Newborn hearing screening programmes technical guidance and management of audiology referrals during the coronavirus (Covid-19) pandemic
21st April 2020 version 0.5

1. Background
It is paramount that antenatal and newborn screening continues during the covid-19 pandemic as specified in the NHS England Service Specification for each programme. Antenatal and newborn screening programmes are time critical and early detection and intervention for some of these medical conditions screened for is important and can have significant mortality and morbidity.

It is important the women and babies with screen positive/higher chance results are given the information they need to make the right choices for them and are safely referred onto the correct care pathway. This can be a highly anxious time for women/parents and they must be adequately supported by health professional advice and information.

2. Purpose
This document provides additional technical guidance on how best to deliver these screening programmes as the Covid-19 pandemic evolves and staff and capacity become more challenging.

This guidance provides recommendations on screening continuity in response to Covid-19. It is acknowledged that maintaining the current service during these unprecedented times will be challenging.

3. Scope
This technical guidance is specific to the newborn hearing screening programme (NHSP)

This guidance provides recommendations on screening continuity in response to Covid-19. It is acknowledged that maintaining the current service during these unprecedented times will be challenging.

It is recognised that these recommendations may increase the risk of delayed identification of cases of newborn Permanent Childhood Hearing Impairment (PCHI) but having a consistent approach may help mitigate the risks and support services. It is accepted that achievement of KPI targets may not be possible during this period.

3.1 Newborn hearing screening
- Screening should continue and the NHSP national IT system SMaRT4Hearing (S4H) must be used to track babies through the screening pathway
- Babies should undergo the newborn hearing screen whilst on the maternity unit in an effort to complete the screening pathway
• **NICU babies:**
  - continue to screen as many NICU babies as possible before discharge from hospital using the current pathway
  - if necessary NHSP teams should liaise with paediatric/neonatology teams to maximise opportunities for screen completion as an outpatient combined with NICU follow ups for any baby discharged unscreened

• **Well babies:**
  - continue to screen using the current pathway
  - commence the screening pathway with AOAE1 for as many babies as possible as close to discharge from hospital
  - if clear response baby can be discharged from the screening pathway
  - if no clear response at AOAE1 and there is time to proceed to second stage test (AOAE2) before discharge, this can be carried out (even if less than a 5-hour interval)
  - if no clear response after AOAE1 or AOAE2 the following options can be considered according to local service provision
    - if there is capacity and opportunity arrange outpatient screening within expected timescales to complete screening
    - if there is no capacity to offer outpatient screening proceed to AABR in the same session, before discharge, accepting there may be an increased subsequent referral rate due to those cases of temporary conductive loss
    - if there is no capacity to offer outpatient screening or the AABR is unlikely to achieve a valid result (due to very young age of baby/test conditions) defer further screening and inform parents that follow up will be arranged by the NHSP team to complete the screen at a later date

• Provider organisations should try to continue outpatient screening wherever this is possible

• It is essential that maternity services and NHSP teams work together to maximise opportunities to complete the screen either as an inpatient or outpatient such as at newborn blood spot screening/postnatal clinics or in community family centres

• Audiology and screening services should explore flexible models such as holding clinics in alternative locations, possibly away from acute settings and where no COVID-19 patients are being treated. This would help to provide parents with some extra reassurance and encourage their attendance

• To maximise coverage, consider changes to working hours to provide more screening cover over the course of the day/week (eg 7am-7pm, 7 days per week)

• Babies who have not been screened, such as early discharges, home births or those who move into the area should be offered appointments for screening if
possible. Where able, establish if a baby in this group has any of the following risk factors to allow future consideration in their management: congenital infection, cranio-facial anomaly, syndrome associated with a hearing loss. **Further advice on the management of babies who have not been screened will follow in due course**

- Letter templates for use during the Covid-19 outbreak are available within S4H

**Managing records in the NHSP national IT system (S4H)**

For babies in the following groups, the outcome on S4H should be set as:

- **Unable to offer screen** (e.g., discharged early, non-availability of outpatient activities or screening staff shortage) - screening outcome – **‘Incomplete - lack of service capacity’** with the reason ‘Covid-19 incident’ and a case note will be created

- **Families would like the screen but would like to defer** to a later date - screening outcome **‘Incomplete - lack of service capacity’** with the reason ‘Covid-19 incident’ and a case note will be created. This group should not be recorded as a decline, unless the family are actually declining the screen.

