

Guideline

Neonatal Repatriations at night

1 Scope

For use within the Paediatric and Neonatal Decision Support and Retrieval service for the East of England

2 Purpose

To provide guidance for elective night-time repatriations performed by the PaNDR Neonatal team.

3 Definitions and abbreviations

CPAP – continuous positive airway pressure
HDU – High dependency unit
HFNC – high flow nasal cannula
BAPM – British Association of Perinatal Medicine

4 Introduction

The PaNDR team often perform elective night-time repatriations. This guideline provides a suggested criteria for completing night repatriations considering patient flow, patient safety and staff wellbeing. Capacity transfers are not covered by this guideline as they are classified as emergency transfers.

5 Rationale

Advantages of night transfers:

- Extends the hours for elective transfers to be completed
- Reduces time from referral to time of transfer
- Journey times may be reduced as there is usually less road traffic at night
- Improves patient flow and capacity in Neonatal Units
- Getting families closer to home
- Maximises use of PaNDR resources

Disadvantages of night transfers:

- Currently there is only 1 team overnight covering the whole region for repatriations and emergency transfers; an overnight repatriation may lead to a delay in the team's response to an emergency transfer
- BAPM guidance recommends that repatriations should generally be planned during normal working hours to minimise disruption to families (1)
- Staff fatigue may be a factor if staff are on multiple nights and / or have had shift overruns
- Staff wellbeing may be affected if an emergency transfer is required immediately post elective transfer with no break. (4)
- Parents may not be available to travel with their baby at night
- Road closures overnight may make the journey more difficult
- There is often reduced medical staffing overnight at the receiving hospitals due to cross covering between paediatrics and neonatal services in local neonatal units and special care units

6 Requirements for Elective Repatriations at night

- **Infant**

- Weight ≥ 1000 grams
- Stable special care babies as per BAPM criteria
- Stable HDU patients as per BAPM criteria
- No significant or complex medical and / or social issues
- No infection control issues that require a deep clean
- Stable observations for the last 24- 48 hours before transfer
- The estimated journey time with the baby on board should be < 90 minutes to maintain timely responsiveness in the event of an emergency referral
- Parents have agreed to overnight transfer
- Parents should be offered to travel with their baby at night



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- Parents aware that there may be no available parental accommodation at the receiving unit overnight and that an elective transfer may be aborted to prioritise an emergency transfer.

- **PaNDR Team**

- Document cot confirmation and acceptance in the receiving unit, usually completed by EBS
- If required ensure medical handover from the referring unit to the receiving unit has been completed
- Complete PaNDR elective referral form
- Unplanned and planned emergency transfers will take priority, and all pending jobs should be reviewed before the night team is dispatched
- Plans for night-time repatriations should be discussed and agreed with the PaNDR night consultant and the clinical team at night handover
- PaNDR night consultant should be aware of planned or ongoing repatriations and be available for advice if required
- No single clinician transfers should be completed overnight
- Clinical team should discuss the transfer timings with the ambulance technician, aim for the total duration of the transfer to be less than 6 hours
- Aim not to commence an elective transfer after 22:30
- Repatriations from a non-tertiary unit should only be completed overnight in exceptional circumstances
- Repatriations out of region can be considered for completion overnight if baby on board for < 90 mins and total journey time is estimated < 6 hours
- Complete a risk score and review staff wellbeing (If risk score ≥ 3 consider whether transfer is necessary overnight)

All team members should agree on the plan before starting the transfer

7 Criteria that should be considered when assessing suitability of an infant for an overnight repatriation

	Green Repatriation	Amber Repatriation <i>may be considered on a case-by-case basis</i>	Red Repatriation <i>case should be reviewed to assess suitability</i>
Birth Gestational age	≥28 weeks gestation	≥27 weeks <28 weeks gestation	
Birthweight	weight ≥1000 grams	weight ≥800 grams <1000 grams	
BAPM criteria	Stable SCU or HDU as per BAPM categories of care (5)	Intensive Care baby as per BAPM categories of care (5)	
Medical background	No complex medical, social or infection control issues	Significant and / or complex medical or social issues	Infection control issues requiring a deep clean
Stability	Stable observations in the last 24-48 hours		
Referring unit	Level 3 unit		Level 1 or 2 unit
Receiving unit	Level 1 or 2 unit	Level 3 unit	
Region	Within region (i.e. within EoE)	Outside of Region but meeting green criteria for baby on board and transfer time	Outside of region, not meeting green criteria for baby on board and transfer time
Dispatch time	Before 22:30	After 22:30 but before midnight	After midnight
Transfer time	Less than 6 hours	6 to 8 hours	More than 8 hours
Baby on Board time	<90 minutes	90 mins - 120mins	>120 mins
Handover	Receiving unit Consultant and Nurse in charge aware and happy to accept infant overnight		
Parental accommodation	Parental accommodation offered and available	No parental accommodation available	
Risk Score	PaNDR risk score ≤ 2	PaNDR risk score 3-4	PaNDR risk score >4
PANDR Caseload	Undertaking transfer will reduce subsequent workload on incoming day teams		



8 References

- 1- Safe and Effective Repatriation of Infants A BAPM Framework for Practice June 2023
- 2-<https://pubmed.ncbi.nlm.nih.gov/33356770/>
Moshynskyy AI, Mailman JF, Sy EJ. After-Hours/Nighttime Transfers Out of the Intensive Care Unit and Patient Outcomes: A Systematic Review and Meta-Analysis. *J Intensive Care Med.* 2022 Feb;37(2):211-221. doi: 10.1177/0885066620984410. Epub 2020 Dec 28. PMID: 33356770.
- 3-<https://pubmed.ncbi.nlm.nih.gov/29938369/>
Vollam S, Dutton S, Lamb S, Petrinic T, Young JD, Watkinson P. Out-of-hours discharge from intensive care, in-hospital mortality and intensive care readmission rates: a systematic review and meta-analysis. *Intensive Care Med.* 2018 Jul;44(7):1115-1129. doi: 10.1007/s00134-018-5245-2. Epub 2018 Jun 25. PMID: 29938369; PMCID: PMC6061448.
- 4-<https://bmjopen.bmj.com/content/3/9/e003567>
Jackson EJ, Moreton A. Safety during night shifts: a cross-sectional survey of junior doctors’ preparation and practice. *BMJ Open* 2013;3:e003567. doi: 10.1136/bmjopen-2013-003567

9 Monitoring compliance and the effectiveness of this document

The PaNDR team will periodically monitor that the guideline is being adhered to, and the results will be presented to the senior team at a governance meeting

10 Equality and diversity statement

This document complies with the Cambridge University Hospitals NHS Foundation Trust service equality and diversity statement.

11 Disclaimer

It is the responsibility of all staff to ensure they are using the latest version of a document.

12 Document management

Approval:	PaNDR Senior team		
Owning department:	PaNDR		
Author(s):	Mostafa Elbatreek /Ronnie Young / Purav Patel / Julia Arthur		
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