The effectiveness of digital hearing aids and assistive listening devices for adults with hearing loss: A systematic review of the literature.

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Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' conclusions
The review conclusions are based on the current evidence available from this report's critical appraisal of literature published on the effectiveness of digital hearing aids and assistive listening devices for people with hearing loss. Although hearing aids do not restore hearing to normal, the studies in this review indicated that adult patients with hearing loss may benefit from using various styles of digital hearing aids. In particular this systematic review has found that satisfaction was gained from the use of various styles and fittings of digital hearing aids. It is noteworthy that the majority of these studies relied on subjective measures to assess the satisfaction with the use of hearing aids, rather than objective measures of hearing ability. Furthermore, the evidence underpinning this finding comes from low level studies, that is, non randomised and with various strengths and weaknesses according to the quality of the methods used. The methodological quality of the included studies ranged from good to poor. The two good quality studies were limited by the small number of the patients included in one study and by the inclusion of patients with tinnitus but also have hearing loss in the other. All studies included were conducted overseas and no individual study was conducted in New Zealand or Australia, therefore it is not known if the results can be generalised to the New Zealand setting.

For patients with high-frequency hearing loss, open canal fittings were much more preferable than non-open canal devices. For patients with asymmetric severe-to-profound hearing loss, contra-lateral routing of signal digital hearing aids may improve satisfaction (as shown by better acceptance rates for the new hearing aids than the older models). At present this systematic review could not identify relevant evidence to support the routine use of the one-to-one communicator (assistive listening devices).

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