An **‘incomplete – lack of service capacity’** outcome, sets the baby’s follow up status as **‘not applicable’** with a patient status of **‘inactive- other’** which will enable these babies to be identified. No follow up assessments should be arranged for these babies at this time.

**Screen referrals**

- Babies with a no clear response at AABR (unilateral and bilateral) must be referred to audiology diagnostic services in the usual manner. Where non-urgent outpatient activity has been reduced or suspended an appointment should not be arranged. The referral should be retained by audiology for future management – see guidance below, section 3.2

- A letter should be given to the parents explaining that the audiology appointment is being deferred due to the Covid-19 incident

- Babies with screening contra-indications should be referred to the audiology diagnostic service and the outcome on S4H set to ‘Incomplete - screening contra-indicated’. These are ‘urgent referrals’ in the current context, see guidance below, section 3.2

- Babies born to Covid-19 positive women, or babies who are themselves Covid-19 positive should be managed in adherence with the current local NHS guidelines on the date of the proposed screening

We realise that these recommendations may increase the numbers referred from the screen. The audiology service will be able to manage prioritisation for these babies using patient and waiting list management systems.
Screening staff

In cases where staff shortage/availability is an issue, it is recommended that the redeployment of audiologists or paediatric audiology assistant/associates to undertake newborn hearing screening is considered.

An audiologist can train in the same way as a new screener and as long as they hold a current professional healthcare registration (RCCP, HCPC and AHCS) they do not need to register for the health screener diploma.

During the Covid-19 incident, an audiologist, carrying out newborn hearing screening in England must:

- be registered on the screening device(s) and S4H
- complete training to enable them to use the NHSP national IT system to provide a failsafe mechanism and to upload test data
- complete NHSP e-learning
- learn the communication skills to inform parents and gain consent
- complete practical training in the use of the equipment and to perform a minimum of five automated otoacoustic emission (AOAE) and five automated auditory brainstem response (AABR) – including equipment protocols
- have been locally assessed by the local manager using the performance observation checklists as competent to carry out the screen
- be supervised screening at all times until the local manager is satisfied that they are competent to screen
- in normal circumstances they should:
  - complete an NHSP OSCE if performing AABR. This can be at the NHSP local manager’s discretion during the Covid-19 incident
  - not screen without the on-site/accessible support from the local manager or experienced screener until an OSCE has been successfully completed. This can be at the NHSP local manager’s discretion during the Covid-19 incident

During the Covid-19 incident, a paediatric audiology assistant/associate, who does not hold a current professional health care registration, carrying out newborn hearing screening in England must:

- be registered on the screening device(s) and S4H
- complete training to enable them to use the NHSP national IT system to provide a failsafe mechanism and to upload test data
- complete NHSP e-learning
- learn the communication skills to inform parents and gain consent
- complete practical training in the use of the equipment and to perform a minimum of five automated otoacoustic emission (AOAE) and five automated auditory brainstem response (AABR) – including equipment protocols
- have been locally assessed by the local manager using the performance observation checklists as competent to carry out the screen
• be supervised screening at all times until the local manager is satisfied that they are competent to screen
• complete an NHSP OSCE and not screen without the on-site/accessible support from the local manager or experienced screener until the OSCE has been successfully completed. Contact PHE.NHSPTraining@phe.gov.uk for further information
• if they are still working as a newborn hearing screener after 6 months register for the health screener diploma (HSD) (please note this timescale may be extended during the Covid-19 situation)

3.2 Guidance on the management of babies referred from the newborn hearing screen requiring immediate diagnostic assessment and targeted follow up

Manage referrals in 3 groups:

• Babies referred from screening with a no clear response at AABR
• Babies with a screening contra-indication
• Targeted follow-up

Where screening has been undertaken and immediate referral is required, there is a responsibility to undertake audiological assessment wherever possible. Parental anxiety of a screen positive result must be considered. A referral may need to be identified as ‘clinically urgent’ if this enables local services to prioritise these referrals appropriately. However, at the present time, these immediate referrals may not fit the description of ‘clinically urgent’ for those trusts where restrictions on outpatient activities is in force.

