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## TRUST CLINICAL GUIDELINE

### Newborn Hearing Screening

#### Overview

The newborn hearing screening test helps to identify babies who have permanent hearing loss as early as possible. This means parents can get the specialist support and advice they need right from the start.

One to two babies in every 1,000 are born with a permanent hearing loss in one or both ears. This increases to about 1 in every 100 babies who have spent more than 48 hours in intensive care. Most of these babies are born into families with no history of permanent hearing loss. Permanent hearing loss can significantly affect a baby's development. Early identification can provide these babies with a better chance of developing language, speech, and communication skills.

NHS England service specifications and Newborn hearing screening guidance's are followed to provide safe, family-friendly hearing screening to all eligible families.

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<b>Author/further information</b>	J. Gregory & R. Loska – NHSP Leads
<b>Guideline version</b>	v1.0
<b>Related policies</b>	None
<b>Related protocols/procedures</b>	<b>UHSx:</b> Antenatal Care, Postnatal Care, Surrogacy
<b>Standards</b>	<b>See:</b> NHS England Service specification number 20 NHS England – <a href="#">Newborn Hearing Screening Operational Guidance</a>
<b>Superseded documents</b>	<b>SRH &amp; WH:</b> CG17004 Newborn Hearing Screening Standard Operating Procedure <b>PRH &amp; RSCH:</b>

## CLINICAL GUIDELINE

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For use at: PRH, RSCH, SRH &amp; WH



University Hospitals Sussex

NHS Foundation Trust

	NS001 Newborn Hearing Screening Programme NHSP Protocol
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## Newborn Hearing Screening

### 1.0 Introduction

UH Sussex Newborn Hearing Screening teams are responsible for offering newborn hearing screening to all babies under 3 months of age (corrected), who are registered with GPs outlined in Appendix (list of GPs mapped to each site).

UH Sussex NHSP teams will offer initial screening to:

- All babies born or resident in UHSussex Hospitals Maternity, SCBU, NICU and PICU wards, including babies with out of area GP's, under the Well baby or NICU baby protocol.
- All babies UHSussex maternity services provide postnatal care to, these may be OOA babies based on their GP.

National guidance and service specifications are adhered to. Internal failsafe processes are in place to ensure all eligible babies are offered a hearing screen.

The national newborn hearing screening database, S4H, is used to track all babies, to store all data for hearing screening results, referrals to Audiology and Audiology data of babies and children diagnosed with a PCHI up to the age of 5 years old.

### 2.0 Scope

This guideline applies to the following:

- Newborn Hearing Screeners - maternity
- Newborn Hearing Screeners - NICU

### 3.0 Responsibilities

Newborn Hearing Screeners:

- To access, read, understand and follow this guidance.
- To use their professional judgement in application of this guideline.

Management:

- To ensure the guideline is reviewed as required in line with Trust and National recommendations.
- To ensure the guideline is accessible to all relevant staff.

#### 4.0 Definitions and abbreviations used within this guideline

<b>AABR</b>	Automated Auditory Brainstem Response
<b>ANNB</b>	Antenatal & Newborn
<b>AOAE</b>	Automated Oto Acoustic Emission
<b>BCP</b>	Business Continuity Plan
<b>BRI site</b>	NHSP site name at Brighton and Princess Royal Hospitals - (BRI_Site Brighton, Hove and Mid Sussex)
<b>CHIS</b>	Child Health Information Service
<b>CR</b>	Clear Response
<b>GP</b>	General Practitioner
<b>HV</b>	Health Visitor
<b>KPI</b>	Key Performance Indicator
<b>MFA</b>	Multifactor Authenticator
<b>MIP</b>	Maternity Improvement Programme
<b>MIS</b>	Maternity Information System
<b>NHSP</b>	Newborn Hearing Screening Programme
<b>NICU</b>	Neonatal Intensive Care Unit
<b>NCR</b>	No Clear Response
<b>OOA</b>	Out of Area
<b>PAS</b>	Patient Administration System
<b>PCHI</b>	Permanent Childhood Hearing Impairment
<b>PCHR</b>	Personal Child Health Record
<b>PDS</b>	Patient Demographic Service
<b>PICU</b>	Paediatric Intensive Care Unit
<b>QA</b>	Quality Assurance
<b>SCBU</b>	Special Care Baby Unit
<b>SEDQ</b>	Screening Equipment Data Quality
<b>SIT</b>	Screening & Immunisation Team
<b>SIAF</b>	Screening Incident Assessment Form
<b>S4H</b>	Smart4Hearing (The National Newborn Hearing Screening Programme database)
<b>WSH site</b>	NHSP site name at Worthing & St Richards Hospitals - (WSH_Site Western Sussex Hospital FT)

