

## Newborn and Infant Physical Examination – Standard Operating Procedure

UHDB/SOP/03:24/O25

### Introduction

The UK National Screening Committee (UKNSC) policy for NIPE is that all eligible children will be offered the NIPE screen within 72 hours of age, unless the baby is too young and/or too ill for NIPE screening. If this is the case screening should be completed as and when the baby's condition allows.

- **'Too young for NIPE screening'** is defined as babies born <34+0 weeks gestation. Screening may be delayed until these babies reach 34+0 weeks corrected age (with screening ideally being undertaken within 72 hours of reaching this age)
- **'Too ill for NIPE screening'** - screening should be completed as and when the baby's condition allows

It is not a fitness for discharge examination and babies may need review following the NIPE prior to discharge.

NIPE-S4N is an IT system for the recording of the newborn examinations of all babies. It provides a robust failsafe system and a consistent means of capturing data. It supports healthcare professionals in improving the quality, timeliness and consistency of the examinations and reduces the number of babies diagnosed late with medical conditions

### Scope

Standard Operational Procedures (SOPs) are formal authorised documents detailing the procedures to be followed in the accomplishment of various tasks; in this case the NIPE examination. This SOP describes the responsibilities of the team and individual practitioner responsible for the provision of NIPE as follows:

- Record all Newborn and Infant Physical Examination using the national tool: NIPE S4N;
- Ensuring monitoring of relevant KPI that all NIPE are undertaken within 72 hours of birth, by an appropriate trained professional and are recorded correctly;
- Produce a public health KPI report for NHS England.

### Equality

Delivery of the screening programme contributes to reducing health inequalities and should include the following deliverables:

- screening should be delivered in a way which addresses local health inequalities, tailoring and targeting interventions when necessary a Health Equity Audit should be undertaken as part of both the commissioning and review of this screening programme; including equality characteristics, socio-economic factors and local vulnerable populations
- the service should be delivered in a culturally sensitive way to meet the needs of local diverse populations

- user involvement should include representation from service users with equality characteristics reflecting the local community including those with protected characteristics
- providers should exercise high levels of diligence when considering excluding people with protected characteristics in their population from the programme and follow equality, health inequality and screening guidance when making such decisions.

### **Cohort**

All babies born within, or cared for within University Hospitals of Derby and Burton, will have the NIPE entered onto the S4N IT System.

### **Timing**

The examination should be completed within **72 hours of age**, unless the baby is too young and/or too ill for NIPE screening. If this is the case screening should be completed as and when the baby's condition allows. The NIPE is less reliable as a screening assessment when done within the first 24 hours due to physiological changes. However many women will wish to be discharged much earlier than this and it is preferable to complete the NIPE prior to discharge.

The NIPE examination should be completed ideally after 6 hours, however, for mothers wishing to be transferred home within hours of giving birth, a baby may be examined around 6 hours of age provided temperature has been maintained and the baby has been appropriately observed for respiratory and feeding status.

It is preferable that NIPE completed in community settings be done once the baby is 24hrs old to remove the need for transfer due to early physiological heart murmurs but if this is not possible then it is better to complete the NIPE earlier than risk a late or missed NIPE.

### **Roles and Responsibilities**

#### **NIPE Lead Midwife & Deputy**

The NIPE lead midwife has the responsibility to ensure that all non-compliance has been followed up; to communicate learning for staff where there are gaps in compliance and to comply with the KPI's for NIPE. The NIPE Lead role will be supported by deputies and failsafe officers who will share clinical and administrative responsibilities. Responsibility for ensuring that any referral pathway is completed is shared between the NIPE lead/deputy and the ward receptionists using a failsafe spread-sheet to track all referrals with the lead/deputy following up any discrepancies.

The NIPE Lead Midwife is responsible for data collection and KPI reporting. This will be completed on a quarterly basis and reported to the Director/Head of Midwifery. They are also responsible for ensuring smooth running of the process and take steps to rectify any failings, report and escalate appropriately.

