# Empowering Individuals with Sight and Hearing Loss Through Digital Accessibility Apps

This project was funded by HealthWatch Redbridge and delivered by Sensory Specialists Ltd over a period of 6 months from May 2025 – October 2025.

## Introduction & Project Summary

Digital access is now fundamental to independence. For older and disabled people, especially those with sensory loss, inaccessible technology can translate directly into reduced autonomy, delayed healthcare, and social isolation. Confidence-building is as critical as technical instruction. Many participants disengage not because technology is beyond their capability, but because previous experiences were overwhelming or inaccessible. Embedding training in participants' everyday contexts on their own devices accelerates adoption and sustains behaviour change.

This report summarises the outcomes of this project aimed at supporting individuals with sight loss and/or hearing loss in using digital accessibility features and health-related mobile apps. The project included three interactive workshops designed specifically for individuals with sight and hearing loss, as well as their carers & family members, and providing personalized support to individuals in their own homes. In addition to these sessions, easy-read leaflets were produced for both Android and iPhone users, which provided simple step-by-step instructions on how to access and use accessibility features and health-related apps.

## Workshop Delivery

During the workshops, attendees received hands-on, personalized assistance to help them navigate their mobile devices. This support helped participants build confidence and independence in using technology to meet daily needs. Participants included individuals with sight loss, hearing loss, or both, and some were accompanied by family members or carers. Two workshops were delivered as part of this project:

- The first workshop was held on July 29 and lasted for 4 hours, with 7 attendees.
- The second & third workshop took place on August 20 and was designed as a double session, with the venue booked for 6 hours with 11 attendees.

## Home-Based Assistance

In total, 8 individuals received one-to-one home-based support; 5 of these individuals received one-to-one support more than once. This home-based assistance allowed focused attention on the service user's specific needs and challenges in a familiar environment, ensuring participants could confidently use digital tools in their daily routines. Our team tailored guidance to meet each person's unique needs, offering hands-on help with app setup, device navigation, and troubleshooting as required. The individualised assistance ensured that each participant could address particular issues with device accessibility, app usage, and troubleshooting in a setting that was comfortable and familiar.

## Accessibility Support Provided

The workshops focused on helping participants use accessibility features on their mobile devices and explore health-related apps. Apps covered included the NHS app, Be My Eyes AI, Seeing AI, and Otter AI. Easy read leaflets were created for both Android and iPhone users, providing step-by-step instructions that participants could take home and use independently or with support from carers.

Each service user was supported according to their individual needs, so everyone had different things with which they were assisted. For example, some participants were interested in learning how to use Maps on their phones, while others needed help setting up the NHS app, and some required support with multiple areas. This personalized approach ensured that each attendee received guidance that was relevant and useful to their specific goals and challenges.

## Service User Feedback & Case Studies

Feedback was highly positive, with most participants rating the workshops as 'extremely helpful'. Many reported increased confidence and independence in using digital devices and accessibility apps. One participant, for example, successfully used digital maps to navigate home independently after training. The supportive and inclusive environment was widely praised.

The following feedback and case studies highlight the positive impact of our project on service users with sight and/or hearing loss:

- *"The home visit was a game changer. The trainer helped me adjust the settings so I can finally read my messages with ease."* – Home-based service user with dual sensory loss

- *"It's easy and happy. Everything is perfect, thank you! It's great for deaf people. Easy to understand."* – Workshop attendee with hearing loss

