



A GUIDE TO REMOTE WORKING IN AUDIOLOGY SERVICES DURING COVID-19 AND BEYOND

Paediatric services

Remote consultations will suit some types of paediatric appointment better than others. It is recognised that where a child's case is considered clinically urgent that they should be seen for a face-to-face appointment, using appropriate Personal Protective Equipment (PPE).

Telemedicine use now will potentially save time for subsequent appointments so that when services do restart, there may be reduced throughput to keep numbers in waiting areas low and to allow decontamination of room/equipment between cases as recommended by the Joint professional Guidance (BAA, etc ref...

Hearing assessments

- For new referrals, telephone appointments can be used for triaging and identifying urgent cases. A full history on the phone, can help to identify risk factors which may warrant faceto-face appointment. A pre-history will save time in appointments when services resume (for fluctuating conditions such as glue ear, the history would need to be repeated in full when they visit as symptoms can change rapidly).
- For assessments, obtaining clinical information in advance informs decisions about test strategy (e.g. need for ear specific testing, likely test method required) and maximises the utility of the clinical test sessions (reduce the time/resources required).
- Counselling, hearing tactics and general advice can also be given over the phone to parents/ carers.
- Hearing screening could be done remotely, but this is a novel approach requiring careful
 planning and evaluation. It would only be suitable for older children and would not replace a
 full hearing assessment. See associated document 'practical guidelines for remote care' for a
 detailed discussion on remote assessment.

Hearing aid fittings/update fitting

 The hearing aid settings advice provided in the 'Adult hearing service' document could be applied to older children, with some consideration of suitability for programmes/volume control and incorporation of previously measured RECDs (if it still suitable).

- Consider fitting slim tube fittings for older children, as this doesn't require impressions to be taken.
- Consider fitting bone conduction aids for management of conductive hearing loss with remote follow up.

Hearing aid reviews

- For existing hearing aid users, histories and parental report questionnaires can be completed remotely, which can also provide valuable information to decide on the urgency of the next face-to- face review.
- Provision of replacement consumables, batteries and tubing can be provided via post. For children who require replacement earmoulds, where these have been previously scanned a remake could be made for lost or split moulds. For children where there may have been growth since seen and moulds are poorly fitting, moulds could be requested to be double or triple dipped on remake. For babies and young children with rapid growth a clinical decision will need to be made locally as to whether they warrant a face-to-face appointment with appropriate PPE.

Managing glue ear:

• Children under review for glue ear, who have normal bone condition thresholds (i.e. SNHL ruled out), and whose parents are no longer concerned about their child's hearing due to a visible improvement, could be removed them from the waiting list entirely (with the caveat that they can get back in touch without needing a new referral if concerns arise again).

National Deaf Children Society resources

- The National Deaf Children's Society website has lots of invaluable information about hearing loss and hearing aids, and you can find some useful videos such as how to re-tube your child's earmould. For leaflet download you need to be a member but it is free to join, and for parents as well if they want to download anything.
- http://www.ndcs.org.uk/family support/how ndcs can help/our videos/howto.html
- There is specific information Specific info related to COVID-19
 at: https://www.ndcs.org.uk/COVID-19-coronavirus-support-for-deaf-children/
- General information leaflets: https://www.ndcs.org.uk/information-and-support/
- Glue ear leaflet:
- Understanding your child's hearing tests:
 https://www.ndcs.org.uk/documents-and-resources/understanding-your-childs-hearing-tests/

https://www.ndcs.org.uk/documents-and-resources/glue-ear-a-guide-for-parents/

- Support and advice for children and families : https://www.ndcs.org.uk/blog/coronavirus-and-support-for-deaf-children-information-for-families/
- Support and advice for professionals: https://www.ndcs.org.uk/blog/coronavirus-and-support-for-deaf-children-information-for-professionals/

The National Center for Hearing Assessment and Management in Utah have created 'A practical guide to the use of tele-intervention in providing early intervention services to infants and toddlers who are deaf and hard of hearing'. Available at: http://www.infanthearing.org/ti-guide/

TABLE 1: Paediatric audiology tools and apps.

Name	Link	Details
Advanced Bionics Rehab Portal	http://www.abrehabportal.com/	Open source. Various rehab tools include: ListeningRoom, SoundSuccess, Musical Atmosphere. Also, a variety of assessment tools. Includes access to validated questionnaires e.g. PEACH
C2Hear	https://www.c2hearonline.com	Information about hearing aids which is suitable for older children and parents on retubing and fitting hearing aids, how to troubleshoot and other useful videos.
Elizabeth Foundation	https://elizabeth-foundation.org/	May be able to assist with virtual family counselling. Some of the resources also on AB rehab portal
BSL	https://www.british- sign.co.uk/learn-online-british-sign- language-course/	Online sign language course available on 'pay-what-you-can' basis
Doncaster Deaf Trust	https://www.doncasterdeafsign.or g.uk/	Free BSL Level 1 course
Aftershokz	https://aftershokz.co.uk/	A cheaper alternative to a BC hearing aid to improve clarity for children with glue ear when they listening to audiobooks, school work, using apps.
hearWHOp ro	https://apps.apple.com/gb/app/hearwhopro/id1488721274	Free hearing test app by the HearX group in conjunction with World Health Organization (based on digits in noise, suitable for older teenagers and adults only).
Hear Glue Ear App	https://play.google.com/store/apps/details?id=com.camdh.app.HGE&hl=en_GB	Songs, games and books to support children with glue ear as well as links to further information for parents. Has a hearing screening tool, but this is uncalibrated so could be misleading
Sound Scouts	https://www.soundscouts.com/engb/	Hearing assessment for a range of ages of children and adults. Validated for children aged 5 and above. Based on speech in noise, speech in quiet and tones in noise. Needs someone with normal hearing for basic calibration. Costs c. £1.99 per assessment. Gives results in or outside normal range
Nuheara	https://www.nuheara.com/hearing -check/	Digits in noise test. Free. Emails you a traffic- light result. Reportedly unsuitable for children under 15 years, but may be suitable with some adjustments to scoring

Name	Link	Details
Ida institute Transition	https://idainstitute.com/tools/telecare for teens and tweens/ https://www.sheffieldchildrens.nhs.uk/patients-and-parents/transition/moving-into-	Counselling tools for children of varying ages. Living well for teens and tweens can be completed online. Tools for younger children not presently easily adaptable for online use. Useful for signposting.
Tinnitus	<u>adult-care/</u> https://www.tinnitus.org.uk/Pages/Category/resources	Links to the leaflets and resources specifically for children:
LittleEars Questionn aire™	https://www.medel.com/en- gb/about-hearing/hearing- test/little-ears-auditory- questionnaire	Evaluates listening ability (aided or unaided) in children up to 2 years old. Can be done online by parents.
PEACH	https://www.outcomes.nal.gov.au/ peach	Evaluates hearing and communication ability (aided or unaided) in children up to 5 years old. Score can be compared to age-related norms.
LSQ-P	Listening Situations Questionnaire for Parents. http://research.bmh.manchester.acuk/mchas/information/eval/quest/ Listening Situations Questionnaire for Parents.	Primarily based on observational information from parents. Different listening situations in everyday life. It includes responses to environmental sounds as well as speech. School aged children usually over seven years old.