

Clinical Guideline: Patient flow including repatriation

Authors: Elizabeth Langham, Julia Cooper, Nina Vieira and PaNDR

For use in: EoE Neonatal Units - Guidance specific to the care of neonatal patients.

Used by: EoE Neonatal units, Transport team (PaNDR)

Key Words: Patient flow, transfer, repatriation, capacity, escalation

Date of Ratification: 4th December 2024

Review due: December 2027

Registration No: NEO-ODN-2024-8

Approved by:

Neonatal Clinical Oversight	
Group	
Clinical Lead Matthew James	Matthew James



Contents

(Hosted by Cambridge University Hospitals)

Abbreviations 3	,
Glossary	4
Equality, Diversity & Inclusivity Statement	5
Background	6
2. Unit designations	7
2.1 Special Care Units (SCU) previously a 'Level 1 unit'.	7
2.2 Local Neonatal Units (LNU) previously a 'Level 2 unit'.	7
2.3 Neonatal Intensive Care Units (NICU) previously a 'Level 3 unit'	7
2.4 Cluster Units	8
3. Escalation	9
3.1 In-utero	9
3.2 Pathways of care for escalation ex utero transfers	9
3.3 Tertiary advice	11
3.4 Surgical flows	13
3.5 Repatriations	14
3.5.1. Process of repatriation (see Appendix 2)	17
3.5.2. Delayed repatriation	19
 Delayed repatriation data (> 72 hours of threshold criteria of home unit) is through the ODN exception report where reasons for delay are identified. 	collected monthly 19
3.6. Decision - not to repatriate	19
3.7. Decision making	20
3.8. Escalation procedures	20
3.9. Monitoring arrangements	21
4. Infection Control	21
5. Unit Closures	22
5.1. EOE EBS team	23
On being informed of a unit closure, the EBS team will ascertain the following	information: 23
Name of unit affected	23
6. Incident reporting	23
REFERENCES	24
Appendix 1 - Unit Designations	25
Appendix 2 – Repatriation Pathway	27
Appendix 3- Network Repatriation Communication Record	28
Appendix 4 – Documentation of booking hospital on Badger Net	33
Appendix 5 – Repatriation Link Nurse Role Description	34
Appendix 6 – Date and time of ready for transfer on Badger Net	35
Appendix 7 – Break the Glass function Badger Net	36
Appendix 8 – How to access clinical records shared by other units	37
Appendix 9 - Unit Closure Notification form	38



Abbreviations

British Association of Perinatal Medicine
Children's Acute Transport Service
Clinical Oversight Group
Cambridge University Hospitals/Addenbrookes/ Rosie
Emergency Bed Service
Extracorporeal membrane oxygenation
East of England
Great Ormond Street Hospital
In utero transfer
Local Maternity and Neonatal Services
Local Neonatal Unit
Luton & Dunstable University Hospitals
Neonatal Intensive Care Unit
Norfolk & Norwich University Hospitals
Next of Kin
Operational Delivery Network
Princess Alexandra Hospital/ Harlow
Paediatric and Neonatal Decision Support and Retrieval Service
Peterborough City Hospital
Special Care Unit

East of England Neonatal ODN (Hosted by Cambridge University Hospitals)

Glossary

Escalation – Transfer of infants from a SCU/LNU or tertiary service for uplift in care provision

Tertiary escalation – Transfer of infants from a non-surgical tertiary centre that require surgery or from all NICU units for ECMO.

Repatriation - Repatriation refers to an infant returning to their local hospital as is appropriate to their care level and requirements

Delayed Repatriation - when an infant who has been identified as fit for discharge to their home unit is delayed by more than 72 hours from the decision

Local/home unit - Unit local to their home address (not always the maternity booking hospital)

Ongoing care unit - Neonatal service close to their local unit/ within network, which can provide the appropriate level of care

East of England neonatal network - Consists of 17 units in Norfolk, Suffolk, Cambridgeshire, Essex, Bedfordshire and Hertfordshire



Equality, Diversity & Inclusivity Statement

This policy document aims to meet the diverse needs of our service, population and workforce, ensuring that none are placed at a disadvantage over others. It takes into account the provisions of the Equality Act 2010 and promotes equal opportunities for all. This document ensures that no one receives less favourable treatment on the protected characteristics of their age, disability, sex, gender reassignment, sexual orientation, marriage and civil partnership, race, religion or belief, pregnancy and maternity. The East of England Neonatal ODN advocates due regard to the various needs of different protected equality groups in our network. The East of England Neonatal ODN acknowledges the additional challenges that gender identity can have. We are aware that there is not yet universal language that addresses all families accessing maternity and neonatal care. We will always use the individual's preferred language, name, pronouns or terminology that they are most comfortable with, as we recognise the importance of providing inclusive and respectful perinatal information and support to all pregnant women, pregnant people, mothers, parents and families. Within this document, the terms woman/ mother is used to reflect all choices.



1. Introduction

This document outlines the EoE Neonatal Care Operational Policy for the movement (admission and transfer) of infants within the EoE region.

Expectations are set out for admission, transfer and repatriation of patients throughout all neonatal inpatient pathways, including the policy for transfer of infants for escalation of care and repatriation of infants to either their home unit or ongoing care. It describes how the processes within all of the neonatal services support the flow of patients. To ensure that the cots across the EoE are used appropriately, this requires transfer of infants into and out of the tertiary centres, to allow provision of intensive care. Moreover, tertiary neonatal units are expected to provide care for infants from their local population including intensive care, high dependency and special care. This document has been developed with the support of the PaNDR and in conjunction with all neonatal units across the EoE to support appropriate and timely transfer of infants.

Background

The Neonatal ODN encompasses the 17 neonatal units in the EoE and the PaNDR. They work in accordance with the <u>Neonatal Critical Care Service Specification</u> (2024) and <u>Neonatal Critical Care Transport Service Specification</u> (2015) as defined by NHS England. The individual units work as a network group across three clusters and with two units having patient pathways into tertiary (NICU) centres in London.

Mothers may book in tertiary centres due to personal choice, where there are complex maternal condition, or concerns around foetal wellbeing. Booking of maternal care <u>ONLY</u> applies to their maternity care not any subsequent provision of neonatal care.

A discussion in partnership with parents soon after admission should take place regarding repatriation along with giving information for the link nurse of the home unit (or receiving unit). An explanation, that when their infants meet clinical criteria, they will be transferred to their closest local unit related to their postcode for ongoing care (BAPM Safe and Effective Repatriation of Infants, 2023).



