East Midlands
Neonatal Operational Delivery Network

SERVICE SPECIFICATION / CARE PATHWAYS

CONTENTS

Introduction 2
Kettering General Hospital NHS Foundation Trust 3
Northampton General Hospital NHS Trust 6
Nottingham University Hospitals NHS Trust - Nottingham City Hospital 9
Nottingham University Hospitals NHS Trust - Queen's Medical Centre (Perinatal Centre) 12
Sherwood Forest Hospitals NHS Foundation Trust - King's Mill Hospital 14
University Hospitals of Derby & Burton NHS Foundation Trust - Queen's Hospital, Burton 17
University Hospitals of Derby & Burton NHS Foundation Trust - Royal Derby Hospital 20
University Hospitals of Leicester NHS Trust - Leicester General Hospital 23
University Hospitals of Leicester NHS Trust - Leicester Royal Infirmary (Perinatal Centre) 26
United Lincolnshire Teaching Hospitals NHS Trust - Lincoln County Hospital 28
United Lincolnshire Teaching Hospitals NHS Trust - Pilgrim Hospital, Boston 31
List of Abbreviations 34

INTRODUCTION

Welcome to the latest version of the East Midlands Neonatal Operational Delivery Network (EMNODN) care pathway document. The EMNODN was established in April 2018 when the Central Newborn Network units were merged with the Trent Perinatal Network units to form a single East Midlands Network.

This Care Pathway was originally drawn up for the Central Newborn and Trent Perinatal Networks following the East Midlands Neonatal unit designation process[1] which was completed in April 2009. It summarises the individual unit thresholds and provides detail on how babies should be cared for across the EMNODN.

The overarching purpose of the Care Pathways is to support the aim of the Network and the Midlands Specialised Commissioning Team: namely to provide a neonatal service that ensures that mothers and babies are able to access the best and most appropriate level of care at the right place and at the right time, and as close to home as possible[2]. This is underpinned by a focus on clinical discussions, agreement, and monitoring.

These pathways detail the clinical thresholds that are expected to be used in order to guide care and to clarify when discussions should take place.

The EMNODN and the Midlands Specialised Commissioning teams will monitor the care received by babies within the EMNODN and suggest any changes as appropriate, in agreement with the Provider Trusts.

A Network exception reporting process is to be completed by the Provider Trust in the event of a unit providing care outside of its individual clinical thresholds.

[1] Developing a Commissioning Strategy for Neonatal Services – Delivering a Safe and Sustainable Service for the Population of the East Midlands. EMSCG, March 2009.
[2] Strategic Plan, East Midlands Neonatal Strategic Coordinating Group. April 2009.

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies will deliver in Kettering General if an agreed postnatal management plan is in place. Babies with antenatally identified surgical conditions will normally be delivered in a unit with neonatal surgery facilities. Following input from a Paediatric Cardiologist, it may also be appropriate to deliver babies with some antenatally detected cardiac problems in a Cardiac or Network Perinatal Centre.

GESTATION LIMIT

In-Utero Transfer

Where possible, women in premature labour at less than 27^{+0} completed weeks gestation, or with an estimated birth weight of less than 800 grams, will be transferred to the Network Perinatal Centre. Women who have a multiple pregnancy and have threatened labour at less than 29+0 weeks should also be considered for transfer to the Network Perinatal Centre where the maternal condition allows.

Ex-Utero Transfer

If, for whatever reason, the above stated patients cannot be transferred, and are delivered at Kettering General, the baby/babies will be stabilised and assessed, and appropriate arrangements put into place following discussion with the Network Perinatal Centre.

***Under 27 weeks gestation*:**	Any baby of less than 27^{+0} weeks gestation should normally be transferred to a Network Perinatal Centre if continuing intensive care is appropriate. If there is doubt about the necessity for transfer (e.g., baby dying, baby stable and on the edge of the unit pathway threshold), there will be Consultant to Consultant discussion with the Network Perinatal Centre. Such exceptional cases which are treated outside these guidelines will be monitored by the Network and Specialised Commissioners.
Multiples under 28 weeks gestation:	In line with the NCCR recommendations, multiples at less than 28 weeks should normally be transferred to the Network Perinatal Centre.
Birth weight less than 800 grams:	Any baby with a birth weight of less than 800 grams should be transferred to the Network Perinatal Centre.
27 weeks gestation and above:	Whether a baby of 27^{+0} gestation, and above, and with a birth weight above 800 grams, or multiples above 28 weeks should remain at Northampton General, depends upon where the care needs fall within the following criteria:

CRITERIA FOR CARE AT KETTERING GENERAL HOSPITAL

Complex Intensive Care:	Babies requiring multi-organ intensive care should be discussed with the Leicester Service Consultant of the NICU and may need transfer to a Network Perinatal Centre.
Ventilation:	If a baby requires conventional ventilation the care being provided should be discussed with the Leicester Service Consultant for the NICU within 24 hours, and the baby may

require transfer out to a Network Perinatal Centre if he/she continues to be ventilated after 48 hours. Details of the conversations should be documented in the baby's notes.

HFOV, ECMO and Nitric Oxide: Babies who require HFOV, ECMO or Nitric Oxide will need to be transferred to a specialist centre and early consideration should be given to this.

CPAP: Babies requiring CPAP can be managed at Kettering General Hospital

HFO2: Babies requiring HFO2 can be managed at Kettering General Hospital.

PN: Babies requiring PN can be managed at Kettering General Hospital.

Surgery: Babies who require surgery, or a surgical opinion, will be transferred out to a Perinatal Surgical Centre.

Cooling: Newly born babies who require cooling for treatment of perinatal asphyxia will be transferred to a Network Perinatal Centre.

Suspected Cardiac/PDA Cases: Where a possible cardiac problem is suspected, after discussion with the Cardiologist, the baby should be transferred to a Cardiac Centre as appropriate. Babies with PDA who require surgery must be discussed with the Leicester Perinatal Centre before discussion with the Cardiologist, as per the agreed Network PDA pathway.

BABIES RETURNING TO KETTERING GENERAL HOSPITAL

Babies may return to Kettering General when they are clinically well and safe for transfer. They may be transferred if the baby still requires CPAP, HFO2, or PN. Babies will not routinely be transferred back if they are ventilated unless they have short term ventilation requirements, e.g., will be extubated upon return, or they require end of life care near to home.

