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

Clinical Guideline:

Authors:

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

Used by: Neonatal units, Transport team (PANDR)

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Neonatal Clinical Oversight Group	
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References

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Summary
This document outlines the East of England Neonatal Care Operational Policy for the movement (admission and transfer) of infants within the East of England. This document sets out the expectations for admission, transfer and repatriation of patients throughout all neonatal inpatient pathways and includes the policy for transfer of infants for escalation of care and repatriation of infants to either their home unit or for step down care. It describes how the flow of patients is supported by the processes within all of the neonatal services. 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. 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 Paediatric and Neonatal Decision support and retrieval service (PANDR) and in conjunction with all neonatal units across the EOE to support appropriate and timely transfer of infants.

Background
The Neonatal Operational Delivery Network (ODN) encompasses the 17 neonatal units in the East of England and the Acute Neonatal Transfer Team (PANDR). They work in accordance with the Neonatal Critical Care (E08/S/a[1]) and Neonatal Critical Care Retrieval (Transport) (E08/S/b[2]) service specifications as defined by NHS England. The units work as a network group across 3 clusters and with 2 units having patient flows to tertiary centres in London.
Mothers may book in tertiary hospitals due to personal choice, or where there are complex maternal conditions or concerns around fetal wellbeing. Booking of maternal care ONLY applies to their maternity care not any subsequent provision of neonatal care. Parents will be provided with information which explains that their infants will be repatriated to their local unit in relation to home post code when their clinical condition allows. There will be situations due to capacity where this is not possible and repatriation to a step down unit close to home may need to be considered.

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

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

SCU's provide special care for their local population. Depending on arrangements within their neonatal network, they may also provide some high dependency services. In addition, Special Care Units provide a stabilisation facility for babies who need to be transferred to a Neonatal Intensive Care Unit for intensive or high dependency care and receive transfers from other network units for continuing special care. *SCU's are able to provide care for babies who are > 30 weeks gestation/ 32 weeks gestation multiples with a birth weight of greater than 1000gms*

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

LNU's 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 Neonatal Intensive Care Unit, in line with the BAPM 2011 recommendations. The LNU will provide escalation of care where appropriate and within the agreed thresholds for infants from SCBU. *LNU's are able to provide care for infants born >27 weeks gestation/ 28 weeks gestation multiples and with a birth weight greater than 800gms*

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

NICU's are often sited alongside specialist obstetric and fetal-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 Neonatal Intensive Care Units in England also provide neonatal surgery services and other more specialised treatment. 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 SCBU units.

Within the East of England there are 3 units where medical intensive care for babies is provided, with 2 units that have co-located designated fetal medicine services; Cambridge University Hospital Foundation Trust (CUH) and the Norfolk and Norwich University Hospital Foundation Trust (NNUH).

CUH and NNUH are both designated to provide specialist neonatal surgery, providing neonatal surgery for the region with the exception of cardiac surgery which is delivered outside of the East of England. CUH is also a specialist paediatric neurosurgical centre. All three lead centres provide Neuroprotection services (cooling) for babies, specialist respiratory therapies (High Frequency and Nitric Oxide) long term intensive care.

Cluster Units
Table 1 : Cluster hospitals and designation

Cluster Hospital	County	Acute Hospital Trust	Neonatal unit	Unit type
Cambridge cluster	Cambridge and Peterborough	Cambridge University Hospitals NHS Foundation Trust	The Rosie Hospital - Addenbrookes	NICU
		North West Anglia NHS Foundation Trust	Peterborough City Hospital	LNU
		North West Anglia NHS Foundation Trust	Hinchingbrooke Hospital	SCU
	Essex	Mid Essex Hospital Services NHS Trust	Broomfield Hosptial	LNU
		East Suffolk and North Essex Foundation Trust	Colchester Hosptial	LNU
		Princess Alexandra Hospital NHS Trust	Princess Alexandra Hosptial Harlow	LNU
	Suffolk	West Suffolk Hospitals NHS Trust	West Suffolk Hospital	SCU
Norwich cluster	Norfolk	Norfolk and Norwich University Hospitals NHS Trust	Norfolk and Norwich Hospital	NICU
		Queen Elizabeth Hospital Kings Lynn NHS Trust	Queen Elizabeth Hosptial	LNU
		James Paget University Hospital NHS Foundation Trust	James Paget Hosptial	SCU
	Suffolk	East Suffolk and North Essex Foundation Trust	Ipswich Hosptial	LNU