**Definitions:**

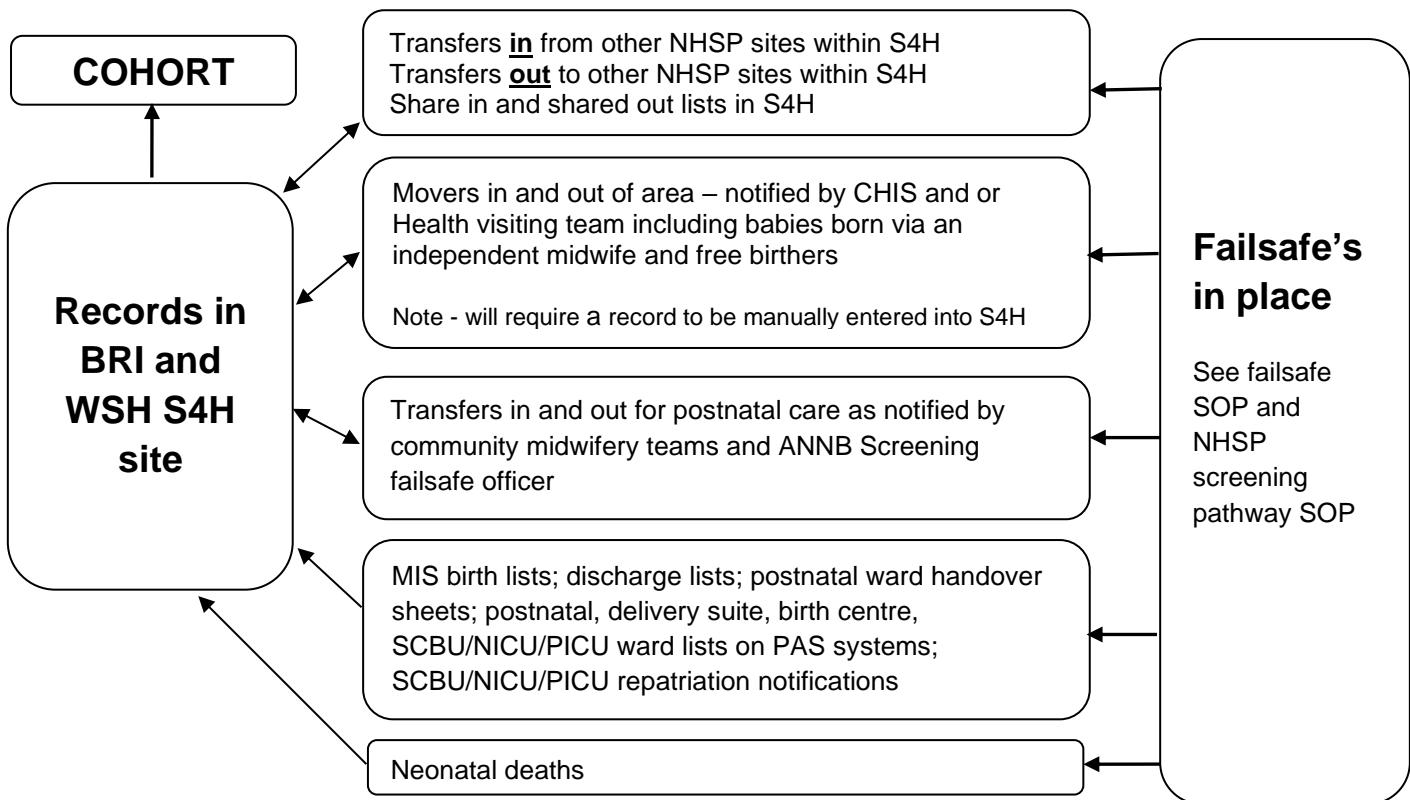
**NICU protocol** – a baby who has spent over 48 hours continuously on a SCBU, NICU or PICU.

**Well baby protocol** – all other babies

## 5.0 Cohort

S4H is populated electronically via PDS, mapped to each NHSP site based on CCG.

Capture of full cohort and movement of population is based on the following and incorporates layers of fail safes to ensure no babies are missed.

