LISTEN UP 2024

Children's hearing services in Wales

A report by the National Deaf Children's Society

National Deaf Children's Society CYMRU

Paediatric audiology services in Wales

A report by the National Deaf Children's Society, updated March 2025

Introduction

This report presents the findings of our national survey of NHS paediatric audiology services (children's hearing services) in Wales, which was carried out in Winter 2023. This is the first time that such a data collection has been conducted by the National Deaf Children's Society in Wales, but there has been an annual survey and report published in England since 2017, which has proved helpful in identifying and tracking trends in paediatric audiology.

As well as allowing us to gather evidence to influence national policy debates, the English Listen Up report has proved to be a useful resource for audiology professionals to benchmark their own services and plan service improvement, and as evidence of need for business cases. We hope that this first Welsh *Listen Up* report will also be useful for discussions with other stakeholders, such as Health Board management and NHS leadership, by providing complementary up-to-date evidence about paediatric audiology service provision.

For the 2023 survey in Wales, questions were adapted from a fuller set of questions for the ongoing English *Listen Up* survey. We are grateful for the support of audiologists in Wales in introducing the *Listen Up* survey.

We sent the survey to the seven Health Boards that provide paediatric audiology services in Wales. As with previous *Listen Up* surveys in England, the National Deaf Children's Society made a Freedom of Information (FOI) request to ensure as many timely responses as possible. In total, five Health Boards responded to the survey before the deadline and were included in our analyses. One Health Board responded after the deadline and, where specified, we were able to use some of the additional date within the analysis. One Health Board did not respond. This gave a response rate of 71% of Welsh audiology services responding within the deadline (86% if including the service which responded just after the deadline).

The aim of individual surveys for each nation is to allow bespoke reporting, but also to allow some comparison within the UK, where appropriate. However, results and differences should be interpreted cautiously due to the different size and structure of each healthcare system and variability in response rates and quality of responses between services. Additionally, not every service answered every question – either because a question was not relevant to their individual service, because they couldn't obtain the data, or for an unspecified reason – meaning that the response rate figures, and thus subsequent findings for each question, have been interpreted with caution.

We are very grateful to all the audiology services that responded to the survey. Although the report reflects some concerning issues and variation across services, it highlights that most audiology departments in Wales are committed to sharing evidence, even when their own time and resources may be stretched.

Key findings

Overall, the responses to the survey highlight the opportunities and challenges paediatric audiology services in Wales are facing, some unique to Wales and some common across the UK. The main themes highlighted were:

- **Challenges**
    - **Long waiting times for first assessments** of children referred to audiology via routes other than from the Newborn Hearing Screening Wales (NBHSW) programme, apart from those identified as urgent. This presents a risk of delayed identification of deafness in children who are not identified at the time of the newborn screen.
    - **Long waiting times for hearing aid reviews**. This presents a risk of missing deterioration of hearing levels in deaf children who use hearing aids and out-of-date hearing aid settings, which could significantly impact on the quality of life and learning opportunities for deaf children.
    - **Significant waiting times for Ear, Nose and Throat (ENT) services.** This is likely to have a significant impact on outcomes for children with temporary and mixed deafness.
    - **Services reported an increased demand** for most types of appointments, such as referrals from school screening and complex assessments. In order to cope with this demand, they reported a need for introducing more testing facilities, providing specialist training to staff and implementation of a complex needs assessment pathway.
    - Paediatric audiologists in Wales are highly qualified. However, **services report some barriers to securing continual professional development** such as funding, study time and local availability.
    - Services described **variability** in how their **funding** is provided.
- **Opportunities**
    - In Wales, **23% of deaf children were reported to have been identified following referral from the NBHSW programme** during the survey period. The majority of deaf children in Wales (76%) are identified later in life through alternative routes to audiology services. We understand the current newborn hearing screening policy in Wales is under review, and we welcome the opportunity that brings to identify more children with permanent childhood hearing impairment (PCHI[1]) at an earlier age.
- **Good practice**
    - All responding services were able to fit hearing aids, where required, within 28 days.
    - Wales is the only country within the UK that has **embedded mandatory quality assurance** within paediatric audiology services.
    - All responding services engage in external peer review of auditory brainstem response (ABR) results, which is recommended practice to assure the quality and safety of the diagnostic ABR test, essential for identifying deafness in babies and children.
    - All services offered extended opening times and most services offered delivery in the community and telephone/video appointments.
    - **Paediatric audiology services routinely engage with other children's services**, such as local specialist education services, speech and language therapy and paediatrics, but referral criteria and ways of collaborative working can vary.
    - There was evidence of good practice in transition to adult services.

Description of key findings from the *Listen Up* survey Wales 2023

Diagnosis of PCHI

In Wales, **23% of deaf children were reported to have been identified following referral from the NBHSW programme** during the survey period. The majority of deaf children in Wales (76%) were identified later in life through alternative routes to audiology services.

[1] PCHI and/or 'deafness' in the context of this report is defined as a permanent hearing loss of any level (mild-profound), affecting one or both ears.

The newborn hearing screening policy in Wales differs to that of England, Scotland and Northern Ireland. Its aim is to identify significant bilateral deafness, of moderate severity or above. In Wales, if a well-baby has a clear response in one ear but no clear response in the other ear, families are offered the opportunity to opt in for follow-up by audiology. Referral for an audiology diagnostic assessment is automatically made for all babies with no clear response in both ears, and for high-risk babies with a clear response from one ear. Mild and unilateral hearing loss is identified by NBHSW, however these fall outside of the intended target condition and are typically identified later through referral from other routes, including school entry hearing screening.

A change to newborn hearing screening to a two ear clear policy could potentially lead to earlier identification of some deaf children who are currently identified via different referral routes. We welcome the opportunity that brings to increase the numbers of children with PCHI identified at an earlier age.

Temporary deafness

Children who have been fitted with hearing aids for temporary deafness represent 22% of the Audiology caseload. On average, children with glue ear are waiting up to 193 days before they are first seen by ENT and a minimum time of a year for grommet surgery. Services report that, as a result of the long waits for ENT and grommet surgery, they are fitting more children with hearing aids, which is good practice but has increased demand for hearing aid fittings and reviews. Only two services offered hearing aids to children waiting for grommet surgery. There were a total of 355 children fitted with hearing aids to manage temporary deafness and 343 children across Wales were referred to ENT over the past year.

Waiting times

None of the responding services that provided data met the 42-day target for routine referral to first assessment for babies and children not referred from the NBHSW programme. The maximum average waiting time for routine new referrals was 290 days. Given the majority of deaf children are identified outside of the newborn hearing screening programme there is a risk of delayed identification for those that are not identified by the screen and/or who have later onset of deafness.

Five services reported that, on average, they were able to fit hearing aids, where required, within 28 days, which shows evidence of good practice. However, four out of five services were unable to offer routine follow-up hearing aid reviews at the expected time, with the delay ranging from five to 189 days. Two out of five services were unable to offer appointments for new earmoulds within two working days.

Similarly, for children who did not use hearing aids but required further assessment and/or monitoring, routine follow-up appointments were delayed, all services reported routine follow-up appointments were delayed varying from 10 to 147 days over the planned review date.

Caseload and service variation

Of the five services that responded to the survey, the populations covered were very different and subsequently the caseloads of children with PCHI they supported were variable (ranging from a caseload of 28 to 471). This may pose a risk for those smaller services, particularly around the management of rarer conditions, such as auditory neuropathy spectrum disorder (ANSD), and in the assessment of children with complex needs or neurodiversity.

Services reported that continual professional development (CPD) is lacking in areas of complex assessment techniques and in higher training. Some services offered fewer options for assessing children with complex

needs, which may lead to regional variations in care.

Staffing and training

The majority of paediatric audiology staff were employed as Band 7 AfC, followed by Band 8 AfC and then Band 6 AfC.

Only one service reported vacant posts but three of the five services reported a reduction in the number or skill level of staff compared to last year. Two services reported being unable to recruit (despite only one reporting vacant posts). Three services cited staff leaving or reducing hours.

Quality assurance

All services in Wales are required to participate in the Welsh quality assurance peer review scheme. All services reported departmental audit against national quality standards, performing peer competency checks and collecting patient satisfaction data, which shows evidence of good practice.

All responding services, where appropriate, engage in external peer review of ABR results, which is recommended practice to assure the quality and safety of the diagnostic ABR test, essential for identifying deafness in babies and children.

Accessibility

For making appointments and contacting the service, all five services offered the option of communicating via email, text and telephone. However, there were few other options available to families who struggle to contact services via these. Only two services reported having BSL as a communication option. However, all services reported that both clinical and administrative staff receive regular updates for deaf awareness training.

All services offered extended opening times and most services offered delivery in the community and telephone/video appointments, which shows evidence of good practice.

