DITSOW Digital Technologies to support social wellbeing

Digital Technologies to support social wellbeing of older adults with vision impairment

Summary of findings from a survey and workshops with older adults who have visual impairment, with recommendations for policy and practice

BRIEFING SUMMARY 4

To listen to the title page, access the audio version via **https://bit.ly/4dYN2io** or by scanning this QR code

Executive Summary

This report is the fourth and final briefing summary from the research project DiTSoW – exploring digital technologies in adult social care to support social wellbeing for older community dwelling adults. The research sits within the National Priorities Programme of Adult Social Care and Social Work, a partnership of nine Applied Research Collaborations (ARCs) from across England, funded by the National Institute of Health and Care Research (NIHR) and led by the Kent, Surrey and Sussex ARC (ARC KSS).

The DiTSoW study explores the implementation of digital technologies to support older adults who do or might draw on Adult Social Care services. This has been done through interviews with professionals working in roles related to social care, technology development, or community care for older adults, see **Briefing One**. We also conducted interviews and focus groups with older adults aged 60+, see **Briefing Two**. Finally, we held two mixed-stakeholder workshops to sense check and further explore our findings and develop recommendations for policy and practice, see **Briefing Three**.

In Phase Two of DiTSoW, we have focused on older people with vision impairment to better understand the facilitators and challenges of digital technology use for this population. This work included undertaking a survey as well as in-person workshops with people with relevant experience e.g. living with vision impairment (more detail on pages 6-9). The planning, delivery and analysis of our research, were guided and supported by older people living with vision impairment, alongside a small professional advisory group, to ensure relevance and accessibility. From the workshop findings and the survey results six key themes were identified. These six themes are explored in more detail on pages 10-21, alongside supporting data, participant quotes and illustrative graphics:

Supporting the social wellbeing for people with vision impairment through digital technologies

The importance of inclusive and accessible design

Practical barriers to technology adoption for people with vision impairment

Fragmented pathways to information and support

The need for effective training for people with vision impairment

Confidence, choice and the limitations of technology

To listen to the Executive Summary, access the audio version via **https://bit.ly/49RFOKt** or by scanning this QR code

These findings were sense checked at an online webinar by a range of stakeholders, including staff in roles related to social work and sensory services and digital inclusion. The event also included representatives from national and local vision impairment charities, other support services for older people with vision impairment, and people with vision impairment. Discussions supported the development of the following recommendations for practice and policy. Taken together, these recommendations highlight the need for a whole-system approach to digital inclusion for people with vision impairment, spanning design, commissioning, service delivery and ongoing support:

- Digital technologies can play a meaningful role in supporting independence, connection and wellbeing for older people with vision impairment. They should be implemented to complement, not replace, human support and equitable non-digital routes to access services must be maintained.
- Accessible and inclusive design is central to whether people with vision impairment can use digital technologies confidently. Existing accessibility guidelines should be consistently applied by designers, developers and commissioners. Accessibility features should be considered and embedded from the outset of design.
- Attention must be given to the affordability, infrastructure, accessible system design and ongoing support of digital technologies to prevent the risk of reinforcing existing inequalities.
- Timely and proactive signposting to services and technologies can support wellbeing and independence and reduce the need for additional intervention. Accessible information should be routinely provided at all key touch points, including hospital appointments, eye clinics and health or social care contacts. Effective approaches include audio-based information, radio advertising, libraries, and verbal signposting during appointments.
- Printed materials can be helpful for people who are partially sighted or supported by sighted people, but consideration needs to be given to accessibility in, for example, the form of contrast, font size, uncluttered and screen reader friendly layouts.

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- Access to appropriate, ongoing and person-centred training and support for people with vision impairment is critical to successful technology use, rather than rely on informal or family-based support. Training and support should be delivered by people with a clear understanding of different visual impairments, their impacts, and the relevant accessibility features that can support use.
- Peer learning was consistently valued by people with lived experience and professionals. Policymakers and commissioners should consider investing in services that facilitate peer-to-peer learning, including partnerships with local and national vision impairment charities and community organisations.

To support all these recommendations, there is the need for meaningful co-production with people who represent the full spectrum of visual impairments. Input is needed at every stage of the design, development and delivery of technology to ensure relevance, usability and acceptability.

Vision Impairment: Long term, medically defined loss of sight that cannot be corrected to a 'normal' level using standard glasses, contact lenses, or surgical interventions. This includes a spectrum of partial and complete sight loss.