Luton Cluster	Bedfordshire	Bedfordshire Hospitals NHS Foundation Trust	Luton and Dunstable Hospital	NICU
		Bedfordshire Hospitals NHS Foundation Trust	Bedford Hospital	SCU
	Hertfordshire	East and North Hertfordshire NHS Trust	Lister Hospital	LNU
		West Hertfordshire Hospitals NHS Trust	Watford Hospital	LNU
Royal London	Essex	Mid Essex Hospital Services NHS Trust	Basildon and Thurrock Unversity Hospitals	LNU
		Mid Essex Hospital Services NHS Trust	Southend Hosptial	LNU

Escalation

In-utero

Thresholds for care are clearly demonstrated below in tables 2-5 . Each unit must have a process in place for discussion of potential deliveries with their midwifery and obstetric colleagues and the timely transfer in-utero where possible of women outside of their threshold limits. Multidisciplinary review of any deliveries which occur outside of a units threshold are required, and these reports should be shared with the neonatal ODN and maternity clinical network (*Appendix 3 Incident Reporting Communication Document: <27-week delivery in a centre without a NICU*)This form should be used to exception report babies born outside of threshold for all units i.e. SCU 28+6 weeks

The emergency bed service (EBS) as part of the PaNDR service will locate maternity and neonatal beds for in-utero transfers. In-utero transfers will be made to the closest most appropriate unit. E.g; Women 27 - 30 weeks gestation can be transferred to units with LNU's where this is deemed appropriate for both the mother and babies care needs with women <27 weeks going to NICU's.

Pathways of care for escalation ex utero Transfers

The units have agreed expected pathways of care for escalation of care which should apply to the majority of patients. 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 3 NICU's willbe notified via the Daily ODN report compiled by the PaNDR services. The South Essex LNU's have agreed pathways into London units

Table 2: Cambridge Unit thresholds

Cambridge Cluster								
	Unit	**CUH**	**Peterborough**	**Colchester**	**Broom field**	**PAH**	**West Suffolk**	**Hinching brooke**
Inborn criteria	Designation	NICU	LNU	LNU	LNU	LNU	SCBU	SCBU
	GA singleton	All	>27 weeks	>27 weeks	>27 weeks	>27 weeks	>30 weeks	>30 weeks
	GA twins	All	>28 weeks	>28 weeks	>28 weeks	>28 weeks	>32 weeks	>32 weeks
	Weight	All	>800gms	>800gms	>800gms	>800gms	>1000gms	>1000gms
Respiratory	HFOV	Yes	No	No	No	No	No	No
	Nitric	Yes	No	No	No	No	No	No
	Ventilation	Yes	<48 hours	<48 hours	<48 hours	<48 hours	Tertiary discussion	Tertiary discussion
	CPAP	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	TPN	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Cooling	yes	No	No	No	No	No	No
	Surgery	General & neuro-surgery	No	No	No	No	No	No

Norwich Cluster					
Table 3	**Unit**	**NNUH**	**Ipswich**	**Kings Lynn**	**James Paget**
Inborn criteria	Designation	NICU	LNU	LNU	SCBU
	GA singleton	All	>27 weeks	>27 weeks	>30 weeks
	GA twins	All	>28 weeks	>28 weeks	>32 weeks
	Weight	All	>800gms	>800gms	>1000gms
Respiratory support	HFOV	Yes	No	No	No
	Nitric	Yes	No	No	No
	Ventilation	Yes	<48 hours	<48 hours	Tertiary discussion
	CPAP	Yes	Yes	Yes	Yes
	TPN	Yes	Yes	Yes	Yes
	Cooling	yes	No	No	No
	Surgery	General	No	No	No

