BAPM

In-utero transfer

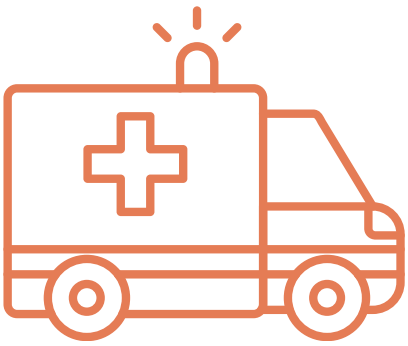
A BAPM Practice Guide on developing an IUT policy

This document is to guide the development of IUT policies for regions.

Guidelines/SOP must be collaborative with representation from families, obstetricians, midwives, and neonatologists. The sections below should be included in your guidance. The notes below contain suggested text or principles of what to include.

It is recognised that the right place of birth is important for survival and reduction of neonatal morbidity. Babies have a 2-3 x higher risk of severe brain injury if born in non- tertiary units and transferred postnatally (NNT 8), and a higher chance of mortality if born in a non-tertiary centre whether transported or not (NNT 20).[1] Some postnatal transfers represent missed opportunities for In Utero Transfers (IUTs).

IUTs are required when a woman or pregnant person is anticipated to deliver a baby at a gestation which cannot be cared for in their local unit, or for other conditions in either mother or baby that require expertise and facilities not available at their local unit. Occasionally they may also be required where the local unit lacks the capacity to provide appropriate care.



Indications for an IUT

Nationally agreed[2] indications for an IUT is when there is a high risk of spontaneous or iatrogenic birth in a unit without facility or capacity to manage a baby at:

- <27 weeks gestation
- <28 weeks gestation if multiples
- EFW < 800g

For a woman or pregnant person, who are suspected to be in preterm labour, the risk of premature birth should be assessed with, at least, quantitative predictive testing and/or cervical length measurements before a decision to transfer is made.

The diagnosis of preterm labour can be difficult. It is important to balance the risk of unnecessary transfer against delivery in a unit without appropriate neonatal facilities.

Maternal corticosteroids should be offered where delivery is likely in the next 7 days between 22+0 and 33+6 weeks gestation (where active neonatal management is planned).

Prophylactic maternal corticosteroids should be considered between 34+0 and 35+6 weeks.

Tocolytics should be considered in line with regional guidelines.[3] Magnesium sulphate infusion for neuroprotection should be offered to all women before 30 weeks and may be considered up to 32 weeks. Magnesium has been shown to reduce the risk of cerebral palsy by a third.[4]

Which patients are not suitable for in utero transfer?

This should be agreed regionally with perinatal teams including obstetrics and neonatology.

Examples of patients that are not suitable for IUT are potentially lethal fetal conditions where active intervention of the fetus was not being considered, active labour where the cervix is more than three centimetres dilated, maternal conditions which may require intervention during transfer (APH or uncontrolled hypertension), and maternal or fetal compromise requiring immediate delivery, including abnormal CTG.

The IUT process

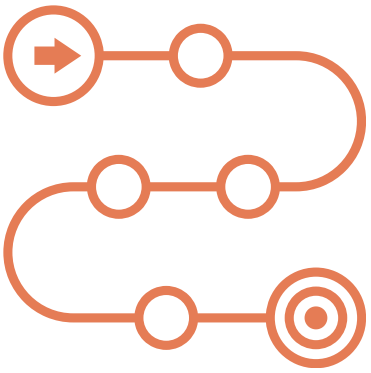
This should include details about cot location in your region, phone numbers, flow charts where applicable.

The responsibility and decision for an IUT must be made by senior clinicians in the referring hospital to ensure the assessment of risk is appropriate and resource implications for the woman or pregnant person and newborn are considered. Good communication is essential between referring, receiving and transferring teams to achieve this, to minimize unnecessary in-utero transfers and postnatal transfers. The BAPM antenatal optimisation toolkit provides useful resources for decision making.[5]

Documented maternal agreement must be obtained prior to transfer.