2. Unit designations

All units within the neonatal network have agreed to provide care for specific infants within their designated units based upon the threshold documents as detailed in appendix 1.

2.1 Special Care Units (SCU) previously a 'Level 1 unit'.

SCUs provide special care for their local population. Depending on arrangements within their neonatal network, they may also provide some high dependency services. In addition, SCUs provide a stabilisation facility for babies who need to be transferred to a NICU for intensive or high dependency care and receive transfers from other network units for continuing special care.

2.2 Local Neonatal Units (LNU) previously a 'Level 2 unit'.

LNUs provide neonatal care for their catchment population, except for the sickest babies. They provide all categories of neonatal care; however, they transfer babies who require complex or longer-term intensive care (more than 48hours) to a NICU, in line with the NHS England Service Specification (2024). The LNU will provide escalation of care where appropriate and within the agreed thresholds for infants from SCBU.

2.3 Neonatal Intensive Care Units (NICU) previously a 'Level 3 unit'

NICUs are often sited alongside specialist obstetric and foetal-maternal medicine services, and provide a comprehensive range of medical neonatal care for their local population, including additional care for babies and their families referred from the neonatal network. Many NICUs in England also provide neonatal surgery services and other more specialised treatments. Within a network, at least one hospital will have Neonatal Intensive Care unit, offering a specialist centre of expertise and experience for the sickest infants. The NICU unit will work closely with the other network LNU and SCU units.

Within the EoE there are three units where medical intensive care for babies is provided:

- CUH
- L&D
- NNUH

CUH and the NNUH have co-located foetal medicine services and are both designated to provide specialist neonatal surgery. The exception is cardiac surgery, which is delivered outside of the EoE (Table 6).

CUH is also a specialist paediatric neurosurgical centre. All three NICUs provide Neuroprotection services (cooling) for babies and specialist respiratory therapies (High Frequency and Nitric Oxide) long term intensive care.



2.4 Cluster Units

Cluster	County	Acute Hospital Trust	Neonatal unit	Unit type
Hospital	,	•		,,
	Cambridge and	Cambridge University Hospitals NHS Foundation Trust	The Rosie Hospital - Addenbrookes	NICU
er	Peterborough	Northwest Anglia NHS Foundation Trust	Peterborough City Hospital	LNU
Cambridge cluster		Northwest Anglia NHS Foundation Trust	Hinchingbrooke Hospital	SCU
idge		Mid Essex Hospital Services NHS Trust	Broomfield Hospital	LNU
ambr	Essex	East Suffolk and North Essex Foundation Trust	Colchester Hospital	LNU
Ö	200 0/1	Princess Alexandra Hospital	Princess Alexandra	LNU
		NHS Trust	Hospital Harlow	
	Suffolk	West Suffolk Hospitals NHS Trust	West Suffolk Hospital	SCU
		Norfolk and Norwich University Hospitals NHS Trust	Norfolk and Norwich Hospital	NICU
cluster	Norfolk	Queen Elizabeth Hospital Kings Lynn NHS Trust	Queen Elizabeth Hospital	LNU
Norwich cluster		James Paget University Hospital NHS Foundation Trust	James Paget Hospital	SCU
	Suffolk	East Suffolk and North Essex Foundation Trust	lpswich Hospital	LNU
ıster	Bedfordshire	Bedfordshire Hospitals NHS Foundation Trust	Luton and Dunstable Hospital	NICU
on Cluster		Bedfordshire Hospitals NHS Foundation Trust	Bedford Hospital	SCU
Luto	Hertfordshire	East and North Hertfordshire NHS Trust	Lister Hospital	LNU
		West Hertfordshire Hospitals NHS Trust	Watford Hospital	LNU
Royal	Essex	Mid Essex Hospital Services NHS Trust	Basildon and Thurrock University Hospitals	LNU
F Lo		Mid Essex Hospital Services NHS Trust	Southend Hospital	LNU

Table 1: Cluster hospitals and designation

East of England Neonatal ODN (Hosted by Cambridge University Hospitals)

3. Escalation

3.1 In-utero

Please refer to the <u>In-utero transfer policy</u> (East of England, June 2024).

3.2 Pathways of care for escalation ex utero transfers

The units have agreed expected pathways of care for escalation of care, which should apply to most infants. When the primary pathway (i.e. to the lead tertiary unit for that cluster) is unable to be followed, the ODN and lead consultant for each of the three NICU's will be notified via the Daily ODN report compiled by the PaNDR services. Basildon and Southend LNU's have agreed pathways into London units.

	Cambridge Cluster											
		Unit	West Suffolk	Hinchingbrooke	PCH	Colchester	Broomfield	РАН	СИН			
		Designation	SCBU	SCBU	LNU	LNU	LNU	LNU	NICU			
Inborn criteria		GA singleton	>30 wks*	>30 wks*	>27 wks	>27 wks	>27 wks	>27 wks	All			
Inbori		GA twins	>32 wks	>32 wks	>28 wks	>28 wks	>28 wks	>28 wks	All			
		Weight	>1000g	>1000g	>800g	>800g	>800g	>800g	All			
_		HFOV	No	No	No	No	No	No	Yes			
ator)	ort	Nitric	No	No	No	No	No	No	Yes			
Respiratory	support	Ventilation	Tertiary discussion	Tertiary discussion	<48 hrs	<48 hrs	<48 hrs	<48 hrs	Yes			
		CPAP	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Nutrition		TPN	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Neuro		Cooling	No	No	No	No	No	No	Yes			
Surgical)	Surgery	No	No	No	No	No	No	General & neurosurgery			

^{*} Under consultation

Table 2: Cambridge Unit thresholds



	Norfolk Cluster											
	Unit	Kings Lynn	NNUH									
	Designation	SCBU	LNU	LNU	NICU							
Inborn	GA singleton	>30 weeks*	>27 weeks	>27 weeks	All							
criteria	GA twins	>32 weeks	>28 weeks	>28 weeks	All							
	Weight	>1000gms	>800gms	>800gms	All							
	HFOV	No	No	No	Yes							
Respiratory	Nitric	No	No	No	Yes							
support	Ventilation	Tertiary discussion	<48 hours	<48 hours	Yes							
	СРАР	Yes	Yes	Yes	Yes							
Nutrition	TPN	Yes	Yes	Yes	Yes							
Neuro	Cooling	No	No	No	Yes							
Surgical	Surgery	No	No	No	Yes							