Digital technologies: The definition of these is broad to include technologies that may be commissioned by health or social care (such as telecare, remote monitoring) and assistive technologies (such as visual or memory aids) and consumer technologies (such as smartphones, voice-controlled devices and widely available apps such as WhatsApp).

Background information

To listen to the Background information, access the audio version via **https://bit.ly/43pyrGw** or by scanning this QR code

The DiTSoW study began in 2021 during a period of accelerated digital adoption in health and social care following the COVID-19 pandemic. Concurrently, government and local authorities are committed to further digital innovation and implementation which is seen as vital to ensure a sustainable future for social care. As digital interfaces have become increasingly embedded in everyday life, and service access, it is important to understand how this shift affects older adults, particularly those with sensory impairments.

Technologies commissioned through social care (such as remote monitoring) may increase efficiency and financial benefits but exacerbate rather than reduce goals of social wellbeing through reduced in-person contact. Technologies aimed at supporting social wellbeing for older people living independently in the community have received less research attention. When considering issues of loneliness and social isolation with associated impacts on individuals, and on health and social care services, this is a timely research project.

The working definition of social wellbeing was developed by our Research Advisory Group comprised of eight older people, two of whom have a visual impairment: 'Social wellbeing is the ability to live a meaningful life with a sense of belonging and purpose, to feel connected to family, friends and society and not be passed by. The boundaries of this are a personal choice. Social wellbeing sits alongside and is achieved in conjunction with all other types of wellbeing: physical, mental, financial and emotional.'

This briefing focuses on older people with vision impairment because technology can play a particular role in supporting independence and connection, but support needs may differ. Vision impairment affects around 1 in 9 people over 60 and 1 in 5 people over the age of 75*, and is associated with increased risk of poorer social wellbeing and potential need for additional support**.

* Royal National Institute of Blind People (RNIB). *Key information and statistics on sight loss in the UK*. RNIB, latest update. **https://www.rnib.org.uk/professionals/research-and-data/key-information-and-statistics-on-sight-loss-in-the-uk/**

** Good Innovation and Insight Angels (2022). *VI Lives: An in-depth understanding of the experiences of people living with vision impairment (VI) in the UK* **https://media.rnib.org.uk/documents/V_I_Lives_Report_2022__APDF.pdf**

What we did

Through quantitative and qualitative data, this research explored how older people with vision impairment use digital technologies, how this supports their social wellbeing, and the barriers and facilitators influencing use. To take part, participants had to be aged 60 or over and living with long term, medically defined partial or full loss of sight that cannot be corrected to a 'normal' level using standard glasses, contact lenses, or surgical interventions.

Key takeaway: Findings are grounded in mixed methods research, combining survey data with in-depth workshop discussion, co-designed and shaped with people living with vision impairment to ensure relevance and accessibility.

In person workshops for people with vision impairment

4 in-person two-hour workshops were held between June and September 2025 with 4 different host organisations across the East of England. Facilitators took notes at the workshops which were compiled and analysed thematically. A summary of findings was sent back to attendees to check that key points had not been missed. Thirty-five people attended our workshops ranging in age from 65-94 and presenting with varying degrees and causes of visual impairment. There was also a range of digital engagement and confidence, from those who did not use technology at all to those who used a wide variety of tools and felt very confident.

Survey

A survey was developed to increase the breadth of understanding about technology adoption amongst older people with vision impairment and the facilitators and barriers thereof. The survey included 29 questions (5 open and 24 closed); some for digital users and some for non-digital users. The survey was co-designed with older people who have lived experience of vision impairment including those who use screen readers. The survey was piloted in a residential care home and with a local vision impairment charity, before wider dissemination through professional contacts and vision impairment organisations. The survey was made available in both digital and paper formats and to support completion from those who are not digitally enabled we also offered telephone calls and in-person support.

In total, 155 surveys were completed, including 115 digitally and 40 (26%) non-digitally (31 paper copies and 9 via phone calls).

The majority of people responding to the survey described themselves as White British and financially comfortable. Responses were almost equal between female and male respondents. Most were digital technology users, although a small but important minority were not. Participants had a wide range of experience of living with vision impairment.