Collaborative working

All five services that responded were able to refer children on their caseload to specialist education services, speech and language therapy (SLT) and to ENT for a medical opinion. All five services reported that they signpost families to the National Deaf Children's Society at diagnosis and whenever a family has an issue that the National Deaf Children's Society may be able to support.

Paediatric audiology services routinely engage with other children's services, such as local specialist education services, speech and language therapy and paediatrics, but referral criteria can vary.

Patient engagement

There was evidence of good practice in transition to adult services. All services provide information to young people and four out of the five services complete a formal transition process. Some services use more engaged approaches, such as joint appointments and young people having the opportunity to come into the clinic without a parent/carer if appropriate. However, this practice is not uniform across all sites.

The average rate of non-attendance/children not being brought to audiology appointments in Wales for the survey period is 14%, but there is evidence of services using strategies to try to prevent missed appointments. Rates for non-attendance put even more pressure on services trying to tackle backlogs in challenging circumstances and services should find ways of engaging services users and improving attendance rates.

Changes in demand

Services reported an increased demand for most types of appointments, including: increased referral rates for preschool children with language delay and additional needs; increased referrals from school entry hearing screening; children requiring more complex assessment, multiple appointments or ABR under sedation or general anaesthetic (GA); and for listening difficulties and sound sensitivity in the presence of normal hearing thresholds.

Services commented that the school entry hearing screen was reintroduced following Covid-19 and more stringent referral criteria are now in place. Services also reported that there is likely to be more demand following a potential increase in referrals from the NBHSW programme as a shift to adopt a bilateral clear response model is anticipated.

Services were also asked what would help them cope with changes in demand. Responses included introducing more testing facilities, providing specialist training to staff and implementation of a complex needs assessment pathway.

Tackling the issues reported

Services did provide examples of good practice to meet increases in demand and tackle some of the issues identified. However, services report that they need increased capacity in terms of staffing and facilities available as well as more funding for service resourcing to be able to cope with increasing demands on the services and tackle the issues reported. These are described more fully in section 10.

Funding and commissioning

There is variability across Wales in how audiology services are commissioned and funded. These differences are described more fully in section 11.

Section 2: Caseload

We asked children's audiology services about their caseloads as of 30 September 2023.

Number of births covered by the service per annum

We asked services how many babies were born in the area covered by their service in 2023 and five services provided information. This ranged from 994 to 7,000, reflecting the varying populations of each Health Board.

Year	Response rate	Range
2023	71% (5)	994 to 7000

Table 1: Number of births per year

The total number of births reported by six of the seven Health Boards was 20,241.

Age range

We asked services to indicate the age range their service covered. Five services covered 0 to 25 years of age and one said they covered 0 to 18. Data from the late submission was included in this analysis.

Total number of children with permanent childhood hearing impairments

We asked services to indicate the total number of children with PCHI in their caseload. The five Health Boards that responded to the survey reported a total of **1,403 children with PCHI** in their caseloads[2]. There was a large variation between services, ranging from 28 to 471.

Year	Response rate	Total	Range
2023	71% (5)	1,403	28 to 471

Table 2: Overall number of children with PCHI in caseload

Routes of referral for children with PCHI into audiology

We asked audiology services how children with PCHI were referred to their service between 1 October 2022 and 30 September 2023.

Five services reported a total of 92 children with permanent deafness who were newly identified during the qualifying period for this survey; 23% (n=21; range 0 to 7) of those were identified following referral from the NBHSW programme. 77% (n=71; range 0 to 24) of children with PCHI were identified via different referral routes, for example GP or school screening.

The newborn hearing screening policy in Wales differs to that of England, Scotland and Northern Ireland. Its aim is to identify significant bilateral deafness, of moderate severity or above. In Wales, if a well-baby has a clear response in one ear but no clear response in the other ear, families are asked to opt in for follow-up by audiology. Referral for an audiology diagnostic assessment is automatically made for all babies with no clear response in both ears, and for high-risk babies with a clear response from one ear.

A change to newborn hearing screening to a two ear clear policy could lead to earlier identification of some deaf children who are currently identified via different referral routes. We welcome the opportunity that brings to increase the numbers of children with PCHI identified at an earlier age.

Number of children with temporary deafness fitted with hearing aids

Services were asked whether they record the number of children with temporary deafness that are fitted with hearing aids[3], and, if they do, how many children in their caseload with temporary deafness are currently fitted with hearing aids.

Year	Response rate	Total	Range
2023	57% (4)	355	10 to 134

[2] One service clarified that the number they provided was only for children with hearing aids; they do not have data for the children with PCHI who are not aided. Data from the late submission was not included as they were unable to separate out their PCHI and temporary deafness caseloads.

[3] Temporary deafness was specified as including those with glue ear who are expected to 'grow out' of the condition before the age of 10 years. It also includes those children with glue ear who are not expected to 'grow out' of the condition before the age of 10 years, such as those born with a cleft palate, Down's syndrome, cystic fibrosis or primary ciliary dyskinesia. The question about children with temporary deafness who may have been fitted with hearing aids as an alternative to grommet surgery, or whilst they are waiting for grommet surgery, should include those who are expected to 'grow out' of the condition before the age of 10 years.

Table 3: Number of children with temporary deafness fitted with hearing aids

Four boards told us the number of children with temporary deafness who are fitted with hearing aids. A total of 355 was reported and there was significant variability between services, ranging from 10 to 134.

Number of children with ANSD

Services were asked to provide the total number of children with ANSD on their caseload.

There were 35 children with ANSD across the five boards' caseloads, ranging from 0 to 19; overall, the proportion of children with ANSD out of the total PCHI caseload was 3%, ranging from 0 to 4.

An estimate of total caseload and distribution of categories of children

An estimate of the distribution of children with PCHI and temporary deafness (aided) in the reported caseload was obtained by adding the numbers of children with the two categories of diagnoses we asked services about. We were able to do this only for the four boards that provided data on all the relevant questions. Nearly three quarters (72%) of the caseload is accounted for by PCHI (see Table 4 and Figure 1).

Year 2023	Response rate	Total	% Distribution	Range of %
Total	57% (4)	1287	100%	-
PCHI	57% (4)	932	72%	51% to 77%
Aided temporary deafness	57% (4)	355	28%	23% to 49%

Table 4: Number of children with PCHI and aided temporary deafness (based on four services)

There is high variability in caseloads and distributions between services. There are important caveats in this approach: services reported estimates, so we may not have accurate data; we only asked services about specific categories, so not all caseload is accounted for, e.g. non-aided children with temporary deafness; and conditions may overlap, e.g. ANSD.

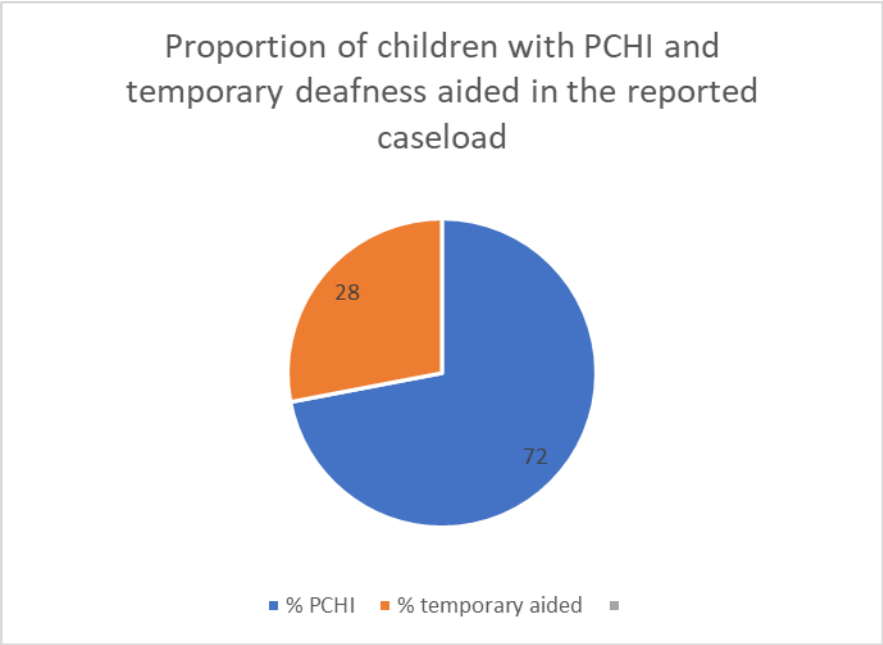

Figure 1. Proportion of children with PCHI and aided temporary deafness in the reported caseload (four services)

Over a quarter of the reported caseload is accounted for by children who have been aided for temporary deafness.

Referrals to ENT

We asked services to give the number of children they referred to ENT between 1 October 2022 and 30 September 2023. There were 343 children with glue ear referred to ENT in the past year, as reported by four boards, with variation across services ranging from 22 to 108 (69 on average).