ANTENATAL TRANSFERS IN TO KETTERING GENERAL HOSPITAL

Women in preterm labour at or above 27^{+0} completed weeks gestation, and with an estimated birth weight of greater than 800 grams, or multiples at or above 28 weeks, may be accepted into Kettering General for delivery.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between Kettering General and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for the referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database who breach the criteria detailed above. Exception reports will be expected where babies stay in Kettering General but appear clinically suitable for referral back to the home unit.

Exception reports are also expected on those babies at or above 44 corrected weeks of gestation that remain on the neonatal unit.

ADVICE CALLS

All calls for clinical advice should go through the call handling service. Callers should specifically ask to speak directly to the Service Consultant of the NICU or out of hours the Consultant on call for the Leicester Neonatal Service in order to seek advice. If a transfer is recommended following this call, then the call handlers will conference call the CenTre Transport Service. Details of all conversations should be documented in the baby's notes.

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies may deliver in Northampton General, if an agreed postnatal management plan is in place. Babies with antenatally identified surgical conditions will normally be delivered in a unit with neonatal surgery facilities. Following input from a Paediatric Cardiologist, it may also be appropriate to deliver babies with some antenatally detected cardiac problems in a Cardiac or Network Perinatal Centre.

GESTATION LIMIT

In-Utero Transfer

Where possible, women in premature labour at less than 27^{+0} completed weeks gestation, or with an estimated birth weight of less than 800 grams, will be transferred to the Network Perinatal Centre. Women who have a multiple pregnancy and have threatened preterm labour at less than 28+0 weeks should also be considered for transfer to the Network Perinatal Centre where the maternal condition allows.

Ex-Utero Transfer

If, for whatever reason, the above stated patients cannot be transferred, and are delivered at Northampton General, the baby/babies will be stabilised and assessed, and appropriate arrangements put into place following discussion with the Network Perinatal Centre.

Under 27 weeks gestation: Any baby of less than 27^{+0} weeks gestation should normally be transferred to a Network Perinatal Centre if continuing intensive care is appropriate. If there is doubt about the necessity for transfer (e.g., baby dying, baby stable and on the edge of the unit pathway threshold), there will be Consultant to Consultant discussion with the Network Perinatal Centre. Such exceptional cases which are treated outside of these guidelines will be monitored by the Network and Specialised Commissioners.

Multiples under 28 weeks gestation: In line with the NCCR recommendations, multiples at less than 28 weeks should normally be transferred to the Network Perinatal Centre.

Birth weight less than 800 grams: Any baby with a birth weight of less than 800 grams should be transferred to the Network Perinatal Centre.

27 weeks gestation and above: Whether a baby of 27^{+0} gestation, and above, and with a birth weight above 800 grams, or multiples above 28 weeks should remain at Northampton General, depends upon where the care needs fall within the following criteria:

CRITERIA FOR CARE AT NORTHAMPTON GENERAL HOSPITAL

Complex Intensive Care: Babies requiring multi-organ intensive care should be discussed with the Leicester Service Consultant for the NICU and may need transfer to a Network Perinatal Centre.

Ventilation:	If a baby requires conventional ventilation the care being provided should be discussed with the Leicester Service Consultant for the NICU after 24 hours, and the baby may require transfer out to a Network Perinatal Centre if he/she continues to be ventilated after 48 hours. Details of the conversations should be documented in the baby's notes.
HFOV, ECMO and Nitric Oxide:	Babies who are likely to require HFOV, ECMO or Nitric Oxide will need to be transferred to a specialist centre and early consideration should be given to this.
CPAP:	Babies requiring CPAP can be managed at Northampton General.
HFO2:	Babies requiring HFO2 can be managed at Northampton General.
PN:	Babies requiring PN can be managed at Northampton General.
Surgery:	Babies who require surgery or a surgical opinion will be transferred out to a Perinatal Surgical Centre.
Cooling:	Newly born babies who require cooling for treatment of perinatal asphyxia will be transferred to a Network Perinatal Centre.
Suspected Cardiac/PDA Cases:	Where a possible cardiac problem is suspected, after discussion with the Cardiologist, the baby should be transferred to a Cardiac Centre as appropriate. Babies with PDA who require surgery must be discussed with the Leicester Perinatal Centre before discussion with the Cardiologist, as per the agreed Network PDA pathway.

BABIES RETURNING TO NORTHAMPTON GENERAL HOSPITAL

Babies should return to Northampton when they are clinically well and safe for transfer. They may be transferred if the baby still requires CPAP, HFO2, or PN. Babies will not routinely be transferred back if they are ventilated unless they have short term ventilation requirements, e.g., will be extubated upon return, or they require end of life care near to home.

ANTENATAL TRANSFERS INTO NORTHAMPTON GENERAL HOSPITAL

Women in preterm labour at or above 27^{+0} completed week's gestation, and with an estimated birth weight of above 800 grams, or multiples at or above 28 weeks, may be accepted into Northampton General for delivery.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between Northampton General and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for that referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion, and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database who breach the criteria detailed above. Exception reports will be expected where babies stay in Northampton General but appear clinically suitable for referral back to the home unit.

Exception reports are also expected on those babies at or above 44 corrected weeks of gestation that remain on the neonatal unit.

ADVICE CALLS

All calls for clinical advice should go through the call handling service. Callers should specifically ask to speak directly to the Service Consultant on call of the NICU or out of hours Consultant on call for the Leicester Neonatal Service in order to seek advice. If a transfer is recommended following this call, then the call handlers will conference call the CenTre Transport Service. Details of all conversations should be documented in the baby's notes.

NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST - NOTTINGHAM CITY HOSPITAL
Local Neonatal Unit

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies may deliver in Nottingham City, if an agreed postnatal management plan is in place. Babies with antenatally identified surgical conditions will normally be delivered in a unit with neonatal surgery facilities. Following input from a Paediatric Cardiologist, it may also be appropriate to deliver babies with some antenatally detected cardiac problems in a cardiac or Network Perinatal Centre.

GESTATION LIMIT

In-Utero Transfer

Where possible, women in premature labour at less than 27^{+0} completed weeks gestation, or with an estimated birth weight of less than 800 grams, will be transferred to the Network Perinatal Centre. Women who have a multiple pregnancy and have threatened preterm labour at less than 28^{+0} weeks should also be considered for transfer to the Network Perinatal Centre where the maternal condition allows.