Referrals should be made via regional transport services, or independent cot bureau. Only 9/15 regions across the UK have a funded cot locator service hosted by the regional neonatal transport team.[6] Cot location can be time consuming and a huge pressure for clinical staff trying to find both a maternal bed and a neonatal cot. NHSE service specification for Neonatal Transport recommends that in utero transfers should be facilitated by transport services.

The referral pathway must have been agreed regionally with systems in place to monitor activity, compliance and governance.



Governance principles

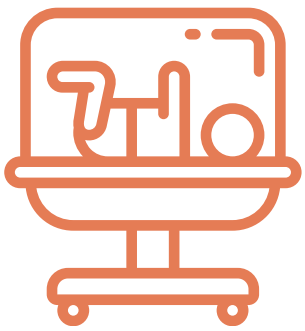
There must be a robust governance structure that allows oversight and monitoring of each IUT. The 2022 Ockenden Report highlighted the need for continuous audit and review of cases in which delivery at <27/40 occurs outside a labour ward with a co-located neonatal intensive care unit.[7]

The report also mandated a further obligation for providers to report cases within which neonatal care falls outside the agreed pathway with local commissioners. An exception reporting tool should be in place.

The effectiveness of the IUT process is reliant on the availability of high-quality data detailing the timeframe, decisions, and individuals relevant to each IUT request.

There must be a description showing how the IUT process fits into both maternity and neonatal OPEL status, escalation and surge principles.

Please see Appendix 1: In Utero Transfer Request Refusal Exception Reporting Tool.



Acceptance principles

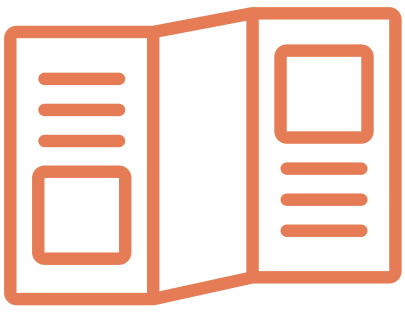
There must be detailed acceptance principles which should include:
MDT discussion between Obstetric consultant, NICU consultant, neonatal coordinator/manager on call and delivery suite (DS) coordinator to identify capacity issues and options to facilitate the admission.
Refusal to accept should only be decided at consultant level.
If DS still declines: Obstetric Unit must be declared closed, Datix to be completed by DS coordinator, Refusal log to be completed by DS coordinator.

Many regions are starting to use universal acceptance principles – accept an IUT if a bed on NICU is available irrespective of DS capacity.

Information for families

A parental leaflet should be available to give to families after counselling about the need for IUT. This should include the need for IUT, contact details for accepting unit, descriptors of different levels of neonatal care, what happens after the baby is born and a link to the neonatal network website for more information.

Please see appendix 2: Transferring to another hospital during pregnancy.



Transfer

Provision of an escort from the referring maternity team for the transfer will be made on a case by case basis. Some regions use a paramedic team for transfer, others a midwife from the referring hospital.

Guidance for frontline clinical staff should be provided, which include descriptor of BAPM levels of care, and a list of which hospitals in the region can provide which level of care with phone numbers. Consideration of a flow chart to aid decision making to support delivery in the right centre.

Please see *Appendix 3: Suspected preterm labour guidance*.

Minimal equipment

An equipment list, developed for Resuscitation Council UK Newborn Life Support Subcommittee by the Pre-Hospital Newborn Life Support working group, represents a minimum recommended standard for those delivering care for planned or emergency births in the out-of-hospital setting. Equipment is needed for thermal care, airway management, breathing support and additional items for cord management.[8]

Resuscitation Council UK: Minimum equipment for newborn resuscitation and the support of transition of infants at birth in the pre-hospital setting.

Documentation principles

All completed IUT requests/proformas should be saved within the woman or pregnant person's clinical notes.

