 2022)

National Institute for Health Research – Help at Home: Use of assistive technology for older people   https://evidence.nihr.ac.uk/themedreview/help-at-home-use-of-assistive-technology-for-older-people/ (Accessed on 3 January 2022)

Skills for Care – Assistive Living Technology https://www.skillsforcare.org.uk/Learning-development/ongoing-learning-and-development/Assistive-living-technology/Assisted-living-technology.aspx (Accessed on 3 January 2022)

NHS – Personal alarms, security systems (telecare) and key safes https://www.nhs.uk/conditions/social-care-and-support-guide/care-services-equipment-and-care-homes/personal-alarms-security-systems-and-keysafes/ (Accessed on 3 January 2022)

Telecare Services Association – The TSA Quality Standards Framework Quality Standards in Technology Enabled Care (tsa-voice.org.uk) (Accessed on 3 January 2022)

Everon GPS Watch Vega GPS Watch - Everon UK Cloud-based call systems (Accessed on 3 January 2022)

Just Checking Activity Monitoring Detailed activity monitoring, helping people stay at home for longer (justchecking.co.uk) (Accessed on 7 January 2022)

Appendices

Appendix A – Results Of Assisted Living Technology Survey
Appendix B – Buddi Case Study Falls
Appendix C – Onecall Case Study

APPENDIX A – RESULTS OF ASSISTED LIVING TECHNOLOGY SURVEY

Question 1: What best describes your living situation?

- Live in a residential care home setting (18)
- Live in a supported living setting (staff are on site 24/7) (15)
- Live in an extra care setting (21)
- Live in my own home (rented or owned) within the community (37)
- Live in sheltered housing (private or council owned) 10)

Question 2: Which of the following assisted living equipment do you currently have in your home?
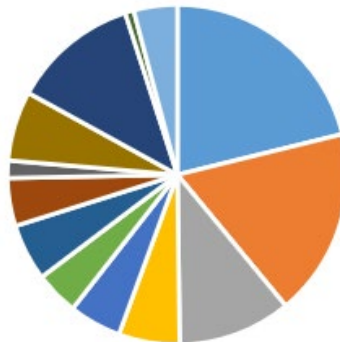
- Telecareline (unit plugged into your home phone or built into your property) (51)
- Carbon monoxide sensor (43)
- Heat sensor (26)
- Bed sensor (14)
- Falls detector (12)
- Epilepsy sensor (10)
- Property exit sensor (13)
- Alexa/Echo device (11)
- FaceBook Portal (4)
- Wearable device, e.g. GPS watch (16)
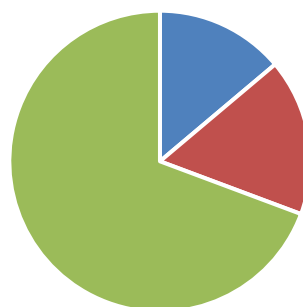- Ring doorbell (29)
- Bogus caller (2)
- Other (10)

Legend

Question 3: If you stated any other equipment, please confirm what this is:

Answers included:

Automatic door opener/closer
IPad
Frames
Hoists
Rails
Cameras within the home

Question 4: Who supplied the equipment?

- A family member, carer or friend bought it for me (14)
- I bought it myself (17)
- The council installed it (70)

Question 5: What do you think of the equipment you currently have?
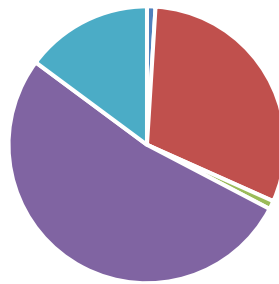
- Don't like it (1)
- Don't mind it (31)
- Don't use it (1)
- Like it (53)
- Love it (15)

Question 6: If you don't like it/don't use it, what is the reason for this?