#### **NIPE Trained Staff**

All NIPE Trained staff have a responsibility to be aware of and adhere to this SOP and ensure that it is embedded into their everyday practice and applied consistently at all times. NIPE examiners include Midwives with a recognised qualification, GP trainees, Paediatricians, Neonatologists and Advanced Neonatal Nurse Practitioners

## **Equipment**

NIPE S4N will be available on designated computers in areas where NIPE is carried out. This will enable responsible clinicians carrying out the NIPE clinic to record the NIPE and print off relevant documents and referrals.

Ophthalmoscope for the examination of the New-born eyes will be available in all areas along with neonatal stethoscopes tongue depressors and SATS machines.

## **Skills & Competency**

All healthcare professionals have personal professional responsibility to maintain competency. All professionals performing NIPES should attend a local annual update and complete the PHE NIPE E-learning module <http://portal.e-lfh.ork.uk/>. Whilst there is no minimum number of NIPES to be performed we recommend that all NIPE trained midwives complete at least one clinic every 6 months to maintain their skills and competency.

## **S4N Training**

All staff undertaking NIPE will receive training in the S4N smart system through either group sessions or one to one session, led by an experienced trainer.

It will be the responsibility of the Health Professional undertaking the examination to record the findings of the examination on the S4N IT system.

## **Password Generation**

Access to NIPE SMART system will be arranged by designated administrators for the system within the Trust, all new starters names and details to be sent to the Named NIPE midwife when starting at the Trust for the this process to be completed. Most staff will be entered on the system in advance using their NMC/GMC number and given a username. To access the password type in your username and then select 'forgotten password' and follow the instructions. If a practitioner is not registered on the database, password generation will be done by a S4N administrator.

## **Daily NIPE Clinic Work list**

Each Trust Midwife will be responsible to ensure that newborns of mothers in their care undergo a NIPE within 72 hours from birth.

A daily UHDB NIPE service will cover inpatient NIPES on the Postnatal Ward, Labour Ward and the Birth Centre as well as any ad hoc appointments when it has not been possible to facilitate NIPE as an inpatient. Any other NIPE trained staff working in these areas who are on shift should also assist with completion of NIPE when activity allows especially if they are providing care to the woman and her baby.

The assigned NIPE midwife for each day will check the daily work list on the S4N IT system.

- On the search page select "NON-NICU" under patient group and "not started" and "in progress" under newborn screen then click search. This will identify all babies who are eligible for a NIPE check that day. The list generated is in reverse order with the oldest babies at the bottom of the list.
- Click the right hand "hamburger" button this allows you to print of a "to do" list which should be worked on in reverse order.
- Babies will be colour coded (see below) so any red or amber babies should be prioritised. The NIPE lead will have overall responsibility for overseeing the S4N IT failsafe when on duty.

- Any newborn infant that has not been examined within 48 hours must be identified (amber babies). The NIPE midwife on duty is responsible for contacting the relevant areas to inform them of the potential breach in the next 24 hours and to ensure a plan is in place for the NIPE to be performed.
- Special care should be taken to ensure that babies in HDU or any other areas are not missed and that if a baby is moved to/from NICU that this is reflected on S4N.
- The midwife on duty should also input any outstanding NIPE paperwork onto the system and generate NIPE labels for the notes.
- If the NIPE S4N system is not operational due to system error, then the NIPE should be hand-completed in the PCHR-(red book) and the appropriate baby notes to allow the woman to go home. The NIPE should then be entered onto the system at the earliest opportunity ensure you select the TIME AND DATE of when the examination was complete. Notes can be marked FAO NIPE lead to facilitate this. Practitioners should ensure the date, time and name of practitioner should be clearly recorded.

