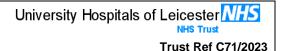
# Paediatric Hearing Aid Fitting Clinical guidelines Hearing Services Department MSS Directorate



#### 1. Introduction and Who Guideline applies to

The following are guidelines to be used by Audiologists when fitting a child with a hearing aid. This includes AC and BC aids but excludes surgically implanted devices or CROS aids. See specific guidelines for these devices. It is expected that the Audiologist will use this as a guide only and that the Audiologist's discretion will be used when applying these guidelines to ensure that hearing aids are fitted optimally but also accommodate the individual requirements of the family and child. These local guidelines should be used in conjunction with relevant national BSA to include;

- Position Statement and Practice Guidance Audiological assessment and hearing aid provision for patients with a programmable ventriculo-peritoneal (PVP) shunt BSA 2023
- Practice Guidance Early Audiological Assessment and Management of Babies Referred from the Newborn Hearing Screening Programme BSA 2021
- Practice Guidance Verification using probe microphone measurements BSA 2018
- Quality standards in Paediatric Audiology BAA 2022

It is expected that Audiologists using this guidance will be competent with hearing aid software, programming of hearing devices and REM equipment & set up. New starters will have had supervised training and been assessed as competent.

Children attending a hearing aid fitting apt will either have had a clinic/phone hearing aid assessment apt or will have been identified with a PCHI via the NHSP and therefore hearing aid discussion and impressions for ear moulds will have been done by the TOD after liaison with the Head of Paediatric Audiology, in this case the hearing aid fitting will be the first contact with the HSD.

Whether to aid unilaterally or binaurally will have been discussed at the hearing aid assessment stage, AC aids will usually be fitted bilaterally unless not appropriate for audiological reasons or due to parent/child preference. BAHI will initially be fitted unilaterally. Consideration for binaural fitting will be given at review if the aid is being worn consistently, behind the ear, is audiologically suitable and being kept for foreseeable future.

#### 2. Guideline Standards and Procedures

#### Appointments

- The hearing aid fitting apt will have been booked directly with the parents at the time of the assessment or will have been requested, via the outcome sheet, for the Paediatric Administrator to book.
- Fitting apts will be within 4 weeks of the assessment unless delayed for clinical reasons or parental choice
- Fitting apts will be booked as 1T, 1.5T or 2T (T=tester), at the discretion of the Audiologist at the assessment stage. Consideration will have be given and detailed on PN as to whether further behavioural testing is required at the fitting apt and aiding options discussed
- Apts will be 1.5 hours if further testing required and 1 hour if not

 The Paediatric Administrator, when booking the apt will note the fitting date on the referrals tab of the hearing aid spreadsheet

#### Pre appointment checks

- Read notes from original referral and assessment apt to ensure that any gaps in information and relevant points to consider during the fitting are identified.
- Plan session
- Ensure that a full audiogram is available (250-8000Hz). If all frequencies have not been tested, enter a new audiogram with the gaps filled in using a 'most likely' approach based on usual audiogram configurations for type of hearing loss, child's history and middle ear function results. This must be recorded when saving the audiogram as 'Estimated audiogram for programming' and must be saved separately from measured audiogram results

For babies where only ABR information is available or children whereby only sound field information is available, this 'most likely' approach still applies and fitting to a conservatively derived audiogram is not advised.

