

**GUIDELINE FOR REVIEW AND REPORTING OF LATER IDENTIFIED
PERMANENT CHILDHOOD HEARING IMPAIRMENT (PCHI) – Joint Derby and
Burton.**

Reference no.: CG-PAEDS/4032/22

1. Introduction

The New-born Hearing Screening Programme (NHSP) was established across England in 2006. The majority of children with permanent childhood hearing impairment (PCHI) are expected to be identified by this screening programme. However, the prevalence of PCHI increases with age and no screening programme is infallible. Therefore, each programme provider, and the associated paediatric audiology service, are required to have a process in place to review children with PCHI who are identified outside of the New-born Hearing Screening Programme.

National guidance suggests a named individual who is preferably a senior clinician in paediatric audiology be designated to coordinate the review and raise any issues identified. This lead will liaise closely with the local NHSP team, the paediatric audiology service manager, and the national NHSE/I NHSP team as required.

2. Aim and Purpose

The review is an integral component of quality control and governance to improve and maintain performance, safety, and confidence in the programme. The review process may identify a weakness or gap in the screening programme or diagnostic audiology pathway.

3. Definitions, Keywords

ANNB: Antenatal and New-born Screening Board

ABR: Auditory Brainstem Response

CID: Confidential Identity number generated by the “Smart for Hearing” national database

Moderate or Greater Hearing Loss: ≥ 40 dB HL averaged across 0.5-4.0 kHz.