Ex-Utero Transfer

If, for whatever reason, the above stated patients cannot be transferred and are delivered at Nottingham City, the baby/ babies will be stabilised and assessed, and appropriate arrangements put into place following discussion with the Network Perinatal Centre.

Under 27 weeks gestation:	Any baby of less than 27^{+0} weeks gestation should normally be transferred to a Network Perinatal Centre if continuing intensive care is appropriate. If there is doubt about the necessity for transfer (e.g., baby dying, baby stable and on the edge of the unit pathway threshold), there will be Consultant to Consultant discussion with the Network Perinatal Centre. Such exceptional cases which are treated outside of these guidelines will be monitored by the Network and Specialised Commissioners.
Multiples under 28 weeks gestation:	In line with the NCCR recommendations, multiples at less than 28 weeks should normally be transferred to the Network Perinatal Centre.
Birth weight less than 800 grams:	Any baby with a birth weight of less than 800 grams should be transferred to the Network Perinatal Centre.
27 weeks gestation and above:	Whether a baby of 27^{+0} gestation, and above, and with a birth weight above 800 grams, or multiples above 28 weeks should remain at Nottingham City depends upon where the care needs fall within the following criteria:

CRITERIA FOR CARE AT NOTTINGHAM CITY HOSPITAL

Complex Intensive Care:	Babies requiring multi-organ intensive care should be discussed with the Nottingham Service Consultant for the NICU and may need transfer to a Neonatal Perinatal Centre.

Ventilation:	If a baby requires conventional ventilation the care being provided should be discussed with the Nottingham Service Consultant for the NICU after 24 hours and the baby may require transfer out to a Network Perinatal Centre if he/she continues to be ventilated after 48 hours. Details of the conversations should be documented in the baby's notes.
HFOV, ECMO and Nitric Oxide:	Babies who are likely to require HFOV, ECMO or Nitric Oxide will need to be transferred to a specialist centre and early consideration should be given to this.
CPAP:	Babies requiring CPAP can be managed at Nottingham City.
HFO2:	Babies requiring HFO2 can be managed at Nottingham City.
PN:	Babies requiring PN can be managed at Nottingham City.
Surgery:	Babies who require surgery or a surgical opinion will be transferred out to a Perinatal Surgical Centre.
Cooling:	Newly born babies who require cooling for treatment of perinatal asphyxia will be transferred to a Network Perinatal Centre.
Suspected Cardiac/PDA Cases:	Where a possible cardiac problem is suspected, after discussion with the Cardiologist, the baby should be transferred to a Cardiac Centre as appropriate. Babies with PDA who require surgery must be discussed with the Nottingham Perinatal Centre before discussion with the Cardiologist, as per the agreed Network PDA pathway.

BABIES RETURNING TO NOTTINGHAM CITY HOSPITAL

Babies should return to Nottingham City when they are clinically well and safe for transfer. They may be transferred if the baby still requires CPAP, HFO2, or PN. Babies will not routinely be transferred back if they are ventilated unless they have short term ventilation requirements, e.g., will be extubated upon return, or they require end of life care near to home.

ANTENATAL TRANSFERS INTO NOTTINGHAM CITY HOSPITAL

Women in preterm labour at or above 27^{+0} completed week's gestation, and with an estimated birth weight of above 800 grams, or multiples at or above 28 weeks may be accepted into Nottingham City for delivery.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between Nottingham City and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for that referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database who breach the criteria detailed above. Exception reports will be expected where babies stay in Nottingham City but appear clinically suitable for referral back to the home unit.

Exception reports are also expected on those babies at or above 44 corrected weeks of gestation that remain on the neonatal unit.

ADVICE CALLS

All calls for clinical advice should go through the call handling service. Callers should specifically ask to speak directly to the Service Consultant on call of the NICU or out of hours Consultant on call for the Nottingham (Queen's Medical Centre) Neonatal Service in order to seek advice. If a transfer is recommended following this call, then the call handlers will conference call the CenTre Transport Service. Details of all conversations should be documented in the baby's notes.

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies will deliver in the Queen's Medical Centre, if an agreed postnatal management plan is in place. Babies with antenatally identified surgical conditions will normally be delivered at the Queen's Medical Centre. Following input from a Paediatric Cardiologist, it may be appropriate to deliver some antenatally detected cardiac problems in a cardiac centre.

GESTATION LIMIT

As a Network Perinatal Centre, the Queen's Medical Centre shall treat babies of the entire gestational age spectrum. It is accepted that some babies may be born 'previable' and thus will not be actively resuscitated.

CRITERIA FOR CARE AT NOTTINGHAM QUEEN'S MEDICAL CENTRE

Specialist Care:	Babies requiring specialist intensive care for renal failure and neurosurgery will be cared for on the Queen's Medical Centre.
Complex Intensive Care:	Babies requiring respiratory support with symptoms of additional organ failure (e.g., hypotension, DIC, renal failure, metabolic acidosis) will remain on the Queen's Medical Centre.
Ventilation:	Babies receiving all ventilatory modalities shall be suitable for treatment on the Queen's Medical Centre.
HFOV:	Babies who require HFOV will be assessed and remain on the Queen's Medical Centre.
ECMO:	Babies who require ECMO will need to be transferred to an ECMO centre.
Nitric Oxide:	Term babies who need iNO will be managed on the QMC Campus. Failure to respond will be discussed with an ECMO centre and early consideration should be given to this.
CPAP:	Babies requiring CPAP will remain on the Queen's Medical Centre.
HFO2:	Babies requiring HFO2 will remain on the Queen's Medical Centre.
PN:	Babies requiring PN will be managed on the Queen's Medical Centre.
Surgery:	Babies who require surgery or a surgical opinion will be managed on the Queen's Medical Centre.
Cooling:	Newly born babies who require cooling for treatment of perinatal asphyxia will be managed on the Queen's Medical Centre.

Suspected Cardiac/PDA Cases: Where a possible cardiac problem is suspected, after discussion with the Cardiologist, the baby may require transfer to a Cardiac Centre as appropriate.

BABIES RETURNING TO NOTTINGHAM QUEEN'S MEDICAL CENTRE

Babies should return to Queen's Medical Centre when clinically stable for transfer.