### **Performing the Examination**

- Always review the obstetric medical notes prior to the examination for any family history, risk factors and/or relevant information.
- Always make sure that the mother, father, carer/ are present for the newborn examination, as an important part of the examination is to answer queries and give reassurance.
- Hand hygiene is essential before and after the newborn examination Always wash or use alcohol gel on your hands before examining the baby. Alcohol gel must dry completely before handling.
- Always wear a glove when performing the digital examination of the baby's mouth and palate and use a tongue depressor.
- The aims and limitations of the examination should be fully explained.
- Obtain maternal history regarding pregnancy, date, time and type of birth and any complications / problems or high risk antenatal screening results referring to maternal hospital notes and birth summary.
- Obtain verbal parental consent for examination of the baby.
- Obtain family history and particularly any sibling history. In particular, ask about family history of hip dislocation / childhood heart problems / eye abnormalities e.g. childhood onset, cataracts, retinoblastoma or glaucoma
- Identify Hepatitis B positive mothers and ensure relevant vaccination programme is commenced (see trust Neonatal Guideline for Hep B)
- Identify if the baby will require a BCG vaccination using the most recent table issued by PHE. Complete BCG referral and provide "TB, BCG and your baby" leaflet.
- Discuss with mother how she perceives the baby is progressing e.g. feeding pattern, sleep pattern, urination and passing of meconium.
- Ensure parent has been given a Personal Child Health Record (red book).

## Documentation

The NIPE examination and any relevant information should be entered immediately, following the examination onto the S4N IT system. The examination should also be documented in the postnatal records and/or paediatric medical notes and Personal Child Health Record-PCHR (Red book). If it is not possible to enter the NIPE examination into S4N at the time of the examination eg. S4N system failure, please enter the examination and any relevant information as soon as possible remembering to change the date to the date and time the examination was completed.

## To input a NIPE on S4N

To find a baby record use the daily work list (see above) and click on the name of the baby. When the record opens ensure this is the correct baby by checking the NHS number, gender and date/time of birth. If any of the information is incorrect please use the edit button via the hamburger menu then click save. Please also report any errors to child health via [scwcsu.derbyshire.chis@nhs.net](mailto:scwcsu.derbyshire.chis@nhs.net)

- Click on the screening tab. Use the drop-down menu to indicate consent.
- If there are no risk factors, set all to 'NO' by clicking 'Set all 'unknown' risk factors to 'no'' via the button at the top of the list. If there are any risk factors click 'Yes' in the relevant sections, then click the relevant notepad icon and add free text information. Enter the correct time and date the NIPE was performed. Then click "next".
- Use the **Local Data Tab** to enter the top to toe examination. To see guidance for each item, hover the cursor over the blue **i** button. Click '**Set All to Normal**' button at the top on the right side. If the examination is entirely normal click the **Screen Results Tab** to move to the next page. Abnormality detected- click 'Abnormality Suspected' for the relevant item and document in the 'Comments/Action Taken'.
- Click the **Screen Results Tab** or "next" .Click 'All Tests Done' button at the top left of the page. This indicates you have performed the whole NIPE. Abnormality detected- complete the relevant line for 'Hips', 'Testes', 'Eyes', 'Heart' and 'Rest of physical examination', and add comments by clicking on the 'Notes' icon in the final column. If unable to complete the NIPE tick '**No**' in the test done column of the appropriate item not completed. Ensure the need to complete this part of the NIPE is handed over for another practitioner to complete. Use the "Review by Senior Clinician" box to indicate if further review is needed and ensure this is handed over to the neonatal team promptly.
- Click "save" to record the NIPE. The system will prompt you to confirm the examination is completed and then again to confirm if no referrals are required.
- You can now Click "print forms" on the hamburger drop-down to generate the labels and print referral letters or use electronic referral system if available. This will open a word document. Please complete mode of birth and indicate if the baby has been admitted to NICU at any point. If using printed referral letters, for routine referrals ensure these are attached securely to the obstetric notes for ward receptionists to action.