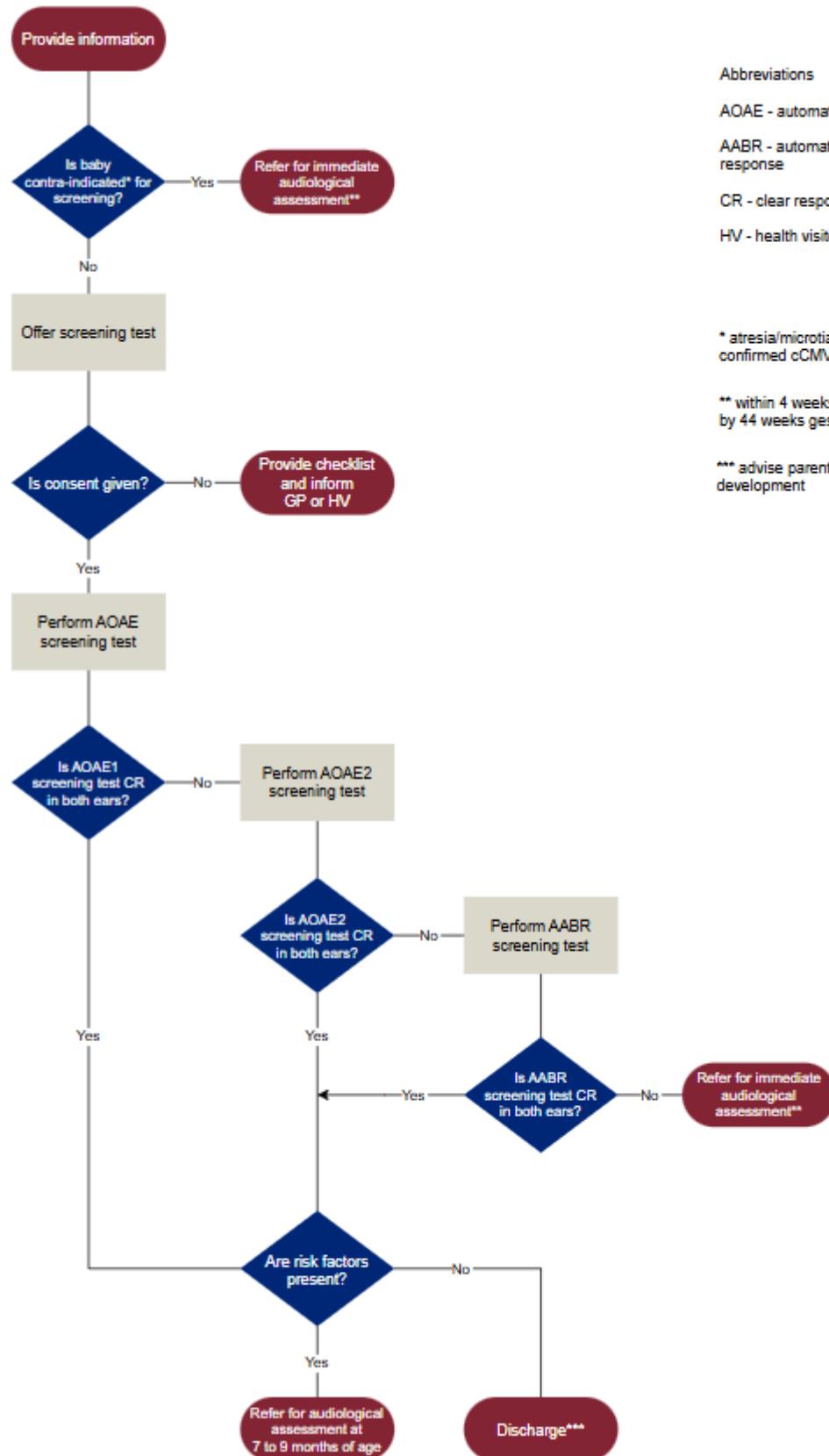


S4H can only be accessed by authorised people, via a secure N1 link.

Access is password protected and requires MFA. [Click here for S4H link.](#)