Participant profile

83 were female

71 were male

1 preferred not to say

135 described themselves as White British (87%)

116 described themselves as financially comfortable (75%)

139 use digital technology (90%)

16 were non-digital (10%)

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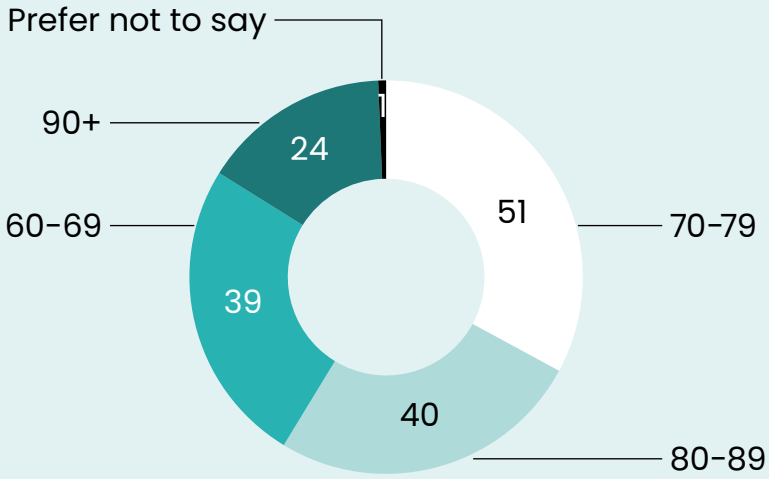
There was a reasonably even spread of ages, as illustrated in the diagram below. 39 people were in their 60s, 51 in their 70s, 40 in their 80s and 24 were in their 90s. 1 person preferred not to say.

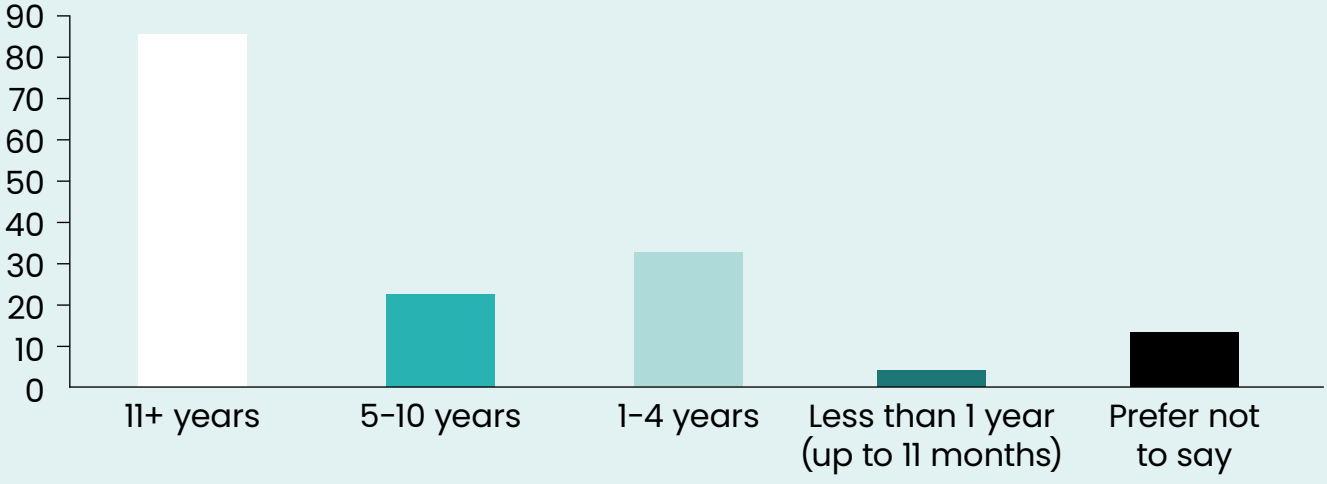
No. of participants by age



Level of vision impairment

- 26 identified as severely sight impaired (blind), 89 as slightly impaired or partially sighted and 40 as other or preferred not to say.
- As the bar chart below illustrates, 84 people had been living with vision impairment for 11+ years, 22 for 5-10 years, 32 for 1-4 years, 4 people for less than I year. 13 preferred not to say.

No. of years living with vision impairment



Mixed stakeholder workshop

Findings from the survey and workshops were taken to a mixed-stakeholder online workshop. Twenty-three people attended including staff working in roles related to social work and sensory services and digital inclusion, representatives from national and local vision impairment charities, other support services for older people with vision impairment and people with vision impairment. This workshop was used to sense check findings and support the development of recommendations for policy and practice.