The cot locator service/transport service should save IUT request forms to allow future monitoring.

Many regions have introduced hand held records which include a 'passport' for care plans. Gold standard is regionalised computerised perinatal passport.

Please see *Appendix 4: Transfer Communication Form*.

References

1. Helenius K, Longford N, Lehtonen L et al. BMJ 2019:16: 367
2. https://www.england.nhs.uk/commissioning/wpcontent/uploads/sites/12/2015/01/e08-serv-spec neonatal-critical.pdf
3. RCOG green top
4. PReCePT (2018) www.ahsnnetwork.com/about-academic-health-science-networks/national-programmes-priorities/precept/precept-resources/
5. www.bapm.org
6. Harrison C, Hurley A . In utero transfer: why is it such a difficult call to make? Acta Paediatr. 2023 Mar;112(3):432-433
7. Ockenden report 2022. www.ockendenmaternityreview.org.uk
8. Newborn Life Support Subcommittee | Minimum equipment for newborn resuscitation and the support of transition of infants at birth in the pre-hospital setting| Jan/2023 | Version 1

Appendix A: In Utero Transfer Request Refusal Exception Reporting Tool

Name of unit requesting transfer:

Unit which was contacted with request to accept transfer:

Date and time of transfer request:

Reason for in-utero transfer request:

Reason for refusal:

With respect to the unit requesting transfer, was this refusal discussed with:

1. Midwife in charge – yes/no If not, why not?
2. Neonatal nurse in charge– yes/no If not, why not?
3. Consultant obstetrician– yes/no If not, why not?
4. Neonatal/paediatric consultant– yes/no If not, why not?

Who else was involved in the discussion?

With respect to the unit contacted to accept referral, was this refusal discussed with:

5. Midwife in charge – yes/no If not, why not?
6. Neonatal nurse in charge– yes/no If not, why not?
7. Consultant obstetrician– yes/no If not, why not?
8. Neonatal/paediatric consultant– yes/no If not, why not?

Who else was involved in the discussion?

Name and position of person completing form and unit in which you work:

Date:

The local maternity systems and Yorkshire and Humber Neonatal Network work together to ensure:

- Mothers and babies receive the care they need, in the right place, as close to home as possible.
- Families receive consistent and high-quality information and support, and are involved in the care they receive.

For further information about the Yorkshire & Humber Neonatal Network, please visit:

https://www.networks.nhs.uk/nhs-networks/yorkshire-humber-neonatal-odn

West Yorkshire and Harrogate Health and Care Partnership

www.humbercoastandvalematernity.org.uk

South Yorkshire and Bassetlaw Integrated Care System

The Yorkshire and Humber Neonatal Operational Delivery Network

The Yorkshire and Humber Neonatal Operational Delivery Network

NHS

Transferring to another hospital during pregnancy

Transferring your care to ensure your baby is born in the right place

Table of Contents

Please see below details of the hospital you are being transferred to:

Hospital:

……..

Address:

……..

……

……

Telephone:

……

If your baby is not born soon after transfer

If you have been transferred to another hospital before your baby is born, there is a possibility you may not give birth following the transfer. Depending on you and your baby's needs you may be discharged home or transferred back to your local hospital for continued antenatal care.

When your baby is born

If your baby is born before transfer is possible and requires further specialised care, your baby will be transferred by the Embrace Transport Team (Yorkshire & Humber Infant and Children's Transport service).

Transferring to your local hospital for continuing care

Once your baby no longer requires specialist care, your baby will be transferred back to a hospital closer to home.

Why do I need to be transferred

If your baby is likely to be born early or poorly, it is important that you and your baby are in the best place to access specialist care. It is much better for the baby to be transferred whilst still in the womb. This transfer could happen very quickly or more slowly depending on several factors i.e., Birthing person/mother and baby are stable to transfer safely, gestation of baby and ensuring all care and medication is optimised for both birthing person/mother and baby before transfer and distance and time of transfer.