## 6.0 National Hearing Screening Pathways

### Well baby Pathway



#### Abbreviations

AOAE - automated otoacoustic emission

AABR - automated auditory brainstem response

CR - clear response

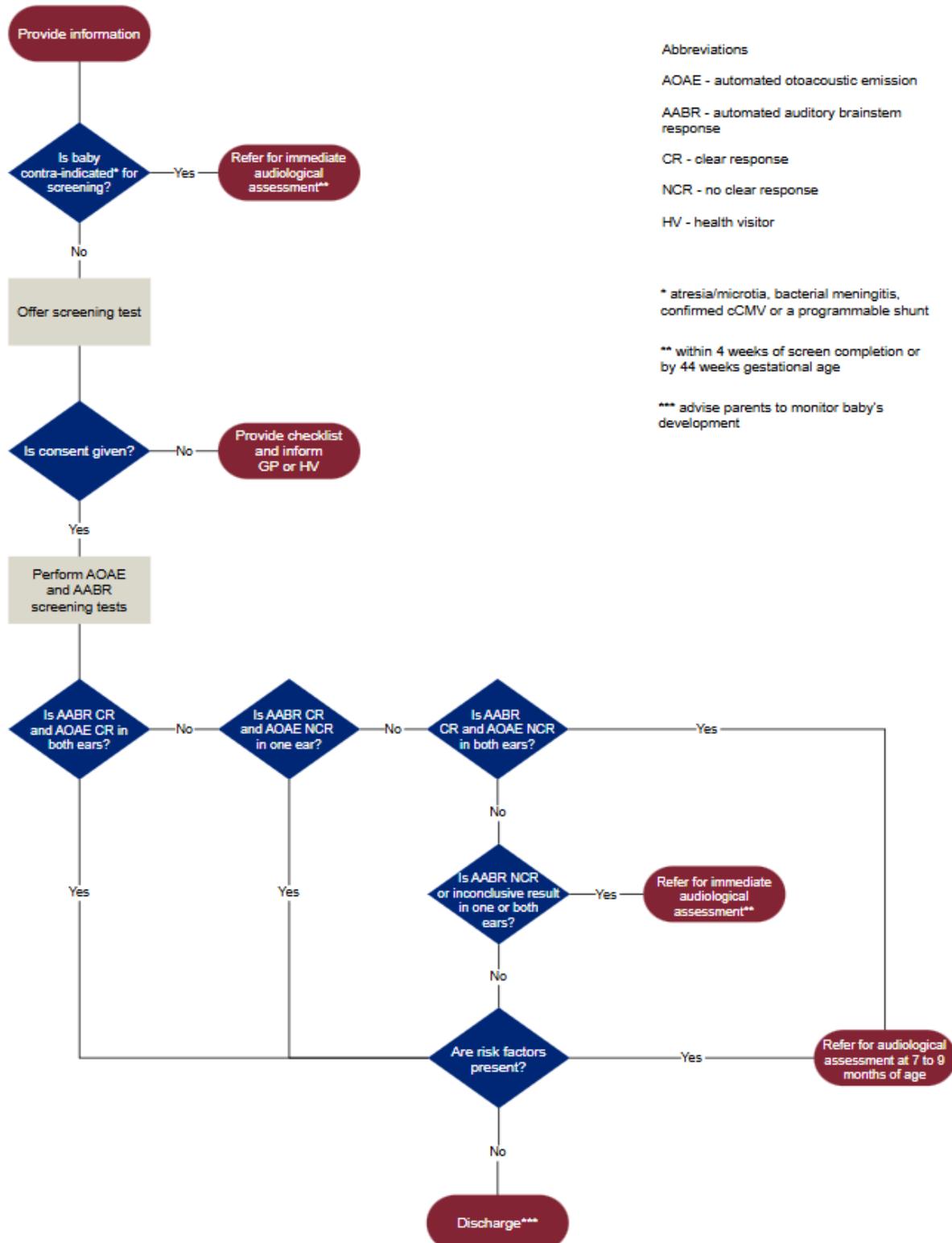
HV - health visitor

\* atresia/microtia, bacterial meningitis, confirmed cCMV or a programmable shunt

\*\* within 4 weeks of screen completion or by 44 weeks gestational age

\*\*\* advise parents to monitor baby's development

## NICU baby Pathway



For local NHSP screening pathways see: NHSP Screening pathway SOP; NHSP decline/withdrew consent SOP; NHSP Errors in S4H SOP; NHSP Border protocol SOP; NHSP baby not going home with birth mother SOP;

## 7.0 Referrals to Audiology

Referrals are made to the following Audiology departments based on the family's residential address and GP:

- **Brighton Audiology Department**, Royal Alexandra Children's Hospital, Eastern Road, Brighton, BN2 5BE. (ABR's only)
- **Portsmouth Audiology Department**, The Elizabeth Foundation, Southwick Hill Road, Cosham, Portsmouth, PO6 3LL (ABR's and targeted follow up's)
- **Sussex Community Trust Paediatric Audiology Department**, Crawley Hospital, West Green Drive, Crawley, West Sussex RH11 7DH (ABR's and targeted follow up's)
- **Worthing Audiology Department**, Worthing Hospital, Lyndhurst Road, Worthing, West Sussex BN11 2DH (ABR's and targeted follow up's)

Referrals are made to Audiology in the following circumstances:

### For an ABR

Where screening is contraindicated:

- Atresia or microtia (no patent canal in one or both ears).
- Confirmed congenital cytomegalovirus (cCMV).
- Programmable ventriculo-peritoneal (PVP) shunt.
- Meningitis (confirmed or strongly suspected bacterial meningitis or meningococcal septicemia).

When a screen positive result (NCR) has been obtained on AABR screening for one or both ears.

If the family have declined the screen and requested a diagnostic appointment with Audiology.

At the request of a Paediatrician.