Theme 1
Technology to support wellbeing

To listen to Theme 1, access the audio version via **https://bit.ly/3RWuiHD** or by scanning this QR code

Key takeaway: Digital technologies already play a meaningful role in supporting independence, connection and wellbeing for older people with vision impairment, but they must complement, not replace, human support.

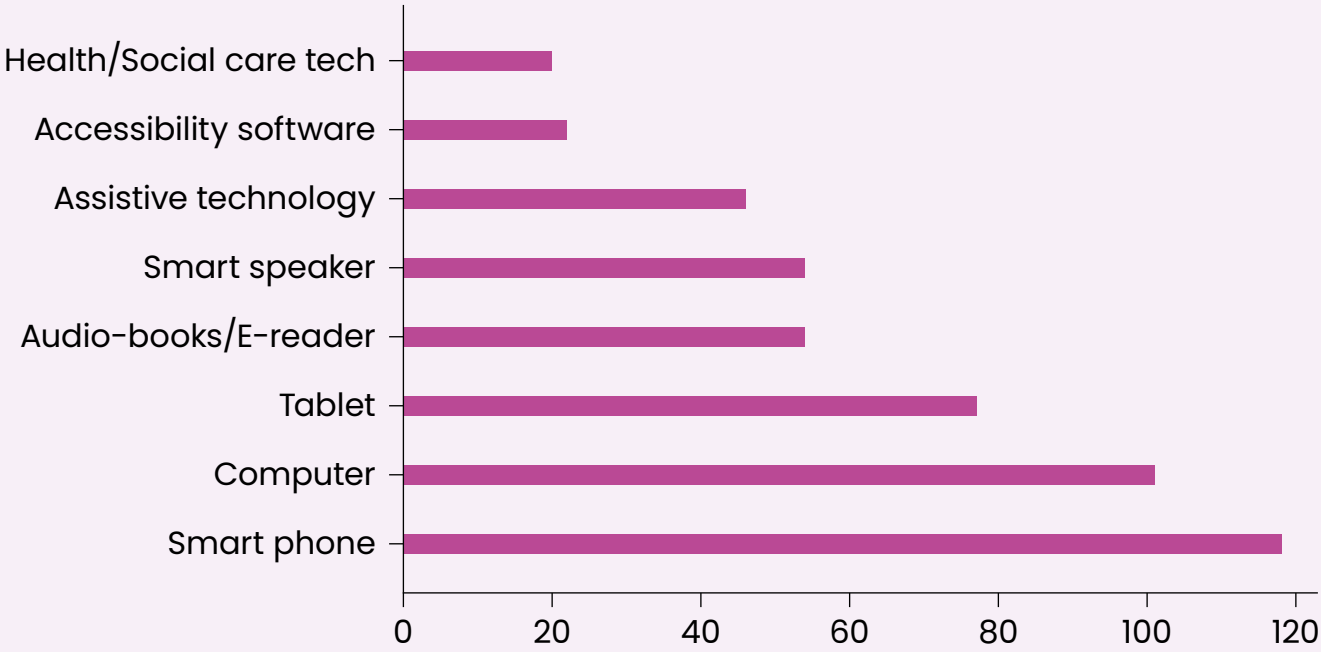
When asked how important digital technology was to overall wellbeing, almost 4 in 5 survey respondents (78%) reported technologies played a meaningful role. Nearly half (49%) described tech as "extremely important" to their wellbeing, with a further 29% rating it as "quite important".

> "Never thought I'd be into tech, but now I can't live without it, having vision loss."
> (Norfolk Focus Group)

Workshop participants described how technology supported their ability to live independent, connected and meaningful lives. Examples included enabling social connection, supporting daily living tasks (online shopping, banking, and talking scales and air fryers for cooking), entertainment (audiobooks, radio and podcasts), supporting health and social care (organising appointments, accessing information and services, glucose monitors, tablet reminders), and personal care (magnification tools, apps to identify colours and objects).

The range of technologies in use was broad and varied, making it difficult to itemise comprehensively. However, as shown in the diagram below, smartphones were the most widely used technology. Among digital users, 85% reported owning a smartphone, with 78% reporting daily use. Around a third also reported using smart speakers and specialist assistive technologies such as magnifiers. Other technologies included GPS devices, screen-reading software and emerging tools such as AI-enabled glasses that describe text and images.

Of 139 tech users, which tech is used?



