

ATTENDING DELIVERIES AND ADMISSIONS

Attending Deliveries

- No member of the neonatal team should attend a delivery alone if they have no NLS training or consider themselves to be inexperienced for the level of care expected.
- Request assistance early. Continue to attend deliveries with help until sufficiently experienced.
- A neonatal doctor/ANNP should attend all caesarean sections under general anaesthesia, instrumental deliveries, deliveries with fetal distress (pathologic CTG, passage of meconium), deliveries of babies with congenital anomalies or in breech position and whenever requested by the obstetric team.
- All preterm deliveries <33+0 weeks (or estimated fetal weight <2.0 kg) should be attended by a neonatal team consisting of at least two people (one nurse and one doctor or two neonatal doctors depending on experience of the team members).
- All preterm deliveries <28+0 weeks (or estimated fetal weight <1.0 kg) should be attended by a neonatal team consisting of a consultant neonatologist, neonatal doctor and nurse.

Pre-delivery Communication

- Ensure effective communication with delivery suite staff regarding antenatal history, progress of labour, gestation, weight and anticipated problems.
- Identify cot status, need for transfer and staff to attend delivery.
- Discuss and document neonatal management, potential problems and likely outcome with parents. If possible arrange a pre-delivery visit to the neonatal unit for the parents.
- Give parents written information as appropriate, i.e. neonatal unit booklet, BLISS premature baby booklet or refer to the TMBU website.
- Inform and discuss with parents enrolment in trials, seek consent if applicable.

Preparation of Equipment

TMBU

- Nursing staff to prepare cot space, including ventilator/CPAP, scales (warm towel), thermometer, apron, gloves and camera.
- Area and equipment will be clean (Ref: Hygiene and Cleaning Guidelines).
- Babies $\geq 35+0$ weeks gestation and requiring intensive care are admitted onto an open incubator, switched on manual mode, radiant heater up to maximum.
- Babies <35+0 weeks gestation are admitted into a closed incubator, set according to gestation of infant (Ref: Temperature Guidelines).

Delivery Room

- Draught free environment (close windows), room temperature ideally to 26-28 °C, additional radiant heater if required.
- Admitting junior doctor/ANNP/nurse to prepare and check resuscitaire (incl. plugs, wall gas/cylinders, heater, suction, neopuff and intubation equipment and settings) and resuscitation trolley (sealed), senior doctor/consultant to double check.
- If not in delivery theatre, ensure resuscitaire with ventilator is moved from theatre into the room being used for the delivery. Ensure battery pack is available to transfer to TMBU with radiant heat.
- Overhead heater up to maximum. Consider using the transwarmer chemical phase mattress for extremely preterm infants.
- Three towels on resuscitaire (prewarmed), polythene bag rolled down on gel mattress, if < 30 weeks gestation, cling film if known gastroschisis, correct size hat warming under heater, cord clamp/scissors.
- Appropriate size ET tube prepared with flange and, if used, an introducer (ETT size \leq gestation/10), laryngoscope checked with correct size blade (sterile).

- Take surfactant to delivery if ≤ 28 weeks. Remember to put back in fridge if not used. May be replaced in fridge if kept at room temperature for up to 24 hours.
- Consider emergency drug amounts for expected gestation of baby (Ref: Delivery Room Management and Resuscitation Guideline).
- For multiple deliveries ensure one resuscitaire plus team is available for each baby.

Admissions

Delivery Room and Postnatal Ward

- See Delivery Room Management and Resuscitation Guideline.
- Any baby $< 35+0$ weeks gestation and/or ≤ 1.8 kg birth weight should be admitted.
- Any baby $> 35+0$ weeks and/or > 1.8 kg should be considered for admission if:
 1. Continuous monitoring of vital parameters is needed.
 2. Normal body temperature cannot be maintained despite appropriate cover.
 3. Normal glucose-homeostasis cannot be maintained according to hypoglycaemia pathway.
 4. > 1 lamp for phototherapy is needed to treat neonatal jaundice.
 5. Surgical treatment is required.

