

Cochlear Implants

Policy statement

Our position

More adults could benefit from cochlear implantation than are currently doing so. NICE (National Institute for Health and Care Excellence) should review and update its current guidance on cochlear implantation, awareness of this treatment option should be raised amongst the public and NHS organisations and audiologists should offer a referral for cochlear implantation to everyone who could benefit.

Introduction

This policy statement presents the main issues for adults who want and could benefit from cochlear implantation across the UK. It includes our stance on cochlear implantation across the UK, and states what actions need to be taken by Government and NHS organisations to meet the commitments in the Department of Health and NHS England *Action Plan on Hearing Loss*¹ to raise awareness of the benefits of cochlear implantation and improve provision of cochlear implant services².

We use the term 'people with hearing loss', throughout this statement, to refer to people who are confronting deafness, tinnitus and hearing loss.

Background

Cochlear implants are electronic devices that can help people hear and understand speech and environmental sounds if they have a functioning auditory nerve and gain little benefit from hearing aids. Instead of making sounds louder and clearer – like a hearing aid – cochlear implants directly stimulate the auditory nerve with electrical signals.

Cochlear implants consist of a receiver, surgically implanted behind the ear, with electrodes inserted in the inner ear (the cochlea), and an external microphone and sound processor. Cochlear implants convert sounds into electrical signals, which are then sent to the brain through the auditory nerve, where they are perceived as sound.

Cochlear implants have been available on the NHS, across the UK, since 1990 for those who are eligible and choose to have them and, since the technology was first introduced, the number of people who use cochlear implants has grown steadily. There are over 12,000 cochlear implants users in the UK. Around 650 adults and 500 children receive them each year³.

To be considered for a cochlear implant, you need a referral from an ENT (Ear Nose and Throat) specialist or audiology service to a specialist cochlear implant centre. There are 23 specialist cochlear implant centres across the UK.

¹ Department of Health and NHS England, 2015. *Action Plan on Hearing Loss*. Available at: <https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf>

² Please note that, like many policy documents, this statement reflects the issues relevant at the time of writing. Over time, this may be subject to change, such as new legislation being introduced, and we may review and amend the document.

³ The British Cochlear Implant Group, 2014. UK cochlear implant provision presentation.

The National Institute for Health and Care Excellence (NICE) guidance on cochlear implantation⁴ recommends one cochlear implant for adults with severe or profound hearing loss, and two for children or adults who also have sight loss or other disabilities that increase their reliance on hearing. This guidance has not been reviewed since 2009.

There is good evidence that cochlear implants are cost-effective and produce positive results for people of all ages, however, research suggests that there are low levels of implantation in adults who could benefit and many audiologists do not feel confident about offering cochlear implantation as an option (see below).

Evidence

An evidence review of the benefits of cochlear implantation by the Ear Foundation⁵ found that cochlear implantation improves communication, speech perception and reduces the level of tinnitus in adults and children. Since the NICE guidance was issued in 2009, the review found that the cost of cochlear implantation has come down and that new evidence suggests a second implant in adults may provide additional benefits, such as reducing feelings of loneliness and depression. The review called on NICE to update its guidance on cochlear implantation to take account of reduced costs and new evidence on the benefits of two cochlear implants in adults.

Estimates of the number of people who use cochlear implants, and the number of people implanted each year suggest that the UK has low levels of cochlear implantation in adults compared to other European countries⁶. An evidence review also suggests that there are large differences in the level of cochlear implantation across the UK in adults compared to children. 74% of children who could benefit from cochlear implantation aged 0-3 have received cochlear implants, increasing to 94% by the time they reach 17 years of age. The comparable figure for adults who have severe or profound hearing loss is only around 5%⁷. Research is also currently underway to see whether the BKB (Bamford-Kowal-Bench) sentence test, which assesses speech and understanding and is used under NICE guidelines to select candidates for cochlear implantation, could be excluding adults who could benefit⁸.

The Department of Health and NHS England's *Action Plan on Hearing Loss*⁹ called for better access to cochlear implantation in England and included "improved access to a choice of support to manage hearing loss, including innovative technologies (e.g. hearing aids and implants)" as a key outcome measure for reducing unwarranted regional variations in service quality and provision.

There is also evidence that greater knowledge and understanding of the benefits of cochlear implantation, amongst audiology professionals, could increase the number of audiologists offering cochlear implantation as an option. A survey of the British Audiology Association (BAA) members¹⁰ found that:

- Fewer than half of respondents (44%) felt very confident about the referral criteria for cochlear implantation.
- More than a third (38%) had not received training on cochlear implantation in the last three years.

⁴ NICE, 2009. Cochlear implants for severe to profound deafness TA166. Available at: <https://www.nice.org.uk/guidance/ta166>.

⁵ Lamb et al, 2013. Adult cochlear implantation: evidence and experience.

⁶ De Raeve and Van Hardeveld, 2013. Prevalence of cochlear implants in Europe: What do we know and what can we expect? *Journal of Hearing Science*, 3 (4).

⁷ Raine, 2013. Cochlear implants in the United Kingdom: awareness and utilisation. *Cochlear Implants International*, 14 (1), 32-37.

⁸ British Cochlear Implant Group. Service evaluation (forthcoming).

⁹ Department of Health and NHS England, 2015. *Action Plan on Hearing Loss*. Available at: <https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf>.

¹⁰ Crook, 2015. Conference presentation, Audiologists referring for implantable devices. Bending the Spend Conference. London, 13 October 2015.

- More than a third (36%) thought they did not have enough information to give to patients.

Recommendations

We recommend the following to raise awareness of the benefits of cochlear implantation – and to ensure cochlear implantation is available to all those who could benefit.

NHS England, NHS Scotland, NHS Wales, Health and Social Care Northern Ireland and governments across the UK should:

- Review current guidelines, to make sure cochlear implantation is available to all people who could benefit.
- Raise awareness of cochlear implantation amongst the public and NHS organisations, to make sure all people who could benefit are offered a referral to a specialist cochlear implant centre.

NICE should:

- Review current guidance, to take account of the reduced cost of cochlear implantation and new evidence on the benefits of two cochlear implants in adults.
- Review eligibility criteria, to make sure cochlear implantation is available and offered as an option to all those who would gain a significant improvement in their quality of life, but who do not qualify under the current criteria.

NHS hearing services should:

- Follow national standards and guidance to make sure cochlear implantation is offered as an option for all those who could benefit.
- Provide regular training and guidance for audiologists on the referral criteria for cochlear implantation.

Action on Hearing Loss will:

- Work with the other members of the **Adult Cochlear Implant Action Group** to raise awareness of the benefits of cochlear implantation in adults, and influence to improve provision of cochlear implant services.

References

Information on cochlear implants

<http://www.actiononhearingloss.org.uk/your-hearing/about-deafness-and-hearing-loss/cochlear-implants.aspx>

<http://www.earfoundation.org.uk/hearing-technologies/cochlear-implants>

NICE technology appraisal for cochlear implantation in children and adults

<https://www.nice.org.uk/guidance/ta166>

The Department of Health and NHS England's Action Plan on Hearing Loss

<https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf>

Adult cochlear implantation: evidence and experience; the case for review of provision

www.earfoundation.org.uk/files/download/667

British Cochlear Implant Group

<http://www.bciq.org.uk/>

National Cochlear Implant Users Association

<http://www.nciua.org.uk/pathways/>