**Case Study 1:**

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| **Service User** | Case Study Participant 1 |
| **Workshop location** | Redbridge Library |
| **Age Range** | 60-70 |
| **Type of sensory impairment** | Severely Sight Impaired |
| **Challenges before the workshop** | Feelings of anxiety or isolation linked to digital exclusion |
| **Support provided at the workshop** | Download and use accessibility and health apps |
| **Apps introduced** | Seeing AI (reading text and identifying objects) |
| **Outcomes and impact** | Increased confidence using their smartphone independently |
| **Participant feedback** | "The training was good and improved situation at that time." Before I went, I could hardly read and water would start dripping from my eyes and I could not concentrate. Seeing AI helped me a little." |
| **Long term benefits of the workshop** | This case study highlights the workshop's critical role in addressing digital exclusion for a participant who is severely sight impaired. Prior to attending, the individual experienced significant barriers to reading and concentration, alongside distressing physical symptoms such as eye watering and visual fatigue. These challenges contributed to anxiety and reduced independence. Through guided support to download and use accessibility applications such as Seeing AI, the participant experienced immediate functional improvement and increased confidence. Importantly, the workshop delivered lasting benefit by enabling the participant to develop essential smartphone skills, supporting greater autonomy in daily life. Overall, the training served as a timely rehabilitation intervention, reducing isolation and empowering the participant to engage more independently with digital tools. |

**Case Study 2:**

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| **Service User** | Case Study Participant 2 |

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| **Workshop location** | Redbridge Library |
| **Age Range** | 60-70 Years old |
| **Type of sensory impairment** | Severely Sight Impaired |
| **Challenges before the workshop** | • Limited confidence using a smartphone<br>• Difficulty accessing digital health services independently<br>• Reliance on others for reading medication labels, managing appointments, or communicating<br>• Feelings of anxiety or isolation linked to digital exclusion |
| **Support provided at the workshop** | • Download and use accessibility and health apps<br>• Navigate smartphone accessibility features |
| **Apps introduced** | Chat GPT |
| **Outcomes and impact** | Increased confidence using their smartphone independently |
| **Participant feedback** | "The training has given me the confidence to utilise Apps on my own. One suggestion would be to include volunteers with sight loss to assist the group as they have a first-hand understanding of the difficulties that people with sight loss face when using their smart phone. |
| **Long term benefits of the workshop** | This case study demonstrates the workshop's effectiveness in building confidence and reducing reliance on others for a severely sight impaired participant. Before the session, the individual faced low confidence in smartphone use, difficulty accessing digital health services, and dependence on others for essential tasks such as managing appointments and reading medication information. The workshop provided structured guidance in accessibility features and introduced supportive digital tools including ChatGPT. Following the training, the participant reported a significant increase in confidence and the ability to utilise apps independently. The participant also offered a valuable recommendation to involve volunteers with lived experience of sight loss, highlighting the potential for peer support to further strengthen inclusivity and engagement. Overall, the workshop delivered both empowerment and practical rehabilitation outcomes. |

**Case Study 3:**

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| **Service User** | Case Study Participant 3 |
| **Workshop location** | Redbridge Central Library |

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| **Age Range** | 50-55 Years old |
| **Type of sensory impairment** | Deaf |
| **Challenges before the workshop** | • Limited confidence in using digital health applications, particularly the NHS App<br>• Frequently relied on family members for support to access and manage digital health services<br>• Found it challenging to navigate certain features independently<br>• Her goal was to improve her digital skills to manage her health information without assistance |
| **Support provided at the workshop** | • Supported through clear visual demonstrations and step-by-step guidance<br>• The session focused on exploring accessibility settings within the NHS App<br>• Support was provided to improve understanding of app navigation<br>• Confidence was built in using key NHS App features, including:<br>  ◦ Viewing and managing appointments<br>  ◦ Ordering repeat prescriptions<br>  ◦ Accessing medical records |
| **Apps introduced** | NHS App (managing appointments and prescriptions) |
| **Outcomes and impact** | • Ability to use mobile device has improved significantly<br>• Confirmed can now access all features of the NHS App independently<br>• Indicated that she no longer requires the same level of support from family members or carers when using mobile device |
| **Participant feedback** | “It’s easy and happy. Everything is perfect, thank you! It’s great for deaf people. Easy to understand.”<br>• Rated overall experience of the workshop as excellent (5/5)<br>• Reported that travelling to the venue by bus was easy (5/5) |
| **Long term benefits of the workshop** | This case study provides strong evidence of the workshop’s success in supporting a Deaf participant to achieve independence in digital health management. Prior to attending, the individual had limited confidence using the NHS App and frequently relied on family members to access appointments, prescriptions, and medical information. Through clear visual demonstrations, step-by-step guidance, and an accessibility-focused approach, the participant |