When the decision to move to another hospital has been made you will be transferred by ambulance with a Midwife. This will take place before your baby is born and you will be going to a hospital with a specialist neonatal unit. We are not always able to offer you and your partner/family a choice of place where their baby is cared for, but will ensure your baby is cared for in the right place with the right level of care needed. We realise this is a worrying time for you and your family a Doctor and Midwife will be available to discuss the reasons for transfer and which unit has been organised with you and your partner/ family.

Unfortunately, your partner will not be able to travel in the ambulance with you but they will be given the hospital details in order to meet you there.

As previously mentioned, not all neonatal units can provide the same level of specialist care for your baby. On page 2 there is a brief guide to the levels of care that neonatal units can provide and on page 3 are the names of the Yorkshire and Humber Neonatal Units.

Special Care Unit (SCU- Level 1)

For babies who need support with the most straightforward care. This may include minimal breathing support, help with feeding, treatment for jaundice and additional monitoring of heart rate and breathing plus any recovery and convalescence from other care. The majority of babies will be born after 32 weeks gestation and weighing more than 1000 grams. If you have a twin pregnancy these babies will need to be over 34 weeks gestation to deliver in a level 1 unit. Higher multiples i.e. triplets will be delivered in a higher-level unit.

Local Neonatal Unit (LNU -Level 2)

For babies who require special care needs as above as well as short-term breathing support via a breathing machine (e.g. a ventilator) and/or High dependency care such as longer-term breathing support (e.g. via other specialist breathing equipment) and/or babies who require more longer-term support with feeding and nutrition are also cared for here. Babies born after 27 weeks gestation weighing more than 800 grams may receive all their care in an LNU.

Neonatal Intensive Care Unit (NICU -Level 3)

Provides all levels of care as above for own local area as well as the Yorkshire and Humber Network including a range of highly specialised care and expertise. Some units specialise in surgery and/or looking after specific conditions. Any baby born after 22 weeks requiring intensive care, High dependency and Special care may receive some or all their care here.

The Yorkshire & Humber Network is made up of 19 units that offer different levels of care.

Special Care Unit (SCBU, Level 1)

Airedale
Bassetlaw
Harrogate
Scarborough
St James, Leeds

Local Neonatal Unit (LNU, Level 2)

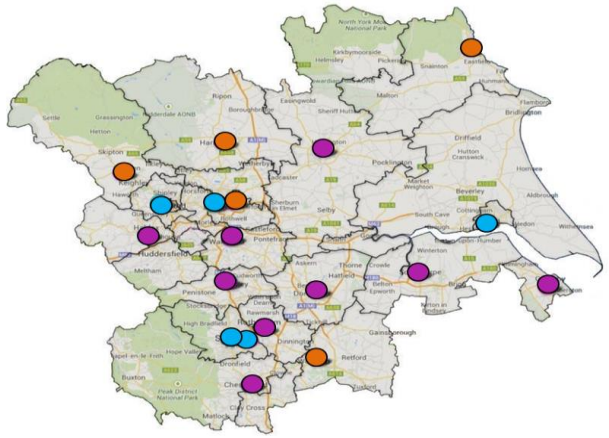
Barnsley
Calderdale
Chesterfield
Doncaster
Grimsby
Pinderfields
Rotherham
Scunthorpe
York

Neonatal Intensive Care Unit (NICU, Level 3)

Bradford
Hull
*Sheffield Children's
Jessop Wing, Sheffield
Leeds General Infirmary

** Neonatal Surgical Unit*

Yorkshire & Humber Neonatal Network



Suspected Preterm Labour

Guidance for Frontline Clinicians

NHS
South East Coast Ambulance Service
NHS Foundation Trust

Background

Over the last 25 years the prospects for babies who are born very premature, have congenital anomalies requiring surgery, or who develop illnesses after birth, have improved greatly. For example, in babies born at extremely low gestational ages (23-25 weeks of gestation) survival increased between 1995 and 2006 by 15%, and since then has continued to improve year on year.[1]

Alongside this, services have been re-organised into a series of networks so that hospitals can work together to ensure that expert care can be delivered when it is needed. These centres are required to look after a minimum number of very small infants and infants requiring intensive care; in order to maintain expertise.

