# RCSLT

Position statement on automated telephone services

August 2022



"As a stammerer, when I use the telephone and am greeted with an automated service, I'm filled with dread and panic, and, minus the lack of any personal interaction, there is simply no way for me to navigate it. All stammerers are different – some may have particular sounds or letters that are difficult to say, and **that one word that's required could be the hardest thing for them to say**. So having the potential to reach a real person by physically pressing a key, rather than speaking the preferred option, is essential." – Paul O' Meara

### Issues for people who communicate differently or with difficulty

People who communicate differently or with difficulty may find it hard to ask a question, name an object or ask for help, while others may have speech difficulties that may impact being understood. Others may have problems processing information and difficulties with reading and writing. Some may use communication devices and require time to create their message. People who communicate differently or with difficulty will have a physical or mental impairment which has a substantial and long-term adverse effect on their ability to carry out normal day-to-day activities (Equality Act, 2010).

Nearly 20% of the population may experience communication difficulties at some point in their lives. People living with a range of conditions including cerebral palsy, learning disabilities, Down's syndrome, autism, hearing impairment, stroke, brain injury, head and neck cancers, Parkinson's disease, motor neurone disease, dementia and many more experience communication difficulties. People without any specific conditions might also experience communication difficulties for a range of reasons.

Automated telephone services can act as a barrier to people who communicate differently or with difficulty. This leads to a risk of not being able to readily access goods and services. As a result, people with communication needs may not be able to enjoy equity of access. Service providers may be impacted economically.

If an automated service requires speech rather than pressing a number, there may not be enough time to speak. Or, someone's speech may not be recognised. This might affect a person who has dysarthria (difficulty speaking caused by brain damage or brain changes later in life), aphasia (difficulty with understanding of and/or expression of verbal language, and therefore



potentially reduced ability to process and follow instructions and/or find the 'right words' to respond in time), is using a communication aid (a range of strategies and tools to help people who struggle with speech) or who stammers. If pressing a number is required, it can be difficult to get to the number in time. For example, this may affect users with limited physical ability if someone is using a communication aid that is not direct access and is reliant on eye gaze or switch use.

For people who communicate differently or with difficulty, one characteristic can be avoidance of talking or of certain situations. This can result in reduced participation in everyday life. It can also limit someone's potential.

Automated telephone services incorporating voice recognition or services which are not accessible by any means other than the telephone are a common challenge for people who stammer. A 2021 membership survey by Stamma found:

- 71% of respondents reported difficulty accessing services due to barriers related to stammering; and
- 40% reported difficulties accessing banks and insurance services.

Several respondents spontaneously provided additional information, directly highlighting telephone systems and voice recognition software as particular barriers to access. Some people who stammer therefore avoid using automated telephone services. This leads to exclusion from what other people are able to access.

When adjustments are not made for people to communicate in a personalised way, they can be at risk of social isolation, withdrawal, and disengagement. This reduces independence, limiting people's ability to manage aspects of life without support. This is frustrating and disempowering. It acts as a barrier to equality of access to goods and services.

#### Accessibility of automated telephone services

Automated telephone services can be challenging particularly for people who find it difficult to quickly formulate and give a verbal response for any reason. For example, receptive or expressive language difficulties like understanding the question and struggling to find or produce the correct word to answer.

It is essential that all services are equally accessible to all users. All organisations have a duty and responsibility to make anticipatory reasonable adjustments when providing services (Equality Act, 2010). Given that 20% of people experience communication difficulties at some point in their lives, the communication accessibility of automated telephone services should be a significant consideration.



## Making automated telephone services more accessible

Firstly, people who communicate differently or with difficulty should be involved in the testing and evaluation of automated telephone services.

For some people, automated telephone services can be made accessible by increasing the amount of time allowed to provide answers, or by giving a menu option such as 'give more time to respond'. Time pressure tends to increase tension, which may make it more difficult for the person with the communication difficulty to communicate. Additionally, improving the speech recognition algorithms would be beneficial.

For others, changes to the menu options may be useful. For those with a communication difficulty but without a physical difficulty, being given flexible options to speak or press buttons could improve accessibility. In general, having shorter menus with a maximum of two options would be helpful particularly for those with receptive language difficulties and cognitive communication difficulties, such as reduced auditory memory. Ideally, having a prompt such as "If you have a communication disability, skip menus and speak to a person who can help" would alleviate issues of responding within a certain amount of time or in a certain way for a computer/artificial intelligence (AI) on the other end of the line to recognise.

The best-case scenario is companies who use automated telephone services providing a wide range of options rather than attempting to build a 'one size fits all' system. Companies should work with disability organisations and make adjustments to their systems for people with communication difficulties in the same way that they are required to make adaptations for access for people with physical disabilities. For example, Google is working on making its voice-activated device functional for people who stammer, by 'banking' stammered speech. Such measures should be undertaken by other similar service providers. Even more broadly, there are known issues with automated speech recognition software and AI reflecting biases that already exist in society, which leads to the potential for some communities to become even further disadvantaged.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> <u>https://www.pnas.org/content/117/14/7684</u> <u>https://fairspeech.stanford.edu/</u> <u>https://www.nytimes.com/2020/03/23/technology/speech-recognition-bias-apple-amazon-google.html</u>



## What needs to happen

#### Governments across the United Kingdom

The UK Government's Cabinet Office Disability Unit should consider best practice for communication accessibility for automated telephone services as part of its ongoing work to implement the government's National Disability strategy.

This recommendation should also be considered by the governments in Scotland, Wales and Northern Ireland as part of their disability and inclusion policies.

#### Service providers

All service providers should review their automated telephone services and consider the steps that can be taken to ensure that their services are truly communication accessible in line with our recommendations as well as those outlined in the Equality Act (2010) and equality legislation in Northern Ireland, given their aforementioned duty and responsibility to make anticipatory reasonable adjustments when delivering services. This should include working with people who communicate differently or with difficulty to develop accessible and inclusive solutions.

Best practice in light of this can be developed using guidance such as:

- <u>Communication Access UK</u> is an initiative developed in partnership by charities and organisations to support people with communication difficulties more effectively.
- <u>Stammering Law</u> provides a brief on the accessibility of voice recognition telephone systems.
- <u>Project Relate</u> is an Android app that aims to help people with speech impairments communicate more easily with others and interact with the Google Assistant.



# Acknowledgements

The RCSLT would like to thank the following people for developing this position statement with us:

- Jennifer Benson, speech and language therapist
- Ashleigh Denman, speech and language therapist
- Kirsten Howells, speech and language therapist
- Elaine Kelman, speech and language therapist
- Paul O'Meara, person who stammers
- Gillian Rudd, speech and language therapist

The Royal College of Speech and Language Therapists (RCSLT) is the professional body for speech and language therapists in the UK. As well as providing leadership and setting professional standards, the RCSLT facilitates and promotes research into the field of speech and language therapy, promotes better education and training of speech and language therapists, and provides its members and the public with information about speech and language therapy.

rcslt.org | info@rcslt.org | @RCSLT