^{*} Under consultation

Table 3: Norfolk Cluster Unit Thresholds

	Luton Cluster											
	Unit	Bedford	Lister	Watford	Luton							
	Designation	SCBU	LNU	LNU	NICU							
Inborn	GA singleton	>30 weeks*	>27 weeks	>27 weeks	All							
criteria	GA twins	>32 weeks	>28 weeks	>28 weeks	All							
	Weight	1000gms	800gms	800gms	All							
	HFOV	No	No	No	Yes							
Respiratory	Nitric	No	No	No	Yes							
support	Ventilation	Tertiary discussion	<48 hours	<48 hours	Yes							
	СРАР	Yes	Yes	Yes	Yes							
Nutrition	TPN	Yes	Yes	Yes	Yes							
Neuro	Cooling	No	No	No	yes							
Surgical	Surgery	No	No	No	No							

^{*} Under consultation

Table 4: Luton cluster unit thresholds



	Essex Cluster									
	Unit	Basildon	Southend							
	Designation	LNU	LNU							
Inborn criteria	GA singleton	>27 weeks	>27 weeks							
iliborii criteria	GA twins	>28 weeks	>28 weeks							
	Weight	800gms	800gms							
	HFOV	No	No							
Respiratory	Nitric	No	No							
support	Ventilation	<48 hours	<48hours							
	СРАР	Yes	Yes							
Nutrition	TPN	Yes	Yes							
Neuro	Cooling	Active pre transfer	Passive							
Surgical	Surgery	No	No							

Table 5: Essex units with London Pathways

3.3 Tertiary advice

From 1st March 2021, all tertiary advice should initially be sought via the PaNDR service. There is a PaNDR Neonatal Consultant available 24/7 to provide advice and support with decision making via **01223 274274.**

PaNDR will liaise with the relevant tertiary units when a patient potentially requires transfer to their NICU, or where there is a complex case requiring wider discussion for example, moving outside of established pathways for further investigations.

Bedford will continue to contact the Luton & Dunstable consultant team for advice the due to their organisationally linked structures.

Short periods of ventilation are expected, but must be discussed with the PaNDR service at 48 hours, and every 24 hours after, if the infant remains ventilated.



A discussion with the PaNDR neonatal Consultant should be sought for SCU's for all ventilated patients (daytime hours if stable).

There will be occasions where it is deemed in the infant's best interests to remain in their LNU /SCU. Examples of this may be:

- TPN / UVC whilst awaiting a long line to be sited in a SCU;
- Ventilated infant at 48 hours who is weaning and ready for extubation in the next few hours,
 following discussion with the PaNDR Neonatal consultant.

The ODN will send out monthly exception requests for any babies cared for outside of the unit's thresholds.

East of England Neonatal ODN

3.4 Surgical flows

Within the EoE, CUH and NNUH provide neonatal surgical care. Surgical

pathways for infants within these cluster groups are into their respective NICU, except for

Peterborough. Luton does not provide surgery for their cluster hospitals. Please refer to table 6.

Cardiac surgery is not provided by any of the tertiary centres and the pathways are detailed below.

	Agreed Clini	cal pathway
-	Non cardiac surgical pathway	Cardiac surgical pathway
Addenbrookes		GOSH
Peterborough	Lei cester/CUH	Leicester / GOSH
PAH	Addenbrookes	Brompton
Colchester	Addenbrookes	Brompton
Chelmsford	Addenbrookes	GOSH
Hinchingbrooke	Addenbrookes	GOSH
West Suffolk	Addenbrookes	Evelina / Brompton
Norwich		Evelina/Brompton
Ipswich	NNUH	Evelina
Kings Lynn	NNUH/ CUH	GOSH
James Paget	NNUH	GOSH
Luton	GOSH/Addenbrookes	GOSH
Lister	GOSH/ Addenbrookes	Brompton
Watford	GOSH/ Addenbrookes	Brompton
Bedford	Addenbrookes /Norwich	GOSH
Basildon	Royal London	Evelina / Brompton
Southend	Royal London	Evelina/Brompton

Table 6: Surgical and cardiac pathways

Cardiac transfers will be undertaken by the PaNDR team. Cardiac referrals should be directed via the PaNDR referral line (01223 274 274) initially, and the PaNDR paediatric consultant will then coordinate a team to undertake the transfer. Where required, the ECMO team will be included in the call.

East of England Neonatal ODN (Hosted by Cambridge University Hospitals)

3.5 Repatriations

It is recognised that the repatriation of infants is necessary to ensure that

the pathways of care continue without unnecessary delay or interruptions, and supports the NHS objective 'Right Care, Right Place, Right Time'.

Concurrently, repatriation is in the families and infants' best interest and aligns with <u>Safe and Effective Repatriation of Infants – Framework for Practice</u> (BAPM, 2023) aims, where infants should be cared for as close to home as possible and efforts made where possible.

This document aims to provide a clear and concise description of the procedures and timescales, to allow repatriation of infants to their local unit for ongoing. It is expected that all hospitals within the EOE repatriate infants in a timely manner. Delay in repatriation:

- Impedes the care pathways for infants being cared for closer to home;
- Causes distress to parents and families where infants are being nursed a long way from home;
- Contributes to delays in getting sick infants into tertiary centres or requires transfer over long distances outside of network for intensive care cots;
- Prevents specialist NICU cots being available when and where they are required.

Infants requiring repatriation can be classified in the following terms:

- Infants who no longer need intensive care but require continuing care at either high dependency or special care level in their local or ongoing care unit (see table 7 and table 8);
- Infants who are admitted to the neonatal unit from outside the EOE due to lack of capacity in their local network;
- Infants who are unexpectedly born within the EOE but whose family normally reside outside of EOE;
- Transfers to support capacity within the tertiary centres.

All units should engage with the processes of notification and communication of outlier babies within their unit and follow the repatriation guidance.

Below are the thresholds for repatriation as agreed by each local team.