## **Completing Stickers and Referrals**

NIPE examiner to print the appropriate NIPE labels/documents

- One for the PCHR
- One for the appropriate baby notes
- Babies who screen positive or have risk factors for heart problems should be referred for paediatric review and the paediatrician will make any referral required.
- For screen positive testicular eye problems follow guidance in NIPE guideline for appropriate escalation pathways and again the paediatric team will complete any referrals.
- For screen positive hips due to national risk factors please order a hip USS for 4 weeks – see **Appendix 1** and **2** for how to do this. If the baby was born <34 weeks gestation, order hip USS at 38 weeks corrected age – **see Appendix 3** on how to work out dates.
- For screen positive hips which feel abnormal please request review by ANNP or neonatal registrar and if confirmed complete a hip referral form and send to [dhft.paedsappointmentrequests@nhs.net](mailto:dhft.paedsappointmentrequests@nhs.net) or print for reception staff to deliver to OPA.
- For any other referrals please tick the “referral required” tick-box on the “Rest of the Physical Examination section of the Screening Results tab. Ensure that the paediatric team are aware that they need to make a referral.

The NIPE MWs, paediatricians and ANNPs are responsible for ensuring that any appropriate referral has been made on discharge from the postnatal ward/labour ward/birth centre. Referrals should be distributed using the electronic system (see appendix 2 or e-mailed by the NIPE practitioner to:

[dhft.paedsappointmentrequest@nhs.net](mailto:dhft.paedsappointmentrequest@nhs.net)

## **NIPE Failsafe Colour-Coding**

### **Babies coloured neutral**

- These babies are between birth and 48 hours old. Any babies in this group and still in hospital should be added to the daily work list in all clinical areas.
- If the Health Professional identifies any baby on this work list as being in the community, she should contact the on call midwife for that area, who should then either arrange for the NIPE take place in the community or for the parents to bring the baby into UHDB for the NIPE to be completed.

### **Babies coloured Amber**

- These babies are between 48-72 hours old and it is the responsibility of the Health Professional to ensure the NIPE check is done before the baby is 72 hours old.
- If the Health Professional identifies any baby on this work list as being in the community, she should call the on call midwife for that area, who should then either arrange for the NIPE take place in the community or for the parents to bring the baby into UHDB for the NIPE to be completed that day.

### **Babies coloured red**

- These babies are over 72 hours old and have breached the 72 hour standard.
- Complete a DATIX
- Inform the midwife/nurse in charge of the ward.
- If the baby is in hospital ensure NIPE is undertaken as soon as their condition allows.
- If the Health Professional identifies any baby on this work list as being in the community, she should call the on call midwife for that area, who should then either arrange for the NIPE take place in the community or for the parents to bring the baby into UHDB for the NIPE to be complete.

### **Babies on NICU**

Babies admitted to NICU should have their NIPE completed by NICU staff once the baby is stable and this is the responsibility of the neonatal team to complete the NIPE prior to transfer to the Postnatal Ward. If this is not possible then the need for NIPE should be clearly documented and handed over to the ward co-ordinator and NIPE midwife. Babies who are admitted to NICU should be marked as NICU on S4N. These babies do not require DATIX if they are coloured red because they were too unwell/pre-term for NIPE to be performed. Neonatal staff should inform the Lead NIPE midwife of any mitigations for such babies and these should also be documented using the “case notes” on S4N.

### **Declines**

If parents decline a NIPE examination for their baby, ensure this is recorded in the S4N IT system by:

- Selecting decline
- Complete reason
- Save (directly from risk factor tab)
- Then press ‘save and exit’

### **In the event of a baby who is deceased**

Ensure this is recorded in S4N IT system to prevent any further distress to parents or they may be recalled for screening.

### **Babies who move into the area**

These babies are the responsibility of the receiving provider (i.e. Derby or Burton). Babies remain eligible for NIPE until 6 weeks of age. Responsibility for identifying eligible babies remains with the birth unit until formally passed to another provider, ideally via S4N, however, because these babies often remain in the Site section of S4N and only administrators have access to this area, the NIPE lead is responsible for checking for any babies and ensuring they have had NIPE completed in a timely manner. Some babies, who transfer in, will be seen by their GP and this needs to be followed up and recorded on S4N.

### **Babies who move out of the area**

Babies who are moving out of area must either have their NIPE completed prior to discharge or contact must be made with the receiving provider and arrangements made for timely NIPE to be completed. This can then be documented on S4N and the baby transferred to the receiving provider by the lead NIPE midwife. In the case of babies who are transferring from NICU, a clear plan should be made regarding whether the baby is expected to transfer back to Derby or remain with the new provider as this will determine if the baby is transferred on the S4N system and this plan should be recorded on S4N. Key contacts in the trust the baby is transferred to should be informed via email when the baby is transferred.