Importantly, most of the technologies supporting wellbeing were privately purchased rather than being provided by health or social care services. While participants emphasised the value of technology in supporting everyday life, there was a clear consensus it should not be positioned as a replacement for human contact or care. Notably, access to these technologies was not universal, with cost and provision influencing who was able to benefit.

> "Technology should be an additional layer not the solution."
>
> (Watford Focus Group)

Theme 2
The importance of accessible and inclusive design

To listen to Theme 2, access the audio version via **https://bit.ly/3QbfaFF** or by scanning this QR code

Key takeaway: Accessible and inclusive design is central to whether people with vision impairment can use digital technologies confidently. Too often, accessibility is treated as optional or an afterthought, rather than being built in from the start.

Survey and workshop responses showed mixed experiences in how easy or difficult technology is to use. This variation reflects differences in accessibility and design suggesting that usability is strongly influenced by how well technologies accommodate different visual needs.

42% found technology easy to use

24% found technology neither easy nor difficult

34% found technology difficult

Our findings also highlighted the highly individual and dynamic nature of vision impairment. What works for one person may not work for another, and accessibility needs can shift over time. Participants felt that designers, developers and service providers often lacked the knowledge or experience to fully understand or assess the needs of people with vision impairment. Technology needs to reflect the full spectrum of vision impairment.

Participants consistently emphasised the importance of considering people with vision impairment at the design stages of technological products and services.

> "I just want things to be set up so that I have to press as little buttons as possible."
> (Cambridgeshire Focus Group)

Specific issues raised included:

- the need for more tactile buttons on equipment, with washing machines frequently cited as an example of poor design,
- more accessible instructions. Instructions were often described as being provided in very small print, arranged in complex columns that were difficult to navigate, or available only online,
- a preference for magnified, simplified or audio instructions, and strong support for more "plug and play" technology, where devices and software require minimal set-up and work intuitively once connected or switched on.
- the need for simplified installation processes; participants found the processes were often complex and/or required repeated adjustments, which create unnecessary barriers.
- inconsistent layouts across digital platforms were identified as a further barrier, particularly where updates changed interfaces or moved key functions.

While accessibility guidelines exist, these are not consistently applied in practice.

> "Accessibility guidelines exist – people need to use them more!"
>
> (Norfolk Focus Group)

The importance of co-design and co-development is crucial, and co-production needs to include a range of people with different visual impairments at every stage of the design, development and delivery of technology to ensure relevance, usability and acceptability.

Accessibility includes screen reader compatibility, keyboard navigation, voice control compatibility, clear heading structures and simple layouts, not just large font and contrast. Accessible digital design benefits everyone, not only people with vision impairment. Designing inclusively from the outset improves usability for all users. Information should routinely be offered in multiple formats as standard practice, rather than only on request.

Theme 3
Practical barriers to adoption

To listen to Theme 3, access the audio version via **https://bit.ly/4uWB5Qd** or by scanning this QR code

Key takeaway: Practical barriers such as cost, infrastructure, system design and the rapid pace of technological change limit who is able to benefit from digital technologies, risking exclusion even among those who are motivated to use them.

While participants recognised the potential of technology to support wellbeing, many highlighted practical barriers that limited adoption or sustained use. Cost was a significant issue, particularly where technologies needed to be purchased privately. For example, nearly a third of survey respondents (31%, 43 of 139) who are digital users identified cost as a major barrier to adopting or continuing to use technology.

Participants also raised concerns about infrastructure and connectivity. Unreliable internet connections, poor mobile signal and inconsistent access to technical support reduced confidence in using digital tools, particularly for those living alone or in rural and coastal areas. There were concerns that if technology failed, there would be limited alternatives or support.

Technology being introduced into access pathways for services was identified as a further barrier. Examples included touchscreens in hospital and clinical settings, and automated telephone systems requiring users to navigate multiple options by pressing numbers. These systems were often experienced as exclusionary, particularly when no accessible or non-digital alternatives were available.

Trust in technology, including emerging uses of artificial intelligence, was another concern. This was compounded by the fast pace of technological change. For example, frequent updates to layouts, and devices becoming obsolete made it difficult for people to retain confidence and familiarity over time.

> “Tech is brilliant when it works and if you can afford it.”
> (Hertfordshire Focus Group)

Together, these barriers illustrate that motivation and interest alone are not sufficient to enable successful technology use. Without attention to affordability, infrastructure, accessible system design and ongoing support, digital technologies risk reinforcing existing inequalities rather than reducing them.