NHS: National Health Service

NHSP: New-born Hearing Screening Programme

OAE: Otoacoustic Emissions

PCHI: Permanent Childhood Hearing Impairment

PHE: Public Health England

QA: Quality Assurance

S4H: “Smart for Hearing” PHE national new-born hearing screening database

SAT: Senior Audiology Team

SDE: South Derbyshire New-born Hearing Screening Programme

SIAF: Screening Incident Assessment Form

SQAS: Screening Quality Assurance Service

STE: East Staffordshire New-born Hearing Screening Programme

UHDB: University Hospitals of Derby and Burton NHS Foundation Trust

4. Which children should be reviewed?

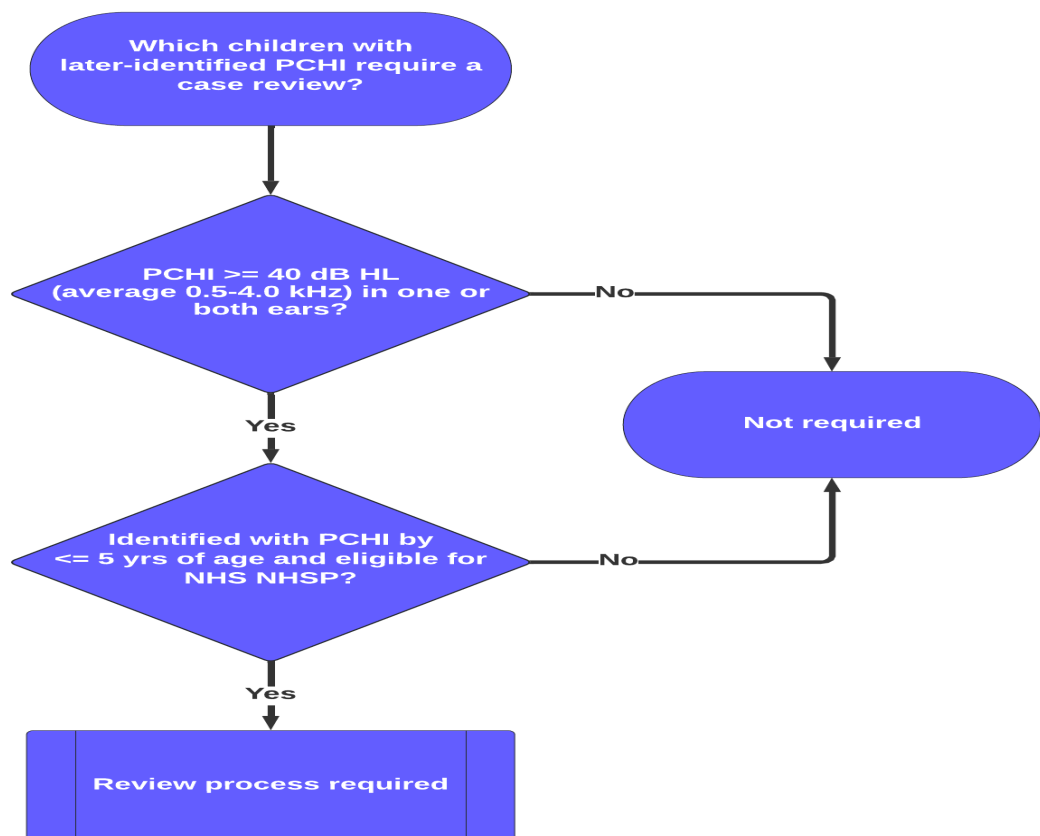


Figure 1: Deciding when to conduct a case review (NHSE/I, 2021).

5. Review process:

The review process will examine the screening episode, the pathway to audiology, the early audiology assessment for children referred from screen, and the targeted follow-up of children with risk factors. The NHSP Local Manager and NHSP Team Leader, the Paediatric Audiologist who diagnosed the child, the Senior Audiology Team, and the Head of Paediatric Audiology will have input in the case review.

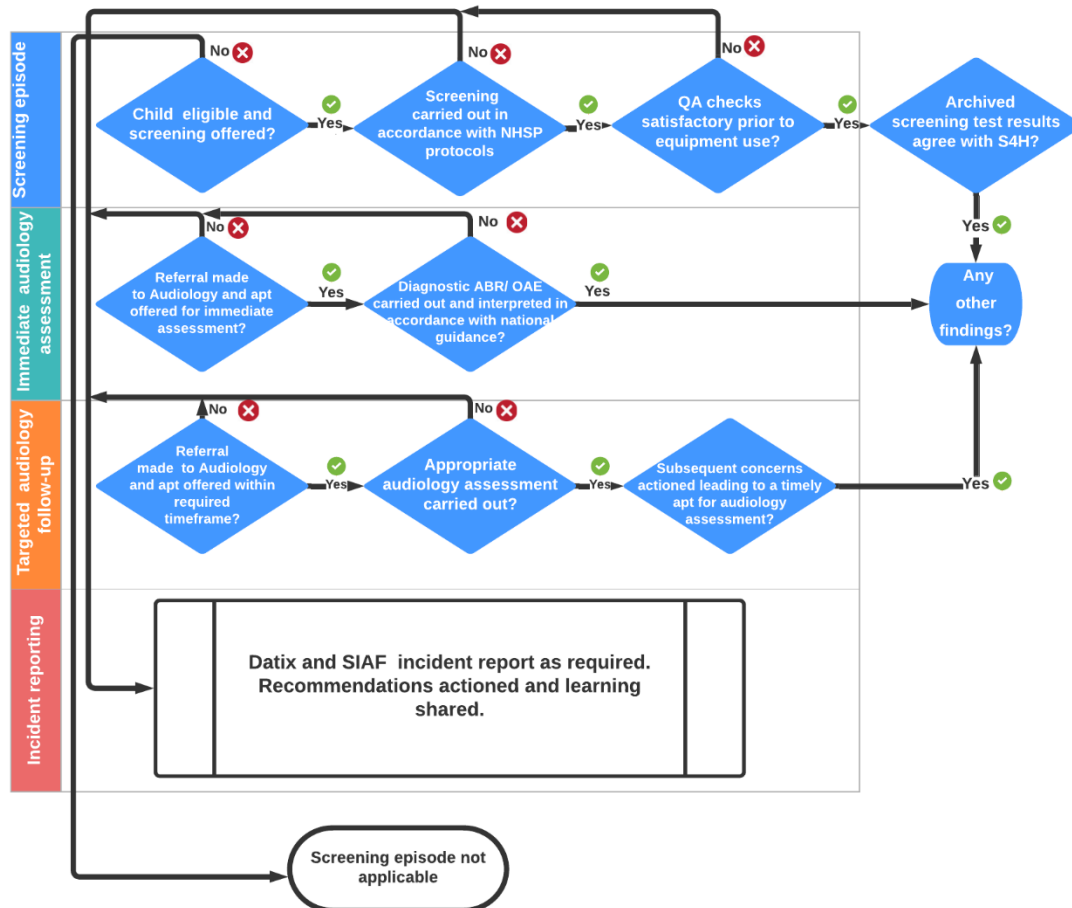


Figure 2: Review process pathway

5.1 Screening episode.

To be completed by the NHSP Local Manager (section 2 of the Review Form, in appendix A section 12, of this document:

- 5.1.1 Was the child eligible and was screening offered?
- 5.1.2 Was screening carried out in accordance with NHSP protocols?
- 5.1.3 Were the QA checks satisfactory prior to equipment use?
- 5.1.4 Do the archived screening test results agree with the results recorded on the national IT system?