(Hasted by Cambridge University Haspitals)																	
	HFNC/ CPAP	Weaning	Nasal cannula	Nebulisers	NGT/ Frequency	LCN	Continuous feeds	Weight (grs)	GA (weeks)	Longline	Broviac/ Hickman lines	Ventricular taps	Seizures	Medication exceptions	Stoma care	Palliative Care	Other
LNU		Resp	oirato	ory		Feeds	5	Thres	holds	А	ccess			Inotropes/ Prostin (<24 hrs included)			
BTUH	Υ	Υ	Υ	Υ	Y	Υ	Υ	≥800	≥27	Υ	Y	N	Υ	N	Υ	Υ	
Broomfield	Υ	Υ	Υ	Υ	Y	N	Υ	≥800	≥27	Υ	N	Case by case	Υ	N	Υ	Υ	
Colchester	Υ	Υ	Υ	Υ	Y	Υ	Υ	≥800	≥27	Υ	N	Υ	Υ	Υ	Υ	Υ	
Harlow	Υ	Υ	Υ	Υ	Υ	Υ	Υ	≥800	≥27	Υ	N	Υ	Υ	N	Υ	Υ	
Ipswich	Υ	Υ	Υ	Υ	Υ	Υ	Υ	≥800	≥27	Υ	N	Y	Υ	Υ	Υ	Υ	
Lister	Υ	Υ	Υ		Υ	Υ	Υ	≥800	≥27	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
Peterborough	Υ	Υ	Υ	Υ	Υ	Υ	Y	≥800	≥27	Υ	Υ	Υ	Υ	N	Υ	Υ	
QEHKL	Υ	Υ	Υ		Υ	Υ	Υ	≥800	≥27	Υ	Υ	Υ	Υ	N	Υ	Υ	
Southend	Υ	Υ	Υ	Υ	Υ	Υ	Υ	≥800*	≥27*	Υ	N	N	Υ	N	Υ	Υ	
Watford	Υ	Υ	Υ		Υ	Υ	N	≥800	≥27	Υ	Υ	Υ	Υ	N	Υ	Υ	

Table 7: LNUs thresholds for repatriation, * Under consultation



Table 8: SCUs thresholds for repatriation, * Under consultation

	HFNC/ CPAP	Weaning	Nasal cannula	Nebulisers	NGT/ Frequency	TUN	Continuous feeds	Weight (grs)	GA (weeks)	Longline	Broviac/ Hickman lines	Ventricular taps	Seizures	Medication exceptions	Stoma care	Palliative Care	Other
SCUs	F	Respi	irato	ory		Feeds		Thresh	olds	Þ	Access			Inotropes/ Prostin (<24 hrs included)			
Bedford	Υ	Υ	Υ		Hourly	N	Only	≥1000	≥30*	Υ	N	N	N	Υ	Υ	Υ	
Hinchingbrooke	Υ	Υ	Υ	Υ	Hourly	N	N	≥1000	≥30*	Υ	N	N	N	N	Α	>	Limit 2 babies on HHFNC/CPAP
James Paget	Υ	Υ	Υ	Υ	Υ	N	Case by case	≥1000	≥30*	Υ	Y	N	N	Y	γ*		* if surgeons will review locally
West Suffolk	Υ	Υ	Υ	Υ	Υ	Υ	Υ	≥1000	≥30*	Υ	N	Υ	Υ	Υ	Υ	Υ	

There is an aim that all infants assessed as clinically fit for transfer to the home unit for ongoing care, will be transferred within 72 hours from the time of referral to transport service and receiving hospital.

In the EOE, bed location is carried out by the EBS within the agreed patient pathways. Where possible, infants should be cared in their cluster units. Therefore, all units must be transparent and provide the following information:

- Current occupancy;
- Available cots for IC, HDU and SC;
- Explanation of any discrepancy between established and available cots.

This information is shared with EBS twice daily and should be available when the EBS team rings.

Early decision-making assists PaNDR to plan workload, and subsequently increase flow and capacity within the region.



Cot location for the treatment of ROP (retinopathy of prematurity) and PDA ligation (Patent ductus arteriosus ligation) is not within the remit for

the Emergency Bed Service. Where ROP laser treatment cannot be provided at the CLUSTER NICU, the referring centre must locate the neonatal cot and ophthalmologist on an individual basis. PDA ligation will require the referring unit to liaise with the cardiac centre and organise a planned surgery date. The transfer of these babies, however, will be undertaken by the PaNDR neonatal team and once a cot is located a referral should be made to this service.

3.5.1. Process of repatriation (see Appendix 2)

Planned delivery in NICU/in utero transfer to NICU/LNU

- Antenatal counselling of women in local services prior to IUT should be an opportunity to explain pathways of neonatal care, including transfer back to the local neonatal service when this appropriate.
- Women booked for delivery with onsite NICU services under the care of foetal medicine/maternal medicine should be counselled antenatally to explain neonatal pathways of care within the EoE network, including transfer back to local neonatal services.

Post birth and admission to an NICU/LNU

- Referral units should ensure that local units are notified of the birth of a local baby within
 their unit by the clinical team (e.g. nurse in charge, neonatal coordinator), and engage with
 the local LNU/SCU with regular weekly communication updates. Information shared should
 be recorded using the Network Repatriation Communication Record (<u>Appendix 3</u>) to support
 effective communication.
- Local teams might not be aware of the birth of a baby following an IUT of the mother or women booked for a delivery in a specialist centre.
- Referring unit needs to make sure that on Badger Net the booking hospital should be the local hospital (Appendix 4).
- Referral units have a joint responsibility for preparing families for repatriation to their local unit with the receiving LNU/SCU. Parents should be provided with written generic information on repatriation for ongoing care to their local unit (Neonatal-Units-Leaflet-v01_2024.pdf (eoeneonatalpccsicnetwork.nhs.uk)). The repatriation link nurse role (Appendix 5) has been created as point of contact for families to build relationships prior to



transfer. The individual unit's repatriation link nurse profile is available on https://eoeneonatalpccsicnetwork.nhs.uk/our-hospitals/.

Date and time for transfer to be entered onto Badger Net (Appendix 6).

Please note the 'Booking Unit' should be recorded on Badger Net as the home unit to allow information to be seen by the home unit regarding the admission.