### For a 7-9 month targeted follow up

When baby has passed the hearing screen (bilateral CR's) and has a risk factor for hearing loss or has obtained specific NICU protocol screening results:

- If baby has a confirmed Congenital Infection – e.g. toxoplasmosis, rubella, herpes.
- If baby has a craniofacial abnormality (excluding minor pits and ear tags) – e.g. cleft palate.
- If baby has a confirmed syndrome related to hearing loss.
- NICU protocol results – bilateral no clear responses (NCR) at AOAE and bilateral clear responses (CR) at AABR.

## 8.0 High risk pregnancies for hearing loss

The maternity ANNB will advise the NHSP Lead, by email, of all booked pregnancies who have a high-risk of hearing loss.

These will be tracked by the NHSP Lead and a discussion had with parents regarding decisions around screening. This may include declining screening in favour of a direct referral to Audiology or both AOAE and AABR screening for a well-baby.

## 9.0 Programme Standards and KPI's

	Programme Standards and KPI's	Acceptable	Achievable
S01	The proportion of babies eligible for newborn hearing screening for whom the screening process is complete < 4 weeks (28 days) corrected age (in services which provide a hospital model – well babies) and neonatal intensive care unit (NICU) babies or by < 5 weeks (35 days) corrected age (in services which provide a community model – well babies). (NH1)	≥ 98.0%	≥ 99.5%
S02a	The proportion of well babies in services providing a hospital model who do not show a clear response in both ears at the first screening test AOAE1.	≤ 27.0%	≤ 20.0%
S03a	The proportion of babies in services providing a hospital model who require immediate referral for audiological assessment.	>2.0% to ≤2.8%	>0.5% to ≤2.0%
S04	The proportion of babies requiring immediate referral for audiological assessment who are offered a first appointment in audiology that is in the specified timescale.	≥ 97.0%	≥ 99.0%
S05	The proportion of babies requiring immediate referral who are brought for an audiological assessment appointment in the required timescale. (NH2)	≥ 90.0%	≥ 95.0%

## 10.0 NHSP KPI reporting

KPI, activity, data quality, highlight and outcome reports (screening and audiology) are published on S4H by NHSE's Digital Screening Service Management Team monthly, quarterly and annually.

There is a 2-week window for providing the Digital Screening Service Management Team with mitigations for missed KPI's on the NHSP mitigations template.

The NHSP team will provide quarterly and annual KPI reports to the regional QA and SIT team, Commissioners, Director of Midwifery, Head of Midwifery, Lead Midwife for ANNB, Audiology and all NHSP staff. These reports and mitigations must be discussed at the monthly Maternity Safety and Quality meetings prior to being emailed out. Reports should be saved as pdf files.

The report template, published on S4H, is used for reporting, this includes information on programme standards, mitigations, Audiology referrals, late onset PCHI's and yield of PCHI's; incidents and challenges within the NHSP team.

Figures from the KPI performance report 2 – programme standards and key performance indicator (KPI) by current site are used to complete the report. The Audiology departments are contacted for accurate completion of the Audiology sections within the KPI report.

Guidance for reports can be found on S4H.

## 11.0 Meeting Schedule

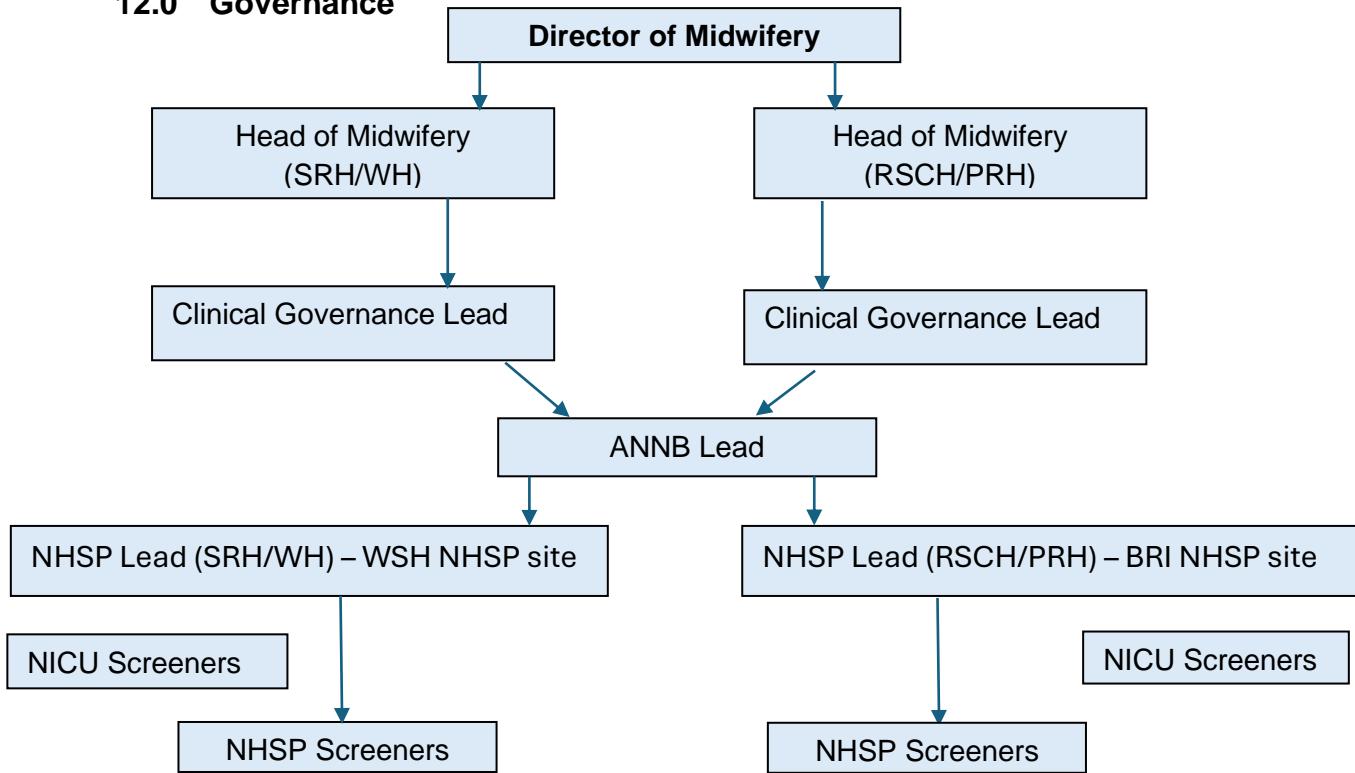
The following meeting schedule applies for the NHSP Local Manager and the NHSP Team Lead.