Improving outcomes should not mean we are complacent. The evidence shows that there are further gains that can and should be achieved. We know that some of the variation in outcomes is due to babies being born in maternity units without intensive care services. Whilst every hospital with a labour ward has the capability to look after a sick or preterm baby who needs intensive care as an emergency; and can do so for a brief period of time – the expertise of an intensive care unit is demonstrated to improve outcomes for these infants. Additionally babies who are born in the wrong centre will then need to undergo a transfer ex-utero, which has also been associated with a worse outcome; as well as causing increased demand for neonatal transfer services.

Achieving more than 85% of extremely preterm births (<27 weeks) in the right place is a national standard (KLOE 20/21); and having in place a perinatal pathway to facilitate this is a NICE quality standard.

In an emergency, it is always the right decision to go to the nearest hospital (with a labour ward). If there is a choice, the aim of this flow chart is to aid decision making to support delivery in the right centre.

Types of neonatal unit

NICU

Neonatal Intensive Care Unit (level 3)

- In-patient care of mothers expected to deliver at less than 27 weeks gestation
- In-patient care of mothers at 27 weeks gestation and above who are considered to be at high risk*
- Babies needing intensive care (excluding short-term intensive care in LNU)
- Babies needing intensive or high dependency care following surgery
- Babies needing high dependency and special care

LNU

Local Neonatal Unit (level 2)

- Deliveries at 28 weeks gestation and above considered to be medium risk.

SCU

Special Care Unit (level 1)

- Deliveries at 32 weeks gestation and above considered to be low risk

Regional contact details

NICU	Medway Maritime, Gillingham 01634 825278	SCU	Conquest, Hastings 0300 131 5341
NICU	Queen Alexandra, Portsmouth 02392 286000 x3286	SCU	Darent Valley, Dartford 01322 428273
NICU	Royal Sussex County, Brighton 01273 696 955 x4373, 7016, 4374	SCU	Epsom 01372 735208
NICU	St Peter's, Chertsey 01932 722160	SCU	Princess Royal, Haywards Heath 01689 864812 or 01689 864839
NICU	William Harvey, Ashford 01233 616124	SCU	QEQM, Margate 01843 234290
LNU	East Surrey, Redhill 01737 768511 x6790	SCU	Royal Surrey, Guildford 01483 464133
LNU	Frimley Park, Frimley 0300 6134357	SCU	St Richard's Hospital, Chichester 01243 831433
LNU	Tunbridge Wells, Pembury 01892 634013	SCU	Worthing 01903 285262

* Identified in clinical guidelines e.g. severe early onset pre-eclampsia, fibronectin positive, cervical length decrease at 24-27 weeks

[1] https://fn.bmj.com/content/105/3/232

Suspected Preterm Labour Decision Tree

DISPATCH TO PREGNANCY RELATED CONCERNS

Do you need senior help?
Consider discussing with CCP/CCD

Assess clinical status
- Maternal baseline observations
- Blood pressure
- Frequency of contractions
- History of blood loss
- Foetal movements
- Antenatal history

Gestation 22-26+6 weeks
- Suspected preterm labour: PV bleeding
- Contractions
- Ruptured membranes

→
- Transfer to **maternity with NICU** if ETA <30 minutes
- Contact critical care desk if ETA >30 minutes

Gestation 27-32 weeks
- Threatened preterm labour

→
- Transfer to **maternity with LNU** if ETA <30 minutes
- May benefit from transfer to maternity with NICU

Gestation <22 or >32 weeks
- Threatened preterm labour
- Concern for foetal wellbeing
- Concern for maternal health