- Repatriation will take place once the infant is clinically stable in respect of their requirement
 for ongoing care. There will be a communication of the infant's clinical history, current
 clinical status, a clear on-going management plan, and the infant's care needs must be able
 to be provided by the receiving unit (see table 7 and table 8).
- Receiving units should prioritise assessing capacity for acceptance of the baby for early
 repatriation in the day (ideally identified at EBS early morning call) to enable timely transfer
 and referral to the PaNDR team, alongside capacity in the NICUs.
- The infant must also be deemed fit for transfer by the PaNDR team.
- Regular communication between the referring and receiving units with PaNDR, to ensure services can appropriately manage patient flow. Appropriate/ predicted repatriation dates should be provided by the referring service and highlighted at the weekly capacity meetings.
- Local LNU/SCU should ensure up-to-date records of outlying baby communications between
 the units are maintained and should be widely available to the local team i.e. local unit
 repatriation folder. All documented communication records should be included in the baby's
 medical record once transferred to the local unit.
- Local units to allocate their Repatriation Link Nurse to contact the family on a regular basis, to form a relationship with them, prior to repatriation. A record of communication should be completed and kept in the baby's notes (Appendix 3).
- Parents to be offered the opportunity to visit the local LNU/SCU during their baby's stay in NICU/LNU prior to repatriation. This could be facilitated virtually, i.e. via video tour (Neonatal Units and Neonatal Intensive Care | EoE ODN (eoeneonatalpccsicnetwork.nhs.uk)) or an in person visit to the neonatal unit, this will be arranged by the Repatriation Link Nurse.
- The decision to repatriate resides with the Consultant responsible for the infant's current care.



- Documentation of fit for discharge/repatriation should be made within the Badger Net system and the infant's notes.
- The referring hospital must complete the relevant discharge summary/ letter including clinical and social information.
- Break glass function on Badger Net for information sharing should be actioned (<u>Appendix 7</u>).
 This enables Badger Net records to be visible to the local teams (<u>Appendix 8</u>). The records of the babies transferred to an NICU/LNU after birth should already be available to their local unit.

3.5.2. Delayed repatriation

All units have a responsibility for documenting (<u>Appendix 3</u>) when a repatriation transfer is delayed: the reason, estimated timeframe and specific requirements needed (i.e. clinical parameters or local unit's measures – staffing not adequate).

- Delayed repatriation data (> 72 hours of threshold criteria of home unit) is collected monthly through the ODN exception report where reasons for delay are identified.
- Escalation to the ODN at 72 hours
- On occasion, there are no cots available for a repatriation, if a cot is likely to become
 available within 24 hours, the repatriation can be postponed for 24 hours, unless the tertiary
 centre is at capacity. In the unlikely event of a cot being available in the next 48 72 hours a
 decision must be taken by the referring team, to wait or to seek available cots in other units
 local to the home unit. This should be escalated to the ODN.

3.6. Decision - not to repatriate

- Where there are clinical concerns due to previous instability of an infant, these should be discussed with the home team and plans made to overcome any difficulties.
- Where parents do not want their infant repatriated, a consultant led conversation with the
 family explaining the need for repatriation should take place. Only in exceptional
 circumstances would a request be agreed for an infant not to be transferred to their home
 unit.
- Where a family's local hospital is a tertiary centre, transfer may be required to support capacity. This should only occur if it will not cause extreme hardship to the family.



- Where infants have made progress, and are ready for home, it may be appropriate to discharge home avoiding transfer to another unit. A direct consultant-to-consultant conversation is required to ensure all parties are clear of any follow-up arrangements, which are required, including outreach requirements.
- Parents must be kept up to date and included with decisions on repatriation. All discussions
 with the parents must be recorded in the notes and outlined on the SEND summary.

3.7. Decision making

- The clinical responsibility lies with the referring hospital until the Transport team arrive.
 Whilst the transfer team is on site at the referring unit, there is shared responsibility. When the transfer team leaves the referring hospital, they formally take over care.
- If an infant's clinical state changes, making the infant unfit to transfer, or they require a higher level of care than can be provided at the receiving unit, the repatriation should be cancelled. Parents, transport team and the receiving unit should be informed.

3.8. Escalation procedures

- If repatriation has not occurred within 72 hours of the decision, and where no change in the infant's condition has been noted, this will be recorded as a repatriation delay by the unit.
- Daily communication between the referring and receiving hospital will be maintained supporting regular updates on cot availability. The neonatal transfer team will be regularly kept up to date on any decisions regarding transfer.
- Escalation to the ODN should be made for all delayed transfers over 72 hours.
- Units should report infants who are greater than 44 weeks corrected gestation and are still
 being cared for on the Neonatal Unit to the ODN through the monthly exception framework,
 completed by the governance leads. The ODN will send monthly reports to the
 commissioning team.

Escalation for delay repatriations



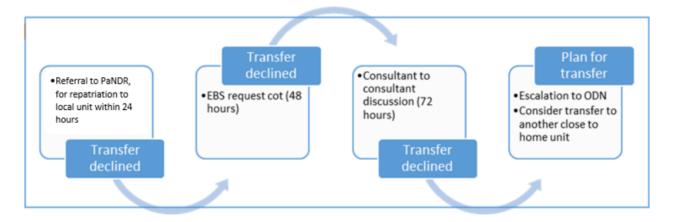


Table 7: Escalation for delayed repatriations

3.9. Monitoring arrangements

- Delay in repatriation over 72 hours is escalated to the ODN; this information will be shared by the EBS team in the daily ODN report, in addition to the unit referring the infant for transfer.
- The ODN will discuss recurrent delays with lead nurse and clinician at the unit and an action plan put in place, if felt to be appropriate.
- Data on exception reporting of infants outside of threshold criteria within the governance structure will be reported quarterly.

4. Infection Control

Colonisation or local practice need for an isolation cubicle is not an indication for repatriation refusal. Babies identified to need isolation as per local Trust Infection guidance can be cared for:

- in an incubator
- in a cubicle or side room
- in an open ward with augmented local infection control practices to prevent cross transfer of multi-resistant organisms.
- Infection control status must be declared at time of referral to receiving unit.
- Repatriation of an infant should not be delayed due to the infant's infection control status;
 this includes but is not exclusive to MRSA, pseudomonas, MDRO (multi drug resistant



organisms) such as Enterobacter, ESBL. Screening and isolation of the infant should be as per Infection Control EoE Neonatal ODN guideline (2022). Due to regular surveillance in many of the EOE units, colonisation rather than infection can identify MDRO.

- Infections which are significant within the neonatal population and require strict isolation precautions i.e. RSV, tuberculosis, transfer of such infants should only take place if appropriate isolation facilities are available.
- Notification to the transfer service of any colonisation or infection must occur on referral of the infant for transfer. The transfer service will organise to ensure appropriate cleaning of equipment post transfer.
- PaNDR team must be informed if infants have been home and are readmitted from the community.

5. Unit Closures

Closure to regional/network activity – unit is currently accepting own and cluster activity but is unable to accept from region – there may be gestations agreed within this statement *Repatriations can continue.