ANTENATAL TRANSFERS INTO NOTTINGHAM QUEEN'S MEDICAL CENTRE

Except in the presence of known severe antenatally detected surgical problems or serious cardiac abnormalities (where delivery in a supra-specialist or Cardiac Centre has been agreed), all women may be considered for delivery on the Queen's Medical Centre.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between Queen's Medical Centre and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for the referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database as meeting the referring hospitals threshold level but are not repatriated and remain on Queen's Medical Centre.

Exception reports are expected on those babies at or above 44 corrected weeks of gestation that remain on the Neonatal Unit and any capacity transfers out of the unit.

SHERWOOD FOREST HOSPITALS NHS FOUNDATION TRUST - KING'S MILL HOSPITAL
Local Neonatal Unit

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies will deliver in King's Mill if a suitable postnatal management plan is in place. Babies with antenatally identified surgical conditions will normally be delivered in a unit with neonatal surgery facilities. Following input from a Paediatric Cardiologist, it may also be appropriate to deliver some antenatally detected cardiac problems in a cardiac or Network Perinatal Centre.

GESTATION LIMIT

In-Utero Transfer

Where possible, women in premature labour at less than 27^{+0} completed week's gestation or with an estimated birth weight of below 800 grams will be transferred to deliver in a Network Perinatal Centre.

Women who have a multiple pregnancy and have threatened preterm labour at less than 28^{+0} weeks should be considered for transfer to the Network Perinatal Centre where the maternal condition allows.

Ex-Utero Transfer

If, for whatever reason, the above stated patients cannot be transferred and are delivered at King's Mill, the baby/babies will be stabilised and assessed, and appropriate arrangements put into place following discussion with the Network Perinatal Centre.

Under 27 weeks gestation:	Any baby of less than 27^{+0} weeks gestation should normally be transferred to a Network Perinatal Centre if continuing intensive care is appropriate. If there is doubt about the necessity for transfer (e.g., baby dying, baby stable and on the edge of the unit pathway threshold), there will be Consultant to Consultant discussion with the Network Perinatal Centre. Such exceptional cases which are treated outside of these guidelines will be monitored by the Network and Specialised Commissioners.
Multiples under 28 weeks: gestation:	In line with the NCCR recommendations, multiples at less than 28 weeks should normally be transferred to the Network Perinatal Centre.
Birth weight less than 800 grams:	Any baby with a birth weight of less than 800 grams should be transferred to the Network Perinatal Centre.
27 weeks gestation and above:	Whether a baby of 27^{+0} weeks gestation and above, and with a birth weight of above 800 grams, or multiples above 28 weeks should remain in King's Mill depends upon where the care needs fall within the following criteria:

CRITERIA FOR CARE AT KING'S MILL HOSPITAL

Complex Intensive Care:	Babies requiring multi-organ intensive care should be discussed with the Nottingham Service Consultant of the NICU and may need transfer to a Network Perinatal Centre.

Ventilation:	If a baby requires conventional ventilation the care being provided will be discussed with the Nottingham Service Consultant of the NICU after 24 hours and the baby may require transfer out to a Network Perinatal Centre if he/she continues to be ventilated after 48 hours. Details of the conversations should be documented in the baby's notes.
HFOV, ECMO and Nitric Oxide:	Babies who are likely to require HFOV, ECMO or Nitric Oxide will need to be transferred to a specialist centre and early consideration should be given to this.
CPAP:	Babies requiring CPAP can be managed at King's Mill.
HFO2:	Babies requiring HFO2 can be managed at King's Mill.
PN:	Babies requiring PN can be managed at King's Mill.
Surgery:	Babies who require surgery or a surgical opinion will be transferred out to a Perinatal Surgical Centre.
Cooling:	Newly born babies who require cooling for treatment of perinatal asphyxia will be transferred to a Network Perinatal Centre.
Suspected Cardiac/PDA Cases:	Where a possible cardiac problem is suspected, after discussion with the Cardiologist, the baby should be transferred to a Cardiac Centre as appropriate. Babies with PDA who require surgery must be discussed with the Nottingham Perinatal Centre before discussion with the Cardiologist, as per the agreed Network PDA pathway.

BABIES RETURNING TO KING'S MILL HOSPITAL

Babies should return to King's Mill when they are clinically well and safe for transfer. They may be transferred if the baby still requires CPAP, HFO2, or PN. Babies will not routinely be transferred back if they are ventilated unless they have short term ventilation requirements, e.g., will be extubated upon return, or they require end of life care near to home.

ANTENATAL TRANSFERS INTO KING'S MILL HOSPITAL

Women in preterm labour at or above 27^{+0} completed week's gestation, and with an estimated birth weight of above 800 grams, or multiples at or above 28 weeks, may be accepted into King's Mill for delivery.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between King's Mill and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for the referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database who breach the criteria detailed above. Exception reports will be expected where babies stay in King's Mill but appear clinically suitable for referral back to the home unit.

Exception reports are also expected on those babies at or above 44 corrected weeks of gestation that remain on the neonatal unit.

ADVICE CALLS

All calls for clinical advice should go through the call handling service. Callers should specifically ask to speak directly to the service Consultant on call of the NICU or out of hours Consultant on call for the Nottingham Neonatal Service in order to seek advice. If a transfer is recommended following this call, then the call handlers will conference call the CenTre Transport Service. Details of all conversations should be documented in the baby's notes.

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies may deliver in Queen's Hospital if an agreed postnatal management plan is in place. Babies with antenatally identified surgical conditions will be delivered in a unit with neonatal surgery facilities. Following input from a Paediatric Cardiologist, it may also be appropriate to deliver some antenatally detected cardiac problems in a cardiac or Network Perinatal Centre.

GESTATION LIMIT

In-Utero Transfer

Where possible, women in premature labour at less than 32^{+0} completed weeks gestation, or with an estimated birth weight of below 1000 grams will be transferred to deliver in a Network Perinatal Centre or an appropriate Local Neonatal Unit where the maternal condition allows.

Ex-Utero Transfer

If, for whatever reason, a baby below 32^{+0} completed weeks, or with a birth weight below 1000 grams is delivered at Queen's Hospital the baby will be stabilised and assessed, and appropriate arrangements put into place following discussion with the Network Perinatal Centre.

Under 32 weeks gestation: Any baby less than 32^{+0} weeks gestation should normally be transferred to a Network Perinatal Centre or an appropriate Local Neonatal Unit. If there is doubt about the necessity for transfer (e.g., baby dying, baby stable and on the edge of the unit pathway threshold), there will be Consultant to Consultant discussion with the Network Perinatal Centre. Such exceptional cases which are treated outside of these guidelines will be monitored by the Network and Specialised Commissioners.