Section 3: Clinical service provision

Assessment options for children with complex needs

We asked services about the assessment options for children with complex needs or those for whom it was difficult to obtain a definitive test result using standard behavioural methods. Five services provided a response.

Year	Specific clinics, for example, with longer clinic times or more experienced staff	Use of non-calibrated stimuli (for example, non-calibrated but band-pass filtered music)	Sedated ABR	ABR under GA	Other
2023	5	4	4	4	1

Table 5: Services provided for assessing the hearing of complex or difficult-to-test children as reported by services

All services that provided a response to this question (five) reported that they offered specific clinics for this group with longer clinic times and/or more experienced staff. The other methods were preferred by four services in various combinations. The one service that selected "Other" specified that they use auditory steady-state response (ASSR) testing and otoacoustic emissions (OAE). While there is variability in the services provided, there is evidence of good practice in considering alternative options to standard behavioural methods.

In addition, we asked what specific training and protocols services have for each one of those assessment options. Responses centred around availability of trained and experienced staff and the staff skills-mix, following national and local protocols, having timing flexibility and working collaboratively with other departments. Specifically, responses included:

- **Protocols for specific clinics –** services reported:
    - using more experienced senior staff with higher level paediatric training; examples included staff members who had completed master's level training and complex needs training; and clinics run by two Band 7 audiologists
    - use of additional staff, e.g joint clinics with a paediatrician or principal audiologist
    - local standard operating procedures (SOPs) and guidelines
    - offering flexible appointment times
    - one board had no specific training or protocol.
- **Use of non-calibrated stimuli**:
    - one board said their protocols are currently under development as part of their complex needs assessment pathway
    - one reported they use band-pass filtered music and a range of non-calibrated stimuli to condition children prior to moving to calibrated stimuli
    - one respondent said they use non-calibrated stimuli only if required and use them alongside calibrated sounds.

- **Sedated ABR**: all boards that reported offering sedated ABR list completion of a five-day evoked-response audiometry course as requirement. Some boards added that the tests are performed in accordance with national guidance and that they engage in peer review of the results.
- **ABR under GA**: one board added that they will coordinate an ABR if the child is having GA for another reason and we are aware this is common practice across the UK.

Services for temporary conductive hearing loss

We asked services about the options in their current management pathway for temporary conductive hearing loss (multiple options could be selected). All five services that participated in the survey provided a response.

Year	Air conduction hearing aids	Bone conduction hearing aids	Grommets	Otovent	Watch and wait	Other
2023	5	5	5	5	5	3

Table 6: Support available to children with temporary conductive hearing loss

All services listed all options, which is evidence of good practice. One specified that they use bone conduction hearing aids only for specific reasons such as recurrent ear infections or anatomy. Three services specified that they do not provide Otovents on prescription but parents are advised to purchase this themselves.

Two services reported that they offer hearing aids to children waiting for grommet surgery.

Provision of hearing aids

We asked services whether they provide hearing aids for the following groups of children and the reasons if they do not.

Year	Temporary conductive hearing loss	Unilateral hearing loss	Mild hearing loss	Moderate hearing loss	ANSD	Other
2023	5	5	5	5	4	1

Table 7: Groups provided with hearing technology

All five services offer hearing aids for temporary conductive hearing loss, unilateral hearing loss, and mild and moderate hearing loss; four offer hearing aids for ANSD; and one reported in the “Other” option that they offer combination of devices for hearing loss and tinnitus.

Additional/non-standard paediatric services

We asked services about additional or non-standard paediatric services they offer and, if they don’t offer them, whether they refer children elsewhere for this service. Respondents could select multiple options.

Year 2023	Wax removal performed by audiologists	Tinnitus assessment/ management	Hyperacusis assessment/ management	Fitting and support for implantable devices other than Cis, e.g. BAHAs, middle ear implants	Paediatric vestibular service	Assessment/ management of listening difficulties in the absence of peripheral hearing loss (APD)	Other
Offer	3	5	5	2	1	3	2
Refer	2	0	0	3	4	2	0

Table 8: Number of additional paediatric services offered by services

Five services said they provide services for tinnitus and hyperacusis, three for wax removal, three for management of listening difficulties in the absence of peripheral hearing loss, two for implantable devices and one for vestibular services. All the services that reported not providing a service said they would refer elsewhere. One of the two respondents that selected "Other" specified that for tinnitus, hyperacusis and listening difficulties said that they would do the assessment but refer to an audiovestibular physician or paediatrician for management. The other specified that for paediatric vestibular assessment they have different pathways based on age: they will see children over 14 if caloric testing is required; those over 10 years old for all other vestibular assessments; and young children are referred to a specialist site.

Section 4: Accessibility

Flexibility for appointments

We asked services about flexible options for appointments that they offer and, if they don't, whether they would like to offer them and what is stopping them from offering it. Respondents could select multiple options.

Year 2023	Extra appointments in school holidays	Extended opening times (before 9am and/or after 5pm)	Saturday appointments	Deliver some services in schools	Deliver some services in other community venues	Telephone or video appointments	Other
Offer	3	5	2	3	4	4	0
Would like to	1	0	1	0	1	0	1

Table 9: Number of services offering flexible appointments

All options were reported by at least some services. All five services used extended opening times. The second common options were delivery in the community and telephone/video appointments. The least common option (reported by two services) was Saturday appointments. Generally, the services that did not use some flexible options for appointments reported that they would like to, but this was not the case with all services or options. For example, one service that did not use remote appointments did not intend to do so; they explained that very few appointments could be completed remotely. Reasons for not offering flexible options were staffing levels, staff working patterns, facilities and room capacity (room capacity onsite, outpatients closed at weekends and lack of suitable community spaces).

Communication options

We asked services about the communication options they offered to contact their service.

Year 2023	Email	Text message	Web form	Online diary/booking system	Telephone	BSL	Other
N services	5	5	1	0	5	2	2

Table 10: Number of communication options offered by services

All five services who responded use email, text and telephone; two use BSL and one uses a web form. An online diary/booking system is not used at all. One of the services that selected "Other" reported using both English and Welsh, and the second service that selected "Other" said they use face-to-face bookings and enquiries.

Service response time for each communication option

We asked services about the response times (in days) for each of the communication options, both target and actual, and whether there is anything preventing them from reaching their target. Numbers in brackets denote the number of services that provided this information.

Year 2023	Email	Text message	Web form	Online diary/booking system	Telephone	BSL	Other
Target: mean response time	1(5)	1(5)	1(1)	N/A(0)	1(4)	1(2)	N/A(2)
Actual: mean response time	1.6(5)	1.6(5)	2(1)	N/A(0)	1.8(4)	3.5(2)	N/A(2)

Table 11: Mean response times for each communication option (number of services providing data in brackets)

All services that used each option reported one day as response target for all. The average actual response time ranged from 1.6 days for email and text (five services using the options) to 3.5 for BSL (two services using the option).

Two services reported that they were unable to meet their response targets. One service reported a three-day response time for email, text, telephone and BSL, and another reported two days for email, text, web form and telephone, and four days for BSL. Reasons for not reaching response targets were provided by one service only and included clinical demands and lack of staffing.

Deaf awareness training

The survey asked what deaf awareness training staff have. Numbers in brackets denote the number of services that provided this information.

Year 2023	One-off training	Regular updates
Deaf awareness training for Audiologists	0 (5)	5 (5)
Deaf awareness training for Reception/administrative staff	0 (5)	5 (5)

Table 12: Deaf awareness training

All services reported that both clinical and administrative staff receive regular updates for deaf awareness training.

Section 5: Waiting times

The waiting times from referral from the newborn hearing screen in Wales to first audiology diagnostic is monitored and reported by the NBHSW programme[4]. The most recent statistical report, covering the time period 1 April 2021 to 31 March 2022, states that 91.6% of babies referred for audiology assessment from NBHSW completed the assessment process within three months, meeting the service standard. We understand that data covering the period 1 April 2022 to 31 March 2023 should be available soon.

For this survey, we asked services to report their **average** waiting times (in days) from referral via other routes to the first audiology assessment (for example GP, school screen or health visitor) in the period 1 October 2022 to 30 September 2023.

Urgent new referrals for diagnostic hearing assessment (outside the NBHSW pathway)

The waiting time target for urgent new referrals for hearing assessment for infants and older children in Wales is 28 days[5]. Five services provided information and all but one of these recorded average waiting times at or below 28 days; waiting times ranged from 16 to 34 days.

Routine new referrals for first assessment (outside the NBHSW pathway)

The waiting time target for routine referrals to first hearing assessment for infants and older children referred via routes outside the NBHSW pathway is 42 days[7]. The average waits reported by the four services who provided data on these waiting times were all significantly outside the target, ranging from 126 to 290 days.[6]

Decision to fit hearing aids to time fitted for PCHI

In Wales all referrals for hearing aids are expected to be offered an appointment for fitting within four weeks (28 days) of decision to aid, with the exception of mild, unilateral and temporary conductive hearing losses, where appointments can be offered within six weeks (42 days) of decision to aid[7].