● I don't like wearing it/using it	11	
● I forget to wear or use it	6	
● I don't like how it looks	2	
● I don't like how it feels	2	
● It makes me feel old/vulnerable	4	
● I don't like technology	5	
● I don't trust technology	4	
● I feel like it's tracking or keepi...	4	
● Other	66	
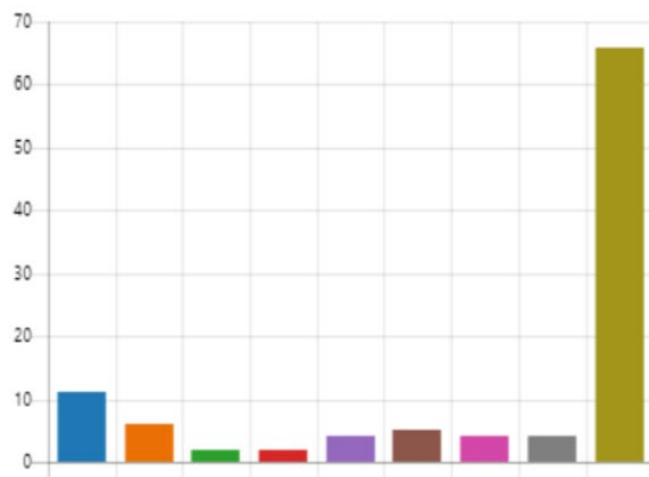
Question 7: Have you ever used the equipment in an emergency?

● Yes	54
● No	47

Question 8: If yes, what was the outcome?
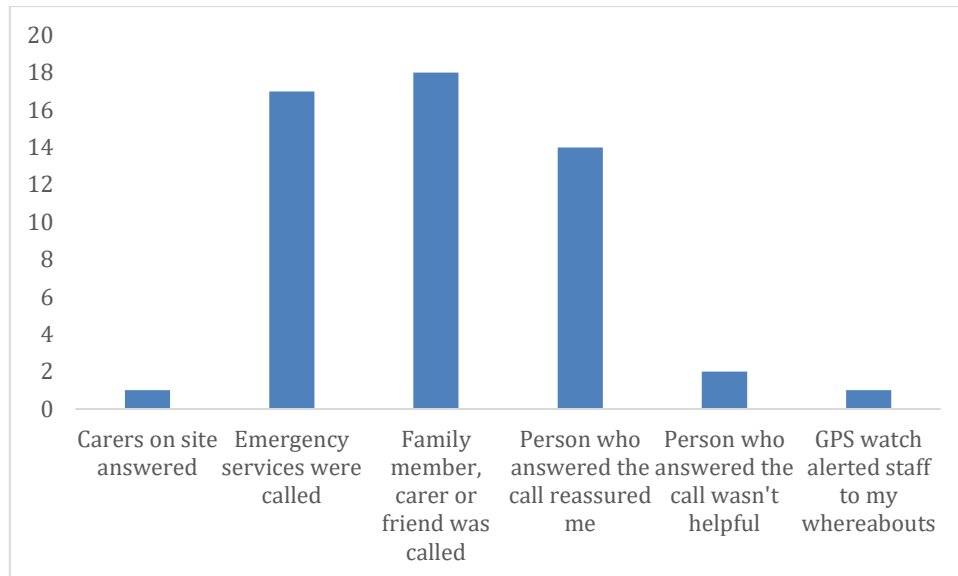
Question 9: Is there any other equipment or technology that you would like to have/use to help you remain safe and independent where you live?

● Yes		21
● No		45
● Maybe		35

Question 10: If yes, please state what this is?

Answers included:

Alexa or Echo device
All systems to be amplified due to increasing deafness (e.g. telephone; doorbell).
Automatic door & rollerlater
Camera equipment
Device to facilitate my exit and entry into my residence
FaceBook Portal
Fall sensor or talker
GPS watch, easy to use mobile phone.
Health sensors so I don't have to go to the doctors or hospital and they can get my readings remotely
Internet/wifi should be free throughout the building
Ring Doorbell

Question 11: If no, please state why this is?

Answers included:

I don't like technology, it scares me
Emergency cord and Alexa device is enough for me
I am ok at the moment & independent
I am severely disabled and I am not sure that there is anything else that can help my condition
I don't know what else is available
I don't need anything else
I don't need anything else other than my pull cords pendant and daily check call from scheme manager
I feel safe with the equipment I have
I think I have most things
I think the council have given me everything they can
I'm not interested in anything else

Question 12: Were you aware that other types of equipment or technology are available to support you to remain safe and independent at home?

Yes	39
No	38
Maybe	24

Question 13: Would you be willing to pay for additional equipment or technology?