For ANSD babies, if behavioural thresholds are not available, a cautious approach to audiogram estimation should be taken (flat 70dBHL audiogram if no thresholds available but parental and professional opinion consensus is that the child is not responsive to speech level sounds). If behavioural thresholds are available then these should be used for the hearing aid programming

- Plot measured or estimated BC thresholds (If estimated, plot at 2.5-8KHz so evident that this is not measured), rgt and Ift ear if a conductive element to the hearing loss is known or suspected. This ensures that the hearing aid software adds additional gain to the prescription targets to overcome the conductive hearing loss element. If these values are estimated as opposed to being measured this must be recorded when saving the audiogram as 'Estimated BC values for programming' and must be saved separately from measured audiogram results
- Calibrate / check equipment and set up room as per stage A (BSA, 2018) departmental guideline. This can include calibrating REM tubes, pre-programming hearing aids and tamper proofing aids to potentially save time during the apt
- Ensure all potential equipment available e.g. REM tubes, hearing aids from allocated aids box/cupboard, fitting kit, batteries, handouts and programming leads
- Check that hand gel and anti-bacterial wipes are available
- Check whether an interpreter is booked and has arrived (If applicable)
- Retrieve ear moulds from parents

#### Introduction

- Invite all attending adults and children into the clinic room
- Introduce all persons in the room
- Check the relationship to the child of accompanying adults and, if not parents, has consent been obtained from the parent to bring the child to the apt.
- Check that all addresses are correct
- Check that correct and complete addresses are available for copies of reports, including school/nursery and other relevant professionals as requested by parents
- Explain the purpose of the apt and how it will proceed. Obtain verbal consent to proceed.

#### History prior to programming hearing aids

- Has there been any change in the hearing since the assessment? If so, a further hearing test may be required
- Has there been any other change in ear health since the assessment? e.g. Infection
- How do parents and child feel about having the hearing aid/s (ask child first if applicable). Bare this information in mind during the explanation/counselling stage
- Are they still agreeable to the decisions made at the assessment in terms of type and colour of hearing aid?
- Discuss tamper proofing of battery drawer if >4yrs old (tamper proofing is mandatory for <=4yrs) and get waiver form signed if tamper proofing declined</li>
- Any other concerns or uncertainties that need addressing prior to proceeding with the fitting

#### Diagnostic tests prior to programming hearing aids

- Repeat behavioural testing, at the Audiologist's discretion if indicated from assessment apt (Incomplete or inconclusive results, possible NOHL, borderline as to whether hearing aid required and room for improvement e.g. conductive loss, history of significant fluctuating hearing) or possible change in hearing identified since assessment
- Otoscopy. Look at size, shape and angle of ear canal and any contraindication for REM e.g. Wax or discharge
- Tympanometry (high frequency tymp if baby < 6 months corrected age). If different from assessment result, consider repeating hearing test if change in hearing possible. Information to be used to decide whether REM measurement is needed in 1 or 2 ears
- Perform other tests at the Audiologist's discretion if in doubt as to whether hearing aid fitting should proceed. e.g. OAE, speech discrimination. This applies in particular if there is a significant change in thresholds, either due to resolving conductive loss or an unexplained change indicating possible NOHL.

#### Consent to proceed to hearing aid

- If the hearing aid is no longer required, the child should be discharged from the hearing aid service on the outcome sheet. The patient may keep the ear moulds. Agree with the parents whether any further hearing tests are required and, if so, either add to appropriate pending list or refer to Community Audiology for future monitoring. All Down syndrome and 'bank' children (PCHI who don't wear hearing aids) should automatically be referred to Community Audiology for review as per Paediatric Audiological Surveillance Chart (2023).
- If hearing aid/s are required, gain verbal consent to proceed if not already done so during the introduction or history

