Brighton and Sussex University Hospitals NHS Trust

Examination of the Newborn

Maternity Protocol: MP070

Date agreed: December 2019

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Version:	3
Approval Committee:	Women's Safety and Quality Committee
Date agreed:	January 2020
Review date:	January 2023
Cross reference:	MP069 Care of the Newborn Immediately after Birth MD084 Women's Service Education Strategy

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Key Principles

A protocol is a set of measurable, objective standards to determine a course of action. Professional judgement may be used in the application of a protocol.

Scope

This protocol applies to:

- Any mother and her newborn.

Responsibilities

Midwives, ANNPs and neonatology medical staff:

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

Management:

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

1 Purpose

1.1 The examination of the newborn is a screening examination. Its main aim is to identify and refer all babies born with congenital abnormalities of the eyes, heart, hips and testes, where these are detectable, within 72 hours of birth; to further identify those abnormalities that may become detectable by 6-8 weeks of age, at the second physical examination by a GP, attempts to identify those Newborns requiring additional or further investigation, treatment or follow-up. It is important to note that the examination will not identify all abnormalities, some of which will not manifest in the early newborn period.

1.2 The examination provides an opportunity to:

1.2.1 Review problems suspected from antenatal screening, family history or events during labour

1.2.2 Address concerns held by parents

- Begin treatment for known conditions or indications
- Screen for specific conditions
- Diagnose congenital malformations or conditions
- Identify the unwell newborn or those at risk of early clinical deterioration
- Enquire about the normal functions of the newborn including feeding, bowel and urinary function
- Identify social issues which place the Newborn at increased risk
- Provide early health education and advice

2 Process for the First Full Physical Examination

2.1 Timings of examination:

2.1.1 After a birth the midwife will perform some initial checks on the baby. A newborn physical examination (NIPE) should then take place within 72 hours of birth.

2.1.2 As per national guidance it is recommended not to perform the examination within 2 hours of birth.

2.1.3 For those Newborns eligible for an early discharge, every attempt should be made to undertake a NIPE before discharge. If this is not possible the mother will be required to return to the hospital the next day. The location of this return visit should be arranged with the postnatal ward at the time of discharge.

3 The Examination of the newborn must include the following elements (Standards):

3.1 Clinical history

This includes an appraisal of the maternal antenatal and labour record, including medical history, family history, social history, previous and current pregnancy history and drug history. It is useful to enquire from the midwife or nursery nurse whether there are any concerns requiring attention.

3.1.1 Before the physical examination commences, the examiner should be aware of the:

- gender
- gestation
- birth weight
- mode of delivery
- condition at birth

3.2 Introduction

3.2.1 The examiner must introduce themselves to the parents, explain the nature and purpose of their visit and gain consent.

3.2.2 Encourage parent/s to attend the examination where possible

3.2.3 The examiner should ask whether the parents have any concerns or questions.

3.2.4 The examiner should enquire about the mode and success of feeding and whether or not the baby has opened their bowels and passed urine.

3.3 Observation

3.3.1 The examiner should observe the interaction of the parents with the baby.

3.3.2 The examiner should observe the appearance and behaviour of the baby prior to the examination, noting the colour, facies, breathing pattern, posture and movement.

3.4 Examination

3.4.1 When assessing newborn infants please consider the following cautionary note:

- Late preterm infants and early term infants (35+0-37+6 week's gestation) are at increased risk of postnatal complications, even if they are generally healthy.

3.4.2 The baby should be naked with the exception of the nappy.

3.4.3 The approach to the examination should be flexible according to the behaviour of the baby. For example, if the baby is quiet at the start, it is wise to auscultate the heart before other parts of the examination which are likely to unsettle them.

3.4.4 A top-down approach is recommended.

3.4.5 The skin should be assessed for colour, turgor, temperature, birth marks and skin lesions

3.4.6 The scalp should be inspected and palpated including an assessment of the anterior fontanelle and the presence of haematomata.

3.4.7 The face and head should be inspected for abnormalities or atypical facies.

3.4.8 The neck and clavicles should be palpated for integrity.

3.4.9 The hands and arms should be inspected carefully.

3.4.10 The chest should be inspected, observed and auscultated including an assessment of respiratory function.

3.4.11 The heart should be auscultated for the presence of murmurs and arrhythmias.

3.4.12 The abdomen should be inspected, auscultated and palpated.

3.4.13 The nappy should be removed. Femoral pulses must be palpated and their presence and character noted.

3.4.14 The external genitalia should be inspected. The presence of both fully descended testes should be noted in male infants.

