

Bilateral Hearing Aids Policy statement

Our position

Action on Hearing Loss believes that people with a hearing loss in both ears should be offered two hearing aids, by their hearing aid provider, when clinically suitable. They should be advised on the benefits of two hearing aids, taking into consideration their individual hearing loss and lifestyle, so that they are able to make an informed decision.

Introduction

This policy statement outlines the main issues around bilateral hearing aids for people with hearing loss. It also includes our stand on the issues¹.

We use the term 'people with hearing loss' to refer to people who are deaf, deafened and hard of hearing throughout.

Background

People with a bilateral hearing loss (a hearing loss in both ears) have difficulty hearing speech sounds, particularly where there is background noise. Wearing hearing aids in both ears:

- improves speech clarity in more demanding situations, such as noisy environments²
- helps identify which direction sound is coming from³
- reduces the effort required to follow speech in difficult listening situations⁴.

Where someone has bilateral hearing loss and is only fitted with one hearing aid, they will not experience the same level of benefit in these areas.

The following issues may also occur where someone with bilateral hearing loss is only fitted with one hearing aid. This means that they are not getting the full benefit from hearing aids and, ultimately, not hearing as well as possible:

- Head-shadow effect

The head can act as a barrier to sound if the sound signal is presented to the side with a hearing loss. This is known as the head-shadow effect. If someone has a hearing loss in both ears and only has one hearing aid, it can be difficult to hear sounds presented to the unaided side. This problem is significantly reduced with two hearing aids⁵.

¹ Please note, like many policy documents this statement reflects the issues relevant at the time of writing. Over time this may be subject to change and new legislation (and further amendments and/or reviews of this document). Therefore, it is strongly recommended that you consult the policy lead in conjunction with using this document.

² Kobler et al. (2002); Leeuw and Dreschler (1991)

³ Stephens et al. (1991); Dreschler and Boymans (1994)

⁴ Noble and Gatehouse (2006)

⁵ Moore et al. (1992)

- Auditory deprivation

Auditory deprivation can occur when the cochlea (the organ of hearing) is not stimulated sufficiently and gradually affects the brain's ability to interpret speech sounds. If there is a hearing loss on both sides and only one hearing aid is fitted, auditory deprivation can occur on the unaided side. This can be prevented by fitting two hearing aids.

- Someone loses or is unable to wear their hearing aid

Wearing two hearing aids can prevent feelings of isolation and worry if one hearing aid is lost or if the person is unable to wear an aid due to an ear infection.

Deciding whether to fit one or two hearing aids

Although most research indicates that two hearing aids are more beneficial than one in demanding listening situations, it has also been shown that one hearing aid is equally beneficial in less-demanding listening situations, such as quiet environments and one-to-one conversations⁶. It is important to remember this and think about lifestyle and individual preference when deciding whether to fit one or two hearing aids.

People with a bilateral hearing loss should be advised on all the benefits of two hearing aids, so that they are able to make an informed decision.

Policy and practice

- NHS hearing aids

Audiology departments provide hearing aids free of charge on long-term loan to NHS patients. All NHS providers routinely offer digital hearing aids.

Quality standards have been introduced in England, Scotland and Wales, as a means of measuring quality. The quality rating tool (QRT) is used in Scotland and Wales and Improving Quality in Physiological Diagnostic Services (IQIPS) is used in England. The QRT includes a standard that indicates that patients should be offered bilateral hearing aids where appropriate. In England, the IQIPS recommends that hearing aid providers should adhere to local protocols for prescribing bilateral hearing aids.

Action on Hearing Loss is concerned that the provision of two hearing aids may be affected by cost-cutting measures. It has recently been brought to our attention that some audiology departments are offering only one hearing aid, even to those with a bilateral loss, who are clinically suitable for two aids. Reports from our members suggest that this is due to a lack of funding.

We have recently conducted a mapping exercise to find out whether this is the case; initial analysis of the results suggests that around 95% of audiology departments in England routinely offer bilateral hearing aids where clinically appropriate.

However, we are concerned that, while it is their policy to offer bilateral hearing aids, audiology departments may influence patients' decisions in other ways. For example,

⁶ Noble and Gatehouse (2006) and Noble (2006).

they could influence a person's decision by suggesting only one aid is required, or by failing to fully discuss the benefits of two hearing aids.