Table 3: Norfolk Cluster Unit Thresholds

Luton Cluster					
Table 4	**Unit**	**Luton**	**Lister**	**Watford**	**Bedford**
Inborn criteria	Designation	NICU	LNU	LNU	SCBU
	GA singleton	All	>27 weeks	>27 weeks	>30 weeks
	GA twins	All	>28 weeks	>28 weeks	>32 weeks
	Weight	All	800gms	800gms	1000gms
Respiratory support	HFOV	Yes	No	No	No
	Nitric	Yes	No	No	No
	Ventilation	Yes	<48 hours	<48 hours	Tertiary discussion
	CPAP	Yes	Yes	Yes	Yes
	TPN	Yes	Yes	Yes	Yes
	Cooling	yes	No	No	No
	Surgery	No	No	No	No

Table 4: Luton cluster unit thresholds

Essex Cluster			
Table 5	Unit	Basildon	Southend
Inborn criteria	Designation	LNU	LNU
	GA singleton	>27 weeks	>27 weeks
	GA twins	>28 weeks	>28 weeks
	Weight	800gms	800gms
Respiratory support	HFOV	No	No
	Nitric	No	No
	Ventilation	<48 hours	<48hours
	CPAP	Yes	Yes
	TPN	Yes	Yes
	Cooling	No	No
	Surgery	No	No

Table 5: Essex units with London Pathways

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

PaNDR will conference in the relevant tertiary units at the point at which a patient is deemed as potentially requiring transfer to their NICU or where there is a complex question requiring a wider discussion for example, moving outside of established pathways or reorientation of care. unit.

Decision support from the PaNDR neonatal consultant is available 24/7 via
01223 274274.
Bedford will continue to contact the Luton & Dunstable consultant team for advice 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 for them 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 exception requests each month for any babies cared for outside of the unit's thresholds. (*Appendix 2- Exception reporting*)
Discussions with the PaNDR neonatal Consultant should take place at the earliest opportunity

Surgical flows
Within the neonatal network Cambridge University Hospitals and NNUH provide neonatal surgery**.** Surgical pathways for infants within these cluster groups are into their respective centre, with the exception of Peterborough. Luton does not provide surgery for their cluster hospitals. Cardiac surgery is not provided by any of the tertiary centres and the pathways are detailed below.

Cardiac transfers will be undertaken when appropriate by the PaNDR Paediatric team, by CATS when the PaNDR Paediatric team is not available and by agreement it may be appropriate for the PaNDR Neonatal team to complete these . Cardiac referrals should be directed via the PaNDR hotline 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. in.

Unit (table 6)	Agreed Clinical pathway	
	Non cardiac surgical pathway	Cardiac surgical pathway
Addenbrookes		GOSH
Peterborough	Leicester/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: Cardiac pathways

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'.
It also provides a clear and concise description of the procedures and timescales to allow repatriation of infants to their local unit or for step down care to occur in a timely manner. This outlines clear expectations to all hospitals within the EOE around the appropriate repatriation of 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 step down unit
- 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

It is acknowledged that within the EOE bed location is carried out by the Emergency Bed Service (EBS) and that this is carried out with the full knowledge of the agreed patient pathways. Where possible infants should be cared for within their cluster units. Therefore all units must be transparent and provide readily available information on cot status. This information is shared with EBS twice daily and should be available when the EBS team ring.

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

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

PaNDR transfer

There is an aim that all infants assessed as clinically fit for transfer to the home unit or to step down unit will be transfered within 72 hours from the time of referral to the receiving hospital. Referral to the transfer service must be made when the infant is clinically fit for transfer. Any baby referred must be ready to be transferred at any point after the referral unless otherwise stated.