#### Hearing aid programming (AC aid on ear mould)

- Remove tone hook filters if possible i.e. Oticon aids. This minimises future problems
  with these filters becoming blocked and, if removed before programming, output
  alterations can be accounted for during programming.
- Discuss tamper proofing of battery drawer if >4yrs old (tamper proofing is mandatory for <=4yrs) and get waiver form signed if tamper proofing declined</li>
- Fit ear moulds into ear, cut tubing to correct length and make any adjustments to the mould if needed e.g. grinding
- Measure RECD in one or both ears dependent on similarity of middle ear function between ears. Ensure that this measurement has been 'copied' to the other ear if applicable. A standard measured RECD with ear mould or a measure using the SSPL probe are acceptable but the SSPL probe should be inserted to a representative ear canal depth to mirror length of mould meatus.
- In situ REM's (i.e not RECD) are not recommended at first fitting so as to enable MPO target match to be achieved without risk of harm/discomfort and also as a reference measure in case of future changes to aid if an in situ REM isn't possible.
- Predicted RECD should only be used if a measured RECD is contraindicated or not possible e.g. due to the compliance of the child. The reason for not obtaining a measured REM should be documented. The audiologist must ensure that the 'fitting age' of the child is correct/appropriate in the REM software. Consideration should be given as to the risk of over or under amplification if the ear canal is not likely to be average for the actual age of the child i.e. grommet or perforation means a larger than average ear canal, lower SPL and therefore risk of under amplification. A smaller than average ear canal e.g. Downs syndrome means higher SPL and therefore risk of over amplification. It is at the Audiologist's discretion to adjust the fitting age if required.
- If the middle ear status is different from usual for the child, in one ear only, a measured RECD may be done in the ear with the 'usual' status. If it different in both ears then this is not a reason not to do the measurement at the fitting but, in both of these cases, consideration should be given to a sooner review with a possible re measured RECD, at review, if necessary
- Connect the hearing aid/s to the software
- Disable hearing aid frequency lowering features if active e.g. sound recovery for Phonak aids (Default for Oticon aids is frequency lowering deactivated)
- Perform measured RECD or select predicted RECD as appropriate. Put a note in notes section of RECD tab section to say which ear measured and if copied to other side or, If using a previously measured RECD, date of measured RECD used (This is for future reference so it is clear when and what was measured)
- In the 2cc coupler, targets should be matched at 65, 50 and 80dBSPL and note on PN and report ability to do so or detail if not e.g. poor dynamic range or unable to match above 2KHz etc.
- If 80dB target cannot be met, check the MPO at 90dBSPL and increase if appropriate. If still unable to meet 80dBSPL target, consider changing to a more powerful aid to improve the dynamic range available.
- Complete all steps as per test flow on left side of REM screen
- If 's' is inaudible with frequency lowering off, turn on the appropriate feature in the software and adjust until audible as per REM measure. If 's' is still inaudible or Page 4 of 18

- frequency lowering required is severe, switch this off as it may cause distortion of audible speech sounds
- Put the hearing aids and moulds in situ on the child. Run the feedback manager if required
- Dependent on the age of the child. Ask for initial feedback on the sound of the aid. Initial concern is ensuring that the aid is not too loud. For younger children, with them feeling relaxed and safe i.e. whilst playing on parents lap, make some loud sounds from a 1-2 metre distance e.g. clapping or talking loudly, to check for signs of loudness discomfort. If loudness discomfort is observed or expressed, consider whether this requires changes to programming activating the adaptation manager is preferable to reducing gain
- When programming complete, record test box measurements
- Save and close the REM module
- Dependent on the developmental age of the child, type of hearing loss and after discussion with child/parents, consider the following in software:
  - 1. Volume control on/off
  - 2. Visual indicator lights on/off (Turn flight mode off as minimum)
  - 3. Additional program/s
  - 4. Start up jingle on (Standard)
  - 5. Datalogging on (Standard)
  - 6. Battery beeps on (Standard)
  - 7. Mute off (Standard)
- Save hearing aid/s settings to aid/s and database

#### Hearing aid programming (AC aid on slim tube/dome (open fit))

 Follow procedure above but open fit needs to be programmed via in situ REM i.e. not RECD. See REM for additional information regarding in situ REM