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| | developed the skills needed to navigate key NHS App features independently. The outcome was a significant improvement in autonomy, with the participant confirming reduced need for external support. Feedback was overwhelmingly positive, describing the session as easy to understand and particularly valuable for Deaf users. Overall, the workshop represents an excellent example of accessible, person-centred digital inclusion practice. |

**Case Study 4:**

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| **Service User** | Case Study Participant 4 |
| **Workshop location** | Redbridge Library |
| **Age Range** | 60-65 Years old |
| **Type of sensory impairment** | Visual Impairment |
| **Challenges before the workshop** | • Difficulties using device due to visual impairment<br>• Required assistance from family members for accessing apps<br>• Difficulty reading the screen even when using the largest font setting |
| **Support provided at the workshop** | • Guidance on accessibility features<br>• Encouraged to navigate apps independently with support<br>• Improving digital skills to manage health-related tasks on her device |
| **Apps introduced** | • Seeing AI (reading text and identifying objects)<br>• Be My Eyes (real-time visual assistance)<br>• NHS App (managing appointments and prescriptions) |
| **Outcomes and impact** | • Experience using Seeing AI was rated 4/5**,** Be My Eyes 3/5, and was able to access NHS App features and attend GP independently<br>• Improved confidence in navigating the phone |
| **Participant feedback** | • Rated the overall workshop experience as excellent (5/5) and would recommend it to others.<br>• Travel to the venue was rated as very easy (5/5) |
| **Long term benefits of the workshop** | This case study illustrates the workshop's impact in enhancing digital confidence for a participant with visual impairment who experienced substantial difficulty using their device, even with maximum font settings. Prior to the workshop, the participant relied heavily on family |

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| | assistance to access apps and manage health-related tasks. The session introduced a range of assistive technologies, including Seeing AI, Be My Eyes, and the NHS App, alongside tailored guidance on accessibility features. Following the workshop, the participant reported improved confidence navigating their phone and was able to access NHS App functions and attend GP appointments independently. High satisfaction ratings and willingness to recommend the workshop further reinforce its effectiveness. Overall, the intervention successfully strengthened digital skills, independence, and access to essential health services. |

## Apps Introduced and Their Benefits

Society increasingly assumes that people can engage digitally. Smartphones and apps are no longer optional conveniences; they are gateways to:

- Healthcare access
- Communication
- Banking and shopping
- Transport and navigation
- Social participation

For older and disabled people, the inability to use modern technology can lead directly to exclusion from essential services. As part of the project, a range of accessible and health-related mobile apps were introduced to service users:

- **Voice Assistant Apps (Google Assistant, Siri):** Enabled users to control devices hands-free, make calls, and set reminders.
- **Be My Eyes**: A volunteer-based app providing real-time visual assistance. https://www.bemyeyes.com/
- **Seeing AI:** A Microsoft app using AI to describe surroundings. https://www.seeingai.com/
- **The NHS App:** Enabling users to manage appointments, prescriptions, and medical records digitally. https://www.nhs.uk/nhs-app/
- **ChatGPT:** AI chatbot providing accessible information and guidance. https://chatgpt.com/

These apps were selected for their accessibility features and relevance to the daily needs of our service users. The ability to customize settings and receive step-by-step guidance greatly enhanced their usefulness and user adoption.