Terms of References and minutes are available for all meetings.

Meeting title – NHSP Local Manager	Minimum Frequency	Led by
NHSP staff huddle (recorded – and huddle template updated)	Weekly	NHSP Local Manager
NHSP staff meeting	Quarterly	NHSP Local Manager
NHSP Team lead meeting	Monthly	NHSP Team Lead
Paediatric Audiology staff meetings	Quarterly	Paediatric Audiology Leads
UHSussex ANNB meeting	Quarterly	UHSussex Lead Midwife for ANNB
Surrey and Sussex ANNB Screening Forum	Quarterly	Sussex and Surrey SIT
NHSP Local Managers Meetings	Quarterly	All NHSP Leads/Local Managers on a rotation basis
Regional CHSWG (West Sussex and Brighton & Hove)	Quarterly	CHSWG Chair
Pan Sussex CHSWG	Annually	CHSWG Chair

Meeting title – NHSP Team Lead	Minimum Frequency	Led by
NHSP Local Manager meeting	Monthly	NHSP Team Lead
Maternity Safety and Quality meetings	Monthly	Maternity Safety and Quality team
Maternity improvement group (MIP)	Monthly	Director of Midwifery
UHSussex ANNB meeting	Quarterly	UHSussex Lead Midwife for ANNB
Surrey and Sussex ANNB Screening Forum	Quarterly	Sussex and Surrey SIT

## 12.0 Governance



## 13.0 Screening risk and incident management

All screening incidents will be reported via the trusts internal system (DATIX), the NHSP Team lead will be notified and escalated, via email, to the NHSP Team lead and regional SIT and QA team using the Screening incident assessment form (SIAF).

The NHSP team lead will escalate through to the maternity management via clinical governance meetings.

The managing safety incidents in NHS screening programmes guidance will be adhered to and a SIAF can be located within this guidance. Root cause analysis will be undertaken, when required, including a timeline of events and learning, these will be signed off at trust level by the clinical governance lead (maternity).

The screening incident log is completed and copies of all SIAF's are stored locally. PDFs of emails from the SIT team following the closure of the incident are also saved.

All incidents are agenda items at NHSP staff meetings, NHSP Team Lead meetings, Trust ANNB meetings, Surrey and Sussex ANNB Screening Forum and NHSP Local Managers meetings.

NHSP teams have risk assessments on the trusts SHE portal which are updated annually as per trust policy.

Any risks or non-compliance within the NHSP service are escalated initially to the NHSP Team Lead, discussed in the ANNB steering group meeting and the MIP steering group meeting, they are added to the trusts risk register.

## 14.0 Equipment

Only equipment that is on the NHS Supply Chain, which has secured a framework agreement, and which has satisfied a detailed scientific evaluation as specified by the NHSP Programme and is SEDQ compliant will be used.

UHSussex NHSP sites use Otoports and Dual Otoports, manufactured and calibrated by Otodynamics with the intermediate software Otolink. Equipment will be maintained and calibrated as per manufacturers guidelines.

