Technology - the range of amplification for deaf individuals
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Hearing aids
Audiology measures needed for hearing aid fitting involve cooperation and conditioning so it is not always possible to establish reliable hearing thresholds or it may take a long time.
Some children will not tolerate wearing any device - this might be because of sensory issues, (not liking the feel of the aid or the sound it conveys) or it might be a lack of insistence on the part of the carer. There is a huge tension when determining what is truly a sensory issue and what is ‘I just don’t want to wear it!’ or ‘I don’t understand what it is for’ (as language doesn’t make sense yet or they prefer to be alone). Where parents have persevered (eg putting the hearing aid back on 18 times in one day) language learning and literacy has blossomed although true social interaction may still be problematic.

Cochlear Implants
NICE guidelines set out the criteria for Cochlear Implantation. Individual centres have their own assessment procedures and consider a range of salient factors.
Here is an example from a large city hospital.
We assess each child individually. There is not a ‘one view fits all’ on whether to implant or not. All usual factors are still relevant eg duration of profound deafness, hearing aid use, etc.
A diagnosis of ASD will not rule out a child from having an implant automatically, however it is a red flag that needs to be considered.
- what impact the ASD is having on the child
- what are their sensory needs/sensitivities (to wearing hearing aids/being touched around the ears and head area)
- is there any evidence of distress from sound
- do they have any level of shared engagement.
- do they condition to vibrotactile stimuli (for testing)
- parental understanding and engagement with the ASD diagnosis and the impact this can have on communication.
- expectations
- placement
- possibility of causing further distress to the child from sensory overload?

There are a range of outcomes, including:
T wears her bilateral implants all the time, shows evidence of responding to music, not using audition alone to follow instructions; vocalising a stream of sounds with some intonation but after 3 years is not producing any recognisable words.
A small scale study reports that audiological intervention has supported communication but not influenced behavioural concerns. Ref: Donaldson A. I., Heavner K.S., and Zwolan T.A., Measuring Progress in Children with Autism Spectrum Disorder who have Cochlear Implants in Arch Otolaryngol Head Neck Surg/Vol 130 May 2004 pp 666-671

Bone conduction and anchored hearing devices
If you have examples of children wearing bone conduction hearing aids either on a soft band or bone anchored and could share this experience please get in touch.
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