32 weeks gestation and above: Whether a baby of 32^{+0} weeks gestation, and above, should remain at Queen's Hospital depends upon where the care needs falls within the following criteria:

CRITERIA FOR CARE AT QUEEN'S HOSPITAL

Complex Intensive Care: Babies requiring multi-organ intensive care should be discussed with the Nottingham Service Consultant of the NICU and will need transfer to a Network Perinatal Centre.

Ventilation: If a baby requires conventional ventilation at any point, the baby will be discussed with the Nottingham Service Consultant for the NICU or the on-call Consultant out of hours and may require transfer out to a Network Perinatal Centre or an appropriate Local Neonatal Unit.

HFOV, ECMO and Nitric Oxide: Babies who are likely to require HFOV, ECMO or Nitric Oxide will need to be transferred to a specialist centre and early consideration should be given to this.

CPAP:	Babies requiring CPAP for longer than 12 hours or who are anticipated to do so will need to be transferred to a Network Perinatal Centre or an appropriate Local Neonatal Unit.
HFO2:	Babies requiring HFO2 for longer than 12 hours or who are anticipated to do so will need to be transferred to a Network Perinatal Centre or an appropriate Local Neonatal Unit.
PN:	Babies requiring PN will need to be transferred to a Network Perinatal Centre or an appropriate Local Neonatal Unit. Where it is difficult to decide if a baby should receive PN then a discussion should take place with the Nottingham Perinatal Centre.
Surgery:	Babies who require surgery or a surgical opinion will be transferred out to a Perinatal Surgical Centre.
Cooling:	Newly born babies who require cooling for treatment of perinatal asphyxia will be transferred to a Network Perinatal Centre.
Suspected Cardiac/PDA Cases:	Where a possible cardiac problem is suspected, after discussion with the Cardiologist, the baby should be transferred to a Cardiac Centre as appropriate. Babies with PDA who require surgery must be discussed with the Nottingham Perinatal Centre before discussion with the Cardiologist, as per the agreed Network PDA pathway.

BABIES RETURNING TO QUEEN'S HOSPITAL

Babies may return to Queen's Hospital when they are clinically well and safe for transfer. Babies may not return if they are still requiring CPAP, HFO2, PN or have on-going ventilation requirements with the exception of those requiring end of life care near to home.

ANTENATAL TRANSFERS INTO QUEEN'S HOSPITAL

Women in preterm labour at or above 32^{+0} completed weeks gestation, and with an estimated birth weight of greater than 1000 grams, may be accepted into Queen's Hospital for delivery.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between Queen's Hospital and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for that referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database who breach the criteria detailed above.

Exception reports are also expected on those babies at or above 44 corrected weeks of gestation that remain on the neonatal unit.

ADVICE CALLS

All calls for clinical advice should go through the call handling service. Callers should specifically ask to speak directly to the Service Consultant of the NICU or out of hours the Consultant on call for the Nottingham Neonatal Service in order to seek advice. If a transfer is recommended following this call, then the call handlers will conference call the CenTre Transport Service. Details of all conversations should be documented in the baby's notes.

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies may deliver in Royal Derby if an agreed postnatal management plan is in place. Babies with antenatally identified surgical conditions will normally be delivered in a unit with neonatal surgery facilities. Following input from a Paediatric Cardiologist, it may also be appropriate to deliver babies with some antenatally detected cardiac problems in a cardiac or Network Perinatal Centre.

GESTATION LIMIT

In-Utero Transfer

Where possible, women in premature labour at less than 27^{+0} completed week's gestation or with an estimated birth weight of below 800 grams will be transferred to deliver in a Network Perinatal Centre where the maternal condition allows.

Women who have a multiple pregnancy and have threatened preterm labour at less than 28^{+0} weeks should also be considered for transfer to the Network Perinatal Centre.

Ex-Utero Transfer

If, for whatever reason, the above stated patients cannot be transferred and are delivered in the Royal Derby, the baby/babies will be stabilised and assessed, and appropriate arrangements put into place following discussion with the Network Perinatal Centre.

Under 27 weeks gestation:	Any baby of less than 27^{+0} weeks gestation should normally be transferred to a Network Perinatal Centre if continuing intensive care is appropriate. If there is doubt about the necessity for transfer (e.g., baby dying, baby stable and on the edge of the unit pathway threshold), there will be Consultant to Consultant discussion with the Network Perinatal Centre. Such exceptional cases which are treated outside of these guidelines will be monitored by the Network and Specialised Commissioners.
Multiples under 28 weeks gestation:	In line with the NCCR recommendations, multiples at less than 28 weeks should normally be transferred to the Network Perinatal Centre.
Birth weight less than 800: grams:	Any baby with a birth weight of less than 800 grams should be transferred to the Network Perinatal Centre.
27 weeks gestation and above:	Whether a baby of 27^{+0} weeks gestation, and above, and with a birth weight above 800 grams, or multiples above 28 weeks should remain at the Royal Derby depends upon where the care needs fall within the following criteria:

CRITERIA FOR CARE AT ROYAL DERBY HOSPITAL

Complex Intensive Care:	Babies requiring multi-organ intensive care should be discussed with the Nottingham Service Consultant for the NICU and will need transfer to a Neonatal Perinatal Centre.

Ventilation:	If a baby requires conventional ventilation, the care being provided should be discussed with the Nottingham Service Consultant of the NICU after 24 hours and the baby may require transfer out to a Network Perinatal Centre if he/she continues to be ventilated after 48 hours. Details of the conversations should be documented in the baby's notes.
HFOV, ECMO and Nitric Oxide:	Babies who are likely to require HFOV, ECMO or Nitric Oxide will need to be transferred to a specialist centre and early consideration should be given to this.
CPAP:	Babies requiring CPAP can be managed at Royal Derby.
HFO2:	Babies requiring HFO2 can be managed at Royal Derby.
PN:	Babies requiring PN can be managed at Royal Derby.
Surgery:	Babies who require surgery or a surgical opinion will be transferred out to a Perinatal Surgical Centre.
Cooling:	Newly born babies who require cooling for treatment of perinatal asphyxia will be transferred to a Network Perinatal Centre.
Suspected Cardiac/PDA Cases:	Where a possible cardiac problem is suspected, after discussion with the Cardiologist, the baby should be transferred to a Cardiac Centre as appropriate. Babies with PDA who require surgery must be discussed with the Nottingham Perinatal Centre before discussion with the Cardiologist, as per the agreed Network PDA pathway.