- Repatriation will take place once the infant is considered to be clinically stable in respect of their requirement for on-going care. There will be a clear on-going management plan and the infants care needs must be able to be provided by the receiving unit (*in line with threshold information on pages 4/ 5)*
- The infant must be deemed fit for transfer by the PaNDR team
- Receiving units must support repatriation of infants to allow for on-going specialist activity in the NICU's, as is appropriate to their unit designation (see threshold document)
- Repatriation is in the families and infants best interest and aligns with the vision in the Long Term plan of patients being care for as close to home as possible and must be supported where possible
- Collection of data on delayed transfers should be recorded by all units. (Delayed Transfer = more than 72 hours after decision to transfer). Escalation to the ODN at 72 hours.

- Regular updates should be obtained by the receiving units and by PaNDR to ensure both services can appropriately manage patient flow, appropriate/ predicted repatriation dates should be provided by the referring service .
- The decision to repatriate resides with the clinical team responsible for the infant's current care.

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, with appropriate communication between the local and tertiary services.
- Where parents do not want their infant repatriated, there must be a consultant led conversation with the family explaining the need for repatriation as part of the provided care pathway. Only in exceptional circumstances would a request be agreed for an infant not to be transferred to their home unit.
- Transfer of infants whose local hospital is a tertiary centres may be required to support capacity. This should only occur if it will not cause extreme hardship to the family.
- Where infants have made good progress and are ready for home it may be appropriate to send directly home. A direct consultant to consultant conversation is required to ensure all parties are clear of any follow-up arrangements which are required
- Parents must be kept up to date with decisions on repatriation. All decisions with the parents must be recorded in the notes and outlined on the SEND summary

Decision making

- When an infant is considered to be fit for repatriation/ step down to their home unit. The Consultant at the referring hospital must authorise infant transport.
- Parents are informed of the decision to repatriate
- Referral to the neonatal transport team made. Clinical information given and approximate timing of transfer discussed
- When cot availability is confirmed at the receiving unit, clinical information can be given to the receiving unit
- On occasion there are no cot available for a repatriation, , if a cot is likely to become available within 24 hours unless the tertiary centre is at capacity the repatriation can be postponed for 24 hours. Where it is unlikely a cot will become 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 .
- Documentation of fit for discharge/repatriation should be made within the badgernet system and the infant's notes.
- The referring hospital must complete the relevant discharge summary/ letter including clinical and social information. Access to badgernet information for the receiving hospital should be made to allow access to clinical information.
- 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 a shared responsibility , when the transfer team leave the referring hospital they formally take over care

- If an infant's clinical state changes making the infant either 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, PaNDR and the receiving unit should be informed

Escalation procedures

- If repatriation has not occurred within 72hours of the decision and where no change in the infants 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 update on the 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 will to the ODN who will send monthly reports to the commissioning team (Appendix 2)

Escalation for delay repatriations

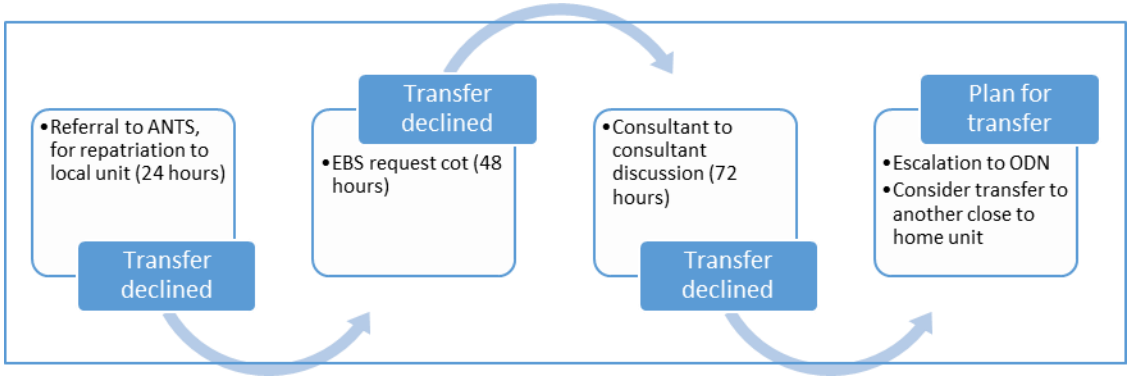

Table 7: Escalation for delayed repatriations

Infection Control

- 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 network guideline (2018). 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 work load to ensure appropriate cleaning of equipment post transfer.
- PaNDR team must be informed if infant's have been home and are readmitted from the community