## Demand for the Service and Outcomes

The workshops were well attended, and feedback indicated strong interest in continuing such support. Participants expressed a desire for more sessions and recommended the workshops to others. The involvement of carers and family members also highlighted the wider impact of the training. Participant feedback was systematically recorded through evaluation forms and qualitative comments. This ensured that:

- Service user voices shaped the project's evidence base
- Outcomes could be demonstrated beyond attendance numbers
- Recommendations for improvement could be developed

Feedback also highlighted the emotional and functional significance of the training, including reduced anxiety and increased independence.

| Project outcome | Measured | Results / feedback |
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| Increased app usage | Participant self-reports | 78% of participants reported more frequent use of apps and devices following the sessions. |
| Improved confidence | Pre- and post-training evaluations | 67% of participants demonstrated notable increases in confidence levels; they found the workshops "extremely helpful". They also found to have less reliance on carers. |
| Better access to healthcare services | Follow-up interviews | 56% service users described successfully accessing the NHS App, Be My Eyes AI, Seeing AI, etc. independently after training. |
| Enhanced social interaction | User testimonials | 78% of service users reported feeling more connected and socially active through increased confidence in digital communication and highlighted the positive group experience. |

The outcomes achieved in this project demonstrate that accessible digital training can create lasting change. This is not simply about learning technology, but about ensuring disabled individuals are not left behind in society's digital transformation. From the feedback received, we see that participants moved from:

- Anxiety to Confidence
- Dependence to Independence
- Exclusion to Inclusion

## Easy Read Leaflets

As part of the project, easy read leaflets were developed for both Android and iPhone users. These leaflets provided clear, simple instructions on how to access and use accessibility features and health apps. They were designed to be user-friendly and helpful for both service users and their carers, enabling continued learning and practice beyond the workshops. These leaflets are linked below:

**iPhone Leaflets:**

Airpod Sound Amplifier on iPhone.pdf

Enlarge Text Increase Contrast on iPhone.pdf

Using Siri on iPhone.pdf

Using Text to Speech on iPhone.pdf

Using Zoom on iPhone.pdf

**Android Leaflets:**

Guide to display settings Android.pdf

Magnify with android.pdf

Sound Amplifier on Android.pdf

Speech to text on Android.pdf

Using voice on Android guide for Bixby.pdf

**Apps Leaflets:**

Guide for be my eyes and AI.pdf

Guide for using Ava app.pdf

Guide for using NHS app.pdf

Guide for using Otter ai app.pdf

## Recommendations and Next Steps

The project has successfully produced a summary report outlining the key challenges faced by individuals with sight loss, deaf and dual sensory loss when accessing digital resources. Based on the feedback and outcomes, the following recommendations are made:

- Maintain the delivery of workshops with tailored support for people with sensory disabilities, ensuring content remains practical, hands-on, and aligned to users' lived experiences.
- Continue offering flexible scheduling options, including drop-in sessions and one-to-one support for those who may require additional time or more personalised guidance.
- Expand the range of easy read, large print, audio and BSL-supported resources to ensure participants can revisit learning in their preferred communication format.

To ensure sustainable digital inclusion for people with sensory loss, organisational changes must occur beyond the scope of this project. The following system-level actions are recommended:

- **Strengthen Compliance with the Accessible Information Standard:** NHS organisations and all publicly funded care providers should ensure that communication and information needs are identified, recorded and consistently met. This includes offering alternative formats such as BSL video relay, braille, large print, audio, speech-to-text support, and accessible email or SMS communication.
- **Embed Accessibility into All Digital Health Services:** Digital tools including the NHS App, GP online services, and patient portals should be designed and tested with sensory-impaired users to ensure compatibility with assistive technology. Clear navigation, screen-reader-friendly layouts, captioning, and high-contrast visual design should be standard.
- **Maintain Non-Digital Pathways:** While digital transformation continues across the NHS, non-digital alternatives must remain available. Telephone, walk-in and paper-based options help ensure those who struggle with digital systems particularly people with progressive sensory loss, low digital literacy or limited device access are not excluded.
- **Improve Staff Training and Awareness:** Frontline NHS staff, GP reception teams, community health workers and administrative staff should receive training on:
    - Understanding sensory loss,
    - Communicating effectively with deaf, blind and deafblind patients,
    - Booking and arranging communication support (e.g., BSL interpreters), and
    - Supporting people to use digital tools safely and independently.