[4] Annual statistical reports - Public Health Wales. https://phw.nhs.wales/services-and-teams/screening/newborn-hearing-screening-wales/programme-reports/annual-statistical-reports/ (Accessed 26 February 2025)
[5] GIG Cymru/NHS Wales. Welsh Health Circular (23 November 2016). gov.wales/sites/default/files/publications/2019-08/quality-standards-for-childrens-hearing-services-2016.pdf (Accessed 22 September 2024).
[6] The target is for maximum waits not average wait, so a service with an average wait of 150 days may not have missed the target for every child within that service
[7] GIG Cymru/NHS Wales. *Quality Standards for Children's Hearing Services: The Assessment and Audit Tool*. gov.wales/sites/default/files/publications/2019-10/quality-standards-for-childrens-hearing-services-the-assessment-and-audit-tool.pdf (accessed 22 September 2024).

Year	Response rate	Maximum average waiting time (days)	Mean average waiting time (days)
2023	71% (5)	28	26

Table 13: Waiting times (in days) from decision to fit hearing aids to time fitted for PCHI

Once a decision to aid is made, all services that responded told us they fit hearing aids within 28 days (average 26 days), which highlights good practice in the management of deaf children.

Routine hearing aid review

Services were asked about waiting times for routine hearing aid review, which was explained as waiting beyond the expected/agreed date, i.e. a child seen for their three-month follow up within three months would be zero days, a child seen at four months for a three-month follow up would be 30 calendar days.

Year	Response rate	Maximum average waiting time (days)	Minimum average waiting time (days)
2023	71% (5)	189	5

Table 14: Waiting times (in days) for routine follow up hearing aid review

All but one (four out of five) services reported they were struggling to review children already fitted with hearing aids at the time that was planned and agreed with the family, with significant variability in delay ranging from five to 189 days over the planned review date.

New earmoulds (working days from time notified of need)

Appointments for replacement earmoulds should be within two working days of request in Wales.

Year	Response rate	Maximum average waiting time (days)	Mean average waiting time (days)
2023	71% (5)	3	2

Table 15: Waiting times (in days) for new earmoulds

Appointments for new earmoulds were offered within two days by three of the five services (two days on average).

Hearing aid repairs (working days from time notified of need)

Appointments for hearing aid repair should be within two working days of request in Wales.

Year	Response rate	Maximum average waiting time (days)	Mean average waiting time (days)
2023	71% (5)	3	2

Table 16: Waiting times (in days) for hearing aid repairs

Hearing aids repairs were offered within two days by four of the five services (two days on average).

Routine follow-up hearing tests for children who are not aided

Services were asked about waiting times for routine follow-up hearing tests for children who are **not** aided (including watchful waits for glue ear and those who require regular review). This was explained as waiting beyond the expected/agreed date, i.e. a child seen for their three-month follow up within three months would be zero days, a child seen at four months for a three-month follow up would be 30 calendar days.

Year	Response rate	Maximum average waiting time (days)	Minimum average waiting time (days)
2023	57% (4)	147	10

Table 17: Waiting times (in days) for routine follow-up hearing tests for children who are not aided

Four services gave a response to the question. All reported routine follow-up appointments were delayed for children who did not use hearing aids but required further assessment and/or monitoring. There was significant variability ranging from 10 to 147 days over the planned review date.

Referrals to ENT

We asked services about waiting times for referrals from their service to be seen initially by ENT. In Wales, the target for an initial appointment with ENT following referral is eight weeks (56 days)[8]. We appreciate that ENT waiting times are outside of the remit of audiology services.

Year	Response rate	Maximum average waiting time (days)	Minimum average waiting time (days)
2023	60%(3)	193	84

Table 18: Waiting times (in days) for referrals to ENT

Three services reported their referral times to ENT services; they all missed the 56 day initial appointment target, with an average waiting ranging from 84 to 193 days[9] .

Grommet surgery for glue ear

We asked services about waiting times for grommet surgery for glue ear. In Wales, 95% of patients should start treatment within 26 weeks (182 days) of referral but 100% within 36 weeks (252 days)[10].

Year	Response rate	Maximum average waiting time (days)	Minimum average waiting time (days)
2023	60%(3)	365	365

Table 19: Waiting times (in days) for grommet surgery for glue ear

All three services that responded to the question about waiting times for grommet surgery reported 365 days, which shows neither the 26 nor 36-week targets are being met.

[8] GIG Cymru/NHS Wales. *Quality Standards for Children's Hearing Services: The Assessment and Audit Tool*. gov.wales/sites/default/files/publications/2019-10/quality-standards-for-childrens-hearing-services-the-assessment-and-audit-tool.pdf (accessed 22 September 2024).
[9] One service gave a range between 10 and 365 days so the mean was used in calculating the average waiting times.
[10] GIG Cymru/NHS Wales. *Quality Standards for Children's Hearing Services: The Assessment and Audit Tool*. gov.wales/sites/default/files/publications/2019-10/quality-standards-for-childrens-hearing-services-the-assessment-and-audit-tool.pdf (accessed 22 September 2024).

Section 6: Quality assurance and improvement

The survey asked about which methods services use for quality assurance and improvement. National paediatric audiology quality standards exist in Wales.

Quality assurance and improvement methods

The most popular methods were all internal forms of quality assurance, with all five boards reporting participating in audits against national quality standards and local guidelines; peer competency checks and patient/service user surveys/focus groups (Figure 2).

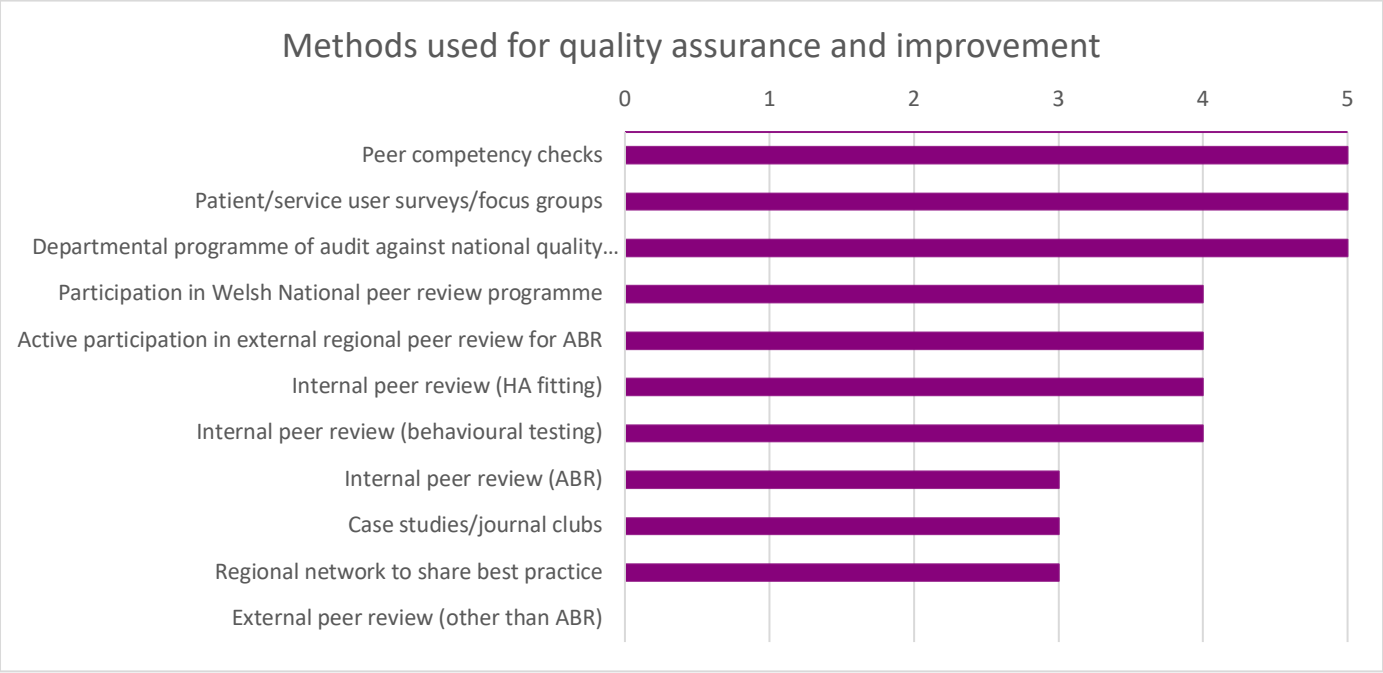

Figure 2. Quality assurance and improvement methods used by services

The second most popular were participation in the Welsh National peer review programme, internal peer review (behavioural testing), internal peer review (HA fitting) and active participation in external regional peer review for ABR. No service reported the use of external peer review outside of ABR.