### **Trainee NIPE Practitioners**

All NIPE practitioners are responsible for ensuring that trainee NIPE practitioners have the opportunity to complete their training NIPES and assessments but this is not appropriate for newly qualified NIPE practitioners who need to develop confidence in their own practice first. Trainee practitioners should be given the opportunity to perform NIPES on a range of babies in different settings. Trainees should complete the requirements set by their teaching institution. S4N administrators should supply midwife trainee practitioners with a login for S4N. Trainees must work alongside another NIPE practitioner until they have evidence of passing their course. This should be provided to the NIPE Lead/Deputy and to the Practice Development Team.

### **Student Midwives**

NIPE is now offered as part of training for student midwives. Students will need to complete supervised NIPES as determined by their institution. As students are not on the register they can only perform NIPES under direct supervision **at all times** and will **NOT** be provided with a login for S4N. There will be a link for students on Pebblepad or equivalent, midwives will be able to review the students' progress. Students will be responsible for providing their own documentation for assessment. All NIPE practitioners are responsible for ensuring that student midwives have the opportunity to complete their supervised NIPES and assessments. The qualified practitioner remains responsible for the NIPE and completion of required paperwork/S4N.

### **Failsafe arrangements**

Monday – Friday the NIPE Lead/Screening Failsafe Officer or deputy will check the S4N IT system to ensure no babies are about to breach 72 hours and that there is a plan in place to complete the NIPE.

During weekends and bank holidays, the NIPE Team Midwife on duty will be responsible for checking S4N and actioning as above.

### **IT System Failure Contingency**

NIPE S4N is populated by the birth notification and generation of NHS number. If there is an IT failure for any reason then the NIPE will be documented either by hand or another IT system if this is available, and placed in the baby's medical notes and the PCHR. The Birth Details and Newborn Examination will be kept for retrospective input. These will be checked against the births for this period. .

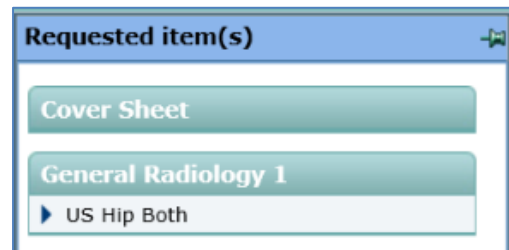


## Appendix 1: How to place a Hip USS request in Lorenzo

- 1 Click on R&R
- 2 Place request
- 3 Type "US hip" into the search bar and then select either of these 2 options
- 4 The order will appear in the requested items column



- 5 Click on *NEXT*
- 6 The cover sheet will open:  
**Priority** - Routine  
**Request to be performed date:** leave as today's date  
**Clinical Details:** Type the following:  
*For USS 4 weeks please. Hip Screening required due to – (enter risk factor e.g FH of DDH, Breech after 36wks, Breech Birth, One of a twin where one baby was breech) )*  
**Contact Mode:** email  
**Contact details:** [dhft.newbornscreening@nhs.net](mailto:dhft.newbornscreening@nhs.net)  
**Infection Control:** green