A copy of the Otoport manual can be located on the Otodynamics website:  
[https://www.otodynamics.com/IFU/NHSP/Otoport\\_NHSP\\_OAE+ABR\\_Manual.pdf](https://www.otodynamics.com/IFU/NHSP/Otoport_NHSP_OAE+ABR_Manual.pdf)  
and a copy is stored locally in the medical devices folder.

The Otoport firmware and Otolink software is updated whenever instructed to do so by the Otodynamics or the national team.

## 15.0 Training

UH Sussex NHSP Teams follow national guidance for training of new NHSP staff and ongoing competency assessments. This can be found in section 2 of the [NHS Operational Guidance](#).

## 16.0 Patient feedback

Patient surveys are an important feedback tool that supports the fundamental principle that people who use the service should have the opportunity to provide feedback on their experience.

Listening to the views of patients and staff helps identify what is working well, what can be improved and how.

NHSP ask for feedback from all families once their screening journey is complete. A quarterly report is written and presented at the Trusts ANNB meeting and NHSP staff meetings.

## 17.0 Business Continuity Plan

Both BRI and WSH NHSP teams have a BCP that will be put into place when required.

## 18.0 Monitoring and audit

Issue being monitored	Monitoring method	Responsibility	Frequency	Reviewed by and actions arising followed up by
Declines for Hearing Screening	Audit	Newborn Hearing Screening Leads	Monthly	ANNB Steering Group

## Appendix 1: List of GPs mapped to UHSussex NHSP site's in S4H

WSH Site:

WSH Site	
GP Surgeries	National ID (GP code)
Adur Health Partnership	H82023
Avisford Medical Group - Yapton	H82048
Ball Tree Surgery	H82065
Barn Surgery	H82087
Bersted Green Surgery	H82016
Billingshurst Surgery	H82055
Bognor Medical Practice	H82020
Broadwater Medical Centre	H82046
Cathedral Medical Group	H82042
Cornerways Surgery	H82076
Fitzalan Medical Group	H82066
Flansham Park Health Centre	H82038
Glebe Surgery	H82070
Grove House Surgery	H82043
Henfield Medical Centre	H82060
Langley House Surgery	H82013
Lavant Road Surgery	H82051
Loxwood Medical Practice	H82031
Maywood Healthcare Centre	H82058
New Pond Row Surgery	H82091
Parklands Surgery	H82049
Petworth Surgery (The)	H82006
Pulborough Medical Group	H82030
Riverbank Medical Centre (Midhurst)	H82032
Selden Medical Centre	H82061
Selsey Medical Practice	H82037
Southbourne Surgery	H82078
St. Lawrence Surgery	H82009
Steyning Medical Practice	H82022
Strand Medical Group	H82011
Tangmere Medical Centre	H82067

The Arundel Surgery	H82021
The Coppice, Herne Lane	H82014
The Croft Practice	H82077
The Lime Tree Surgery	H82034
The Orchard Surgery	H82096
The Park Surgery	H82039
The Witterings Medical Centre	H82095
Victoria Road Surgery	H82041
West Meads Surgery	H82099
Westcourt Medical Centre	H82007
Willow Green Surgery	H82059
Worthing Medical Group	H82045

<b>BRI Site</b>	
<b>GP Surgeries</b>	<b>National ID (GP code)</b>
<b>MID SUSSEX</b>	
Brow Medical Centre	H82084
Cuckfield Medical Practice	H82005
Dolphins Practice	H82044
Lindfield Medical Centre (Dr Knight)	H82035
Meadows Surgery	H82003
Mid Sussex Health Care	H82057
Moatfield Surgery	H82063
Modality Mid Sussex	H82040
Newtons Practice	H82056
Northlands Wood Practice	H82100
Ouse Valley Practice	H82615
Silverdale Practice	H82072
<b>BRIGHTON &amp; HOVE</b>	
Arch Healthcare	G81689
Ardingly Court Surgery	G81006
Beaconsfield Medical Practice	G81042
Brighton Station Health Centre	Y02676
Broadway Surgery	G81669
Carden Surgery	G81014
Hove Medical Centre	G81001

Links Road Surgery	G81663
Mile Oak Medical Centre	G81073
Montpelier Surgery	G81044
Park Crescent Health Centre	G81028
Pavilion Surgery	G81054
Portslade Health Centre	G81046
Preston Park Surgery	G81018
Regency Surgery	G81656
Saltdean Medical Practice	G81076
School House Surgery (Brighton)	G81613
Ship Street Surgery	G81694
St. Peter's Health Centre	G81011
Stanford Medical Centre	G81038
The Avenue Surgery	G81075
The Charter Medical Centre	G81034
The Haven Practice	G81646
The Seven Dials Medical Centre	G81047
Trinity Medical Centre	G81070
University Of Sussex Health Centre	G81071
Warmdene Surgery	G81036
WellBN	G81638
Wellsbourne	Y06007
Wish Park Surgery	G81083
Woodingdean Medical Centre	G81065