Closure to regional/network and cluster activity – unit is currently accepting own activity but is unable to accept from region/network or cluster

Closed to regional/network, cluster, and own activity – unit is negotiating out of all expected preterm / complex deliveries and is not accepting transfers from outside of the trust

Closed - The unit is unable to accept any admissions including those from maternity — escalation of closure of maternity



5.1. EOE EBS team

On being informed of a unit closure, the EBS team will ascertain the following information:

- Name of unit affected
- Reason for closure (includes type of infection if applicable)
- Expected duration of closure
- How many cots are closed

EBS will collect the information and make the other units aware; EBS will share this information with the ODN via daily update reports.

Any closure beyond 24 hours, **MUST** be reported to the ODN using the attached form (Appendix 9).

6. Incident reporting

- All neonatal services should work within their trust governance process and report adverse incidents as per policy
- Serious incidents within any of the neonatal units must be escalated to the ODN as well as through established local and regional governance structures
- All incidents related to delays in transfer/ repatriation will be reported to the ODN after 72
 hours by the referring and receiving unit through escalation pathways
- All serious incidents related to transfer should be reported to the PaNDR leadership team
 (Matron, Operational Manager and Service Director) and these will be shared with the ODN through a standardised reporting structure.
- Quarterly reports of incidents related to repatriation should be provided to the Clinical Oversight Group as part of the transfer presentation.
- All units should collect data on periods of time exceeding 24 hours when their service is closed to any type of delivery. This data will also be collected by EBS

REFERENCES



BAPM Safe and Effective Repatriation of Infants (2023)

BAPM Service Quality Standards FINAL.pdf (hubble-live-assets.s3.eu-west-1.amazonaws.com) (2022)

Categories of Care (2011) | British Association of Perinatal Medicine (bapm.org) (2011)

Family Integrated Care | British Association of Perinatal Medicine (bapm.org) (2021)

Neonatal Critical Care Service Specification (2024)

Neonatal Critical Care Transport Service Specification (2015)

Neonatal Transport Group | British Association of Perinatal Medicine (bapm.org)

NHS England » Implementing the Recommendations of the Neonatal Critical Care Transformation Review (2019)

Safe and Effective Repatriation of Infants | British Association of Perinatal Medicine (bapm.org) (2022)

<u>TVW-Repatriation-Framework-and-Guideline-v4.-Ratified-June-2022.pdf</u> (neonatalnetworkssoutheast.nhs.uk).

Appendix 1 - Unit Designations



Thresholds as described within the recently published Neonatal Critical Care Service Specification (NHS England, 2024):

Special Care Unit:

- Babies born after 29 +6* weeks GA with anticipated weight above 1000 grams. This
 threshold might be higher for multiples.
- Stabilisation of babies meeting the threshold of transfer, prior to transfer to a LNU or NICU.
- Care for local babies following repatriation from LNU or NICU within the region.
- Referrals for ongoing special care from other regional units who are overcapacity.
- Care for local babies' post-surgery following repatriation from surgical unit.
- Transitional care working in collaboration with postnatal services.
- Is not expected to support ongoing care beyond initial stabilisation of babies less than 29+6
 weeks GA and less than 1,000grams.
- Is not expected to provide intensive care for any baby apart from initial stabilisation prior to transfer.
- * Under consultation

Local Neonatal Unit:

- Additionally, to all the services provided on a SCU, LNUs are responsible for:
 - o Care of babies above 26+6 weeks (or above 27+6 weeks for multiples) providing that birth weight is above 800 grams.
 - o High dependency care and special care for their local population.
 - Care for local babies repatriated from neonatal units who require high dependency or special care.
 - Ongoing care for local babies who have undergone specialist surgery following repatriation from a surgical NICU.
 - o Referrals from within network neonatal units who are unable to undertake high dependency care and special care, due to capacity and/or network guidelines.

Local Neonatal Units are not expected for:



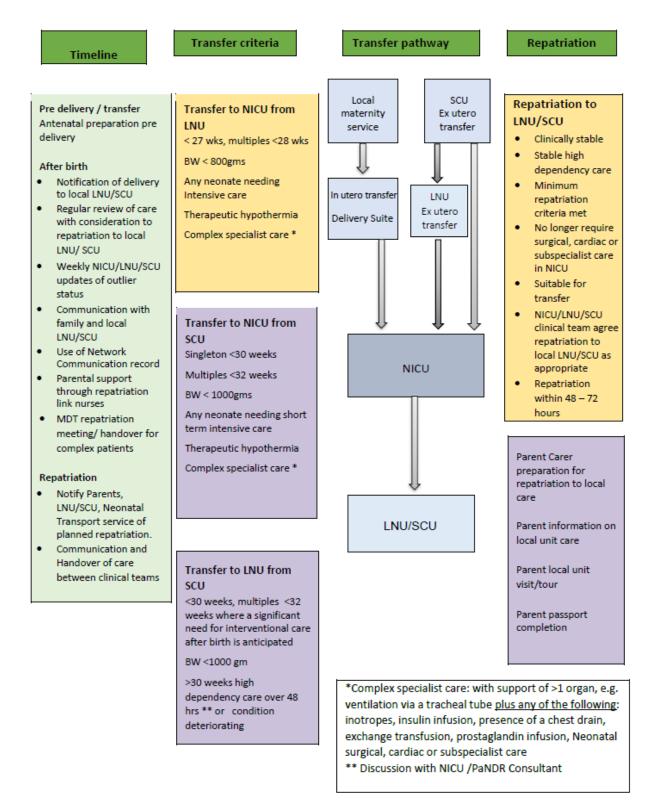
- Ongoing intensive care beyond initial stabilisation to babies less than 27+0 weeks of GA and/or below 800 grams.
- Ongoing complex intensive care beyond initial stabilisation, including babies requiring respiratory support with symptoms of additional organ failure (e.g. hypotension, DIC, renal failure, metabolic acidosis) or babies requiring the following treatment and support:
 - Support of more than one organ (ventilation plus inotropes/insulin/chest drain/exchange transfusion/prostaglandin) beyond stabilisation.
 - INO
 - HFOV
 - Therapeutic hypothermia beyond initial stabilisation
 - Prolonged intensive care (intubated ventilatory support) for greater than 48 hours.