#### Hearing aid programming (BAHI)

- If child is unable to do an in situ BC measurement, plot a 10dB, not masked, bc threshold audiogram (in NOAH) at 0.25-8KHzor 'most likely' BC audiogram if a sensori-neural element is known/suspected
- Insert battery, turn device on and connect processors
- Select 'Softband'
- Put BAHI in position on child, ensuring headband is at the desired tension and BAHI
  is in the position that it will be worn. For babies or children with poor head control,
  the BAHI may need to be worn in front of the ear i.e. temple area.
- Measure BC in situ at all frequencies if possible or a low, mid and high frequency if child's attention does not allow full measurement. Estimate intermediary frequencies if not tested. When estimating, bear in mind that frequencies at 2KHz and above tend to be worse than actual BC thresholds when measured using a diagnostic audiometer (this is due to high frequency attenuation caused by hair, skin etc.)
- Do not run feedback manager unless obvious audible feedback is heard as this can cause a significant reduction in dynamic range
- Set BAHI as follows, it is at the Audiologists discretion to alter from default set up below. Note on PN notes any changes from default.

- 1. Select Omni (surround) microphone array
- 2. Turn noise management off
- 3. Turn mute on
- 4. Turn volume off
- 5. Turn jingle on
- Save settings
- Disconnect BAHI. Turn device off and on.

#### Post programming considerations (Applicable dependent on aid type)

- Insert right and left markers in aid/s
- All children should be offered lockable battery drawers. Children <=4 years must have lockable battery drawers fitted and lockable tone hooks if available. This should also be encouraged if felt to be necessary for children with special needs or where there is felt to be a risk to younger children or vulnerable adults within the family or school/nursery. Ensure tools for opening the locks are issued
- Choose adult/paed tone hooks dependent on which gives best fit and security behind the ear/s.
- Fit a safety line for younger children and special needs children as appropriate. In babies or children with small ears/shallow concha's, the weight of the safety line can sometimes pull the aids out, supporting the weight of the safety line by hooking it into hair grips or tying the 'strings' together can help with this.
- Consider toupee tape/ sticky pads and adjust the angle of the hearing aid on the ear mould if retention is an issue
- Otoferm/ear mould cream may be useful for babies who will outgrow ear moulds rapidly or for children with severe or profound losses to reduce feedback
- Prepare the care kit to include the following
  - 1. Stetoclip (For severe to profound hearing losses, an attenuated stetoclip should be issued)
  - 2. Drying crystals
  - 3. 2 boxes (1 for home and 1 for school/nursery or out and about).
  - 4. Batteries, x 2 packets per aid
  - 5. Tubing puffer
  - 6. Safety line (Optional)
  - 7. Otoferm/ear mould cream (Optional)
  - 8. Stickers (Optional)
  - 9. Lockable battery drawer tool if applicable
  - 10. Manufacturers instruction booklet
  - 11. Battery replacement booklet and card
  - 12. Hearing aid maintenance booklets as applicable
  - 13. Spare tubes/domes

## Additional post programming considerations for BAHI

- Safety line should always be used. This can be attached to clothes, hair clip or the soft band
- Issue one soft or hard band. Usually the soft band will fit and stay in place better for younger children. Older children may prefer the hard band if only aiding unilaterally

and as a short term measure as the screw holding the BAHI bracket will need tightening regularly and therefore softband is preferable for longer term use