5.2 Immediate audiology assessment following new-born hearing screening (for neonates referred by the screen).

To be completed by the NHSP Team Leader with oversight from the Head of Paediatric Audiology (part of section 2 of the Review Form, in appendix A section 12, of this document). Input from the NHSP Local Manager will be required for 5.2.1:

5.2.1 Was a referral made to audiology and an appointment offered?

5.2.2 Was the diagnostic (ABR and/or OAE) assessment carried out and interpreted in accordance with national guidance (NHSP British Society of Audiology (BSA) guidance)

5.3 Targeted audiology follow-up (neonates with a nationally recognised risk factor).

The NHSP Local Manager to complete 5.3.1. The NHSP Team Leader to complete 5.3.2, and 5.3.3. with oversight from the Head of Paediatric Audiology:

5.3.1 Was a referral made to audiology and an appointment offered?

5.3.2 Was an appropriate audiology assessment carried out?

5.3.3 Were any subsequent concerns, particularly for children who passed the new-born hearing screen, actioned leading to a timely referral and appointment for audiology assessment?

5.4 Review procedure

5.4.1 Locate and update the national IT system S4H record. Share the record, if not already in the host programme, update the audiology results including any changes to the GP and address.

5.4.2 Team Leader for NHSP, with the assistance of the NHSP Local Manager, to complete the review form in appendix A following instructions on the form using the S4H confidential ID number as the identifier. The NHSP Team Leader will seek input the Paediatric Audiologist who diagnosed the child, the Senior Audiology Team, and the Head of Paediatric Audiology.

5.4.3 The NHSP Team Leader to identify those cases that are notifiable and email the completed form in password protected format to the programme centre.

5.4.4 Case review to be kept with Child's record in AuditBase with a copy in the 'Later-Identified' electronic file in the shared Audiology Drive.