Neonatal Intensive Care Units:

- Additionally to all the services provided on a SCU and LNU, NICUs are responsible for:
 - Neonatal intensive care for out of region neonatal units due to a lack of capacity in their own network NICU.
 - Leadership within neonatology for the neonatal ODN units and 24 hour acute clinical telephone consultations are required.
 - Care for local network babies repatriated from elsewhere requiring ongoing care from a NICU.

Appendix 2 - Repatriation Pathway





(Adapted from the Framework for Repatriation of Neonates within TV & Wessex Neonatal ODN, <u>TVW-Repatriation-Framework-and-Guideline-v4.-Ratified-June-2022.pdf</u> (neonatalnetworkssoutheast.nhs.uk))



Appendix 3- Network Repatriation Communication Record

Repatriation Communication Record



Baby's ID sticker To be completed by the referring and receiving unit, copies to be kept in the Unit's Repatriation Folder.

The referring unit should keep a copy in the medical record once discharged and send the completed record with the patient.

Baby's name:	GA:							
Parents preferred names:	Corrected GA:							
Type of delivery:	Birth weight: Current weigh	nt:						
Parent/carer contact no:	Parent/carer's	email address:						
Parents' communication requirements (interpreting services, disabilities, etc.)	Address:							
Siblings:	Cultural belief	:						
Mode of travel:	Accommodati	on:						
Referral for travel/accommodation expenses: Y / N	Other informa	tion/notes:						
Qualifying benefits receiving/discussed	Any social/ sa involved?	feguarding concerns or other	agencies					
Booking hospital:	Telephone nu	mber:						
Birth Hospital:	Telephone nu	mber:						
Referring hospital:	Telephone nu	mber:						
Consultant:	GP:							
Psychological support received/ required? Y/	N							
Parents informed of Network pathways/ transfer to receiving hospital when appropriate:	Y/ N Date: //	BadgerNet Record Sharing (BreakGlass function for neonates born in referral hospital)	Y/N Date: //					
Parents provided with Repatriation PIL and receiving unit specific PIL	Y/N Date: //	Parents offered receiving unit visit/ meet the team (eg. Virtual unit tour, met unit coordinator)	Y/N Date: //					





Baby's ID sticker

REPATRIATION TO RECEIVING UNIT

When does baby meet criteria for repatriation?		Outside of East of England pathway? Y/N	
		East of England capacity? Y/N	
Date baby accepted to receiving unit?//		Following usual pathway for unit? Y/N	
, ,		E.g. Peterborough to Leicester hospital/ Basildon to Royal London.	
Receiving unit:			
Name of the accepting Consultant?		Name of the accepting Nurse In charge?	
HANDOVER (If cross-site MDT discharge meeting occurred this, may not be applicable/update only)		Date:	
Medical handover		Referring Clinician:	
Date://	Y/N	Receiving Clinician:	
Nursing handover		Referring Nurse:	
Date: / /	Y/N	Receiving Nurse:	
Specialist team/ AHP handover		Referring Professional:	
Date:/	Y/N	Receiving Professional:	
Reason for refusal/deferral (if applicable)	Date: Reason: If not resolved by 72 hours, notify ODN (see Escalation Pathway policy): Y/N Date: Reason: If not resolved by 72 hours, notify ODN (see Escalation Pathway policy): Y/N Date: Reason: If not resolved by 72 hours, notify ODN (see Escalation Pathway policy): Y/N If not resolved by 72 hours, notify ODN (see Escalation Pathway policy): Y/N		
	Date: Reason: If not resolved by 72 hours, notify ODN (see Escalation Pathway policy): Y/N (if more space required, add to the blank page at the end of this document)		
Name of Consultant/ Nurse in Charge responsible for decision to refuse/defer transfer:			
Follow up call log/ expected date of acceptance:			
Further information/plan:			





Baby's ID sticker

PARENT PASSPORT RECORD

Date:					
Please Outline Care parents a	re confident	in and where	ongoing support is required.		
Activity	Confident	Would like further support	Activity	Confident	Would like further support
Understanding baby's behavioural cues			Taking Temperature		
Recognising and managing pain and discomfort			Developmentally supportive weighing (e.g. wrapped weighing)		
Understanding of the impact of the sensorial environment (e.g. smell, taste, sound, light, touch)			Swaddled Bathing		
Reading to Baby			Dressing		
Providing quiet time			Awareness of benefit of Breast milk		
Positive Touch			Hand Expressing		
Skin to Skin			Breast Pump		
Taking Baby out of Cot / Incubator			Storage and Handling of Breast Milk		
Skin Care			Sterilising		
Eye Care			Tube feeding		
Mouth Care			Recognising Readiness to Feed Orally		
Developmentally supportive nappy change (e.g. side lying method)			Breast Feeding		
Positioning			Bottle Feeding		
Changing Bedding			Formula preparation		
Additional comments					





Baby's ID sticker

FAMILY COMMUNICATION LOG

Date:	□ Phone □ Email	□ Video Call □ In Person
Participants:		Current Gest: Current weight:
What was discussed?		
Action/Follow up/Support		
		How often parent/carer would like contact with the Link Nurse (maximum weekly)?/ Document information or signposting provided.
Additional comments		
Next contact date:		

Date:	□ Phone □ Email	□ Video Call □ In Person
Participants:		Current Gest: Current weight:
What was discussed?		
Action/Follow up/Support		How often parent/carer would like contact with the Link Nurse (maximum weekly)?/ Document information or signposting provided.
Additional comments		

Moving Between Units – Family Communication Record (V10/2024) Kindly adapted from Thames Valley and Wessex ODN





Next contact date:

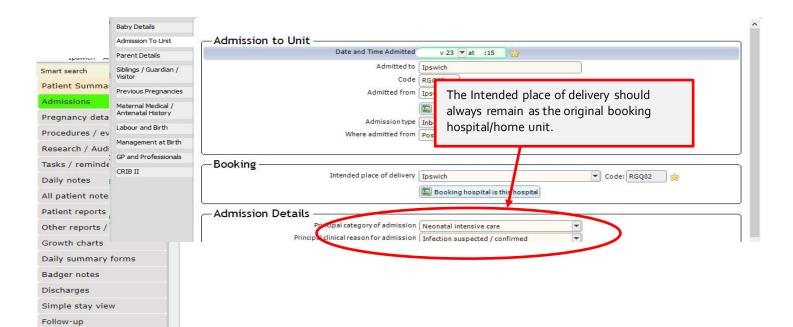
If more copies of this page required, please download from the ODN website.				
Baby's ID sticker				