Theme 4
Fragmented pathways to information and support

To listen to Theme 4, access the audio version via **https://bit.ly/4gbNB9T** or by scanning this QR code

Key takeaway: People with vision impairment often rely on personal motivation or informal networks to discover digital technologies, with many receiving no information at all, highlighting fragmented signposting and missed opportunities for early, accessible support.

How people find out about technology

42% find out themselves

32% don't usually find out

17% hear through charities

9% other routes*

*Family (living with or not living with), friends, other professionals

Survey findings showed wide variation in how participants discovered digital technologies and the role they could play in supporting wellbeing and daily living. Simultaneously, workshops highlighted that there is a desire to know more about technologies. Among digital users, the most common route was self-identification, with 42% (58 of 139) reporting that they found out about technologies themselves. This suggests a heavy reliance on personal research, lived experience and trial-and-error rather than structured or proactive information. Participants felt there were technologies that may be able to help them live independent and connected lives and were keen to know more. Of concern, almost a third of digital users (32%, 45 of 139) reported they do not usually find out about relevant technologies in any systematic way. Participants described a lack of signposting at key points such as hospital appointments, eye clinics and health or social care contacts, where timely information could make a significant difference.

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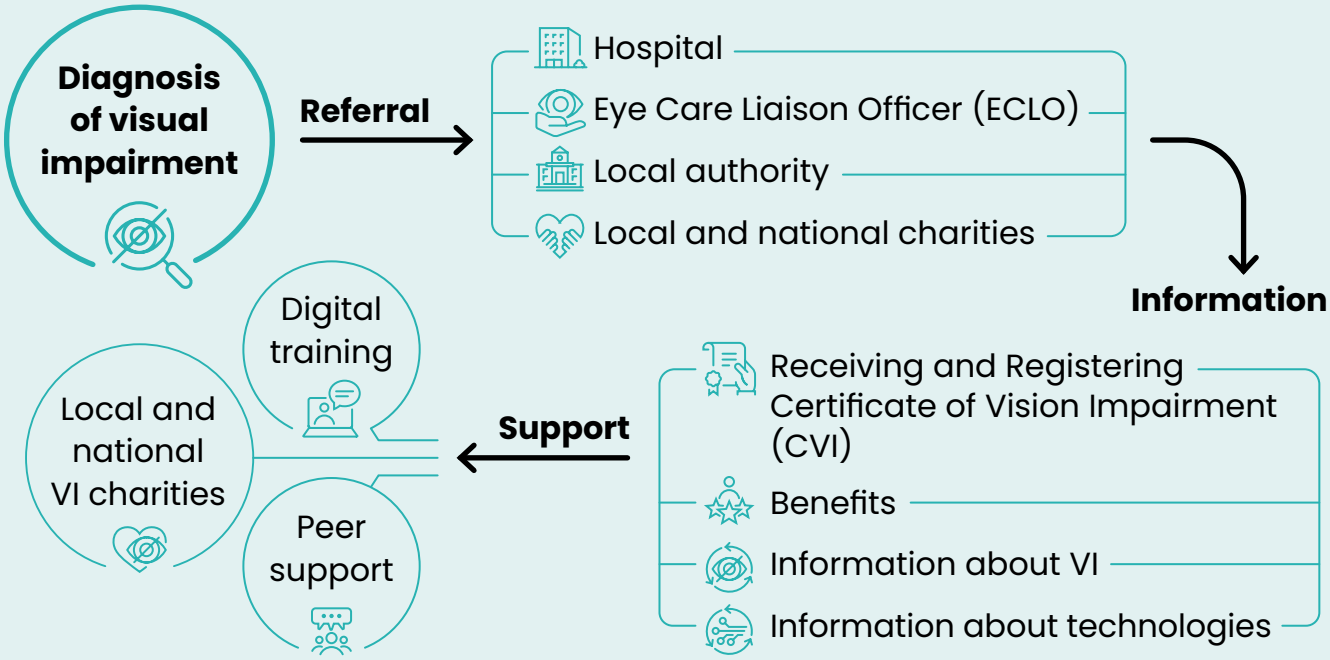
This infographic represents the recommended pathway of support for people with vision impairment.