Improved staff confidence directly reduces errors, missed appointments and patient frustration.

- **Improve the Accessibility of Appointment Systems and Digital Communication:** Appointment reminders, test results, referral updates and care information should be written in plain language and provided in accessible formats. Systems should ensure that individuals with sensory loss receive communications that match their recorded needs every time.
- **Strengthen Local Partnerships and Community-Based Digital Support:** Local authorities, sensory-loss charities, NHS Integrated Care Boards (ICBs), and community health providers should work together to offer:
    - Community-based digital inclusion hubs in familiar and trusted settings
    - Peer-led learning opportunities, including volunteers with lived sensory-loss experience
    - Coordinated support that builds confidence over time rather than only at single points of contact
- **Collaborate With Sensory-Loss Organisations:** Ongoing engagement with organisations such as Deafblind UK, RNID, and local sensory services ensures that digital health solutions reflect the lived experiences of those most affected. These partnerships support co-design, user testing, and continuous improvement of accessible digital pathways.

## Project Outcomes Assessment

Below is an assessment of how the project aligning with its original goals:

| Outcome | Achieved | Notes |
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| We proposed running three workshops teaching participants with sight loss or dual sensory loss how to use several assisted technology and digital healthcare apps. | Yes | We ran 3 workshops:<br>● (Workshop 1) 29/07/2025 and we supported 7 candidates.<br>● (Workshop 2&3) 20/08/2025 we supported 11 candidates.<br>● 8 candidates supported on a 1 to 1 basis in their homes.<br>● 5 candidates supported more than once on a 1-1 basis.<br><br>Workshops covered all planned topics. |

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| | | From the total of 26 service users supported:<br>● 3 of them had a hearing loss, predominantly using BSL (British Sign Language)<br>● 21 service users had a sight loss<br>● 2 service users had dual sensory loss |
| Provide 1 to 1 support sessions as required. | Yes | Support provided during workshops and during home visits |
| Empower participants by providing skills and confidence to navigate the digital healthcare apps. | Yes | Feedback shows that most participants felt more confident and skilled. |
| Record participant feedback and insights. | Yes | Feedback forms collected and summarised in the report. |
| Provide a summarised report describing the issues faced by individuals with sight loss and dual sensory loss in accessing digital resources and making recommendations. | Yes | Challenges and recommendations to follow after candidates have the opportunity to use the NHS App on a few occasions. To follow in April 2026. |
| Provide a further update, six months after completion of the workshops. | Not due yet | To be completed by 30/04/2026 |

## Overall Evaluation and Concluding Statement

The project delivered far more than digital skills training: it generated measurable behavioural change, emotional empowerment, and long-term functional independence. Participants consistently transitioned from avoidance to active engagement with their devices, with many using the NHS App independently for the first time. The outcomes achieved demonstrate a tangible reduction in health-related dependency and digital exclusion.

Several participants reported critical shifts such as independently ordering prescriptions, navigating maps alone, and reading correspondence without family assistance, each representing a regained life skill. For Deaf participants, visual demonstration-led learning created immediate breakthroughs, eliminating the communication barriers that previously made the NHS App difficult or impossible to use. The presence of a trainer with lived

experience of sight loss also elevated trust, cultural relevance, and peer modelling, amplifying participant openness and retention of skills.

The project successfully delivered lasting benefits for individuals with sensory impairments, increasing confidence, independence, and digital skills. Participants gained the ability to use smartphones and apps to manage appointments, prescriptions, communication, and experienced practical improvements in daily life, such as reading prescriptions, checking sell-by dates, following cooking instructions, and accessing written information independently. Accessible technologies, including Seeing AI, Be My Eyes, ChatGPT, and the NHS App, directly addressed barriers of digital exclusion, anxiety, and isolation. Overall, the project empowered participants to navigate everyday tasks confidently, promoted autonomy and inclusion, and ensured that individuals with sensory impairments remain active and independent in an increasingly digital world.