→
- Transfer to **nearest maternity centre** with a neonatal unit

Antenatal history
Known need to deliver at hospital with NICU: e.g. growth restriction (weight <800g), significant congenital anomaly or maternal condition

→
- May benefit from transfer to nearest maternity with NICU
- Contact critical care for advice

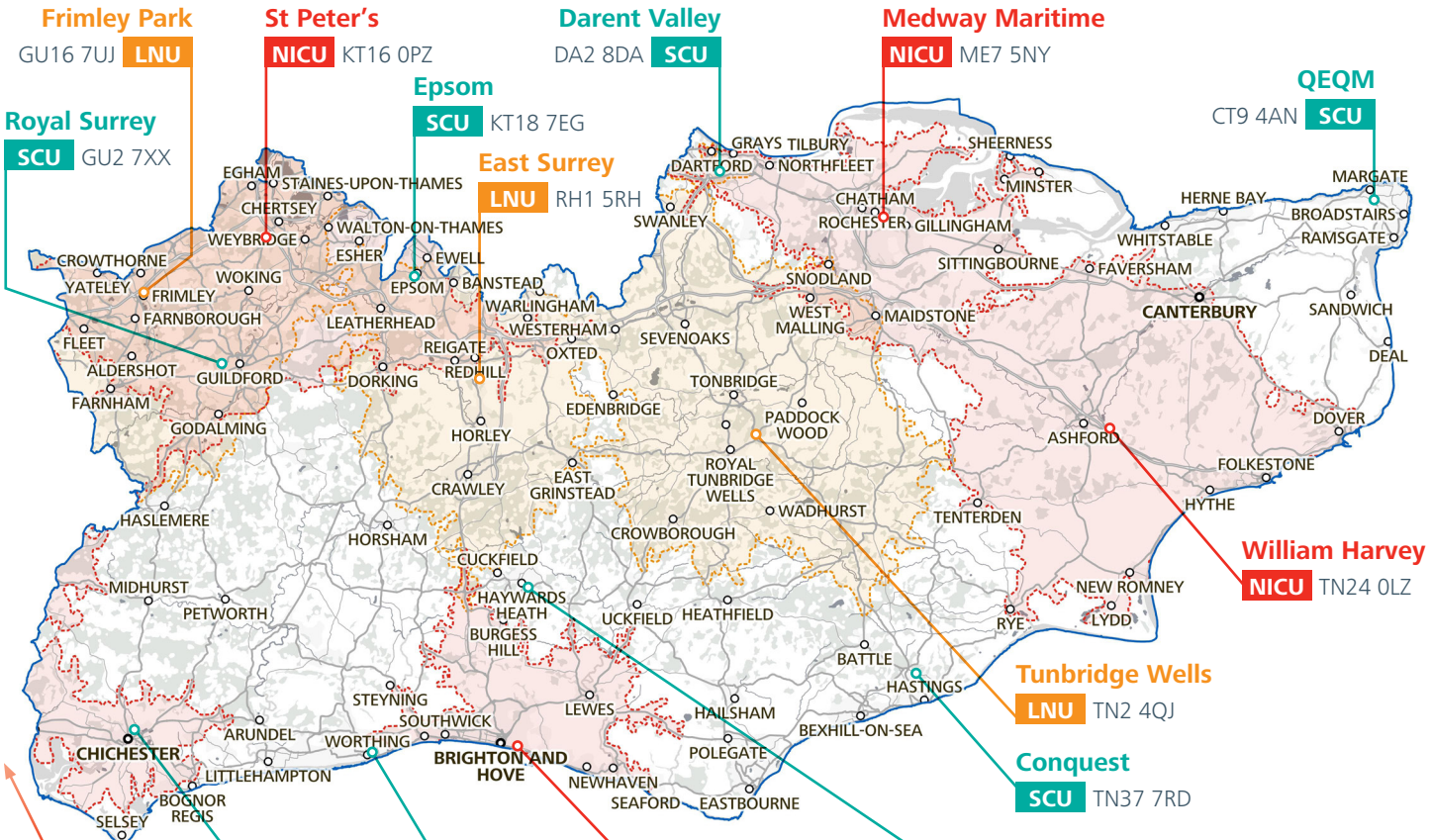
Delivery on scene or en route
- Preterm <32 weeks
- Any gestation need for maternal or infant resuscitation