BABIES RETURNING TO ROYAL DERBY HOSPITAL

Babies may return to Royal Derby when they are clinically well and safe for transfer. They may be transferred if the baby still requires CPAP, HFO2, or PN. Babies will not routinely be transferred back if they are ventilated unless they have short term ventilation requirements, e.g., will be extubated upon return, or they require end of life care near to home.

ANTENATAL TRANSFERS INTO ROYAL DERBY HOSPITAL

Women in preterm labour at or above 27^{+0} completed week's gestation, and with an estimated birth weight of above 800 grams, or multiples at or above 28 weeks, may be accepted into Royal Derby for delivery.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between Royal Derby and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for that referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database who breach the criteria detailed above. Exception reports will be expected where babies stay in Royal Derby but appear clinically suitable for referral back to the home unit.

Exception reports are also expected on those babies at or above 44 corrected weeks of gestation that remain on the neonatal unit.

ADVICE CALLS

All calls for clinical advice should go through the call handling service. Callers should specifically ask to speak directly to the Service Consultant of the NICU or out of hours the Consultant on call for the Nottingham Neonatal Service in order to seek advice. If a transfer is recommended following this call, then the call handlers will conference call the CenTre Transport Service. Details of all conversations should be documented in the baby's notes.

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies may deliver at Leicester General, if an agreed postnatal management plan is in place. Babies with antenatally identified surgical conditions will normally be delivered in a unit with neonatal surgery facilities. Following input from a Paediatric Cardiologist, it may also be appropriate to deliver babies with some antenatally detected cardiac problems in a cardiac or Network Perinatal Centre.

GESTATION LIMIT

In-Utero Transfer

Where possible, women in premature labour at less than 32^{+0} completed weeks gestation, or with a baby an estimated birth weight of 1000 grams, will be transferred to deliver in a Network Perinatal Centre or an appropriate Local Neonatal Unit where the maternal condition allows.

Ex-Utero Transfer

If, for whatever reason, a baby below 32^{+0} completed weeks, or below 1000 grams is delivered at Leicester General, the baby will be stabilised and assessed, and appropriate arrangements put into place following discussion with the Network Perinatal Centre.

Under 32 weeks gestation: Any baby of less than 32^{+0} weeks gestation, or below 1000 grams should normally be transferred to a Network Perinatal Centre or an appropriate Local Neonatal Unit. If there is doubt about the necessity for transfer (e.g., baby dying, baby stable and on the edge of the unit pathway threshold), there will be Consultant to Consultant discussion with the Network Perinatal Centre. Such exceptional cases which are treated outside of these guidelines will be monitored by the Network and Specialised Commissioners.

32 weeks gestation and above: Whether a baby of 32^{+0} weeks gestation, and above, should remain at the Leicester General depends upon where the care needs fall within the following criteria:

CRITERIA FOR CARE AT LEICESTER GENERAL HOSPITAL

Complex Intensive Care: Babies requiring multi-organ intensive care should be discussed with the Leicester Service Consultant of the NICU and will need transfer to a Neonatal Perinatal Centre.

Ventilation: If a baby continues to require conventional ventilation at any point, the baby will be discussed with the Leicester Service Consultant for the NICU or the Consultant out of hours and may will require transfer out to a Network Perinatal Centre or appropriate Local Neonatal Unit.

HFOV, ECMO and Nitric Oxide: Babies who are likely to require HFOV, ECMO or Nitric Oxide will need to be transferred to a specialist centre and early consideration should be given to this.

CPAP:	Babies requiring CPAP for longer than 12 hours or who are anticipated to do so, will need to be transferred to a Network Perinatal Centre or an appropriate Local Neonatal Unit.
HFO2:	Babies requiring HFO2 for longer than 12 hours or who are anticipated to do so will need to be transferred to a Network Perinatal Centre or an appropriate Local Neonatal Unit.
PN:	Babies requiring PN will need to be transferred to a Network Perinatal Centre or an appropriate Local Neonatal Unit. Where it is difficult to decide if a baby should receive PN then a discussion should take place with the Leicester Perinatal Centre.
Surgery:	Babies who require surgery or a surgical opinion will be transferred out to a Perinatal Surgical Centre.
Cooling:	Newly born babies who require cooling for treatment of perinatal asphyxia will be transferred to a Network Perinatal Centre.
Suspected Cardiac/PDA Cases:	Where a possible cardiac problem is suspected, after discussion with the Cardiologist, the baby should be transferred to a Cardiac Centre as appropriate. Babies with PDA who require surgery must be discussed with the Leicester Perinatal Centre before discussion with the Cardiologist, as per the agreed Network PDA pathway.

BABIES RETURNING TO LEICESTER GENERAL HOSPITAL

Babies may return to Leicester General when they are clinically well and safe for transfer. Babies may not return if they are still requiring CPAP, HFO2, PN or have on-going ventilation requirements with the exception of those requiring end of life care near to home.

ANTENATAL TRANSFERS INTO LEICESTER GENERAL HOSPITAL

Women in preterm labour at or above 32^{+0} completed weeks gestation, and with an estimated birth weight of above 1000 grams, may be accepted into Leicester General for delivery.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between Leicester General and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for that referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database as being below 32 weeks gestation or who breach the criteria detailed above.

Exception reports are also expected on those babies at or above 44 corrected weeks of gestation that remain on the neonatal unit.

ADVICE CALLS

All calls for clinical advice should go through the call handling service. Callers should specifically ask to speak directly to the Service Consultant of the NICU or out of hours the Consultant on call for the Leicester Neonatal Service in order to seek advice. If a transfer is recommended following this call, then the call handlers will conference call the CenTre Transport Service. Details of all conversations should be documented in the baby's notes.

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies will deliver in the Leicester Royal. Babies with antenatally identified surgical conditions will normally be delivered at Leicester Royal.

GESTATION LIMIT

As a Network Perinatal Centre, the Leicester Royal shall treat babies of the entire gestational age spectrum. It is accepted that some babies may be born 'previable' and thus will not be actively resuscitated.