3.4.15 The anus should be inspected.

3.4.16 The hips should be examined using the Barlow and Ortolani tests.

3.4.17 The spine and back should be inspected.

3.4.18 An assessment of tone should be made while handling the newborn, consider checking the Moro reflex if good tone is not easily identified.

3.4.19 Examine the eyes using an ophthalmoscope for the presence of symmetrical red reflexes and other eye abnormalities.
(See Appendix 2. Examination of the newborn: referral pathways for midwives, 2019)

4 Staff able to Perform Newborn Examination

4.1 The following health professionals are able to perform an examination of the newborn:

- Consultant Neonatologist
- Neonatal registrar
- Neonatal SHO
- Advanced Neonatal Nurse Practitioner
- Qualified Midwife with the Examination of the Newborn qualification.

4.2 Training, assessment and validation for personnel undertaking examination of the newborn

4.2.1 Junior medical staff:

- All junior medical staff routinely receive an induction on entry to the service that they are booked onto.
- This induction, led by a consultant neonatologist, includes a lecture, slide presentation, demonstration and supervised full physical examination of the newborn.
- Teaching includes the use of the 'hippy' baby for the demonstration and practice of the hip examination described above.
- Attendance at this induction training session is logged with the neonatal secretaries and logged on the maternity training database.
- Junior staff are supported by a consultant neonatologist at all times.

4.2.2 Consultants, Staff grades and ANNPs:

- These individuals are permanent members of staff with regular exposure to clinical practice in the examination of the newborn.

4.2.3 Midwives:

- Midwives performing examination of the newborn only do so following successful completion of a University accredited 'examination of the newborn' programme of study. On completion of the course the midwife should provide evidence of this to the Practice Development Midwife who will keep a copy and log it centrally on the training database.
- Midwives have a professional responsibility to maintain their competency and will be required to attend an in-house Examination of the newborn annual update. Annual competency will be monitored by the NIPE Lead and updates and e-learning logged centrally on the NIPE training database.

- Midwives will be required to complete the NIPE e-learning resource annually.
- The baby should meet the following criteria for a midwife examination:
  - ≥37+0 weeks gestation and not small for gestational age
  - Uncomplicated instrumental delivery (max 3 pulls and no change of equipment) or uncomplicated caesarean section (failure to progress and elective section)
  - Not on transitional care anymore
- An annual review of completion of the attendance at junior medical staff induction and the ongoing competency of Midwives will be undertaken by the NIPE lead. For further details on training requirements, recording and co-ordination of non-attendance see the MD084 Women's Services Education Strategy
- Providers/NIPE Lead/Clinical lead should ensure:
  - Training has been completed satisfactorily and recorded and that there is a system in place to assess on-going competency in undertaking the NIPE examination.
  - There are adequate numbers of appropriately trained staff in place to deliver the NIPE screening programme.
  - Appropriate annual CPD in line with the programme requirements for example national NHS Screening Programme e-learning for professionals involved in the NIPE screening pathway.

5 Documentation

5.1 Practitioners undertaking full physical examination of the newborn are responsible for ensuring:

5.1.1 Full or partial Informed consent from parent/s is documented in the baby notes.

5.1.2 The process of examination is completed

5.1.3 The outcome of the examination will be recorded immediately on the Northgate S4N national database and copies placed in the baby notes and maternal brown folder.

5.1.4 This will include written indication of satisfactory completion of each element of the examination.

5.1.5 The documentation will include the date & time of examination, signature and printed surname of the practitioner and role designation.

5.1.6 Where necessary, when any deviation from normal is identified, an appropriate management plan including investigations, expert opinion sought, referrals and follow-up arrangements should be entered onto the S4N record.

5.1.7 That the outcome of the first full physical examination is communicated to the parents and that this communication and any further discussions are documented.

6 Communication

6.1 Practitioners undertaking full physical examination of the newborn should:

6.1.1 Always ensure they have informed consent from the parent/s prior to the examination. . This should be entered onto the first page of the S4N record. NB. You cannot enter further information on the NIPE record without first entering ‘consent’.