#### Instruction/counselling

- If a 2nd Audiologist is available, they can instruct the child and parents whilst the aid is being programmed
- Ensure that the following instructions are covered (see instructions checklist Appendix 1):
  - 1. Markers for rt and lt
  - 2. Battery changing, where to get new batteries and how to describe type of battery needed i.e. colour of battery. Importance of using tamperproof battery drawer Issue button battery leaflet and ensure waiver signed if lockable battery drawer declined
  - 3. Risks of battery ingestion or inserting into nose/ear, importance of storing and disposing of new and used batteries safely Issue button battery leaflet and ensure waiver signed if lockable battery drawer declined
  - 4. Volume/program/mute switch
  - 5. Mould cleaning, maintenance and recognising when new mould needed
  - 6. Tubing checking, cleaning and cutting to size (Changing tube does not need to be covered as too complicated for fitting appt)
  - 7. How to check function of aid manually and via stetoclip (daily)
  - 8. What to do if aid faulty
  - 9. Contents and use of care kit including safety line as necessary
  - 10. Need to keep aid safe when not being worn i.e. always put in box provided
  - 11. How to insert/remove aid correctly child and parent to do this
  - 12. Data-logging function
  - 13. Connectivity and warning regarding auto reconnecting or misuse
- H-aid, mould, battery detail card completed and issued to parents to be brought to all future apts
- Discuss acclimatisation period and how this may affect the child in the short term
- Ensure that expectations are realistic and discuss limitations of the aid e.g. in background noise, at distance, coping with fluctuations in h-loss or ability to amplify to 'normal' hearing levels
- Address concerns that the parent/child may have had prior to the fitting e.g. cosmetic, bullying or child might pull aids out etc. Exchange ideas for handling these issues and reassure that they will be supported if problems occur, via TOD and clinic.
- Explain that the aim is for consistent use at home, school and socially (all waking hours) but, dependent on age and severity of h-loss of child, discuss how to build this up i.e. how to prioritise time aid/s used, if child won't wear aid/s all day from the start
- Discuss when the child will be reviewed in clinic, how to contact should problems occur prior to the review, what the aims are for the child to have achieved by the review and what support will be available in the meantime e.g. TOD

- If not completed at assessment apt, consent for referral to TOD and get consent form signed
- If relevant and not discussed at assessment, Cochlear Implant assessment referral should be discussed with all families when hearing thresholds are within CI criteria. Referral for assessment should be encouraged with emphasis to parents/child that a referral for CI assessment doesn't mean that they have to have the surgery but they will learn a lot about what the child can and can't hear with current aids during the assessment process.

#### **Review appt**

- This should be 4-12 weeks after fitting dependent on age, complexity of fitting and Audiologist/parental concern. A phone review should only be considered if the child/parents are experienced with hearing aids, the aids are known to only be needed for a short time period e.g. grommet surgery date known, or as an interim check-in i.e. phone review 6 weeks and; if all ok, timeframe for face to face review will then be agreed.
- The timing, venue and any apt restrictions should be discussed with child/parents
- The review details should be noted on the outcome sheet. 1T/1.5T/2T (BAHA apt type is not to be selected unless an apt with the BAHI lead is required for consideration of alternative BC options or BAHI surgery), '1st review', month/year of review, clinic location and any additional information e.g. specific Audiologist, time/day of apt, Interpreter required, etc.

#### **Documentation**

- Ensure that all information regarding fitting is clearly recorded and legible if someone else sees the child. Note any problems/concerns, deviance from guidelines and guide for tests/checks to be done at review apt – use PN notes template
- Report from assessment to be completed (Located in reports 'partial complete' folder) with test results, programming, summary of discussion and advice regarding use of aid/s. Send to parents, TOD, referrer, GP, school/nursery and other relevant professionals as checked with parents
- If referring for CI assessment, send report (As referral) with all relevant other information available, including NHSP ABR results and waveforms, ENT letters, aetiology results, previous HSD reports and history, to NAIP (Nottingham Auditory Implant Program).
- Ensure that aid, mould and programming details are completed and accurate on report form
- Add hearing aids (not BAHI) to PN devices
- Add BAHI details (new devices only) onto BAHA fitting spreadsheet (H drive/BAHA/BAHI orders and fittings/BAHI fittings)
- Print report copies, including a copy to be emailed to TOD.
- Send email report copies (except TOD)
- Complete outcome sheet. Ensure that venue for review and any patient specific apt requirements are asked and noted.