In addition to this, some services reported:

- internal peer review (ABR)
- case studies/journal clubs
- regional/national networks to share best practice
- weekly and monthly clinical team meetings and monthly multidisciplinary team meetings.

Biennial external quality assurance audits should be undertaken for every Paediatric Audiology service, as per Welsh Government mandate. The results of these are shared with each individual Health Board, and an all Wales summary report is published by Public Health Wales. Wales is the only country within the UK that has embedded quality assurance within paediatric audiology.

The services that reported active participation to external ABR peer review also reported that they submit regular traces of all hearing losses and a sample of discharge cases. There were 14 ABR testers reported across the four services that responded to the question, ranging from two to five per service, and all were reported as participating in peer review; the one service that did not report participation in external ABR peer review does not offer an ABR service.

When asked about how they act on ABR external review findings, services reported the following:

- findings discussed at service meetings and audiologists meeting; “Lessons Learned” process in place
- patient-related action: if clinically indicated, patient is booked back in for further testing or management plan is amended and parents advised
- professional action: clinician to reflect on practice; any variation from guidance is reported to regional coordinator for the NBHSW programme and the audiologist concerned.

Section 7: Staffing and training

We asked about staff working in paediatric audiology services as of 30 September 2023. Services were asked to report on clinical staffing levels (including the AfC grades of staff), staff vacancies, any observed reduction in skill, reasons for that reduction and steps taken to address such challenges. We asked for staffing numbers expressed as a fraction of a full working week. So, one full-time role and a part-time role of three days in a five-day week would be 1.6 FTE.

Number of permanent staff

The total number of FTE posts reported by services was 31.6.

Number of clinical staff at all AfC levels

The graph that follows shows the number of staff at each AfC band working in the five paediatric audiology services responding to the 2023 survey.

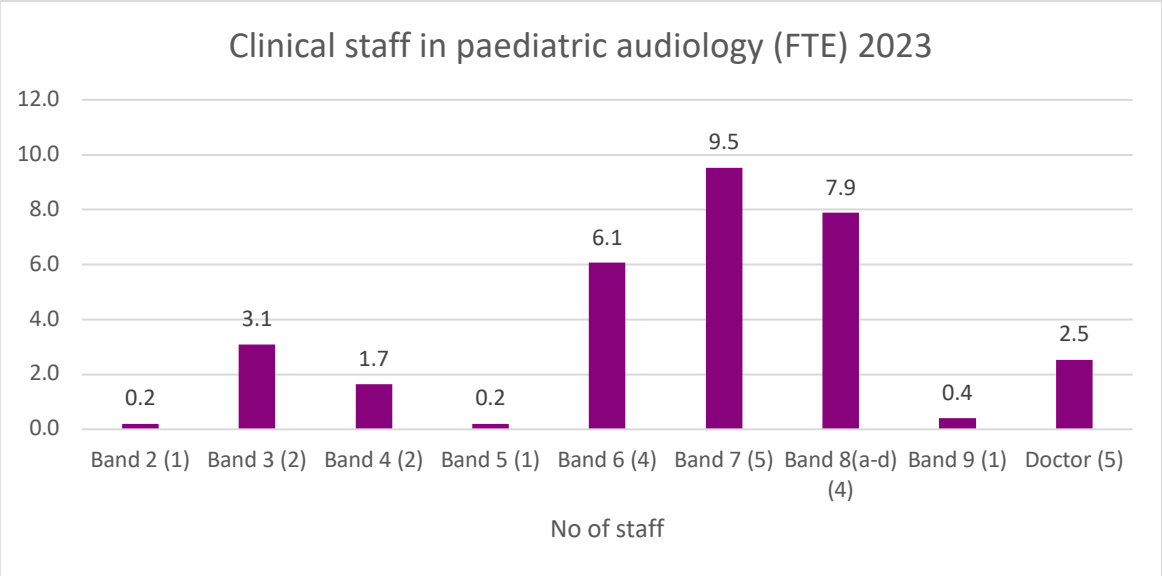

Figure 3: Number (FTE) of clinical staff working in paediatric audiology, by AfC band

The numbers in brackets under each band in Figure 3 show the number of services that provided an answer. The majority of paediatric audiology staff were employed as Band 7 AfC, followed by Band 8 AfC and then Band 6 AfC. Lower band staff typically assist more senior experienced staff with clinical work and would typically not be expected to lead clinics, but one service reported Band 5 AfC staff being able to lead routine paediatric clinics for school age children.

Vacant posts

Year	Number of staff across services	Number of services
2023	1.2	1

Table 20: Number of vacant posts

Only one service reported vacant posts for Band 7 (0.8 FTE) and doctor (0.4 FTE). No responses to this question were received from the other services.

Reduction in the number or skill level of staff compared to last year

Three services reported reduction in staff/skill level in the past year.

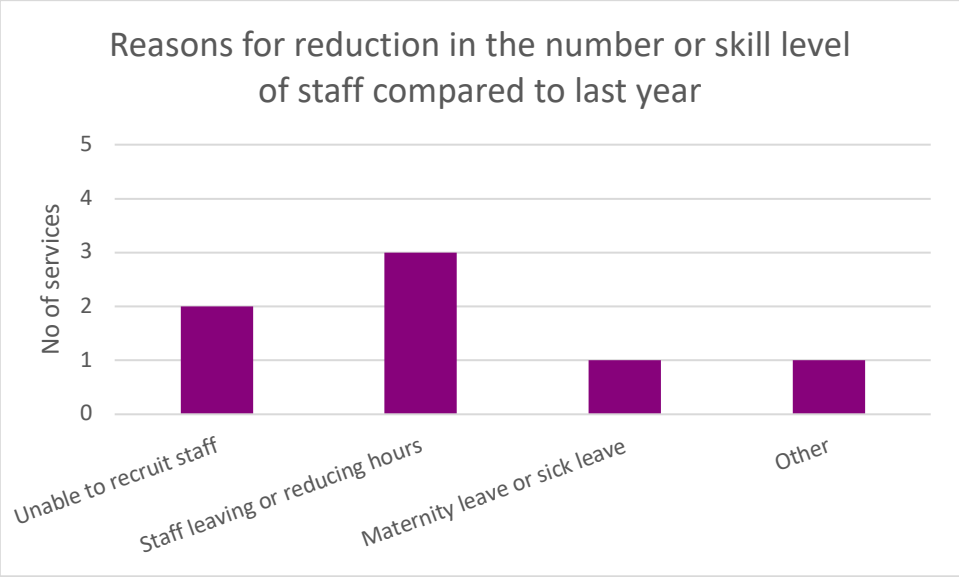

Figure 4. Reasons for the reduction in the number or skill level of staff compared to last year

Two services identified being unable to recruit staff as the reason; three identified staff leaving or reducing hours (with one citing retirement); and one service identified maternity/sick leave. Other comments identified wider challenges, such as general recruitment delays at health board level, funding, Covid-19, restructuring and catchment area changes.

Reported actions include staff taking on additional hours, active risk monitoring, demand monitoring and plans to train for Band 5 (national shortage) via a part time degree route.

Continuing professional development (CPD)

We asked services questions in relation to CPD in their teams:

- CPD that is required to meet development needs and stay competent:
    - Three services reported that they follow the CPD requirements set by the professional bodies regulating staff, e.g. the Registration Council for Clinical Physiologists, the Academy of Healthcare Science and the Health and Care Professions Council.
    - One service reported internal yearly CPD requirements.
    - One service reported that they provide specific training for clinics as needed, e.g. ABR, VRA and paediatric hearing aid training.

- CPD that staff accessed. The following activities were mentioned by four services:
    - external training, e.g. ABR course Harrogate, ABR peer review training/exam to become a peer reviewer, VRA assistant training, HTS, Effective Amplification in Infants and Children and external training "sharing the news"
    - conferences (Tinnitus UK conference, BSA Scientific meeting)
    - internal training, e.g. in-house training for "sharing the news" and away day for all paediatric staff
    - governance/audit days and paediatric development meetings every other month to discuss service developments
    - clinical reviews.
- CPD that is lacking or difficult to access: Four services mentioned:
    - training to lead two-tester clinics, specifically VRA testing, AEP testing (aside from ABR), e.g. CERA, ASSR, access to STP and HTS (not an accredited site, therefore staff need to resign from post as unable to hold post open), auditory processing disorder and auditory training.
- CPD needs that aren't provided for. One service reported:
    - supporting children with additional learning needs and their families – testing and rehab adaptions.
- Barriers to accessing CPD. Three services mentioned:
    - cost, funding, travel involved/no local provision, study time required and being unable to release staff due to high service demand.

One service quoted Section 12 exemption and did not respond to this section about CPD at all.