Yes	13
No	40
Maybe	31
I think it should be means test...	17

Question 14: Would your friends, family, carers like to see you use more equipment and technology?

● Yes	32
● No	24
● Maybe	22
● Don't know	23

Question 15: Do you have a mobile phone?

● Yes	62
● No	39

● Yes	57
● No	44

Question 17: Do you have a computer, laptop or tablet device?

● Yes	38
● No	63

Question 18: If yes, do you use it?

● Yes	36
● No	65

Question 19: If yes, what do you use it for?

Answers included:

Alarms for medication
Calendar
Checking bills
Checking sports results
Crosswords, puzzles, scrabble, solitaire
Education and leisure
Exercise classes
FaceBook
FaceTime with family
Internet shopping
Keeping in touch with loved ones
Listening to music
Ordering prescriptions
Photos of family and friends
Reading the news
Researching
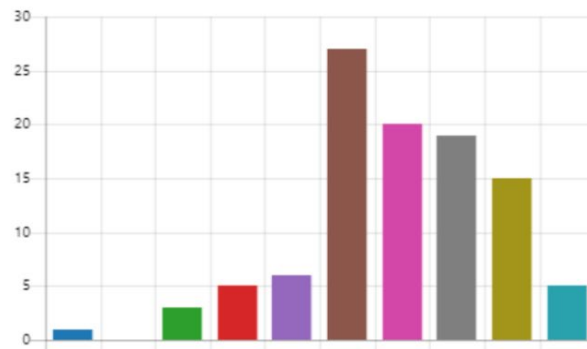Watching the news, films
YouTube

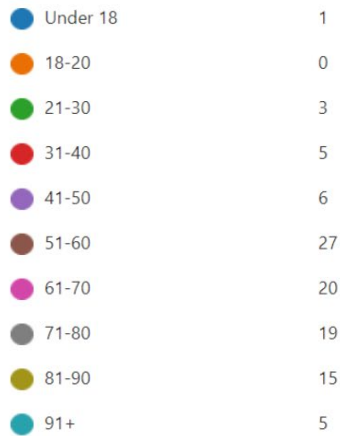Question 20: If no, why don't you use it?

Answers included:

Because I can't use both my hands
Can't afford it
Can't get a good signal
I don't have the mental capacity
I don't like it, can't remember how to use it
The device belongs to a family member so I have limited access to it
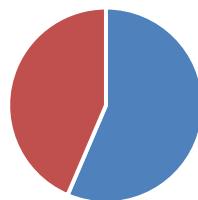Unable to use due to physical or learning disability and need support

Question 21: Would you be interested in having training on using more equipment or technology?

● Yes	21	
● No	46	
● Maybe	34	

Question 22: What is your age group?

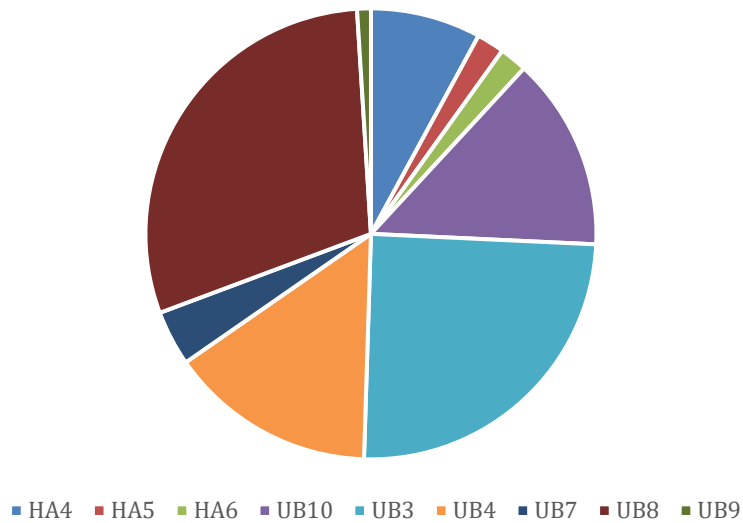|	
● Under 18	1
● 18-20	0
● 21-30	3
● 31-40	5
● 41-50	6
● 51-60	27
● 61-70	20
● 71-80	19
● 81-90	15
● 91+	5

Question 23: What is your gender?