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
- Network Quality Dashboard to demonstrate delays in repatriation on a quarterly basis

Data on delayed repatriations/ transfers will be kept by the ODN and presented on a quarterly basis along with exception reporting of infants outside of threshold criteria within the governance structure

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

Table 8	HHFNC02 / CPAP	Weaning	NGT Frequency	NJT accepted	Continuous feeds	Weight restriction	Gestational restriction	Long line	Broviac/hickman lines	Ventricular tap	convulsions	Medication exceptions	Other
LNU	Respiratory		Feeds			Thresholds		Access					
BTUH	Y	Y	Y	Y	Y	≥800gms	≥27 Weeks	Y	Y	N	Y	N	
Broomfield	Y	Y	Y	Y	Y	≥800gms	≥27 Weeks	Y	Y	Y	Y	N	
Colchester	Y	Y	Y	Y	Y	≥800gms	≥27 Weeks	Y	Y	Y	Y	N	
Harlow	Y	Y	Y	Y	Y	≥800gms	≥27 Weeks	Y	N	N	Y	N	
Ipswich	Y	Y	Y	Y	Y	≥800gms	≥27 Weeks	Y	Y	Y	Y	Y	End of life individual discussion
Lister	Y	Y	Y	Y	Y	≥800gms	≥27 Weeks	Y	Y	Y	Y	N	
Peterborough	Y	Y	Y	Y	Case by case	≥800gms	≥27 Weeks	Y	Y	Y	Y	N	
QEHKL	Y	Y	Y	Y	Y	≥800gms	≥27 Weeks	Y	Y	Y	Y	N	
Southend	Y	Y	Y	Y	Y	≥800gms	≥27 Weeks	Y	N	N	Y	Inotropes	
Watford	Y	Y	Y	Y	N	≥800gms	≥27 Weeks	Y	Y	Y	Y	N	
SCU													
Bedford	Y	Y	hourly	Y	Only NJT	≥1000gms	≥30weeks	Y	Y	N		N	Palliation individual discussion
Hinchingbrooke	Y	Y	hourly	N	N	≥1000gms	≥30weeks	Y	N	N	N	N	Limit 2 babies on HHFNC/CPAP
James Paget	Y	Y	Y	N	N	≥1000gms	≥30weeks	Y	Y	N	N	Prostin/ inotropes	Stoma babies if surgeons will review at JPH
West Suffolk	Y	Y	Y	Y	Y	≥1000gms	≥30weeks	Y	Y	Y	Y	N	

Table 8: Thresholds for repatriation

Unit Closure Policy

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

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

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 4)

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 trust 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
- 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.

Definitions

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)

Step down 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

Emergency Bed Service EBS

Closure

Closure to local network/ Cluster activity - unit is currently accepting own local activity but unable to accept from local network/Cluster- there may be gestations agreed within this statement

Closure to Local network/Cluster and own activity- unit is negotiating transfer 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

Appendix 1

Exception thresholds - BAPM categories of care 2010

LNU

- Babies <27wks < 28 week multiples or <800g in a LNU beyond 1 day of life
- Babies receiving intubated ventilatory support for greater than 48 hours beyond 1 day
- Babies receiving ventilation via a tracheal tube **AND** Inotrope, prostaglandin infusion, insulin infusion, a chest drain, or had an exchange transfusion in a LNU beyond 1 day
- Babies with hypotension, disseminated intravascular coagulation (DIC), renal failure, or metabolic acidosis
- Babies who received nitric oxide, HFOV, or therapeutic hypothermia