Roles and skill mix

We asked services to indicate what roles the different members of the team can have at each grade in paediatrics. Respondents could select all that apply.

AFC band	Lead newborn diagnostic assessment and/or immediate follow up	Lead routine assessments	Assist routine assessments	Lead routine assessments	Provide routine testing only for ENT clinics (e.g. no history-taking)	Lead assessment of children with complex needs	Assist assessment of children with complex needs	Lead pre-school and/or complex needs hearing aid clinics	Lead school age hearing aid clinics	Lead additional/ advanced clinics, e.g. for tinnitus, hyperacusis or auditory processing disorder
		<4 years	<4 years	school age						
2	0	0	1	0	0	0	1	0	0	0
3	0	0	2	0	0	0	1	0	0	0
4	0	0	3	0	0	0	2	0	0	0
5	0	0	2	1	4	0	1	0	0	0
6	0	2	3	4	5	1	4	1	4	0
7	3	5	4	5	3	4	4	4	5	2
8a	4	4	3	4	3	4	4	4	4	3
8b	2	2	1	2	1	2	2	2	2	1
8c	2	3	2	3	2	2	3	2	2	3
8d	2	2	1	2	1	2	2	2	2	2
9	2	2	1	2	1	2	2	2	2	2
Doctor	0	1	1	1	1	1	1	0	0	0

Table 21: Roles performed by staff at different grades (numbers reported by role and grade)

Section 8: Collaboration

Referrals to local specialist education services

We asked services about referrals to the local specialist education service for deaf children in their area (services could select multiple options). We asked whether they were able to refer aided (fitted with hearing aids) and non-aided children separately. For each group we asked about children with a severe/profound hearing loss, moderate or mild sensorineural hearing loss, permanent or long-term conductive hearing loss, temporary/fluctuating conductive hearing loss, unilateral hearing loss and ANSD, also providing an "Other" option. We recognise that education referral criteria are outside the remit of audiology services.

Figure 5 presents the number of children in each group (aided and non-aided) across categories and a comparison between the two groups of children.

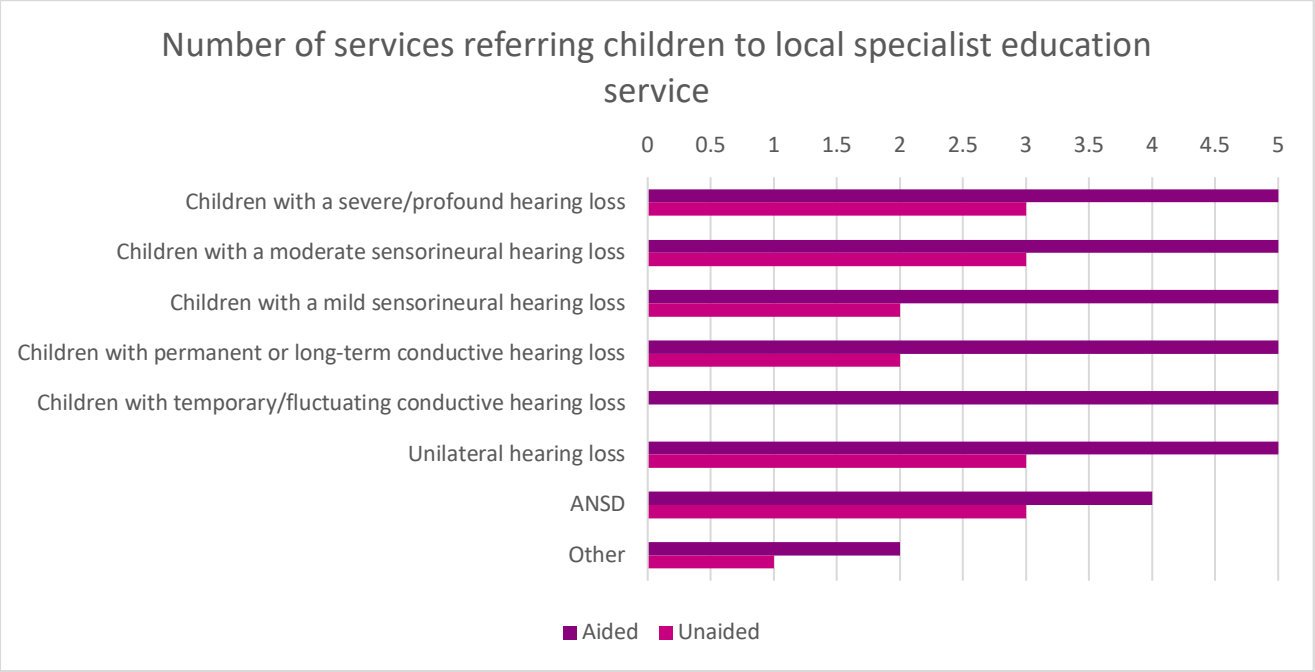

Figure 5. Aided and unaided groups of children that hearing services refer

Aided children with any hearing loss are referred to local specialist education services by all audiology departments with the exception of aided children with ANSD, who are referred by four of the five responding services. Two services also mentioned APD, in the "Other" response, one specifying that they do that if children are struggling in school, to try assistive listening devices.

Children with hearing loss who are not fitted with hearing aids are not referred to local specialist education services by all audiology services. In particular, children with temporary or fluctuating hearing loss are not referred to education services by any responding audiology department, while only two services reported that they refer children with mild sensorineural hearing loss and permanent or long-term conductive hearing. One service selected "Other" and specified that they refer all children when they report listening difficulties, while for children with temporary/fluctuating conductive hearing loss, they would not do so unless there are specific concerns.

Referrals to non-audiology or external professionals

We asked if services were able to routinely refer directly to non-audiology or external professionals, such as SLT, ENT, family support/social work departments, child protection, clinical psychology/CAMHS, Deaf CAMHS, paediatrician/developmental assessment service, the National Deaf Children's Society or other third sector/community organisations.

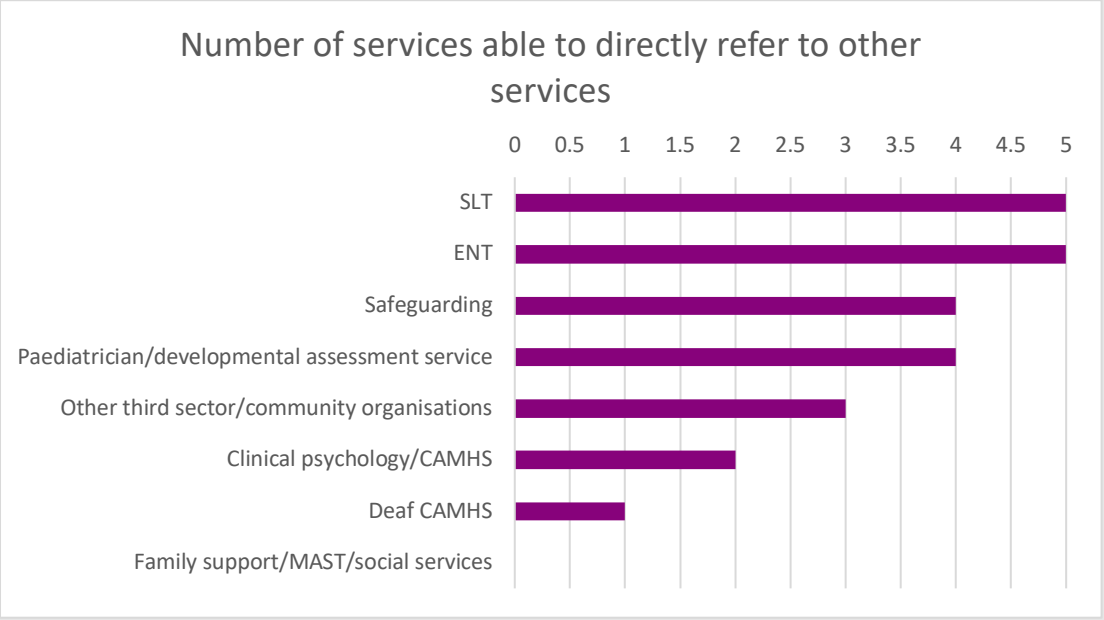

Figure 6. Referrals to non-audiology/external professionals

All services told us they can refer to ENT and SLT, four services can refer to safeguarding and a paediatrician, three services can refer to the third sector, two services can refer to clinical psychology/CAMHS and one service can refer to Deaf CAMHS. No service reported that they can refer to family support/social services.

