UHL NNU Guideline: (NTC) Neonatal Transitional and enhanced PNW care UHL Guideline

University Hospitals of Leicester NHS Trust

Trust ref:C9/2019

Contents

1. Introduction and Who Guideline applies to

This guideline is aimed at all Health care professionals involved in the care of infants within the Neonatal Service.
This guideline has been updated in 2022 to meet the British Association of Perinatal Medicine (BAPM) A framework for Neonatal Transitional Care. October 2017.[1]

1.1 Aims

- To keep parents and babies together in a Neonatal Transitional Care (NTC) setting
- To support resident birthing parent as primary care providers for their babies with care requirements more than normal newborn care, but who do not require neonatal unit (NNU) admission
- To provide additional support for small and/ or late preterm babies and their families.
- To facilitate a smooth transition to discharge baby's home
- To prevent neonatal admission

1.2 Background

The goal for NTC in UHL is to adhere to BAPM guidelines to care for the birthing parents and their babies together. Currently babies identified as requiring Transitional Care are looked after by midwifery staff in the main post-natal ward

rather than in a designated area with dedicated nurses. Babies requiring enhanced care but who do not meet the definitions as laid out in the Critical care data set definitions[2] have previously been counted as Transitional care babies in UHL. Since November 2022, only babies meeting the BAPM criteria for NTC have been designated as such on the Badger database (See Appendix A for UHLs current position).

1.3 Current criteria for Neonatal Transitional Care currently being delivered on the PNW in UHL

Every baby on Transitional Care (TC) will be reviewed daily by a paediatrician or an advanced neonatal nurse practitioner (ANNP). Following the review the babies should be discussed with the tier 2 doctor responsible for special baby care unit on NNU or a Consultant.

In all babies, if the clinical care requirement cannot be met using the standards set out below, they should be considered for admission to the neonatal unit and discussed with the on-call consultant.

To be eligible for Transitional Care (TC), the primary carer must be resident with the baby. Neonatal Transitional Care (NTC) is care additional to normal infant care, provided in a postnatal clinical environment by the mother or an alternative resident carer, supported by appropriately trained healthcare professionals

1.4 Care requirements meeting the BAPM definition of Transitional Care

- Babies born between 34+0- and 35+6 weeks' gestation
- Birth weight of >1600g and < 2000g who do not fulfil criteria for neonatal admission for other reasons
- Babies with haemolytic disease-causing jaundice requiring phototherapy but can be managed with single lights.
- Babies receiving antibiotics, who are clinically stable on NEWS observations - to be located on Badger notes as on the PNW (see later in guideline)
- Inability to maintain temperature following a first episode of rewarming and despite skin to skin and/or adequate clothing.
- Palliative care

Babies receiving enhanced PNW care with neonatal support.

- These are well babies ≥36 weeks gestation receiving aspects of normal newborn care and would be expected to be managed principally by the midwifery staff.
- NEWTT2 observations
- Babies managed under the prevention of hypoglycaemia policy needing additional feeding support.
- Temperature monitoring as required and a single episode of rewarming using a heat source if required. Aiming for 12-24 hours of normothermia.
- Physiological jaundice (usually DAT negative) requiring single phototherapy
- Non-life-threatening anomaly/condition requiring investigations as an inpatient e.g. bilateral undescended testes

Babies cared for on SCBU
Additional conditions are defined in the BAPM document as Transitional care (ref BAPM guidance) but currently are cared for within SCBU at UHL. Parents should be encouraged to be as closely involved in their baby's care where admission to SCBU is required. These babies include the following:

- Babies with indwelling urethral or suprapubic catheter
- Babies requiring oxygen by low flow nasal cannulas
- Babies feeding by orogastric, nasogastric, jejunal or gastrostomy tube
- Babies with a stoma
- Babies receiving drug treatment for neonatal abstinence syndrome
- Babies born with a gestation at birth < 34 weeks, until discharge from hospital.
- Babies requiring step down care before discharge home when the mother has been discharged from maternity care

1.5 Role and responsibilities;

Medical staff and Advanced Neonatal Nurse Practitioners (ANNPs)

- Admission onto Badger for babies meeting criteria for TC when referred by midwifery team.
- Daily clinical review of all TC babies.
- Make feeding plans where required in conjunction with midwifery or neonatal assistant.
- Initial septic screens and prescribing of antibiotics.
- Discharge letters.
- Review of babies where clinical concerns have been raised by midwifery or midwifery support workers. This responsibility extends to all babies on the PNW.
- Escalation to other medical staff if unable to review a baby in a timely way due to other tasks.