SCBU

- Babies <30wks or 32 week multiples or <1000g in a SCBU beyond 1 day of life (except London ODN which doesn't use the beyond 1 day of life criteria)
- Babies receiving IC in a SCBU beyond 1 day
- Babies receiving inotrope, prostaglandin infusion, insulin infusion, have a chest drain, or had an exchange transfusion in a SCBU beyond 1 day
- Babies receiving intubated ventilatory support for greater than 24 hours beyond 1 day
- Babies with hypotension, disseminated intravascular coagulation (DIC), renal failure, or metabolic acidosis
- Babies who received nitric oxide, HFOV, or therapeutic hypothermia

Appendix 2

Exception reporting form

Complete all areas which are applicable to the type of exception being reported (Threshold, >44 weeks, delayed repatriation)

Unit						
contact details						
Badger Unique identifier						
		Babies receiving intubated ventilator support for greater than 48 hours beyond 1 day				
		Babies receiving ventilation via a tracheal tube AND Inotrope, prostaglandin infusion, insulin infusion, a chest drain, or had an exchange transfusion in a LNU beyond 1 day				
		Babies with hypotension, disseminated intravascular coagulation (DIC), renal failure, or metabolic acidosis				
		Babies who received nitric oxide or HFOV				
		Therapeutic hypothermia				
		Delayed Repatriation				
		> 44 weeks Corrected Gestation				
Brief clinical details	Gestation		DOB		Time of birth	
First discussion with ANTS/EBS/ NICU (where applicable)	Date and Time, Who:					
Discussion with other specialist centre	Date and Time, Who:					
Reasons for non-transfer						
Decision made by:	LNU/EBS/specialist centre/ mutual agreement					
Cot available in region?	YES/NO		Nearest Cot available			
Nursing staffing						
Medical staffing						
LNU activity +(template)	IC		HD		SC	
Antenatal/ DS status / anticipated activity						
Additional information. (If completing contemporaneously us this box to update every 24 hours.)						
Final outcome						

Form Completed by			
Date from started		Date form completed	
Date form submitted to Network			

Appendix 3

Incident Reporting Communication Document: <27-week delivery in a centre without a NICU.
(updated April 2021)

*__PLEASE NOTE__: This exception form should be completed and submitted within 24- 48 hours of the incident and copies emailed to Neonatal ODN **kelly.hart5@nhs.net** & Maternity Clinical network **england.maternitycn@nhs.net**

Unit Name:							
Badgernet Number:		Infant Name: (initials only for emailed copy to Network)					
Date / time of admission of mum:		Date / time of delivery:		Gestation at birth:			
Mother' ethnic origin		Father' ethnic origin					
Were efforts made to undertake an in- utero transfer prior to delivery?				**Yes**		**No**	
If no which of the following statements apply				Please tick			
Tertiary NICU unable to accept.							
Tertiary Obstetric service unable to accept.							
Delivery occurred prior to transfer.							
Maternal condition unsafe for transfer.							
Delivery indicated immediately.							
Who was the transfer discussed with (obstetric consultant, neonatal consultant, senior midwife labour ward, NNU in charge)							
Other reasons – please state:							
Prior to delivery did communications take place with a tertiary NICU consultant?				**Yes**		**No**	
If no, why not?							
If yes, name / title of contact at tertiary unit:							
Prior to delivery did communications take place with a senior midwife on labour ward of the NICU?				**Yes**		**No**	
If no, why not?							