CRITERIA FOR CARE AT LEICESTER ROYAL INFIRMARY

Specialist Care:	Babies requiring specialist intensive care for cardiac conditions will be cared for at the Leicester Royal where they can access paediatric cardiology services from EMCHC.
Complex Intensive Care:	Babies requiring respiratory support with symptoms of additional organ failure (e.g. hypotension, DIC, renal failure, metabolic acidosis) will remain at the Leicester Royal.
Ventilation:	Babies receiving all ventilatory modalities shall be suitable for treatment at the Leicester Royal.
HFOV:	Babies who require HFOV will be assessed and remain at the Leicester Royal.
ECMO:	Babies who require ECMO will need to be transferred to an ECMO centre.
Nitric Oxide:	Term babies who need iNO will be managed at the Leicester Royal. Failure to respond will be discussed with an ECMO team and early consideration should be given to this.
CPAP:	Babies requiring CPAP will remain at the Leicester Royal.
HFO2:	Babies requiring HFO2 will remain at the Leicester Royal.
PN:	Babies requiring PN will be managed on the Leicester Royal.
Surgery:	Babies who require surgery or a surgical opinion will be managed at the Leicester Royal.
Cooling:	Newly born babies who require cooling for treatment of perinatal asphyxia will be managed at the Leicester Royal.
Suspected Cardiac/PDA Cases:	Where a possible cardiac problem is suspected, this can be discussed with the Paediatric Cardiologist, and a review can take place on the NICU.

BABIES RETURNING TO LEICESTER ROYAL INFIRMARY

Babies may return to Leicester Royal when clinically stable for transfer.

ANTENATAL TRANSFERS INTO LEICESTER ROYAL INFIRMARY

Except in the presence of known severe antenatally detected surgical problems (where delivery in a supra-specialist centre is recommended), all women may be considered for delivery at the Leicester Royal.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between the Leicester Royal and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for that referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database as meeting the referring hospitals threshold level but are not repatriated and remain at the Leicester Royal.

Exception reports are also expected on those babies at or above 44 corrected weeks of gestation that remain on the Neonatal Unit and any capacity transfers out of the unit.

UNITED LINCOLNSHIRE TEACHING HOSPITALS NHS TRUST - LINCOLN COUNTY HOSPITAL
Local Neonatal Unit

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies will deliver in Lincoln County, if an agreed postnatal management plan is in place. Babies with antenatally identified surgical conditions will normally be delivered in a unit with neonatal surgery facilities. Following input from a Paediatric Cardiologist, it may also be appropriate to deliver babies with some antenatally detected cardiac problems in a cardiac or Network Perinatal Centre.

GESTATION LIMIT

In-Utero Transfer

Where possible, women in premature labour at less than 27^{+0} completed weeks gestation, or with an estimated birth weight of below 800 grams, will be transferred to deliver in a Network Perinatal Centre.

Women who have a multiple pregnancy and have threatened preterm labour at less than 28^{+0} weeks should also be considered for transfer to the Network Perinatal Centre where the maternal condition allows

Ex-Utero Transfer

If, for whatever reason, the above stated patients cannot be transferred and are delivered in Lincoln County the baby/babies will be stabilised and assessed, and appropriate arrangements put into place following discussion with the Network Perinatal Centre.

***Under 27 weeks gestation*:**	Any baby of less than 27^{+0} weeks gestation should normally be transferred to a Network Perinatal Centre if continuing intensive care is appropriate. If there is doubt about the necessity for transfer (e.g., baby dying, baby stable and on the edge of the unit pathway threshold) there will be Consultant to Consultant discussion with the Network Perinatal Centre. Such exceptional cases which are treated outside these guidelines will be monitored by the Network and Specialised Commissioners.
Multiples under 28 weeks Gestation:	In line with the NCCR recommendations, multiples at less than 28 weeks should normally be transferred to the Network Perinatal Centre.
Birth weight less than 800 grams:	Any baby with a birth weight of less than 800 grams should be transferred to the Network Perinatal Centre.
***27 weeks gestation and above*:**	Whether a baby of 27^{+0} weeks gestation and above, and birth weight above 800 grams, or multiples above 28 weeks should remain in Lincoln County depends upon where the care needs fall within the following criteria:

CRITERIA FOR CARE AT LINCOLN COUNTY HOSPITAL

Complex Intensive Care:	Babies requiring multi-organ intensive care should be discussed with the Nottingham Service Consultant for the NICU and may need transfer to a Network Perinatal Centre.

Ventilation:	If a baby requires conventional ventilation, the care being provided should be discussed with Nottingham Service Consultant of the NICU after 24 hours and the baby may require transfer out to a Network Perinatal Centre if he/she continues to be ventilated after 48 hours. Details of the conversations should be documented in the baby's notes.
HFOV, ECMO and Nitric Oxide:	Babies who are likely to require HFOV, ECMO or Nitric Oxide will need to be transferred to a specialist centre and early consideration should be given to this.
CPAP:	Babies requiring CPAP can be managed at Lincoln County.
HFO2:	Babies requiring HFO2 can be managed at Lincoln County.
PN:	Babies requiring PN can be managed at Lincoln County.
Surgery:	Babies who require surgery or a surgical opinion will be transferred out to a Perinatal Surgical Centre.
Cooling:	Newly born babies who require cooling for treatment of perinatal asphyxia will be transferred to a Network Perinatal Centre.
Suspected Cardiac/PDA Cases:	Where a possible cardiac problem is suspected, after discussion with the Cardiologist, the baby should be transferred to a Cardiac Centre as appropriate. Babies with PDA who require surgery must be discussed with the Nottingham Perinatal Centre before discussion with the Cardiologist, as per the agreed Network PDA pathway.

BABIES RETURNING TO LINCOLN COUNTY HOSPITAL

Babies may return to Lincoln County when they are clinically well and safe for transfer. They may be transferred if the baby still requires CPAP, HFO2, or PN. Babies will not routinely be transferred back if they are ventilated unless they have short term ventilation requirements, e.g., will be extubated upon return, or they require end of life care near to home.

ANTENATAL TRANSFERS INTO LINCOLN COUNTY HOSPITAL

Women in preterm labour at or above 27^{+0} completed week's gestation, and with an estimated birth weight of above 800 grams, or multiples at or above 28 weeks may be accepted into Lincoln County for delivery.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between Lincoln County and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for the referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database who breach the criteria detailed above. Exception reports will be expected where babies stay in Lincoln County but appear clinically suitable for referral back to the home unit.