→
- Transfer to **nearest maternity centre**
- If ongoing resus, then **nearest emergency department**

Pass pre-alert call to receiving unit

Kent, Surrey, Sussex neonatal unit locations

30 min drive to LNU | 30 min drive to NICU



*Outside SECAmb

Appendix 4: Example of Transfer Communication Form

GIG CYMRU NHS WALES

ALL WALES IN- UTERO TRANSFER COMMUNICATIONFORM

ADDRESSOGRAPH

	MATERNAL DETAILS	**FETAL DETAILS**
SITUATION	**Gravida** ..... **Para** ..... **SROM** Y/N Date..... Time..... **Blood Group**..... Rh ..... Antibodies ..... **Medication**..... **Reason for transfer / other comments**	**EDD**..... **Gestation**..... **Multiple Pregnancy** Y/N No. of fetuses.....
BACKGROUND	**Previous pre-term birth:** Y/N Details..... **Obstetric history**..... ..... **Medical history**..... ..... **Has Mother?** • Received health care treatments (inc IVF), in other countries outside Wales during last year? Y/N • If yes, details of treatment.....Country..... • Had any infections/positive screening results during pregnancy? Y/N • If yes, please specify.....	**Anomalies** Y/N Details..... ..... **Safeguarding issues** Y/N Details..... ....
ASSESSMENT	**Pre-Term Labour Test:** Pos/ Neg fetal fibronectin/Actim partus QUIPP app risk score: Transvaginal scan cervical length: **Vaginal Examination:** Date.....Time.....Findings..... ..... **Is Mother?** • Currently infected or colonised with organism/virus that is multi-resistant or could cause harm to baby? Y/N/Unknown • If yes: Sensitivities of organism..... • Currently on any antimicrobial treatment? Y/N • If yes, please specify..... • On tocolysis : Y/N Please specify..... **HVS:** Y/N Date/s..... Sensitivities of isolates..... **Outstanding Microbiology results?** Y/N Please specify.....	**Fetal Compromise?** Y/N Comments..... ..... **Maternal Steroids?** Y/N Date..... Gest..... **Magnesium sulphate?** Y/N Date..... Time..... **USS** Date..... AC..... HC..... FL..... AFI..... Doppler..... EFW..... Comments.....

RECOMMENDATION	**TRANSFER FROM:**	**TRANSFER TO:**
	Hospital	Hospital
	Consultant Obstetrician	Consultant Obstetrician
	Obstetric tier 2:	Obstetric tier 2 informed Labour Ward Coordinator informed Neonatal Unit informed ***NB: All must be informed prior to transfer***
	Named midwife for transfer:	

Person completing form:

Name: Designation: Signature:

GMC / NMC: Date: Time:

BAPM

Leading Excellence in Perinatal Care

This document was produced by the British Association of Perinatal Medicine (BAPM).

BAPM is a membership organisation that is here to support all those involved in perinatal care to optimise their skills and knowledge, deliver and share high-quality safe and innovative practice, undertake research, and speak out for babies and their families.

We are a professional association of neonatologists, paediatricians, obstetricians, nurses, midwives, trainees, network managers and other health professionals dedicated to shaping the delivery and improving the standard of perinatal care in the UK.

Our vision is for every baby and their family to receive the highest standard of perinatal care. Join us today.

www.bapm.org/join

British Association of Perinatal Medicine (BAPM)
is registered in England & Wales
under charity number 1199712 at
5-11 Theobalds Road, London, WC1X 8SH