Registered Midwives (RMs)

- Newborn examination (NIPE) if relevant training has been completed, and escalate any concerns identified.
- Refer all babies that meet the TC criteria to the medical staff and commence NEWTT2 chart**.**
- Perform routine daily newborn checks.
- Escalation of clinical concerns identified or reported by midwifery assistants or nursery nurses. For babies with significant compromise the Crash bleep system should be used to summon immediate and senior support. For less urgent calls, a direct escalation to the neonatal tier 2 bleep may be appropriate to summon senior help.

- <u>Delays in review – escalation process</u>
    - Where there is an unexplained delay in review of a clinical concern by the tier 1 doctor, a 2nd request should be made. Where the tier 1 doctor is unable or doesn't attend then the midwifery team should escalate to the tier 2 doctor or if no response, to the neonatal consultant responsible for SCBU (9am-5pm), to the on-call consultant (5pm – 9pm) or resident consultant (9pm to 9am).

Midwifery Support Workers Nursery Nurses (MSW NN)

- MSW NN's perform duties under the direction of the registered members of staff.
- Duties include; NEWTT2 observations, blood sugar monitoring, documentation of feeding plans, transfer of babies to other departments for investigations, day 3 and 5 weights, routine daily newborn checks and newborn blood spot screening.
- Creating feeding plans based on infant feeding guideline.
- Any concerns or deviations from normal parameters will be escalated to the registered members of staff.

Neonatal Nursing Assistant (NNA's)

- Assist medical staff to carry out newborn checks and assist medical staff in creating feeding plans based on infant feeding guideline.
- Taking blood, both heel prick and venous, sending blood samples except initial septic screens and genetic samples.
- Liaising with homecare team and overseeing preparation of discharge letters.
- Check maternal details, medical history and paed alert forms and ensure appropriate action taken and appropriate referrals/escalations are made where there are concerns.
- Completing daily update on Badger and maintain accurate newborn notes

2. Guideline Standards and Procedures

2.1 Management standards for infants under TC:

- **Gestation - 34+0-to-35 +6-week and clinically well**
- **Birth Weight between 1600g and 2000g**

Badger admission with ***location on Badger as TC***
NEWTT2 observation every 4 hours for at least 24 hours (Stop when NEWTT2 score is 0 for 24 consecutive hours)
Pre feed blood sugars – see Hypoglycemia Guide Link[5]
Early feeding and feed chart
Day 3 weight
D5 weight is required if day 3 weight loss is over 7%
Refer to Home Care Team if BW is <1.8kg

2.2 Babies who are receiving IV Antibiotics

- Clinically well baby

Badger admission with ***location on Badger as PNW***
NEWTT2 observations every 4 hours for duration of antibiotics
Care in line with guideline - Early and late onset Sepsis Guideline [3]

2.3 Haemolytic Disease of Newborn (usually DAT positive jaundice)

- Single phototherapy only
- If jaundice presents in the first 24 hours of life, please discuss with Consultant or Registrar.

Badger admission with ***location on Badger as PNW***
NEWTT2 Observations every 4 hours while on phototherapy
Care in-line with NICE – NICE Jaundice[4] and UHL jaundice in the newborn - Link
Monitor and document feeding and feeding support
On discharge photocopy jaundice chart for community midwives and consider if medical follow up or jaundice clinic is required.
Once single lights complete, babies can be discharged off badger.

2.4 Inability to maintain temperature requiring more than one episode of rewarming.

Badger admission with ***location on Badger as TC***
Initial temperature and monitoring every hour until stable then 4 hourly
NEWTT2 Observations 4 hourly until scoring zero for 24 hours
Monitor and document feeding

2.5 Discharge Letters or ICE/NerveCentre

TC babies and some of those with enhanced care will require a badger discharge summary or an ice/nerve centre letter depending on which criteria they fit into and whether they require follow up.
Badger letters are used as per the list below and where neonatal clinic follow up is needed, please print out Badger or ICE/Nerve letter and put into the baby's notes.
ICE/Nerve centre letters are also used to send information to the GP or where the only follow up is with other specialties
All babies requiring a discharge letter (Badger OR ICE) should have their own notes created.

BADGER DISCHARGE LETTER	ICE/NERVE CENTRE DISCHARGE LETTER
34+0 to 35 +6 week gestation inclusive	Physiological jaundice (usually DAT Negative) requiring single phototherapy
Birth weight >1600g and <2000g	Babies with an antenatal plan of an inpatient or outpatient investigation e.g., ECHO, Ultrasound
Haemolytic disease of the new-born (usually DAT Positive jaundice) managed with single phototherapy	Heart murmurs needing an investigation or neonatal follow up
Temperature instability - after an episode of rewarming requiring admission to TC	Congenital anomalies requiring inpatient investigation e.g. bilateral undescended testes
Palliative care	Other conditions managed on the PNW which require follow up or documented information for other health care professionals
Babies who are being treated with antibiotics	