Services were asked which children they refer. Their responses were:

- SLT referrals:
    - two services refer to SLT all preschool children with PCHI
    - three services refer to SLT if child assessed to have speech and language delay or need for therapy.
- ENT referrals:
    - All services reported that referrals are based on clinical criteria.
- Safeguarding referrals:
    - All four services that refer to safeguarding reported they do so when there are safeguarding concerns.
- Paediatrician/developmental assessment referrals:
    - Three of the four services that refer to a paediatrician do so when this is assessed as clinically appropriate and refer via the medical lead.
- Other third sector/community organisations referrals:
    - No service provided an explanation.
- Clinical psychology/CAMHS referral:
    - The two services that refer to CAMHS do so via liaison with the medical lead if needed or through a health visitor/school nurse.
    - One service explained that they are not able to refer children directly to mental health teams, as all referrals are required to come from the child's GP.
- Deaf CAMHS:
    - The one service that refers to Deaf CAMHS does so via liaison with the medical lead/local CAMHS.
    - Another service, which did not report ability to refer directly, added that they were unsure about their answer.
- Family support/Multi Agency Support Team/social services:

- One service explained they cannot refer directly, but can request via Audio Vestibular Medicine (AVM).

No service specified which other third sector/community organisations they refer to or for which children they do so.

Signposting to the National Deaf Children's Society

We asked services about the categories of children with hearing loss and their families that they routinely signpost to the National Deaf Children's Society. We further asked to specify whether they signpost to the organisation or provide people with information about it.

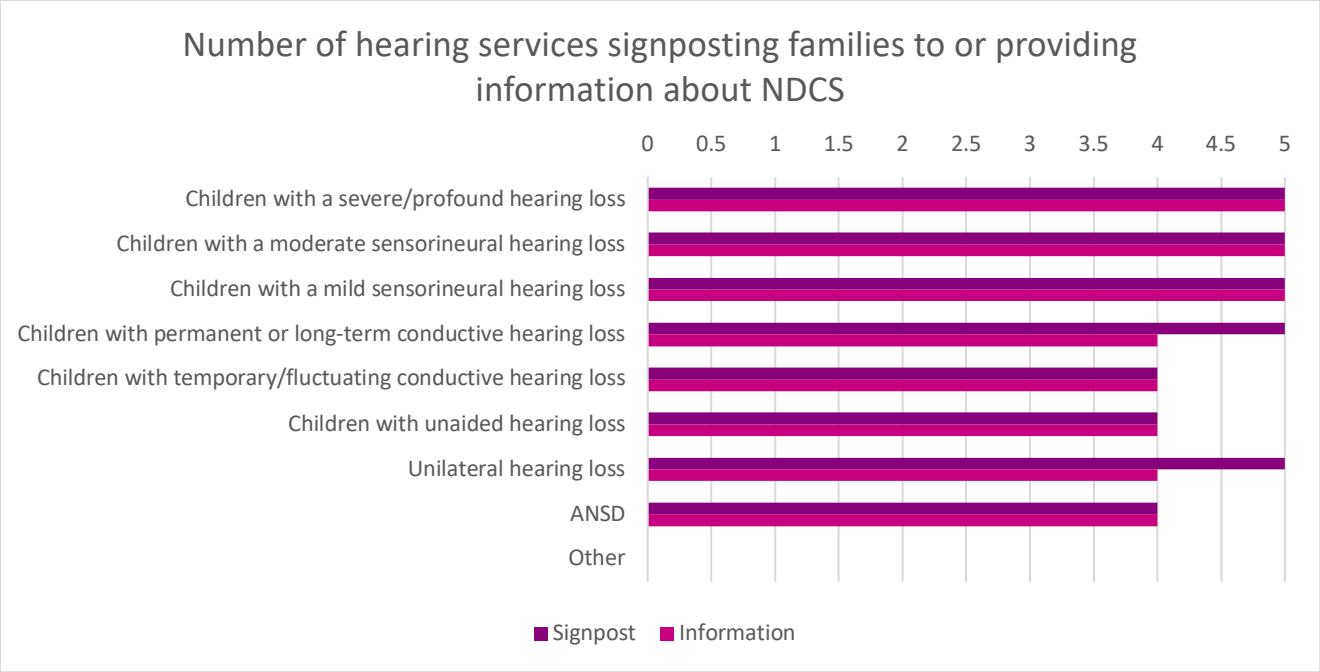

Figure 7. Signposting to the National Deaf Children's Society

Three services reported that they signpost all categories of children to the National Deaf Children's Society; one reported that they do not do so for ANSD; and one that they do not do so for temporary conductive and unaided hearing loss.

The picture was similar in relation to routinely providing the National Deaf Children's Society information, with the exception of one service that does not provide the National Deaf Children's Society information for conductive (permanent or temporary), unaided or unilateral hearing loss.

All five services reported that they signpost families to the National Deaf Children's Society at diagnosis and whenever a family has an issue that the National Deaf Children's Society may be able to support

Children's Hearing Services Working Groups (CHSWGs)

We asked services whether they have a CHSWG in their area. All five services reported that they do have one in their area. We also asked about representation in their group:

- All five had paediatric audiology, SLT and a specialist education service representative.
- Three had a parent representative.
- Two had an NBHSW representative and a trust senior management team/Health Board manager representative.

- Three had an adult audiology service/transition team representative.
- No service had young deaf person representation.
- One service also added that they had a teacher of the multi-sensory impaired, medical lead, paediatric audiology representative and a National Deaf Children's Society representative.

Section 9: Patient engagement

These questions were related to how services strove to engage positively with children and young people and their families.

Transition to adult services

Services were asked about how they prepare young people for transition to adult services. They were offered nine options, including "Other" and could select all that apply. Figure 8 displays the number of services that responded to the question and specified which options they use.

All five services stated that they provide information on the adult service for young people; four complete a transition assessment/process; three, in different configurations, offer the following:

- start talking about the transition process from age 14
- hold joint appointments with both paediatric and adult audiologist present (virtual or face to face)
- offer an appointment with the adult service before discharging the young person from the children's service
- offer young people the opportunity to come into the clinic without parent/carer, if appropriate.

One service reported they hold transition event or clinic for young people, while no service offered school visits.

No service offered all eight options: the number of options offered per service ranged from three to six. Of the two services that selected "Other", one specified that the age of transition in their services starts from 15, and the other explained that the paediatric and adult audiologist is the same person.

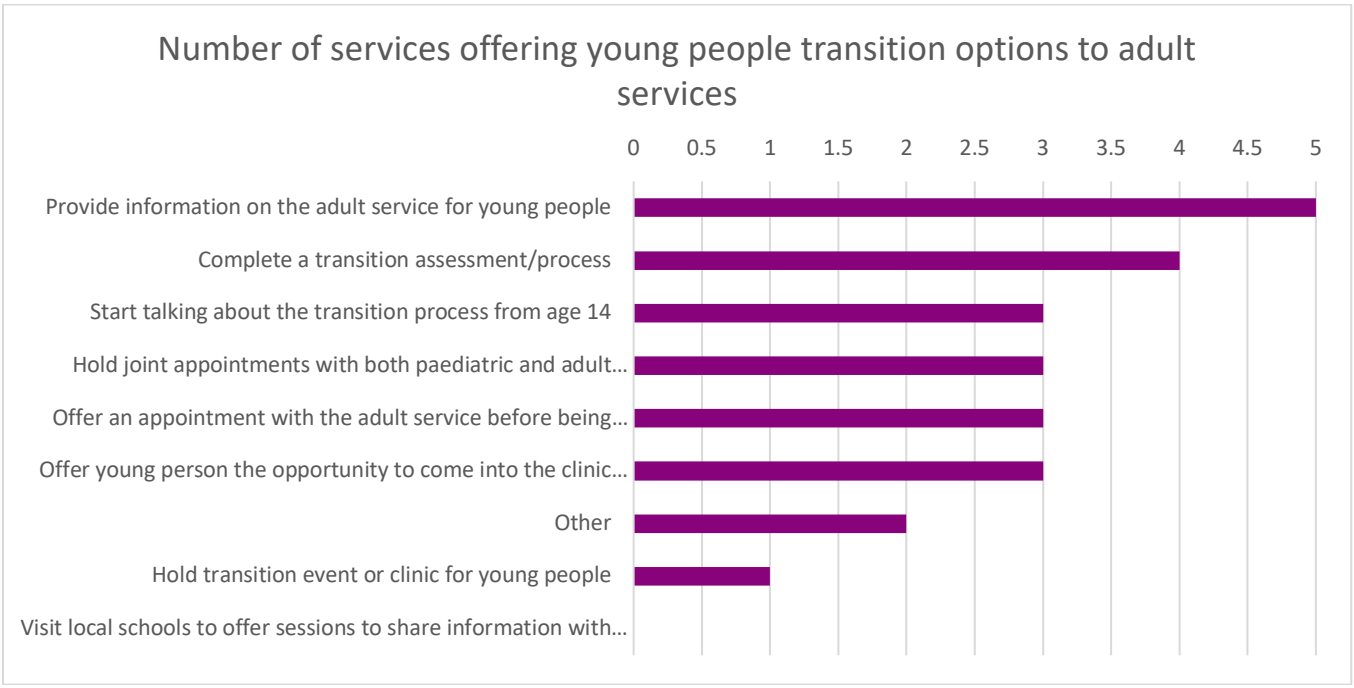

Figure 8. How paediatric hearing services prepare young people for transition to adult services

There is evidence of good practice, with some services using more engaged approaches, such as joint appointments and young people having the opportunity to come into the clinic without a parent/carer, if appropriate. However, this practice is not uniform across all sites.