6 Which later-identified children should be reported to the national programme centre?

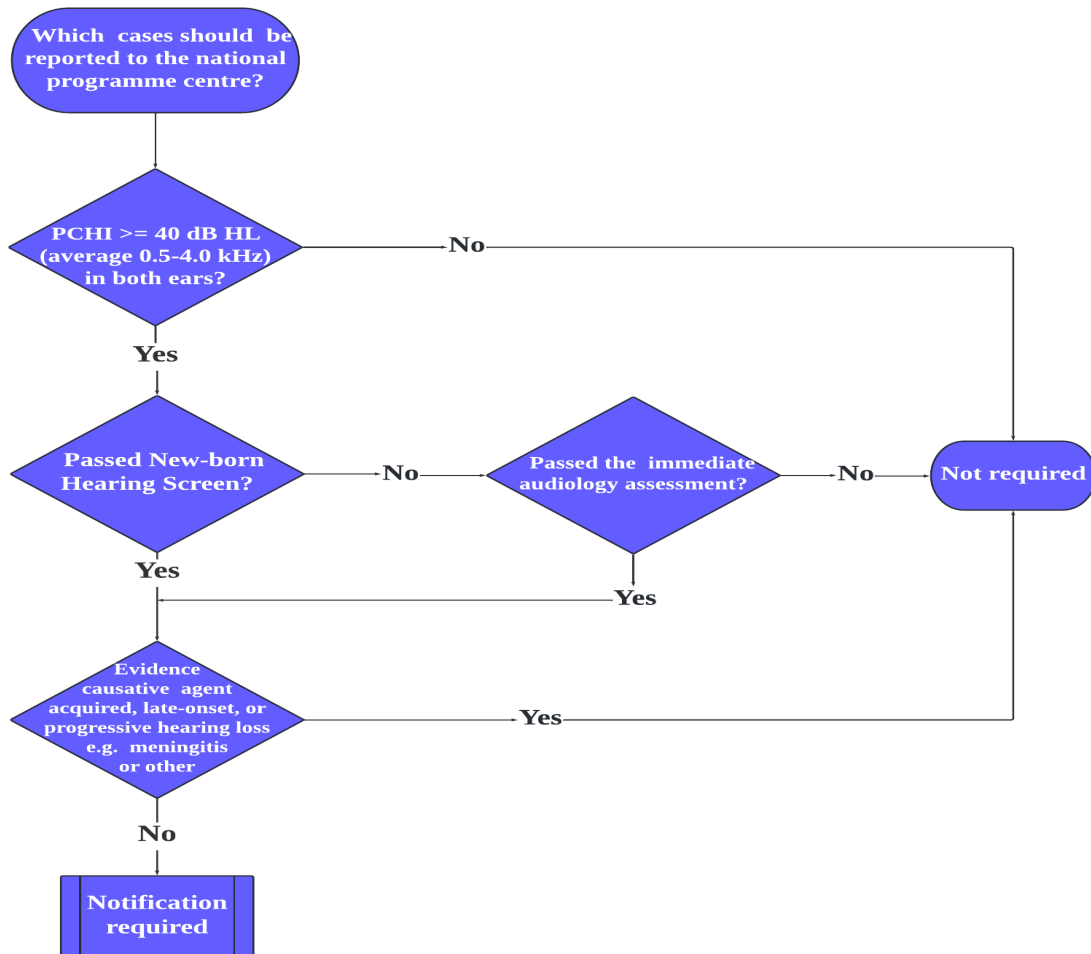


Figure 3: Deciding when to notify the programme centre of a later-identified case (NHSE/I, 2021).

If notification is required the NHSP Local Manager or NHSP Team Leader will email the completed form as a password protected Word document to the [NHSE/I screening helpdesk](#) (Note: do not use individual identifying data or the NHS number as a file name or within the form).

7 Incident reporting

It is not the aim of the review, nor is it possible, to retrospectively state whether the hearing screen gave a 'correct' result. However, if the review identifies cases where the correct protocols were not followed, referrals not made, or appointments offered, local incident reporting and review process should be followed (NHSE/I, 2021).

The NHSP Local Manager is responsible for identifying if a NHSE/I Screening Incident Assessment Form (SI AF) requires completing and document in-line with the NHS Screening Programme Framework (PHE, 2017) and communicate with the Screening Quality Assurance Service (SQAS).

8 Key Roles and Responsibilities (top down)

The Head of Paediatric Audiology and the Senior Paediatric Audiology Team to discuss the findings of the review for later-identified cases of PCHI at Senior Audiology Team meetings, agree recommendations that come to light from the review, disseminate learning with the team, implement service improvements, incident reporting, categorising severity, and escalating as required. Recommendations should be actioned promptly for programme governance, improvement, confidence, and safety.

The Head of Paediatric Audiology is responsible for oversight of numbers of cases and emerging trends.

The NHSP Team Leader is responsible for identifying if the child needs a case review, notifying the NHSP Local Manager, ensuring S4H is updated appropriately, and completing the review process. The NHSP Team Leader is responsible for identifying if the case review requires notifying / sharing with the NHSE/I Screening Programme Centre and submitting the review documentation. In cases where a review is required, the NHSP Local Manager is responsible for investigating the screening episode and completing sections 1 and 2 of the later-identified form (appendix A). The NHSP Team Leader will complete section 3 (appendix A) of the case review in liaison with the Paediatric Audiologist who diagnosed the child and the Senior Audiology Team.

It is the responsibility of the Paediatric Audiologist who diagnosed the child to notify the NHSP Team Leader of the case and update S4H.

9 Monitoring Compliance and Effectiveness

The Senior Audiology Team are responsible for auditing and measuring compliance.

Monitoring Requirement:	All children with permanent hearing loss should be assigned to the PCHI register in the Patient Management System (AuditBase) by the Paediatric Audiologist who diagnosed the child. Paediatric Audiologists diagnosing
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	a child with later-identified hearing loss should notify the NHSP Team Leader who will carry out a case review where required, notify the programme centre where appropriate, and share with SAT and Head of Paediatric Audiology.
Monitoring Method:	Comparison of local AuditBase PCHI register with the national S4H PCHI register. Run search with date of birth and date of PCHI confirmation to identify later-identified cases. Identify those children who required a case review at diagnosis and cross-check against local database.
Report Prepared by:	NHSP Team Leader
Monitoring report presented to:	Head of Paediatric Audiology
Frequency of Report	Every 2 years

10 References

Managing Safety Incidents in NHS Screening Programmes. (2017). PHE

Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/672737/Managing_safety_incidents_in_National_screening_programmes.pdf

Accessed: 20/02/2022

Public Health England. NHS Screening Programmes (2016). Guidance on applying duty of candour and disclosing audit results.