At outreach site, onto outcome sheet, add how many copies are required to be printed by Admin and email this to <a href="mailto:paediatricHSD@uhl-tr.nhs.uk">paediatricHSD@uhl-tr.nhs.uk</a>

- Place collated reports and outcome sheets in the paediatric hearing aid admin 'reports in' tray in the Admin office at LRI
- Place signed lockable battery drawer waiver forms in 'paediatric admin scanning' tray if applicable
- Complete medical referral and consultation on PN
- Ensure patient is attended on PN

### 3. Education and Training

No training is required for current staff.

New staff to the department or to the paediatric team will require a period of supervision dependent on their experience and skill level. The peer review process will be undertaken before they are able to work unsupervised.

#### 4. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Room prepared appropriately and plan for apt prepared	Peer review process	Head of Paediatric Audiology	New starter after initial supervisory period.  All applicable paediatric staff every 2 years	Required actions to be given to audiologist by the peer reviewer and recorded on peer review documented
Introduction of adults present and demographic details checked as appropriate	Peer review process	Head of Paediatric Audiology	As above	Required actions to be given to audiologist by the peer reviewer and recorded on peer review documented
Appropriate level of history taken and additional diagnostic testing undertaken if required	Peer review process	Head of Paediatric Audiology	As above	Required actions to be given to audiologist by the peer reviewer and recorded on peer review documented
Appropriate explanation of results for the family/child and their concerns addressed	Peer review process	Head of Paediatric Audiology	As above	Required actions to be given to audiologist by the peer reviewer and recorded on peer

				review documented
Hearing aid programmed using appropriate REM technique and software settings	Peer review process	Head of Paediatric Audiology	As above	Required actions to be given to audiologist by the peer reviewer and recorded on peer review documented
Appropriate validation of fitting performed (loudness discomfort checks, child feedback or observation) and appropriate changes made and recorded	Peer review process	Head of Paediatric Audiology	As above	Required actions to be given to audiologist by the peer reviewer and recorded on peer review documented
Safety precautions applied to aids as required (tamperproofed, safety line etc)	Peer review process	Head of Paediatric Audiology	As above	Required actions to be given to audiologist by the peer reviewer and recorded on peer review documented
Appropriate explanation of aid use and maintenance given	Peer review process	Head of Paediatric Audiology	As above	Required actions to be given to audiologist by the peer reviewer and recorded on peer review documented
Care kit complete and issued	Peer review process	Head of Paediatric Audiology	As above	Required actions to be given to audiologist by the peer reviewer and recorded on peer review documented
Documentation complete	Peer review process	Head of Paediatric Audiology	As above	Required actions to be given to audiologist by the peer reviewer and recorded on peer review documented

#### 5. Supporting References

- 1. BAA (2022) Quality standards in Paediatric Audiology
- 2. British Society of Audiology (2018) BSA recommended procedures Guidance on the verification of hearing devices using probe microphone measurements
- 3. BSA (2018a) Practice Guidance Verification using probe microphone measurements
- 4. BSA (2021) Practice Guidance Early Audiological Assessment and Management of Babies Referred from the Newborn Hearing Screening Programme

- 5. BSA (2023) Position Statement and Practice Guidance Audiological assessment and hearing aid provision for patients with a programmable ventriculo-peritoneal (PVP) shunt
- Feirn, r. (editor) (2014). Guidelines for Fitting Hearing Aids to Young Infants. Version. Available: <a href="http://research.bmh.manchester.ac.uk/mchas/innfantHAfittingguidelines/infantHAfittingguidelines.pdf">http://research.bmh.manchester.ac.uk/mchas/innfantHAfittingguidelines/infantHAfittingguidelines.pdf</a>. Last accessed 19/1/2018.
- 7. Hartland, S. (2023) Paediatric Audiological Surveillance Chart v1.3. Available via HSD shared drive:
  H:\IQIPS Leicester LRI\Guidelines\Clinical Guidelines (Team Leads)\Paediatric Team\Pathways\ paediatric audiological surveillance chart version 1.3 June 2023