Indication for Admission to Transitional Care

- Any well newborn with one of the following risks:
 - Mother with pyrexia ($> 38^{\circ}\text{C}$)
 - Abnormal CTG, emergency c/s
 - Thick meconium, blood clot or mucus plug
 - Need for active resuscitation beyond inflation breaths
 - 5 min APGAR < 6
 - Umbilical arterial pH < 7.0 or BE < -6 mmol/l
 - Antibiotic treatment
 - Withdrawing newborn of a substance misusing mother
 - Any other clinical concern (after discussion with Neonatal team)

Monitoring and Observations for all Patients on Transitional Care

- Colour, respiratory rate, heart rate and temperature 1-hourly for first 2 hours, then 2 hourly for next 10 hours from birth or the start of a treatment
- Discontinue observations after 12 h if pink colour, warm, respiratory rate ≤ 45 bpm, normal heart rate, tone, activity, feed and no other concerns
- Follow hypoglycaemia pathway for glucose monitoring of patients at risk or with hypoglycaemia
- Use neonatal abstinence syndrome chart for withdrawing newborns as per guideline
- Inform Paediatrician for assessment and investigations/treatment if baby persistently tachydyspnoeic beyond 2 h of life (> 60 bpm), criteria for discontinuation of observations at 12 hours not fulfilled or any other concerns at any time
- Consider admission to the neonatal unit with persisting clinical signs of an unwell baby:
 1. Respiratory rate > 60 , apnoeas
 2. Bradycardia, hypotension
 3. Temperature instability
 4. Hypoglycaemia, metabolic acidosis, poor feeding, vomiting
 5. Petechiae, jaundice < 24 hours, rash, umbilical flare
 6. Abnormal movements, irritability, lethargy, abnormal muscle tone
- Check cannula site regularly every shift (peripheral vein care bundle)

Home Births and Early Discharges at RSCH

- An unwell baby in the first 24 h of life may be brought in with their mother for assessment on Labour Ward or Postnatal Ward.
- An unwell baby > 24 h of age should be referred to RACH after discussion with the consultant.
- If a baby requires intensive or high dependency care the baby will be admitted to the TMBU or HDU at RACH after discussion with the consultant.

- If the baby is severely ill and/or requires cardio-pulmonary resuscitation, the baby may be taken to the Paediatric Accident & Emergency Department. The neonatal team may be called to assess, resuscitate and stabilise the baby there with the paediatric team.

Home Births and Early Discharges at PRH

- A baby requiring clinical assessment for feeding difficulties, jaundice or poor weight gain up to 10 days of age may be seen on SCBU or Bolney ward and admitted if necessary.
- An unwell baby or baby over 10 days of age should be referred to RACH.
- If a baby requires intensive or high dependency care the baby will be admitted to the TMBU or HDU at RACH after discussion with the consultant.
- If the baby is severely ill and/or requires cardio-pulmonary resuscitation, the baby **must be taken to** the Paediatric Accident & Emergency Department **at RACH**. The neonatal team may be called to assess, resuscitate and stabilise the baby there prior to admission.

Initial Assessment and Documentation

- Thorough history (maternal, drug, family, pregnancy, labour & delivery, resuscitation and postnatal course, if applicable) and documentation according to Badger / Metavision proforma, (Ref: Documentation Guideline).
- Perform and document 1st day check (**NIPE**) including weight and head circumference on **ALL** babies once >35 weeks gestation. Repeat head circumference and plot growth weekly.
- Ensure daily care record sheets and Metavision are updated in legible and comprehensive fashion on ward rounds, following investigations and procedures or when a change in management plan is made.
- Every entry has to fulfil the following minimum criteria: Identification of patient, date and time of entry, name and designation (printed and signed).
- Contact infant's Health Visitor and liaise with other agencies involved in infant's care on admission to the neonatal unit.