Available at:

<https://www.gov.uk/government/publications/nhs-screening-programmes-duty-of-candour>

Accessed 03/03/2022

NHS public health functions agreement 2019-20. Service specification No.20. NHS Newborn Hearing Screening Programme. NHS England and NHS Improvement.

Available at:

<https://www.england.nhs.uk/wp-content/uploads/2017/04/Service-Specification-No.20-NHS-Newborn-Hearing.pdf>

Accessed 15/03/2022

Review and report of case of later identified PCHI. PHE, 2021.

Available at:

<https://www.gov.uk/government/publications/newborn-hearing-screening-programme-nhsp-operational-guidance/9-audiology#review-and-report-of-case-of-later-identified-pchi>

Accessed 15/03/2022

11 Documentation Controls

Reference Number CG/Paeds/4032/22	Version: 1 1.0.0		Status Final	
Version / Amendment History	Version	Date	Author	Reason
	1	18/07/2022	Daniel Langer	Not applicable – new document.
Intended Recipients: NHSP Local Manager, NHSP Team Leader, and Paediatric Audiology Team.				
Training and Dissemination: NHSP and Paediatric Audiology Team Meetings and through departmental electronic guidelines, SOPs and Policy documents.				
Development of Guideline: Job Title: UHDB NHSP Team Leader				
Consultation with: NHSP Local Manager, Audiology Senior Management Team and Head of Department.				
Linked Documents: NHSE/I NHSP National Programme Centre, Review of case of PCHI not identified by the newborn hearing screen.				
Keywords: NHSP (New-born Hearing Screening Programme)				
Business Unit Sign Off			Group:Paediatric BU Date:April 2022	
Divisional Sign Off			Group:Women and Children’s Date:April 2022	
Date of Upload			July 2022	
Review Date			August 2024	
Contact for Review			Daniel Langer, NHSP Team Leader for Derby and Burton	

12 Appendices

Appendix A: Review form to be completed if child meets criteria

1. Details of case for review

1.1 General information

Date review completed	
Clinician name	

Child details	
Patient Confidential id (from national IT system) ¹	
Screening protocol (NICU/Well baby)	

Provider and reporting clinician details	
NHSP programme name	
Name	
Designation	
Address 1	
Address 2	
Address 3	
Telephone	
E mail: please print clearly	

Most recent hearing status			
	Right ear	Left ear	Better ear*
PCHI of any degree	Yes/No/NK	Yes/No/NK	Yes/No/NK
Average hearing level (0.5,1,2,4 kHz)			

* use this column if sound field results only are available

KEY: NK=not known; NA= not applicable

¹ Please include this for all records. Programme team staff are unable to view NHS numbers in the national IT system.

Audiological and management information: Please confirm that the following information (where applicable) has been entered in the national IT system	
Appointment details and test results for all audiological assessment appointments	Yes/NA
Most recent assessment summary shows degree, type and category of hearing loss for each ear	Yes/NA
Key dates entered:	
date of confirmation of hearing loss	Yes/NA
date aid offered, agreed	Yes/NA
date referral to ToD	Yes/NA
amplification and cochlear implant details (if applicable)	Yes/NA

2 Screening episode

Screening information and verification of results

Please enter the screening test results under well baby or NICU protocol as appropriate.

If the screening test results are clear response (CR) please verify the result against the downloaded screening data file. You can do this as follows:

1. For results uploaded via SEDQ the local manager can access the full screening data (including waveforms) via the screening page in the national IT system in conjunction with the intermediate software for the relevant screening equipment.
2. You may find that for screening tests carried out in the early years of the programme the screening data has not been uploaded into the national IT. In that case you will need to ask the local manager for the provider that carried out the newborn hearing screen to access the screening data from the locally stored archive and verify the results.

Note: you will also need to ask the screening manager to verify that all equipment QA checks had been carried out appropriately.