Missed appointments

We asked services how many appointments they offered in the period 1 October 2022 to 30 September 2023 and the proportion of them that were classed as "Was Not Brought" (WNB) or "Did Not Attend" (DNA).

Year 2023	Total number
Number of all appointment types for children	28,589
Number of appointments classed as WNB or DNA[11]	4,050
Percentage WNB/DNA	14%

Table 22: Total number of appointments and appointments classed as WNB or DNA across five services.

All five services provided data in this section. A total of 28,589 appointments for children were offered in the year covered in this survey.

The rate of WNB/DNA reported across services was 14%, which is higher than the NHS Wales figure of 7% for all outpatient appointments (2019[12]). However, non-attendance tends to be higher for children and young people, as they need to be brought by adults. The figure is comparable to WNB/DNA rates in the other nations.

High rates for non-attendance put even more pressure on services trying to tackle backlogs in challenging circumstances and can indicate a need for services to find ways of engaging service users and improving attendance rates.

Strategies for missed appointments

We asked services what strategies they used to prevent missed appointments.

Strategy	No of services
Partial booking	3
Text reminders	2
Phone reminders	4
Other	4

Table 23: Strategies for missed appointments

Four of the services reported they use phone reminders, while three use partial booking and two use text reminders. One service reported that they arrange appointments with the family at a time convenient for

[11] Services were only asked about the percentage of appointments classed as WNB/DNA. Consequently, the number of WNB/DNA appointments was calculated from that information.

[12] StatsWales. Outpatient attendances by organisation and site. statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Hospital-Activity/Outpatient-Activity/outpatient-attendances-by-organisation-site (accessed 22 September 2024).

them, and another service uses validation letters. One said they could not employ any measures due to lack of administrative staff.

Section 10: Issues affecting service provision

Changes in demand

We asked services whether there any areas where demand has changed significantly in the last year. There was a list of seven areas to consider and an "Other" option was also provided. All were multiple-choice responses.

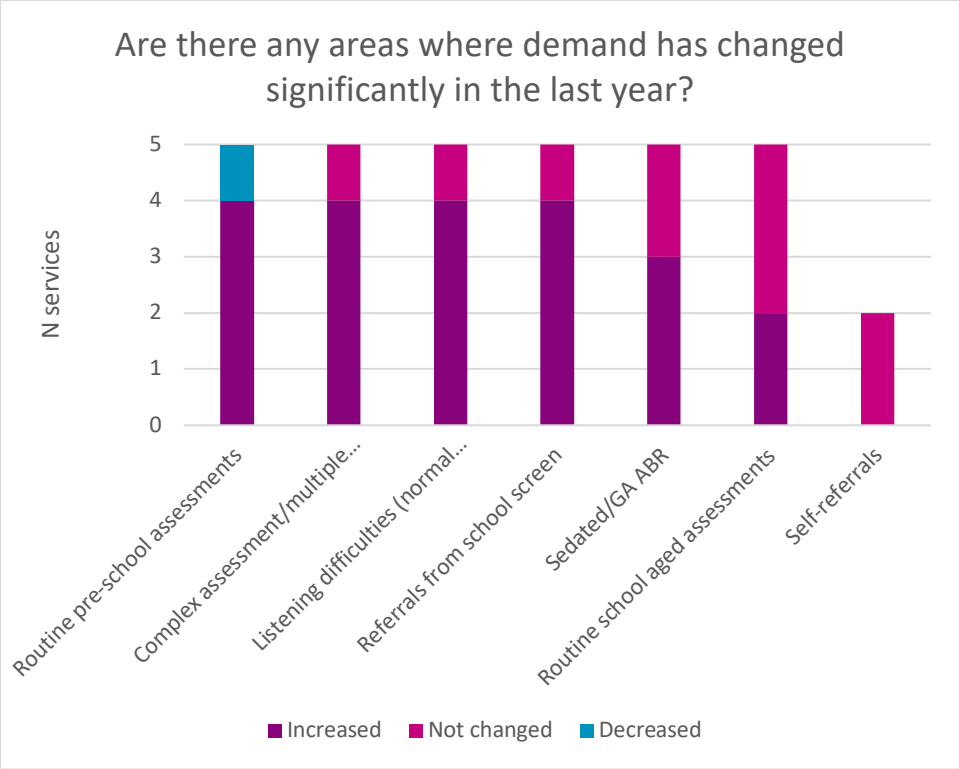

Figure 9. Service areas that have seen changes in demand

Services reported increases in most areas: four out of five saw increases in routine preschool assessments, complex assessment/multiple appointments, listening difficulties (normal hearing) and referrals from school screening. Routine school assessments did not change for three out of five services. One service that selected "Other" reported increased demand for fitting hearing aids for temporary hearing loss due to the long wait to see ENT and the long wait for intervention.

Drivers for change in demand

Services were also asked about causes of changes in demand. In some cases, demand data may not have been available but was anecdotally reported by services.

The following points were raised:

- Preschool assessment:
  - increasing concerns regarding speech and language development
  - more referrals for children with complex needs.
- Routine school aged assessments:

    - increased referrals due to the reintroduction of the School Entry Hearing Screen following Covid-19.
- Complex assessment/multiple appointments:
    - more awareness of the links with hearing loss and additional needs.
- Sedated ABR
    - being unable to obtain behavioural results (linked to seeing more children with complex needs).
- Listening difficulties (under normal hearing):
    - Post-Covid-19 reintroduction to classroom/playground environment.
- Referrals from school screening:
    - more children not developmentally able to complete screening
    - school entry hearing screening reintroduced and post-Covid-19 catch-up.
    - updated local standard operating procedures implementing more stringent referral criteria from school health nurses.

Coping with changes in demand

Services were also asked what would help them cope with changes in demand. Not all services provided a response. Responses included the following: introducing more testing facilities, more staff, more staff trained in paediatrics/electrophysiology/ABR and the implementation of a complex needs assessment pathway.

Areas of good practice or innovation

Services were asked about any good practice or an innovative solution that they would like to share with others. Three services shared their experiences. Responses included: early support work for preschool children – collaborative working with schools and teachers of the deaf service; school hearing screening for children with complex needs in special schools; using Covid-19 recovery funds; wax management service; and joint clinics with ENT.

Current and anticipated challenges

Services were asked about challenges they are experiencing now and the ones they anticipate in the future. All five services provided responses, indicating current challenges include:

- long waiting times and backlogs
- not enough staff with the right skills and experience
- failing ABR equipment
- limited facilities for testing under-fours
- due to the long waits for ENT and grommet surgery, services are fitting more children with hearing aids, which has increased the time required for hearing aid reviews.

Anticipated challenges included:

- financial – service resourcing, including capital equipment (for equipment that's too old)
- increased demand without increases in staffing
- potential increase in referrals from NBHSW if the programme adopts a bilateral clear response model
- possible introduction of reportable waiting times to the Welsh Government.

Section 11: Funding and commissioning

Services were asked how their funding is provided and were offered five options, of which they could select all that apply:

- as a block contract within ENT services
- as a block contract within wider children's services
- as a block contract for children's audiology services
- as a block contract for both child and adult audiology services
- as an individual tariff per child/young person.

Their responses indicated:

- Funding for three services is provided as a block contract for both child and adult audiology services.
- One service has no contracting in place regarding funding for audiology.
- One service obtains Health board funding from Welsh Government and NHS funding to provide the service (they did not specify the kind of contract).

Conclusion

This report does present evidence of some opportunities and challenges likely to affect children and young people requiring timely access to good quality audiology services in Wales. Challenges include long waiting times for routine first assessments, hearing aid reviews, ENT services and meeting the changes in demand. Paediatric audiologists report some barriers to securing continual professional development such as funding, study time and local availability. There is variability in how funding for paediatric audiology services is provided.

Wales is implementing a review of the newborn hearing screening policy and we welcome the opportunity that brings to increase the numbers of children with PCHI identified at an earlier age.

There is evidence of good practice such as, fitting hearing aids in a timely manner, embedded quality assurance, flexibility in appointment times, collaboration and transition to adult services.

The National Deaf Children's Society is very grateful to audiology services for sharing these insights, particularly in the light of all the challenges that audiology professionals and services face in the current economic climate affecting the NHS. This evidence will be instrumental in helping us to influence national policy affecting the areas of concern in audiology.

If you have any questions about this report or our work, please contact professionals@ndcs.org.uk.