	Repatriation	
Repatriation date:	Time:	Current gestation:
		Current weight:
		current weight.
Summary:		
Any action/follow up/support:		
D	ischarge Home	
Discharge date:	Time:	Current gestation:
		Current weight:
		current weight.
Summary:		
Any action/follow up/support:		

Moving Between Units – Family Communication Record (V10/2024) Kindly adapted from Thames Valley and Wessex ODN



Appendix 4 – Documentation of booking hospital on Badger Net



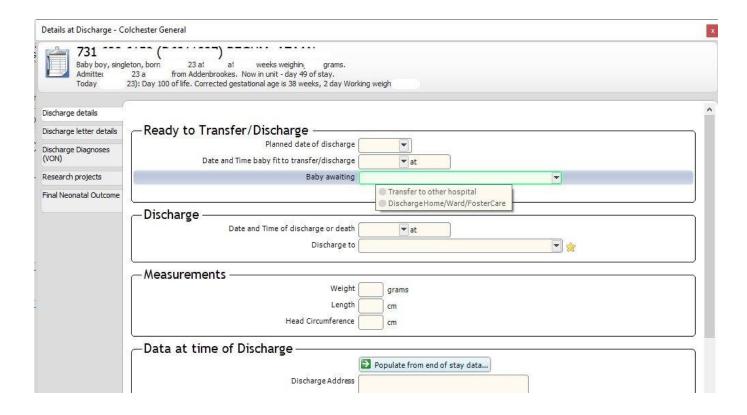


Appendix 5 - Repatriation Link Nurse Role Description

- Local Unit (LU) refers to the neonatal unit closest to the home postcode. This does not relate to the level of care or unit category (NICU, LNU, SCU).
- To form and build relationships with outlying families cared for in a unit outside of their Local Unit.
- Be part of the regular clinical update between the current Neonatal Unit and LU. Clinical team must still be responsible for clinician-to-clinician updates.
- Weekly contact with families. Email/phone call/text.
- Allocated contact details for the link nurse. Phone and email details.
- Link with current neonatal Unit to prepare parents for repatriation.
- Arrange virtual and actual visits to local units to meet the team and familiarise them with their new settings.
- Responsible for the completion and collation of the call logs.
- Information point and advocate for the families.
- Complete 2 logs, 1 clinical (in conjunction with clinical team) and 1 following conversations with parents including:
 - Complete parent passport section of combined family communication record to ensure continuity of care.
 - Complete section on AHPP (Allied Health Professionals and Psychology) service involvement to ensure continuity of care.
 - This will be kept together in a file and at discharge will form part of the baby's notes.
- Current unit responsible for initial contact with LU following in-utero transfers.
- Meet with family on once repatriation is complete.
- Single person role or shared role between 2 staff to ensure that links remain during period of A/L or sickness. Allocation of cover for A/L if single person role.
- Escalate concerns to Unit Manager/ Lead Nurse (either site) as appropriate.
- Engage with ODN Repatriation meetings.
- Attend minimum of 4 ODN Repatriation meetings per year (virtual).



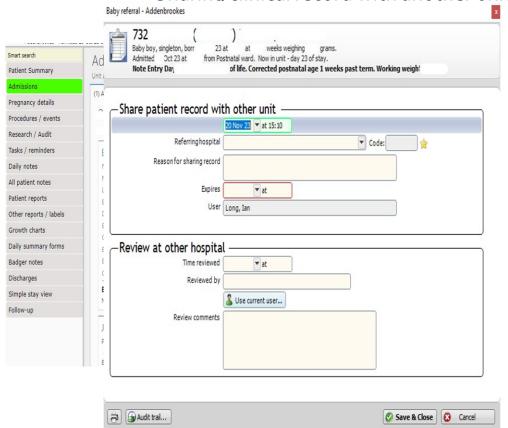
Appendix 6 - Date and time of ready for transfer on Badger Net





Appendix 7 - Break the Glass function Badger Net

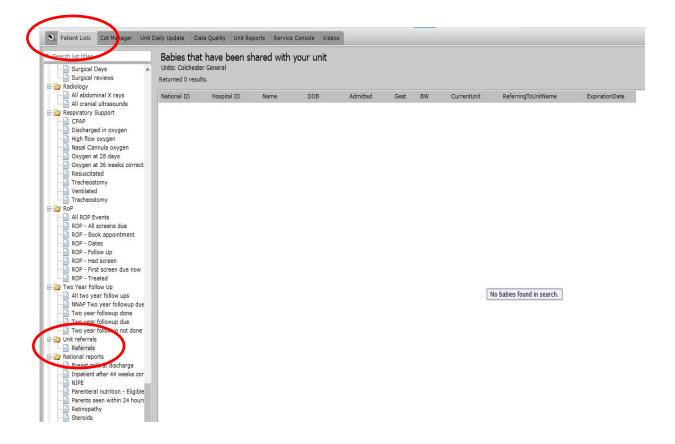
Sharing clinical record with another unit







Appendix 8 - How to access clinical records shared by other units





Appendix 9 - Unit Closure Notification form

Unit Closure Notice to ODN			
Date:			
Unit			
Person			
completing form			
Consultant on			
duty			
Internal			
escalation			
information			
Reason for	Capacity IC HD SC (current activity)		
closure	Infection control Details		
	Pending deliveries □		
	Staffing: Please specify and give information for next 24 hours		
	Nurse □		
	Medical □		
	Other:		
Closure	Closed to Network		
	Closed to Network and local activity $\ \square$		



	Closed to deliveries < please specify	
	Capacity available maternity closed	
Repatriation	Name of unit	Level of care
		IC/HD/SC
Out of unit		
Into the unit		
Time scale	Detail approximate anticipated length of closure	

Please email form to $\underline{\text{add-tr.eoeneonatalodn@nhs.net}} \ \text{requesting receipt}.$



All Rights Reserved. The East of England Neonatal ODN withholds all rights to the maximum extent allowable under law. Any unauthorised broadcasting, public performance, copying or re-recording will constitute infringement of copyright. Any reproduction must be authorised and consulted with by the holding organisation (East of England Neonatal ODN).

The organisation is open to share the document for supporting or reference purposes but appropriate authorisation and discussion must take place to ensure any clinical risk is mitigated. The document must not incur alteration that may pose patients at potential risk. The East of England Neonatal ODN accepts no legal responsibility against any unlawful reproduction. The document only applies to the East of England region with due process followed in agreeing the content.