If yes, name / title of contact at tertiary unit: N/A				
Were there any risk factors for preterm birth, if yes was a personalised care plan in place?	**Yes**		**No**	
Please comment, including if there any risks that were not ident6ified or managed in the antenatal period				
Were there any significant documented antenatal concerns in the 2 weeks prior to delivery?	Yes		No	
If yes, what were they? please include telephone discussions or contacts with DS/ Triage / Community midwife				
Did you report this as clinical incident within your Trust / reported via datix?	**Yes**		**No**	
If yes, has it been reviewed locally and any actions identified?	**Yes**		**No**	
Name / title of reviewer(s): Maternity: Neonatal: Risk Management				

Incident Reported by:	
Name and Title:	Date:
Organisation:	

Appendix 4

Parent Letter

Dear Parent/s
Neonatal units work within a network which aims to provide "the right care for the right baby in the right place" . This neonatal unit is part of the East of England Neonatal Networks. Within this network there are 3 NICU (neonatal intensive care units) which provide all levels of care, two of these units also provide surgery. 10 LNU (local neonatal units) which provide short term intensive care, high dependency and special care, and 4 SCBU who provide stabilisation, short term high dependency care and special care. All units have access to skilled nurses and clinicians 24 hours a day and are able to provide high quality care.
To enable the network to achieve the "right baby in the right place" and to ensure that all babies within the neonatal service receive the highest standard of care it is sometimes necessary for babies to be moved to other units. This may happen for a number of reasons

- *Your baby requires intensive care which needs to be provided within one of the 3 Neonatal intensive care units (NICU)*
- *Your baby has received a period of intensive care at one of the 3 NICU's and now no longer requires intensive care and is transferred back to your local LNU(local neonatal unit) or SCU (special care units)*
- *Your baby does not require intensive care and is transferred to a local unit for on-going care- this is occasionally necessary to ensure that the intensive care units cots are available when they are needed for sick infants*.

It is the aim of the neonatal network to try to keep families as close to home as much as possible, although this may not necessarily be your local hospital or the hospital where you booked your maternity care .
For parents who have booked their maternity care at one of the 3 NICU'S but live closer to another hospital there may be occasions where your baby is transferred to a unit closer to your home address. This supports family life, improved family support and earlier discharge as your baby may require on-going outreach support which can only be provided by the team at your local hospital.
Please be assured that prior to any transfer of your baby you will be fully informed of the reasons for transfer by the local team. Transfer to other neonatal units is often difficult for parents especially when you have built a relationship with the team caring for your baby.
Where possible we would encourage parents to visit the unit their infant will be transferred to, so that they can be reassured before the transfer and familiarise themselves with the facilities. This is of course not always possible if your baby is transferred for emergency care.
The East of England transfer service that will transfer your baby is called PaNDR (paediatric and neonatal decision support and retrieval service) One parent can travel with your baby and all units can provide you with information about this service.
Whilst we understand that having a sick baby is very stressful for the whole family we will aim to keep transfers to a minimum, however provision of cots for sick babies is essential to ensure that all infants across the East of England have the opportunity to receive the most appropriate level of care.
Please support us to ensure that all babies have the opportunity to receive the highest quality care as close to home as possible.

Regards
Liz Langham
Director Neonatal ODN UNIT CD / lead nurse

Appendix 5

Unit Closure Notification form

Unit Closure Notice to ODN		
Date:		
Unit		
Person completing form		
Consultant on duty		
Internal escalation information		
Reason for closure	Capacity □ IC HD SC (current activity) 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 □ 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*	

Appendix 6

Exceptional Circumstances Form

Form to be completed in the **exceptional** circumstances that the Trust is not able to follow ODN approved guidelines.

Details of person completing the form:	
Title:	Organisation:
First name:	Email contact address:
Surname:	Telephone contact number:
Title of document to be excepted from:	
Rationale why Trust is unable to adhere to the document:	
Signature of speciality Clinical Lead: Date:	Signature of Trust Nursing / Medical Director: Date:
Hard Copy Received by ODN (date and sign):	Date acknowledgement receipt sent out:

Please email form to: mandybaker6@nhs.net requesting receipt.

Send hard signed copy to: Mandy Baker
EOE ODN Executive Administrator
Box 93
Cambridge University Hospital
Hills Road
Cambridge CB2 0QQ