■ Female 57 ■ Male 44

Question 24: What is the first part of your postcode? E.g. UB10 or HA4

Legend: HA4 · HA5 · HA6 · UB10 · UB3 · UB4 · UB7 · UB8 · UB9

Question 25: Which best describes your ethnic background?

(Note: These categories are taken from the Ethnicity & Facts on Gov.uk)
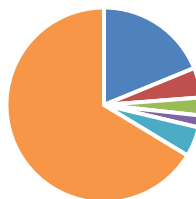
- Asian or Asian British (Indian, Pakistani, Bangladeshi, Chinese, any other Asian background)
- Black, African, Caribbean or Black British (African, Caribbean, any other Black, African or Caribbean background)
- Mixed or Multiple ethnic group (White and Black Caribbean, White and Black African, White and Asian, any other Mixed or Multiple ethnic background)
- Other ethnic group (Arab, any other ethnic group)
- Prefer not to say

APPENDIX B – BUDDI CASE STUDY FALLS

P has epilepsy and lives in accommodation with minimal on-site support.

P has 24/7 access to the community and often goes out to see friends who live locally.

As there are no staff available to monitor pager-linked devices, the option of linking an existing epilepsy/falls detector device to acall monitoring service was considered. However, the occupational therapist (OT) determined that the risks presented by seizures at home were minimal and that 24/7 was no longer needed.

When out with friends, it was also determined to be a minimal risk, as P's friends would be able to assist if needed. However, there was still a risk of P experiencing a seizure when out in the community unsupervised, for example when travelling to and from meeting with friends. This was the issue that needed to be resolved.

According to P, there is a short period of time prior to going into a tonic-clonic seizure, when they know that the seizure is going to occur. P stated that they may be able to press an alarm button during this time, but this was not certain. The OT further stated that P's epilepsy profile indicated that they would be likely to collapse when going into a tonic-clonic seizure.

Provision of aversion of an epilepsy seizure monitor that could be linked to a mobile phone was considered, as well as a Buddi device with falls detector. Discussion took place between P, the OT and the assistive technology co-ordinator regarding which device was likely to be the most appropriate.

The Buddi solution was explained and its functionality demonstrated. P has a good insight into the risks presented by their epilepsy and felt that they would be able to use the Buddi's "panic button" feature to call for help if needed. However, if P was unable to activate this feature before going into a tonic-clonic seizure, then the likely subsequent collapse may be detected by the falls detector bracelet and an alert raised, allowing support staff to locate and assist them.

The OT also identified that P could use the Buddi device at home ,as well as when away from the home, instead of being set up with a separate community alarm service.

It was made clear to both P and the OT that the Buddi and associated falls detector are not designed to specifically identify tonic-clonic seizures. Also that the device is not waterproof and cannot be used in the shower. Despite this, both the OT and P opted to utilise the Buddi device with the falls detector(in preference to an epilepsy monitor linked to a mobile phone)due to the Buddi's ease of use, falls/collapse detection, "panic button "features and the established reliability of the device and associated monitoring service.

P is able to easily charge the device and capable of reporting if there are any problems, such as breakages or lost parts. P is also encouraged to periodically test the device.

At P's request, an agreement was drafted that staff would not utilise the device to locate P unless the falls detector was activated or the "panic buttons" were utilised.

APPENDIX C – ONECALL CASE STUDY

OneCall is Stockton on Tees Borough Council's assistive technology and response service and their primary goal is to keep service users safe within their own homes.

This has been more demanding and challenging with the team having to look at ways to work around Covid-19, putting new guidelines in place to keep their employees, service users and their families, safe.

With Covid-19 restrictions and nationwide lock downs in place, technology has played a vital role, ensuring that not only services users are kept safe but that their families are able to see for themselves that their loved one is safe.

Buddi, in conjunction with other technologies, has helped provide this coverage, using technology around those service users with Dementia/Alzheimer's and memory issues, to live independently in their own homes.

With care home costs ranging from £600 to £1500 per week (depending on the care need and type of care/nursing home), the use of such technology is a welcome alterative. This also saves the social services department thousands of pounds a month which can help to fund other social care packages.

Working with the social service team, Stockton on Tees Borough Council can tailor a care package to any client thanks to technologies like Buddi.

Case Study kindly provided by Stockton-on-Tees Borough Council.