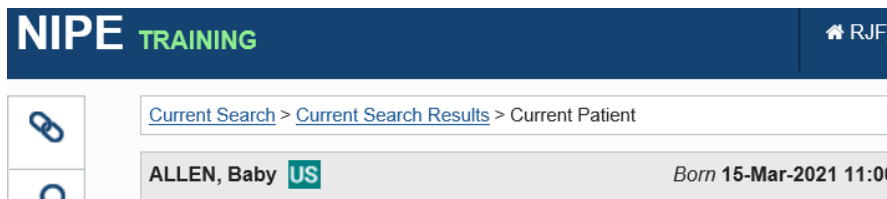


- 7 Click on *NEXT*
- 8 Complete the General Radiology page

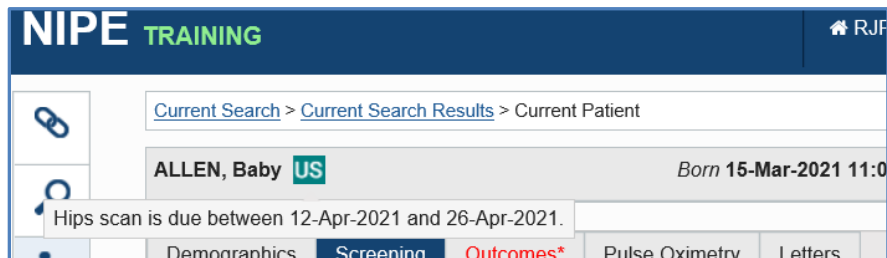
- 9 Click on *Finish*

## Appendix 2: How to place an USS request in V6

1. On S4N, when the national hip risk factor is ticked, it identifies the baby as requiring a hip ultrasound scan.
2. On completion of the NIPE a **US** tab will come up next to the baby's name as below



3. Hover the mouse over the **US** tab and it would bring up dates within which the Hip scan should be done.



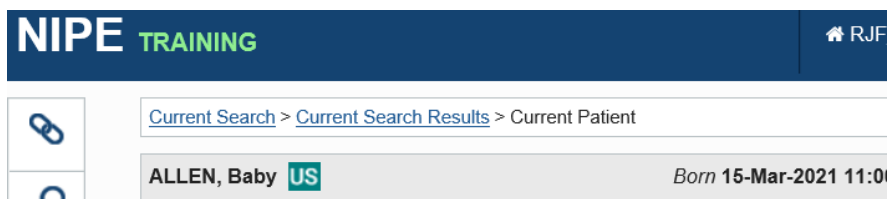
4. Open V6 to order Hip Ultrasound; Use **Amb Orders**
5. Complete the "scan to be completed" field with the 1<sup>st</sup> date above. In this example it would be 12 April 2021.

*Reason for exam:	At risk of DDH
:	
*Scan to be completed within (weeks)?	12/4/2021
Please give number of weeks gestation at birth:	36

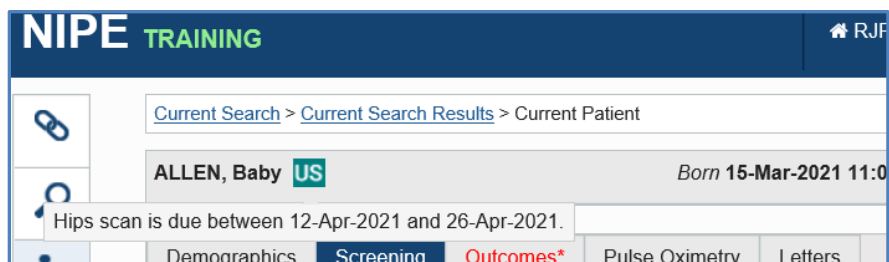
\*For AMB Orders DO NOT change Time Frame from 1 day\*

## Appendix 3: Hip USS request for babies born <34 weeks gestation (Both sites)

1. For babies born before 34 weeks gestation and have risk factors for DDH, the Hip scan need to be completed at 38 weeks corrected age. Please follow steps below to work out date for Hip Scan.
2. On S4N, when the national hip risk factor is ticked, it identifies the baby as requiring a hip ultrasound scan.
3. On completion of the NIPE a **US** tab will come up next to the baby's name as below



4. Hover the mouse over the **US** tab and it would bring up dates within which the Hip scan should be done.



5. Complete the "Scan to be completed" field (V6) or specify in the "Clinical Details" (Lorenzo) with the 1<sup>st</sup> date above. In this example it would be 12 April 2021.

## Documentation Control

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Version/Amendment	Version	Date	Author	Reason
	1	April 2021	Rachel McClean - Specialist Midwife	
	2	March 2024	Rachel McClean - Specialist Midwife	Review
<b>Intended Recipients:</b>				
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