Well baby protocol						
	Date	NHSP programme	Right ear result	Left ear result	Results verified? (if result=CR only)	Equipment QA checks OK?
AOAE 1					Yes/No/NA	Yes/No/NA
AOAE 2					Yes/No/NA	Yes/No/NA

AABR					Yes/No/NA	Yes/No/NA
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NICU protocol						
	Date	NHSP programme	Right ear result	Left ear result	Results verified? (if result=CR only)	Equipment QA checks OK?
AOAE					Yes/No/NA	Yes/No/NA
AABR					Yes/No/NA	Yes/No/NA

Final screening outcome (mark which ever applies)			
Clear response - no follow up	<input type="checkbox"/>	Incomplete - equipment malfunction	<input type="checkbox"/>
Clear response - targeted follow up**	<input type="checkbox"/>	Incomplete - appointments missed	<input type="checkbox"/>
No clear response - unilateral refer	<input type="checkbox"/>	Incomplete - decline	<input type="checkbox"/>
No clear response - bilateral refer	<input type="checkbox"/>	Incomplete - withdrew consent	<input type="checkbox"/>
Incomplete - screening contraindicated	<input type="checkbox"/>	Incomplete - out of coverage	<input type="checkbox"/>
Incomplete - baby unsettled	<input type="checkbox"/>	Incomplete - lost contact	<input type="checkbox"/>
Incomplete - equipment not available	<input type="checkbox"/>	Incomplete - lack of capacity	<input type="checkbox"/>

**Reason(s) for targeted follow up (if applicable)	
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If the screening resulted in an immediate refer please summarise the results of the initial diagnostic assessments and attach copies of the diagnostic test results
<i>Enlarge box as required</i>

If the screening resulted in a referral for targeted follow up please summarise the results of the targeted follow up

Enlarge box as required

Summary and conclusion re screening episode	
Eligible for NHSP screen i.e. born in England or moved into England by age 3m	Yes/No/NA
If eligible, screen offered	Yes/No/NA
If eligible, screen completed	Yes/No/NA
If screen pass, archived results cross checked and verified as being in agreement with results in national IT system	Yes/No/NA
The screening episode was satisfactory i.e. screening was offered and carried out within the required timescale, the equipment had undergone satisfactory QA checks, the number of screening tests/attempts did not exceed the permitted number, the results were correctly documented in the national IT system and the correct screening outcome was set. If NO give details and lessons learned below and report as an incident.	Yes/No/NA
<i>Enlarge box as required</i>	

Summary and conclusion re immediate follow up (if screen refer)	
Referral to audiology within appropriate time scale	Yes/No/NA
Appointed in audiology within appropriate time scale	Yes/No/NA
Attended audiology within appropriate time scale	Yes/No/NA
If non-attendance were appropriate efforts made to secure attendance and relevant professionals informed	Yes/No/NA
If attended have the results of the audiological assessment been reviewed	Yes/No/NA
The screen referral was initiated and carried out and the diagnostic test results have been reviewed and are satisfactory. If NO give details and lessons learned below and report as an incident.	Yes/No/NA

Enlarge box as required

Summary and conclusion re targeted follow up (if screen outcome=clear response-targeted follow up)

Referral to audiology within appropriate time scale	Yes/No/NA
Appointed in audiology within appropriate time scale	Yes/No/NA
Attended audiology within appropriate time scale	Yes/No/NA
If non-attendance were appropriate efforts made to secure attendance and relevant professionals informed	Yes/No/NA
If attended have the results of the audiological assessment been reviewed	Yes/No/NA
The targeted follow up referral was initiated and carried out and the diagnostic test results have been reviewed and are satisfactory. If NO give details and lessons learned below and report as an incident.	Yes/No/NA

Enlarge box as required

3 Referral pathway that led to identification of hearing loss

Referral details. Please complete the following details **in respect of the referral that led to the identification of hearing loss.**

Referral date	
Referral source e.g. HV, parent,	
Referral reason	

Clinical history and timelines Please summarise the timelines from referral to identification. Include any relevant clinical history including risk factors, aetiological investigations and parental opinion about the duration/onset of the hearing loss.

Enlarge box as required

Conclusion re identification of concern, referral and diagnostic process.	
There was timely referral after identification of concern, audiological assessment was offered promptly and assessment was completed within a reasonable timeframe.	Yes/No/NA
If NO please give details and lessons learned below.	
<i>Enlarge box as required</i>	