

## Quick reference guide

# Cochlear implants for children and adults with severe to profound deafness

### Guidance

This technology appraisal examined the currently available devices for cochlear implantation. No evidence was available to the Committee to allow recommendations to be made for devices manufactured by Neurelec.

- 1 Unilateral cochlear implantation is recommended as an option for people with severe to profound deafness who do not receive adequate benefit from acoustic hearing aids, as defined in 5.  
  
If different cochlear implant systems are considered to be equally appropriate, the least costly should be used. Assessment of cost should take into account acquisition costs, long-term reliability and the support package offered.
- 2 Simultaneous bilateral cochlear implantation is recommended as an option for the following groups of people with severe to profound deafness who do not receive adequate benefit from acoustic hearing aids, as defined in 5:
  - children
  - adults who are blind or who have other disabilities that increase their reliance on auditory stimuli as a primary sensory mechanism for spatial awareness.Acquisition of cochlear implant systems for bilateral implantation should be at the lowest cost and include currently available discounts on list prices equivalent to 40% or more for the second implant.
- 3 Sequential bilateral cochlear implantation is not recommended as an option for people with severe to profound deafness.
- 4 People who had a unilateral implant before publication of this guidance, and who fall into one of the categories described in 2, should have the option of an additional contralateral implant only if this is considered to provide sufficient benefit by the responsible clinician after an informed discussion with the individual person and their carers.
- 5 For the purposes of this guidance, severe to profound deafness is defined as hearing only sounds that are louder than 90 dB HL at frequencies of 2 and 4 kHz without acoustic hearing aids. Adequate benefit from acoustic hearing aids is defined for this guidance as:
  - for adults, a score of 50% or greater on Bamford–Kowal–Bench (BKB) sentence testing at a sound intensity of 70 dB SPL
  - for children, speech, language and listening skills appropriate to age, developmental stage and cognitive ability.
- 6 Cochlear implantation should be considered for children and adults only after an assessment by a multidisciplinary team. As part of the assessment children and adults should also have had a valid trial of an acoustic hearing aid for at least 3 months (unless contraindicated or inappropriate).
- 7 When considering the assessment of adequacy of acoustic hearing aids, the multidisciplinary team should be mindful of the need to ensure equality of access. Tests should take into account a person's disabilities (such as physical and cognitive impairments), or linguistic or other communication difficulties, and may need to be adapted. If it is not possible to administer tests in a language in which a person is sufficiently fluent for the tests to be appropriate, other methods of assessment should be considered.

## Implementation tools

NICE has developed tools to help organisations put this guidance into practice (listed below). These are available on our website ([www.nice.org.uk/TA166](http://www.nice.org.uk/TA166)).

- Costing tools:
  - costing report to estimate the national savings and costs associated with implementation
  - costing template to estimate the local costs and savings involved.
- Audit support for monitoring local practice.

## Further information

### Ordering information

You can download the following documents from [www.nice.org.uk/TA166](http://www.nice.org.uk/TA166)

- A quick reference guide (this document) – the recommendations.
- 'Understanding NICE guidance' – a summary for patients and carers.
- The NICE guidance.
- Details of all the evidence that was looked at and other background information.

For printed copies of the quick reference guide or 'Understanding NICE guidance', phone NICE publications on 0845 003 7783 or email [publications@nice.org.uk](mailto:publications@nice.org.uk) and quote:

- N1785 (quick reference guide)
- N1786 ('Understanding NICE guidance').

## Related NICE guidance

There is no related guidance for this technology.

## Updating the appraisal

This technology appraisal will be considered for review in February 2011. Information about the progress of a review will be available at [www.nice.org.uk/TA166](http://www.nice.org.uk/TA166)

This guidance represents the view of NICE, which was arrived at after careful consideration of the available evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. This guidance does not, however, override the individual responsibility of healthcare professionals to make appropriate decisions in the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way which would be inconsistent with compliance with those duties.

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