ADMISSION TO NEONATAL UNIT, TRANSITIONAL CARE UNIT AND POSTNATAL WARDS AT WORCESTERSHIRE ROYAL HOSPITAL

This guidance is based on the West Midlands Perinatal Network Guideline and is in line with BAPM TCU criteria.

Key changes – Revision to gestational age criteria to be in line with BAPM guidance. Changes to Social admissions onto Neonatal Badgernet system.

INTRODUCTION
There are three areas of postnatal care for neonates born at Worcestershire Royal Hospital. These are the Neonatal Unit, the Transitional Care Unit and the Postnatal Ward. The following guideline seeks to inform staff of the admission criteria for each area thus providing the appropriate level of care for individual patients.

Any baby requiring admission to the neonatal or transitional care unit should be transferred as soon as possible following delivery. The first weight can be completed on the neonatal or transitional care units.

- There should be sound clinical reasons for admission to the Neonatal unit.
- **Every effort should be made to prevent unnecessary separation of mother and baby impacting the close and loving relationship.**

CRITERIA FOR ADMISSION TO NEONATAL UNIT FROM DELIVERY SUITE, MEADOW BIRTH CENTRE OR POSTNATAL WARD

Discuss need for admission with senior medical staff, make arrangements for transfer and liaise with midwife and neonatal staff.

- <34+0 weeks' gestation and/or birth weight <1700 g
- Babies delivered in LNU/SCBU <27 weeks (<28 if multiples) or < 800g need transfer to a NICU. They should follow IUT pathway to avoid being born outside a NICU.
- Clinical condition requiring constant monitoring determined by senior medical team.
- Babies assessed as requiring intensive/ high dependency care may include:
- ❖ Poor condition at birth requiring prolonged resuscitation. Note that a low cord pH <7.0 may not in itself necessitate admission.
- ❖ Significant respiratory distress or cyanosis requiring respiratory support and/or additional oxygen.
- ❖ Clinical symptoms of encephalopathy or seizures.
- ❖ Jaundice needing intensive phototherapy (triple) or exchange transfusion.
- ❖ Major congenital abnormality likely to threaten immediate survival.
- ❖ Milk feed intolerance with bile stained and/or excessive vomiting (posseting is normal).
- ❖ Abnormal abdominal examination distension and firmness on palpation, discolouration or tenderness, masses.
- ❖ Hypoglycaemia not responding to treatment as per pathway (see **Hypoglycaemia** guideline).

- Seizures related to neonatal abstinence syndrome requiring treatment (see **Abstinence syndrome** guideline).
- Short-term care while mother admitted to ITU. Baby should be cared for by another legal guardian/parent where possible.
- Unaccompanied babies e.g. babies for adoption, babies of mothers who are on intensive care.

Procedure

- Manage immediate life-threatening clinical problems (e.g. airway, breathing, circulation and seizures).
- Show baby to parents, facilitate delivery room cuddles if possible and explain reason for admission to neonatal unit.
- Offer for birth partner to accompany baby to the unit.
- Ensure baby is transferred with identification (patient name labels if possible).
- Complete neonatal record paperwork and badger admission summary including history.
- Complete top to toe physical examination as soon as possible
- Measure and plot birth weight and head circumference on admission paperwork and badger.
- Measure admission temperature, respirations, heart rate and blood pressure using non-invasive cuff.
- Commence appropriate continuous monitoring of vital signs.
- Take blood gas and blood sugar if clinically warranted.
- Treatment in conjunction with nursing and senior medical colleagues.
- Ensure that all babies from 34+0 who are well and do not require respiratory support other than low flow oxygen have a NIPE completed by 72 hours of age.

Investigations

- Obtain one bloodspot on newborn bloodspot screening (Guthrie) card.
- Other investigations required should be based on initial assessment and suspected clinical problem (e.g. infection, jaundice, hypoglycaemia, postnatal diagnosis of surgical conditions etc.) see relevant guidelines.
- FBC
- Blood glucose
- Blood gases
- Request chest Xray if signs of respiratory distress persist beyond first hour of admission or respiratory support.
- If umbilical lines have been inserted, order chest and abdominal X-ray.
- If suspicion of infection, FBC, blood culture and CRP before starting antibiotics and consider lumbar puncture (see **Infection in first 72 hours of life** guideline).
- Clotting screen if clinically indicated (see **Coagulopathy** guideline).

IMMEDIATE MANAGEMENT

- Evaluation of baby, including full clinical examination.
- Determine and document appropriate management plan and procedures in consultation with middle grade doctor/ANNP.
- Aim for examination and procedures to be completed within ≤1 hr of admission to ensure baby is not disturbed unnecessarily.
- If no contraindications, unless already administered, give vitamin K with parents' consent (see **Vitamin K** guideline).
- If antibiotics indicated, give within 1 hr of venous access being gained.
- Senior clinician to update parents as soon as possible (**certainly within 24 hr**) and document name, time and discussion on Badger.