## Appendix 2: Guideline Version Control Log

Version	Date	Author	Comment
1.0	April 2025	Jacqueline Gregory, NHSP Lead SRH&WH  Ruth Loska, NHSP Lead PRH&RSCH	New Trust wide guidance replacing: <ul style="list-style-type: none"><li>• CG17004 Newborn Hearing Screening Standard Operating Procedure (SRH&amp;WH)</li><li>• NS001 Newborn Hearing Screening Programme NHSP Protocol (PRH&amp;RSCH)</li></ul>

### Appendix 3: Due Regard Assessment Tool

To be completed and attached to any guideline when submitted to the appropriate committee for consideration and approval.

		Yes/No	Comments
<b>1.</b>	<b>Does the document/guidance affect one group less or more favourably than another on the basis of:</b>		
	Age	No	
	· Disability	No	
	· Gender (Sex)	No	
	· Gender Identity	No	
	· Marriage and civil partnership	No	
	· Pregnancy and maternity	No	
	· Race (ethnicity, nationality, colour)	No	
	· Religion or Belief	No	
	· Sexual orientation, including lesbian, gay and bisexual people	No	
<b>2.</b>	<b>Is there any evidence that some groups are affected differently and what is/are the evidence source(s)?</b>	No	
<b>3.</b>	<b>If you have identified potential discrimination, are there any exceptions valid, legal and/or justifiable?</b>	NA	
<b>4.</b>	<b>Is the impact of the document likely to be negative?</b>	No	
<b>5.</b>	<b>If so, can the impact be avoided?</b>	NA	
<b>6.</b>	<b>What alternative is there to achieving the intent of the document without the impact?</b>	NA	
<b>7.</b>	<b>Can we reduce the impact by taking different action and, if not, what, if any, are the reasons why the guideline should continue in its current form?</b>	NA	
<b>8.</b>	<b>Has the document been assessed to ensure service users, staff and other stakeholders are treated in line with Human Rights FREDA principles (fairness, respect, equality, dignity and autonomy)?</b>	Yes	

If you have identified a potential discriminatory impact of this guideline, please refer it to [Insert Name], together with any suggestions as to the action required to avoid/reduce this impact. For advice in respect of answering the above questions, please contact uhsussex.equality@nhs.net (01273 664685).

## Appendix 4: Template Dissemination, Implementation and Access Plan

To be completed and attached to any guideline when submitted to Corporate Governance for consideration and TMB approval.

	<b>Dissemination Plan</b>	<b>Comments</b>
1.	Identify:	
	Which members of staff or staff groups will be affected by this guideline?	Midwives and paediatricians/neonatologists
	How will you confirm that they have received the guideline and understood its implications?	Dissemination through the usual communication channels and highlighted at Safety Huddles. Screening Lead to disseminate to teams.
	How have you linked the dissemination of the guideline with induction training, continuous professional development, and clinical supervision as appropriate?	All new members of staff are shown where to access Clinical documents that are relevant to their area of practice.
2.	How and where will staff access the document (at operational level)?	Accessed by staff via Sharepoint.

		<b>Yes/No</b>	<b>Comments</b>
3.	Have you made any plans to remove old versions of the guideline or related documents from circulation?	Yes	Previous versions will be archived as part of the uploading onto sharepoint process.
4.	Have you ensured staff are aware the document is logged on the organisation's register?	Yes	Dissemination plan includes notifying staff via email, departmental noticeboards, and safety huddles.

## Appendix 5: Additional guidance and information

- [Newborn hearing screening: programme overview](#)
- Newborn Hearing screening service specifications (updated each year)
- [NHS population screening standards](#): Newborn hearing screening programme (NHSP)
- [Newborn Hearing Screening Operational Guidance](#)
- Newborn hearing screening programme: [care pathways for well babies](#)
- Newborn hearing screening programme (NHSP): [care pathways for babies in NICU](#)
- Newborn hearing [screening pathway requirements specification](#)
- Newborn hearing screening [training requirements](#)
- [Managing safety incidents in NHS screening programmes](#)
- [Population screening: data and intelligence: detailed information](#)
- [Modernising Children's Hearing Aid Services \(MCHAS\) Infant HA fitting guidelines](#)
- [British Society of Audiology Diagnostic audiology protocols](#)
- [Surveillance-and-audiological-referral-guidelines](#)
- [British Academy of Audiology Standards for Paediatric Audiology](#)
- [Improving Quality in Physiological Services \(IQIPS\)](#)
- National Institute for Health and Clinical Excellence (NICE) Clinical guideline NG194: Postnatal care 2021 -