Workshop participants identified charities and voluntary organisations input as transformative, improving quality of life through access to peers, trusted information, training and ongoing support. Survey participants supported this with 17% (24 of 139) learning about technologies through these routes. However, discussions highlighted regional inequalities and inconsistency in referrals, meaning access to information and support often depended on where people lived and whether they were connected to a charity.

Workshop participants reported that following diagnosis of a visual impairment, referrals to sensory services were often delayed, inconsistent or absent, limiting opportunities to learn about supportive technologies and how to use them. This lack of awareness was particularly evident among survey participants who do not use digital technology, with 81% (13 of 16) reporting they were unaware of what technologies were available or where to start.

This lack of structured information was compounded by the way the information is communicated. Participants noted a reliance on inaccessible formats, such as small-print leaflets left in waiting rooms. More accessible, non-visual approaches were suggested, including audio-based information, radio advertising, libraries, and verbal signposting during appointments.

Challenges in navigating the technology landscape were not limited to service users. Professionals also experienced similar challenges in staying abreast of rapidly changing technologies and related services, particularly within short-term funding cycles and fragmented local provision. This further contributes to inconsistent advice, signposting and support.

Theme 5

The need for effective training for people with vision impairment

To listen to Theme 5, access the audio version via **https://bit.ly/4ezFAu4** or by scanning this QR code

Key takeaway: Access to appropriate, ongoing and person-centred training is critical to successful technology use, yet most people with vision impairment receive little or no formal support and often have no one to turn to when problems arise.

Survey findings show that relatively few participants received formal training or support to help them access and use digital technologies. Among digital users, only 32% (45 of 139) reported having received training, and just one non-digital user. This highlights a significant gap in structured support, even among those already engaging with technology. Moreover, lack of ongoing help was expressed by workshop attendees a common concern. Over a third of digital users (37%, 52 of 139) reported having no one they could ask for help, rising to half of non-digital users (50%, 8 of 16).

Many participants reported a heavy reliance on support from family members but also expressed challenges in being supported by grandchildren or younger relatives, who were too quick or simply do things for them, which does not support learning. In contrast, peer learning was valued and people expressed a strong appetite for more opportunities to learn in this way.

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What effective training looks like

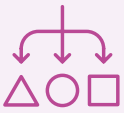
Person-centred and goal-led
Person-centred beginning with an understanding of an individual's goals, preferences and existing confidence.

In-person, paced appropriately
In-person support strongly preferred, delivered at an appropriate pace in a patient manner.

Clear, accessible language
Avoiding use of jargon.

Ongoing and on-demand support
One session is rarely sufficient. Instead, people emphasised the importance of ongoing and ad-hoc support to help resolve issues as they arose.

Trainers with VI and accessibility expertise
Compassionate and competent trainers who have an understanding of the vision impairment of the person they are training and the specific technologies and accessibility features that may support use. Too much training is currently sight orientated – for example people simply saying 'press here'.



Options beyond family support
Greater appreciation that people do not always have families and friends to support with technology at home.

Diversity in vision impairment
A strong understanding that vision impairment varies greatly, and the importance of adapting approaches and technologies to support differing visual requirements.

"People, in general, do not have the experience and skills to understand or assess the needs of a visually impaired person."
(Watford Focus Group)