Respiratory support

- If required, this takes priority over other procedures.

- Includes incubator oxygen, high flow humidified oxygen, continuous positive airway pressure (CPAP) or mechanical ventilation.

IV access

- If required, IV cannulation and/or umbilical venous catheterisation (UVC) – see appropriate guidelines in **Practical procedures** section.

MONITORING

- Cardiorespiratory monitoring through skin electrodes. **Do not use** in babies <26 weeks' gestation.
- Pulse oximetry. Maintain SpO_2 as per gestation target values (see **Oxygen saturation targets** guideline).
- Temperature.
- Blood glucose (see **Hypoglycaemia** guideline).
- If ventilated, umbilical arterial catheterisation (UAC)/peripheral arterial line for monitoring arterial blood pressure and arterial blood gas – see appropriate guidelines in **Practical procedures** section.

CRITERIA FOR ADMISSION TO TRANSITIONAL CARE UNIT

The aim of transitional care is to keep mothers and babies together wherever possible. Therefore, if a baby fulfils the criteria for admission to TCU every attempt should be made to arrange this admission from delivery suite.

The following babies **may** be admitted from the delivery suite or the wards by a midwife, following discussion with the midwife on TCU and the Nurse in charge on NNU. The paediatric team should be informed of all new admissions to TCU.

- Babies who are taking 3 hourly feeds and establishing oral feeding.
- Babies of 34+0 to 35+6 weeks gestation at delivery, who are otherwise well.
- In **exceptional** circumstances, babies over 33/40 who are well may be assessed on an individual basis by consultant as to suitability for TCU.
- Babies whose birth weight is less than 2.0 kg and are otherwise well, e.g. >34 weeks gestation and >1.7 kg.
- Unaccompanied babies e.g. babies for adoption, babies of mothers who are on intensive care, providing an appropriate level of observation can be maintained to assist with capacity on NNU, following a discussion with the Nurse in charge on NNU.
- Babies who require **treatment** for Neonatal Abstinence Syndrome (See **Abstinence syndrome guideline**).
- Readmission from home if previous NNU/TCU preterm patient, with feeding or jaundice issues. Babies with a suspected current contagious infection are not to be readmitted to TCU.
- Preterm babies with an above clinical need where there are also social concerns and the parents require additional support and observation.

    - **Babies who do not meet TCU admission criteria but have HIGH RISK Safeguarding Concerns "Social Cases" will continue to be transferred from Delivery Suite to TCU if capacity allows. These babies will be cared for, along with their parent by the TCU midwife. These babies will remain on the Maternity Badgernet system and not be admitted onto Neonatal Badgernet.**
    - **The TCU midwife should escalate any workload issues to the Postnatal Ward Manager as help may be required from the postnatal midwives.**

- **Babies who are subject to a Child in Need Plan should be discussed with locality specialist midwife as they may not require transfer to TCU and can be cared for on Postnatal Ward.**

The following babies may be admitted to TCU following discussion with the Neonatal Consultant:

- Babies who no longer require care on the neonatal unit but are not ready for home or postnatal ward.
- Babies receiving low flow oxygen post successful download prior to discharge home.
- Babies receiving IV glucose for initial hypoglycaemia and are establishing oral feeds.
- Observations including saturation monitoring for babies with mild respiratory distress, who do not require oxygen.

CRITERIA FOR ADMISSION TO THE POSTNATAL WARD

All babies of 36 + 0 weeks and/or have a birth weight of 2.0 kg or greater, who do not fulfil the criteria for admission to the neonatal unit or transitional care. This will include the following:

- Babies requiring intravenous antibiotics.
- Babies requiring single or double phototherapy for the treatment of Jaundice.
- Babies requiring nursing in a hot cot or incubator to correct hypothermia.
- Babies whose mothers need support with breast feeding or parenting skills, including those with a hospital birth plan which does not identify any risk of significant harm to the baby.
- Babies who require blood sugars, e.g. babies of diabetic mothers.
- Low birth weight infants weighing 2.0 kg or greater.

Nursing staff on TCU and the neonatal unit will try to offer advice and support for such babies if required.
The above admission criteria are not exclusive, and other cases may be discussed on an individual basis with both the neonatal consultant and neonatal nurse in charge.

Monitoring Compliance and Effectiveness

The compliance and effectiveness of this guidance will be monitored in the following ways:

• Admissions into these areas will be monitored via incidents reported in Datix and through the Avoidable Term admission in NNU audit that is carried out monthly.

REFERENCES:

British Association of Perinatal Medicine 2017. A Framework for Neonatal Transitional Care