6.1.2 Encourage parent/s to attend the examination where possible.

6.1.3 During the examination the practitioner should discuss and explain the procedure and results with the parent/s if present

6.1.4 The process for communicating the outcome of the full physical examination with the parents is as follows:

- Abnormalities or issues giving rise to concern to the practitioner should be openly and honestly expressed to the parents at the time of the examination.
- This may simply be an expression of the need for a second opinion, providing an explanation of from whom the opinion will

be sought and an expected timeframe within which the parents may expect to receive it.

- Alternatively, the practitioner should clearly indicate any further clinical assessment or investigations required and their urgency, together with the management plan to inform parents of results. Arrangements for outpatient or other follow-up should be explained and, whenever possible, provided as soon as possible.
- The practitioner should provide information relevant to the abnormality identified and answer any questions posed by the parents within the limit of their expertise. Parent information leaflets should be offered when available.
- The practitioner should seek advice or assistance from a senior colleague or Consultant Neonatologist as appropriate and indicate this to the parents.

7 Process of referral for further medical investigation, treatment or care if deviations from normal are identified.

7.1 Universal process for general referral

The practitioner should make arrangements for the appropriate investigations to be completed Identify abnormality during newborn examination and document clearly in the baby notes and on the S4N record.

7.1.1 Inform and explain to parents about any concerns and subsequent referral process

7.1.2 If a midwife or junior medical staff are undertaking the NIPE, bleep the on call senior neonatologist (registrar level) or senior ANNP and ask for a second review. This should be documented in the postnatal baby notes and on the S4N record.

7.1.3 Senior neonatologist (registrar level) or senior ANNP to review the baby as requested and decide on a plan of care and if a further referral is required. This should be documented in the postnatal baby notes and on the S4N record.

7.1.4 If an **urgent referral** is required:

- The midwife undertaking the NIPE should bleep the on call senior neonatologist or senior ANNP and ask them to review the neonate *immediately*. If they are not able to come and review the baby urgently then the consultant neonatologist should be contacted via switch and asked to review the baby immediately. This should be documented in the notes, to include times and names of people contacted.
- A full set of observations (temperature, pulse, respiration rate, SATS, tone and colour) should be undertaken and documented in the notes.

- If the midwife/doctor is concerned about the condition of the baby it should be taken to the neonatal resuscitaire and the emergency bell called for assistance; a 2222 call for 'neonatal emergency' should be put out to summon the neonatal team to attend immediately.
- Parents should be kept informed at all times and any advice / discussions documented in the notes.
- (For further guidance please refer to Appendix 2. Examination of the newborn: referral pathways for midwives. Department of neonatology. 2019)

8 References

Examination of the newborn: referral pathways for midwives. BSUH. Department of Neonatology, 2019.

National Institute for Health and Clinical Excellence clinical guideline: Routine Postnatal care of women and babies (NICE, 2006)

UK National Screening Committee: https://www.gov.uk/government/groups/uk-national-screening-committee-uk-nsc

Newborn and Infant Physical Examination Screening Programme Handbook: Public Health England 2016/17

Service specification No.21 – NHS Newborn and Infant Physical Examination Screening Programme: NHS Public Health Functions agreement 2019 – 19

Roberton's Textbook of Neonatology 5th Ed.

Appendix 1 - Midwives guidelines for examination of the Newborn

Midwives guidelines for examination of the Newborn

Midwives who have undertaken an accredited examination of the Newborn course:

Midwives can examine babies	Midwives should not examine babies
Over 37 weeks	Under 37 weeks
Normal vaginal birth	Complicated/traumatic vaginal birth
Uncomplicated instrumental delivery (no more than 3 pulls and no change of instrument).	Complicated/traumatic instrumental delivery
Uncomplicated LSCS	Complicated/traumatic LSCS
Low risk babies on meconium observations	
Babies who have completed their transitional care who have not yet had a NIPE by an SHO, ANNP or registrar.	Babies who are still on transitional care other than meconium observations.
	Maternal medical history that could affect the baby (e.g. CDH, cardiac abnormalities)
	Antenatal U/S diagnosis of any abnormalities in the fetus/baby
	Parental informed consent not obtained

Midwives should refer babies whom they are not able to examine to be reviewed by an ANNP or neonatologist. This should be clearly documented in the postnatal notes.

Appendix 2 NIPE Screening Programme: Newborn Pathway.

(Please click at above link)

Appendix 3 NIPE Guideline for Midwives

(Please click at above link)