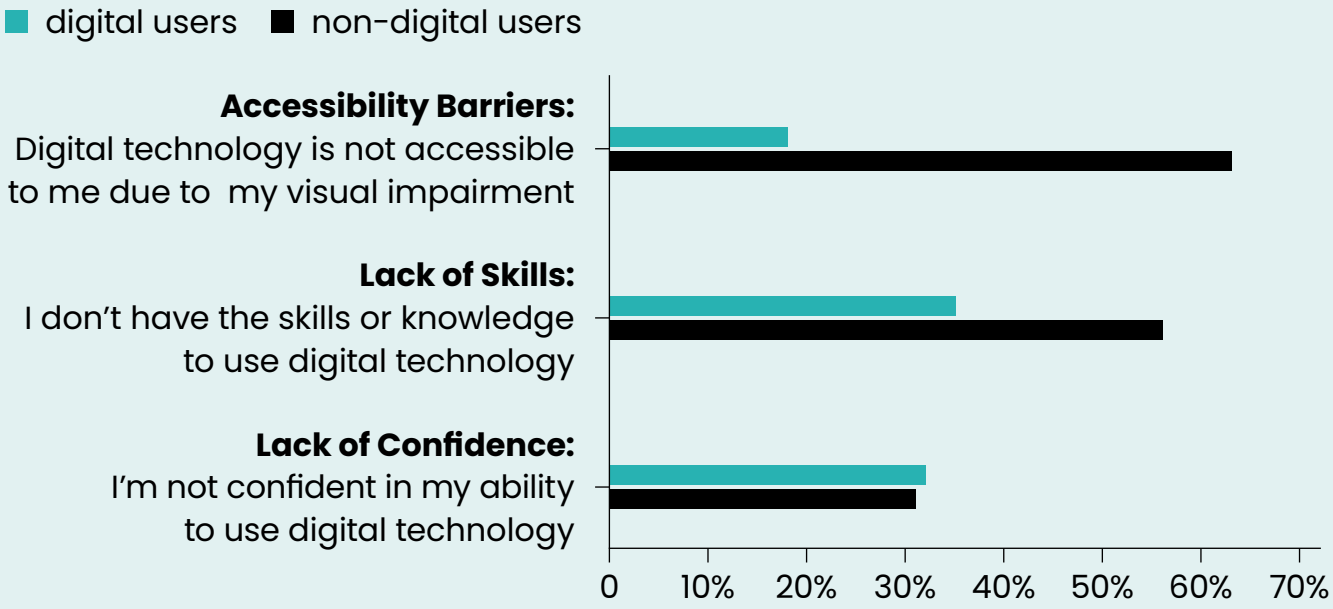
Theme 6
Confidence, choice and limitations of technology

To listen to Theme 6, access the audio version via **https://bit.ly/4vBPqRQ** or by scanning this QR code

Key takeaway: Decisions about whether to use digital technology are shaped by knowledge, confidence, skills, accessibility and support. Many people are excluded not by lack of interest but by barriers that undermine independence, choice and confidence.

Key barriers influencing digital technology use among digital and non-digital users with vision impairment

The three main barriers to technology use were reported to be accessibility issues due to vision impairment, a lack of skills to use technologies and a lack of confidence. This is shown in the graphic below.



Despite many people adopting technology in different ways, there was a common perception that vision impairment reduced or prevented the use of technology. From the survey findings, this was particularly evident among those who do not use digital technology. Nearly two thirds (63%, 10 of 16) cited accessibility barriers due to their visual impairment as a main reason for not using technology, compared with 18% of digital users (25 of 139). This highlights that accessibility is a key driver of digital exclusion, rather than lack of motivation.

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Differences were also evident in skills and confidence. Over half of non-digital users (56%, 9 of 16) reported lacking the skills or knowledge to use technology, compared with 35% of digital users(48 of 139). Lack of confidence was reported by around a third of both groups (32% of digital users and 31% of non-digital users), suggesting confidence remains a significant barrier even among those who are already engaging with technology.

Nearly one third of non-digital users (31%) reported a lack of interest in technology but overall, it appeared confidence and interest were often closely intertwined. Workshop discussions highlighted that internalised ageism is a potential deterrent to successful technology adoption. Opinions were voiced that perhaps people considered themselves too much of a “dinosaur” or a “fossil” to fully grasp technology. When technologies did not work as expected, participants often assumed personal failure rather than poor design or system issues, further undermining confidence.

Participants also described how pride and a desire for independence could discourage them from seeking help. Many were reluctant to "bother" family members, particularly those who did not live nearby. While informal support is often suggested as a solution, needing to ask for help can feel at odds with the promise of technology to increase independence and can reinforce feelings of dependency.

There were also concerns of over-reliance on technology. Participants questioned what would happen if devices failed or systems went down, and some expressed a preference not to replace in-person contact with digital alternatives. Simultaneously, there was widespread concern that as more information and services move online, people without access to or confidence in using technology risk being excluded from society altogether.

> "Everyone wants you to work with an app on the phone. Bane of my life."
> (Cambridgeshire Focus Group)

> "Complete reliance on phone is troublesome, if it goes down you have nothing."
> (Norfolk Focus Group)

To listen to Further information and Acknowledgments, access the audio version via **https://bit.ly/4ojIGG4** or by scanning this QR code

Further information

If you would like this briefing or the infographics in a different format, such as large print, audio or Braille, let us know and we will be happy to provide this.

For additional information please contact:
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Or see our webpage: **https://arc-eoe.nihr.ac.uk/research-implementation/research-themes/social-care-dementia-and-ageing/digital-technologies**

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DiTSoW Digital Technologies to support social wellbeing