Where outpatient services have been suspended and only clinically urgent cases are being seen, then priority must be given to those cases where immediate diagnostic assessment is required for medical purposes or where delayed identification of the presence of a hearing impairment will have a severe life-long change to management i.e. confirmed or suspected bacterial meningitis where late identification may preclude the insertion of a cochlear implant due to ossification or cCMV where the urgency is related to the short window of opportunity for anti-viral treatment.

If no restrictions are in place for audiology services, follow the usual immediate referral process for your service. Where restrictions are in place, audiology should provide an explanation to the parents and a letter / telephone contact should be given to explain the current situation and that further follow up will be arranged in due course.

Once the situation resolves and the restrictions are lifted with regards outpatient attendance, the referred babies should be prioritised in the following order:

• Screening contraindicated babies (if not already seen)
• NICU babies bilateral referrals
• Well babies bilateral referrals
• Unilateral referrals
• Targeted follow-up

Management for these babies will depend on their age at the time of the restriction being lifted. Dependent on the length of any service interruption, various options will need to be considered. If the time is short (i.e. less than 12 weeks) these babies could be seen for ABR testing under natural sleep and it would therefore be appropriate for them to be offered a standard diagnostic appointment at that time. If the time of service interruption is significantly longer, and possibility of successful ABR assessment under natural sleep is deemed unlikely, it may be necessary to include parental concern as a factor in the sub-prioritisation of those within each group.

**Babies with a screening contra-indication**
The following groups of babies must be referred directly to audiology as current practice:

  - Group 1. Microtia and external ear canal atresia.
  - Group 2. Neonatal bacterial meningitis or meningococcal septicaemia
  - Group 3. Babies with a PVP shunt
  - Group 4. Confirmed congenital cytomegalovirus (cCMV)

We would recommend that babies in these groups should still be seen for a diagnostic appointment within the usual time frame where possible, as these should be considered urgent, local restrictions allowing and every effort made for them to attend. This is due to the high risk of hearing loss in this cohort.

4. **Additional things to consider**

  4.1. **Information for parents**

   It is important that parents understand which appointments they should attend and especially in situations where appointments need to be rescheduled. Information will be given to screen positives including contact numbers for audiology for any parental concerns. Letter templates, with parental checklists, for use during the Covid-19 outbreak are available within S4H.

   All parents should receive PHE’s Screening tests for you and your baby information about antenatal and newborn screening and should be signposted to the [online version of this leaflet](#) if required. PHE has more guidance on how to do this effectively, including a range of resources to support health professionals which can be requested from the [screening helpdesk](#).

   As leaflet usage changes, services should review any screening leaflet standing orders with the national print provider (APS) to manage local stock levels appropriately.

  4.2. **Screening safety incidents**

   As far as possible, the principles in the [national guidance](#) should be followed. Incidents or potential incidents should be reported to the screening quality assurance service (SQAS) and
commissioners so that they know about problems occurring. SQAS will continue to give advice whilst recognising the intense pressure that many providers staff will be under.

4.3. QA visits and network meetings
All screening QA visits and network meetings are postponed from 23 March until further notice.

This will support our NHS colleagues who are focusing their efforts on frontline activity. We will regularly review this situation and keep staff and stakeholders informed. Communication to both providers due a QA visit and network meeting attendees will be via regional quality assurance teams.

5. Data requests/submissions for key performance indicators and standards
Our aim is not to put any additional pressure on screening providers or the wider NHS.

Performance against thresholds – we appreciate meeting some thresholds is challenging and will caveat any reporting of data during this time.

6. PHE Screening publishing and social media activity
We have stopped all social media activity, including blogging and tweeting, and will not be publishing any new guidance on GOV.UK at present; including quality assurance executive summary reports.

7. Documenting changes as they happen
We anticipate that there will be a need to evaluate the impact of the pandemic had sometime in the future, so we advise providers document dates and changes made to the delivery of screening for audit purposes.

8. For further queries
PHE.screeninghelpdesk@nhs.net

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