#### 6. Key Words

Hearing aid; Paediatric Audiology; Hearing Services; Hearing; Audiology; Real Ear Measurement (REM); Real Ear to Coupler Difference (RECD)

CONTACT AND REVIEW DETAILS					
Guideline Lead (Name and Title) Sheena Hartland Head of Paediatric Audiology	Executive Lead Hazel Busby-Earle (Consultant)				

Details of Changes made during review: addition of appendix regarding PVP shunt version 1.1 Information added regarding plotting and using BC values in REM software version 1.2 Change to policy for tamper proofing from <=3yrs to <=4yrs. Added to fitting instructions version 1.3 Reference to departmental stage A calibration guidelines added to pre apt checks section page 2 version 1.4

Version 2 PVP shunt appendix removed 1.5T clinic type added

Programing and REM changes of procedure made to reflect current aids and Affinity set up General changes to procedure to reflect current practice

# 1. OVERVIEW

Title	Title of P&G Document Being Reviewed: Insert Details Below:		Comments
1.	Title and Format		
	Is the title clear and unambiguous?		
	Does the document follow UHL template format? If no document will be returned to author		
2.	Consultation and Endorsement		
	Complete the consultation section below		
3.	Dissemination and Implementation		
	Complete the dissemination plan below		
	Have all implementation issues been addressed?		
4.	Process to Monitor Compliance		
	Ensure that the Monitoring Table has been properly completed.		
5.	Document Control, Archiving and Review		
	Ensure that the review date and P/G Leadis identified.		
6.	Overall Responsibility for the Document		
	Ensure that the Board Director Lead is identified		

# 2. EQUALITY IMPACT ASSESSMENT

			Comments		
1.	What is the purpose of the proposal/ Policy	To standardise practice for paediatric hearing aid fitting			
2.	Could the proposal be of public concern?	No			
3.	. Who is intended to benefit from the proposal and in what way?		Audiologists as it provides guidance for the programming and issue of hearing aids to children and patients/family as it provides standardisation of practice		
4.	. What outcomes are wanted for the proposal?		Standardised hearing aid programming, advice and considerations for paediatric fitting apts		
		Yes/No	Comments		
5.	Is there a possibility that the outcomes may affect one group less or more favourably than another on the basis of:				
	Race	No			
	Ethnic origins (including gypsies and travellers)	No			

			Comments
	Nationality	No	
	Gender	No	
	Culture	No	
	Religion or belief	No	
	Sexual orientation including lesbian, gay and transsexual people	No	
	Age	Yes	Guidelines are for children <16 years old
	Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
6.	Is there any evidence that some groups are affected differently?	No	
7.	If you have identified that some groups may be affected differently is the impact justified E.g. by Legislation: National guidelines that require the Trust to have a policy, or to change its practice.	n/a	
8.	Is the impact of the proposal / policy likely to be negative?	No	
9.	If so can the impact be avoided?	n/a	
10.	What alternatives are there to achieving the proposal/ policy without the impact?	n/a	
11.	Can we reduce the impact by taking different action?	n/a	

If you have identified a potential discriminatory impact; please ensure that you do a Full Impact Assessment.

If you require further advice please contact Service Equality Manager on 0116 2584382.

#### 3. CONSULTATION SECTION

(To be completed and attached to Policy and Guidance documents when submitted to the UHL Policy& Guidelines Committee)

Elements of the Policy or Guidance Document to be considered (this could be at either CMG/Directorate or corporate level or both)	Implicat ions (Yes/ No)	Local or Corpor a-ate	Consul- ted (Yes/ No)	Agree with P/G content (Yes/No)	Any Issues (Yes / No)	Comments / Plans to Address
Education (ie training	No					
implications)						