- Private hearing aids

Private hearing aid dispensers can assess hearing loss and supply digital hearing aids, and are regulated by the Health Professions Council (HPC). There are Standards of Proficiency that hearing aid dispensers must adhere to, but they do not specifically cover bilateral hearing aids. There are no guidelines about selection or fitting of hearing aids. Without professional advice from the dispenser regarding bilateral aids, a client may choose one expensive hearing aid over two less expensive aids where this is not the most beneficial option.

Recommendations

- People with a hearing loss in both ears should be offered two hearing aids when clinically suitable.
- The advantages of two hearing aids should be discussed with the patient in relation to their hearing loss and lifestyle, so that they are able to make an informed decision. This should be documented in the Individual Management Plan⁷ (IMP) and, if declined, the patient's reasons stated.
- Patients should be given the option to have a second hearing aid at a later date if it is initially declined. There should be protocols in place so that they are able to access this directly through their audiology service.
- Private dispensers should discuss the benefits of two hearing aids with each individual, taking into consideration their lifestyle and preference. It is important that clients are made aware that two hearing aids, within their budget, are more beneficial than one very expensive hearing aid using up their whole budget.
- We need more qualitative evidence from hearing aid users about the benefit of two versus one hearing aid.
- We need more quantitative evidence to assess the impact cost-cutting is having on audiology services – and how widespread it is across the UK.

References

Boymans, M. and Dreschler. W. A. (2011). 'Unilateral versus bilateral hearing aid fittings', *Advances in Sound Localization*, Pawel Strumillo (Ed.), ISBN: 978-953-307-224-1, InTech, Available from: <http://www.intechopen.com/articles/show/title/unilateral-versus-bilateral-hearing-aid-fittings>

⁷ An Individual Management Plan is a set of agreed needs and actions that aim to improve a person's participation in life by reducing the disabling effects of a hearing loss.

Cox, R. M., Schwartz, K. S., Noe CM, Alexander GC (2011). 'Preference for one or two hearing aids among adult patients'. *Ear and Hearing* Mar-Apr; 32(2):181-97.

Dreschler, W. A., & Boymans, M. (1994). 'Clinical evaluation on the advantage of binaural hearing aid fittings'. *Audiologische Akustik*, 5, 12-23.

Holmes, A. E. (2003). 'Bilateral amplification for the elderly: are two aids better than one?'. *International Journal of Audiology* Jul;42 Suppl 2:2S63-7.

Köbler, S., & Rosenhall, U. (2002). 'Horizontal localization and speech intelligibility with bilateral and unilateral hearing aid amplification'. *International Journal of Audiology*, 41, 3905-400.

Leeuw, A. R., Dreschler, W.A. (1991). 'Advantages of directional hearing aid microphones related to room acoustics'. *Audiology* 30(6): 330-344.

Moore, B. C., Johnson, J. S., Clark, T. M., Pluinage, V. (1992). 'Evaluation of a dual-channel full dynamic range compression system for people with sensorineural hearing loss'. *Ear & Hearing* 13(5): 349-370.

Noble W., Gatehouse S. 2006. 'Effects of bilateral versus unilateral hearing aid fitting on abilities measured by the Speech, Spatial, and Qualities of Hearing Scale (SSQ)'. *International Journal of Audiology*. Mar; 45 (3):172-181.

Noble, W. (2006). 'Bilateral hearing aids: a review of self-reports of benefit in comparison with unilateral fitting'. *International Journal of Audiology*. 45(1):63-71.

Silverman, C, Silman, S. 1990. 'Apparent auditory deprivation from monaural amplification and recovery with binaural amplification.' *J. Amer. Acad. Audiol.* 1:175-180.

Stephens, S.D., Callaghan, D.E., Hogan, S., Meredith, R., Rayment, A., & Davis, A. (1991). 'Acceptability of binaural hearing aids: a cross-over study'. *Journal of the Royal Society of Medicine*, 84(5), 267-269.

Quality Standards for Adult Hearing Rehabilitation Services, 2009.

Quality Enhancement Tool, Department of Health.