Exception reports are also expected on those babies at or above 44 corrected weeks of gestation that remain on the neonatal unit.

ADVICE CALLS

All calls for clinical advice should go through the -call handling service. Callers should specifically ask to speak directly to the Service Consultant of the NICU or the out of hours Consultant on call for the Nottingham Neonatal Service in order to seek advice. If a transfer is recommended following this call, then the call handlers will conference call the CenTre Transport Service. Details of all conversations should be documented in the baby's notes.

FETAL ANOMALY

Babies with an antenatal diagnosis of cardiac or other congenital anomalies will deliver in Pilgrim if an agreed postnatal management plan is in place. Babies with antenatally identified surgical conditions will normally be delivered in a unit with neonatal surgery facilities. Following input from a Paediatric Cardiologist, it may also be appropriate to deliver babies with some antenatally detected cardiac problems in a cardiac or Network Perinatal Centre.

GESTATION LIMIT

In-Utero Transfer

Where possible, women in premature labour at less than 32^{+0} completed weeks gestation, or with an estimated birth weight of below 1000 grams will be transferred to deliver in a Network Perinatal Centre or appropriate Local Neonatal Unit where the maternal condition allows.

Ex-Utero Transfer

If, for whatever reason, a baby below 32^{+0} completed weeks or with a birth weight below 1000 grams, is delivered at Pilgrim the baby will be stabilised and assessed, and appropriate arrangements put into place following discussion with the Network Perinatal Centre.

***Under 32 weeks gestation*:** Any baby of less than 32^{+0} weeks gestation should normally be transferred to a Network Perinatal Centre or appropriate Neonatal Unit. If there is doubt about the necessity for transfer (e.g., baby dying, baby stable and on the edge of the unit pathway threshold), there will be Consultant to Consultant discussion with the Network Perinatal Centre. Such exceptional cases which are treated outside these guidelines will be monitored by the Network and Specialised Commissioners.

***32 weeks gestation and above*:** Whether a baby of 32^{+0} weeks gestation, and above, should remain in Pilgrim depends upon where the care needs fall within the following criteria:

CRITERIA FOR CARE AT PILGRIM HOSPITAL

Complex Intensive Care: Babies requiring multi-organ intensive care should be discussed with the Nottingham Service Consultant of the NICU and will need transfer to a Network Perinatal Centre.

Ventilation: If any baby requires conventional ventilation at any point, the baby will be discussed with the Nottingham Service Consultant for the NICU, or the Consultant out of hours, and will require transfer out to a Network Perinatal Centre or an appropriate Local Neonatal Unit.

HFOV, ECMO and Nitric Oxide: Babies who require HFOV, ECMO or Nitric Oxide will need to be transferred to a specialist centre and early consideration should be given to this.

CPAP:	Babies requiring CPAP for longer than 12 hours or who are anticipated to do so will need to be transferred to a Perinatal Centre or an appropriate Local Neonatal Unit.
HFO2:	Babies requiring HFO2 for longer than 12 hours or who are anticipated to do so will need to be transferred to a Perinatal Centre or an appropriate Local Neonatal Unit.
PN:	Babies requiring PN will need to be transferred to a Network Perinatal Centre or an appropriate Local Neonatal Unit. Where it is difficult to decide if a baby should receive PN then a discussion should take place with the Nottingham Perinatal Centre.
Surgery:	Babies who require surgery, or a surgical opinion, will be transferred out to a Perinatal Surgical Centre.
Cooling:	Newly born babies who require cooling for treatment of perinatal asphyxia will be transferred to a Network Perinatal Centre.
Suspected Cardiac/PDA Cases:	Where a possible cardiac problem is suspected, after discussion with the Cardiologist, the baby should be transferred to a Cardiac Centre as appropriate Babies with PDA who require surgery must be discussed with the Nottingham Perinatal Centre before discussion with the Cardiologist, as per the agreed Network PDA pathway.

BABIES RETURNING TO PILGRIM HOSPITAL

Babies may return to Pilgrim when they are clinically well and safe for transfer. Babies may not return if they still require CPAP, HFO2, PN or have on-going ventilation requirements with the exception of those requiring end of life care near to home.

ANTENATAL TRANSFERS IN TO PILGRIM HOSPITAL

Women in preterm labour at or above 32^{+0} completed weeks gestation, and with an estimated birth weight of greater than 1000 grams, may be accepted into Pilgrim for delivery.

REPATRIATION OF BABIES TO REFERRING UNIT

Discussion regarding repatriation must commence between Pilgrim and the babies referring unit **as soon as** the baby meets the clinical pathway threshold for the referring unit. Arrangements for repatriation should be commenced as soon as the baby is stable for transfer.

Babies may be returned to the referring unit before they meet the gestational cut off if they no longer require a higher level of care, and if there has been a Consultant to Consultant discussion and agreement beforehand. In this instance the Network Management Team must be informed by way of an exception report, giving the details of the case in order that it will not be extracted from BadgerNet as an exception.

EXCEPTION REPORTING

The Network Management Team and Specialised Commissioners will expect exception reports on those babies that are identified from the BadgerNet database as being below 32 weeks gestation, or who breach the criteria detailed above.

Exception reports are also expected on those babies at or above 44 corrected weeks of gestation that remain on the neonatal unit.

ADVICE CALLS

All calls for clinical advice should go through the call handling service. Callers should specifically ask to speak directly to the Service Consultant of the NICU or out of hours the Consultant on call for the Nottingham Neonatal Service in order to seek advice. If a transfer is recommended following this call, then the call handlers will conference call the CenTre Transport Service. Details of all conversations should be documented in the baby's notes.

LIST OF ABBREVIATIONS

CPAP	Continuous Positive Airway Pressure
DIC	Disseminated Intravascular Coagulation
ECMO	Extracorporeal Membrane Oxygenation
HFO2	High Flow Oxygen
HFOV	High Frequency Oscillatory Ventilation
IPPV	Intermittent Positive Pressure Ventilation
NEC	Necrotising Enterocolitis
NCCR	Neonatal Critical Care Review
NICU	Neonatal Intensive Care Unit
PDA	Persistent Ductus Arteriosus
PICU	Paediatric Intensive Care Unit
PN	Parenteral Nutrition