MSS		17/11/23	3	Approved,				
Committee or Group (eg CMG Board) that has formally revie Guidance document		or	Date reviewe	d	Outcom	e / Dec	ision	
Committee on Oneum (c ONE	/Directoret-		Data		0	- / Dr -		 
Any others	No							
Staff Side/ (where applicable)	No							
Finance (ie cost implications)	No							
Facilities (ie environmental implications)	No							
Operations (ie operational implications)	No							
Human Resources	No							
Patient Safety	No							
Clinical Effectiveness	No							
IM&T (ie IT requirements)	No							
Corporate & Legal	No							

Lead Officer(s) (Name and Job Title)	Contact Details
Hazel Busby-Earle (Consultant)	Hazel.busby-earle@uhl-tr.nhs.uk

Please advise of other policies or guidelines that cover the same topic area:

Title of Policy or Guideline:	
See references.	

# **4. IMPLEMENTATION AND REVIEW**

Please advise how any implications around implementation have been addressed:					
Financial	No				
Training	No				
REVIEW OF PREVIOUS P&G DOCUMENT					

Previous P&G already being used? Yes	Trust Ref No:		
If yes, Title: Paediatric Hearing Aid Fitting. Clin	nical guideline v1 n/a		
Changes made to P&G? Yes	If yes, are these explicit Yes If no, is P&G still 'fit for purpose? Yes		
Supporting Evidence Reviewed? Yes	Supporting Evidence still current? Yes		

# **5. DISSEMINATION PLAN**

DISSEMINATION PLAN					
Date Finalised:	Dissemination Lead (Name and contact details) Sheena Hartland, Head of Paediatric Audiology				
To be disseminated to:	How will be disseminated, who will do and when?	Paper or Electronic?	Comments		
HSD Paed Team	Via staff meeting – HSD shared drive	Electronic			

CATEGORY 'C' POLICIES OR GUIDELINES ONLY CMG/Directorate Approval Process:			
CMG Approval Committee:	MSS		
Date of Approval:	17/11/23		
Copy of Approval Committee Minute to be submitted with request to upload into Policy and Guideline Library			

# **Glossary of terms**

1T - One tester 2T - Two tester

ABR - Auditory Brainstem Response

AC - Air conduction

ANSD - Auditory Neuropathy Spectrum Disorder

Apt - Apt

BAHI - Bone anchored hearing instrument

BC - Bone conduction
CI - Cochlear Implant
ENT - Ear, Nose and Throat
GA - General Anaesthetic
GP - General Practitioner

HSD - Hearing Services Department

Lt/Lft - Left

MPO - Maximum power output

NAIP - Nottingham Auditory Implant Programme
NHSP - New born Hearing Screening Programme

NOHL - Non-organic Hearing Loss

PCHI - Permanent Childhood Hearing Impairment

PN - Practice Navigator

RECD - Real ear to coupler difference

REM - Real ear measurement

Rt/Rgt - Right

SPL - Sound pressure level

SSPL - Saturation sound pressure level

TOD - Teacher of the Deaf

# Appendix 1 Fitting Instructions Checklist

Components of hearing aid (what goes where)

Mould Hygiene, attaching & detaching tubing from aid

Clearing out condensation (use of drying pot if needed

Rt and Lt markers

On/Off (tamperproof)

Vol control/programming switch if applicable

Changing batteries-Frequency, battery beeps, method, safe use of tamper-proofing

Batteries-Risk of batteries ingestion. Safe storage and disposal of new and old. Risk to vulnerable others e.g. siblings, visitors, peers – Issue button battery leaflet and ensure waiver signed if lockable battery drawer declined

Insertion/removal of aid/s/mould/s - Practice with parents

Use of stetoclip to check hearing aid working

How to check aids are working (Without stetoclip)

Checks if hearing aid/s doesn't work: Tubing/filters/battery-including correct orientation

**Data-logging** 

Use for all waking hours – hints and tips (child specific)

Repair sessions

Care kit – check and explain contents

#### **Leaflets/Information**

Apt Card

Replacement batteries leaflet-please explain method

Button battery warning leaflet

Administrator contact details

General care and maintenance of your hearing aid					