3. Education and Training

None

4. Monitoring Compliance

TC activity to be monitored for the Maternity Incentive Scheme and where necessary through the neonatal department audit plan Monthly audit of the following:

- Proportion of babies receiving care on TC which meet the criteria as per the BAPM definition for eligibility (minimum of 1 HRG 4 criteria)
- Number of care days delivered on TC that meet the criteria for TC as defined by BAPM
- Care days for babies nursed on NNU who would have met the criteria for TC as per the definitions in the BAPM criteria

5. Supporting References

1. British Association of Perinatal Medicine. October 2017. A Framework for Neonatal Transitional Care.
2. https://www.networks.nhs.uk/nhs-networks/staffordshire-shropshire-and-black-country-newborn/documents/documents/neonatal-hrgs
3. Kairamkonda, V., Stachow, L. and Koo, S. 2021. Antibiotic Guideline for Early-onset & Late-onset neonatal infection.
4. National Institute for Health and Care Excellence. 2016. Jaundice in newborn babies under 28 days.
5. Yadav, K. 2018. Prevention and Management of Symptomatic or Significant Hypoglycaemia in Neonates.

6. Key Words

British Association of Perinatal Medicine, Newborn

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

EDI Statement

We are fully committed to being an inclusive employer and oppose all forms of unlawful or unfair discrimination, bullying, harassment and victimisation.

It is our legal and moral duty to provide equity in employment and service delivery to all and to prevent and act upon any forms of discrimination to all people of protected characteristic: Age, Disability (physical, mental and long-term health conditions), Sex, Gender reassignment, Marriage and Civil Partnership, Sexual orientation, Pregnancy and Maternity, Race (including nationality, ethnicity and colour), Religion or Belief, and beyond.

We are also committed to the principles in respect of social deprivation and health inequalities.

Our aim is to create an environment where all staff are able to contribute, develop and progress based on their ability, competence and performance. We recognise that some staff may require specific initiatives and/or assistance to progress and develop within the organisation.

We are also committed to delivering services that ensure our patients are cared for, comfortable and as far as possible meet their individual needs.

CONTACT AND REVIEW DETAILS			
Guideline Lead (Name and Title) Joanna Preece - Consultant Jo Lavelle - ANNP Deepa Panjwani - Consultant			**Executive Lead** Chief Nurse
Details of Changes made during review:			
Date	**Issue Number**	**Reviewed By**	**Description Of Changes (If Any)**

March 2019	**1**	**Cara Hobby Julie Park**	**New SOP**
April 2023	**2**	**Jo Lavelle - ANNP Deepa Panjwani - Consultant Joanna Preece - Consultant Neonatal Guidelines Meeting (new guideline) Neonatal Governance Meeting (ratified)**	**Converted from SOP to guideline Completed re-written to incorporate BAPM framework**
Nov 2023	**3**	**TC working group Neonatal guidelines group**	**Key changes from previous version (April 2023)** • Guideline now clearly outlines which babies meet the criteria for Transitional Care and which babies (previously counted as TC) are now classified as receiving *Enhanced PNW care*. From a practical point of view, management and responsibility for these babies has not changed but some of the documentation methods have changed. • Some definitions of conditions have been changed to be in line with BAPM ○ Jaundice – now defined as "haemolytic disease of the newborn" ○ Requiring temperature monitoring – now defined as babies with "an Inability to maintain temperature following a first episode of rewarming and despite skin to skin and/or adequate clothing" ○ Risk factors for sepsis – now defined as "babies requiring IV antibiotics" • The following babies will no longer be recorded on Badger unless meeting the criteria for TC for other reasons and will receive ICE letters rather than badger discharge letters: ○ **Physiological Jaundice** requiring single phototherapy – for ease of diagnosis this has been defined as DAT negative jaundice ○ **Well babies with a murmur** found on newborn / NIPE check undergoing assessment with ECG +/- Echo and requiring neonatal or cardiology follow up ○ **Babies requiring genetic testing** as per an antenatal plan or following findings at postnatal checks ○ **Babies with non-life-threatening conditions requiring investigation** either as an inpatient or outpatient as per antenatal or postnatal findings and who may require follow up either in neonatal clinic or following referral to other specialties. ○ Other conditions managed on the PNW which

			require follow up or documented information for other health care professionals All babies requiring ICE or Badger documentation will have their own notes creating and documentation from their PNW stay should no longer be filed in the maternal notes. The NNA will create these notes.
Sept 2024	**4**	**DR J Preece**	**Update in line with MIS requirements and introduction of NEWTT2** • Addition of description of staff responsibilities with escalation pathways Change in terminology from NEWS to NEWTT2 and addition of updated timeframes