ADMITION TO NICU: LEVEL OF CARE

POST RESUSCITATION
Infants who have required resuscitation are at risk for deterioration after their vital signs have returned to normal and must be admitted to NICU for ongoing observations.
   - Any infant with poor muscle tone 10mins after delivery.
   - Any infant who has responded slowly to significant resuscitation.
   - Any infant with respiratory distress / grunting > 20mins after delivery
   - Any infant requiring cardiac massage.

<table>
<thead>
<tr>
<th>LEVEL 2 CARE INDICATED FOR</th>
<th>LEVEL 3 CARE INDICATED FOR</th>
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<tbody>
<tr>
<td>Transient problems requiring cardiorespiratory monitoring / frequent laboratory investigations in neonates &gt;32weeks, &gt;1500gm, not requiring level 3 care</td>
<td>Sustained assisted ventilation (intermittent positive pressure ventilation or continuous positive airways pressure)</td>
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<tr>
<td>Need for peripheral IV fluid therapy.</td>
<td>Preterm &lt; 32 weeks until stable</td>
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<tr>
<td>Convalescing infants recovering from acute problems</td>
<td>Cardiorespiratory monitoring for recurrent apnoea or seizures</td>
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<tr>
<td>Assessment for poor feeding</td>
<td>Exchange transfusion</td>
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<td>Jaundice infants requiring peripheral IV fluid therapy and closer monitoring.</td>
<td>Severe systemic illness</td>
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<tr>
<td>Assessment of NAS, until stable.</td>
<td>Parenteral nutrition via central line.</td>
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KEY POINTS
- Admission nurse is responsible for checking the resuscitation equipment/admission set-up prior to admitting an infant. Ascertain if there is need to isolate the infant.
- It is the responsibility of the person(s) taking handover of the care of the infant to check the infant’s identification, gender and obtain a detailed history of the birth and relevant pre/perinatal events. Check administration of any medications and if Vitamin K and/or Hepatitis B has been given. If not, whether the parents have consented to them being administered.
- Check whether the infant has voided or passed meconium since birth
- Cord clamp in place, no ooze and skin intact.
• Check preferred method of feeding. Obtain written consent for the use of formula milk if applicable.
• The mother’s hepatitis status.

EQUIPMENT
• A warmer, pre-warmed incubator or open cot. Ventilator / nasal CPAP if applicable
• Stethoscope
• Cardiopulmonary monitoring, Non-invasive blood pressure (Invasive BP/TCM / CVP -if applicable)
• Thermometer
• Pre weighed nappy and equipment for urinalysis
• Hat and appropriate clothing
• Scales / Measuring tape
• Admission paperwork / Name bands
• Infusion pump or syringe pump (L3 need 2 - 3 syringe pumps +/- infusion pump)
• Equipment for peripheral access and/or central access
• Equipment for septic screen

PROCEDURE
1. On admission, weigh the infant to provide a baseline on which to calculate fluids/feeds/drug doses. Keep the infant attached to the ventilator if their condition warrants.
2. Place the infant on a pre-warmed radiant warmer or incubator (see thermoregulation)
3. Complete full physical assessment (may be done later if condition warrants). If there is excessive moulding or caput, the HC should be repeated daily until this has resolved.
4. Document observations hourly for the first 3 hours then reassess the need for continuous monitoring (See monitoring and observation guidelines)
5. If there is a suspicion of sepsis, a septic screen should be performed – see septic screen
6. Routine bloods – see Ordering Blood Tests
7. Medications - Administer prescribed medications after obtaining specimens for laboratory investigations. Administer Vitamin K and Hepatitis B (if BW >1000g and no pyrexia or coagulopathy).
8. CXR/AXR for ETT/Line placement and further management if applicable.
9. Commence fluids or feeds as early as possible, preferably within 2 hours of birth. Respiratory compromised infants can only be fed enterally if their condition allows.
10. Blood glucose should be tested with the blood gas machine as soon as lines are in situ. Repeat within 2 hrs or as ordered. If feeding orally, do a pre 2nd feed blood glucose. See metabolic management: section 10 for management of hypoglycaemia.
11. Initially weigh all nappies to assess urine output. Carry out a ward urinalysis.
WHEN STABILISED

1. Complete and document full physical examination within the first 24 hours to assess for undetected abnormalities. If there is excessive moulding or caput, the HC should be repeated when this has resolved.
2. If there is excessive amounts of bodily fluids ie. Meconium or blood the neonate can be minimally cleansed with a cloth whilst under the warmer. Don’t bath for 24 hours. (If antistaphing policy in place see policy)
3. Determine whether an open cot or incubator is required.
4. Use appropriate positioning aids to enhance physiological stability, promote energy conservation and to reduce physiological and behavioural stress.
5. Complete necessary documentation plus the Birth Register, Fireboard and Handover file.
6. When the parents visit make sure that they are welcomed and shown the layout of the unit and understand NICU handwashing and visiting guidelines.

ANTI-STAPHYLOCCAL PROTOCOL

- To reduce the transient colonization of potentially pathogenic bacteria.
- Use chlorhexidene emulsion 1% solution. Solution should never be applied to excoriated or ulcerated areas of skin.
- Use on infants in *incubators* on day 1 then on alternate days
- Use on infants in *open cots* on day 1 then on alternate days until having routine baths.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
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<tbody>
<tr>
<td>1.</td>
<td>Warm the chlorhexidene emulsion 1% solution</td>
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<tr>
<td>2.</td>
<td>Increase incubator temperature by 2 degree (if applicable)</td>
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<td>3.</td>
<td>Remove ECG leads if condition stable and not &lt;27 weeks</td>
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<td>4.</td>
<td>Weigh the infant</td>
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<tr>
<td>5.</td>
<td>Minimal cleanse with warm water and unsterile cotton wool balls or ‘redi-wipe’</td>
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<td>6.</td>
<td>Dry thoroughly</td>
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<tr>
<td>7.</td>
<td>Apply chlorhexidene solution on cotton wool sparingly to the body and head, do not apply to face, hands, lower arms.</td>
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<td>8.</td>
<td>Replace ECG leads</td>
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<td>9.</td>
<td>Return incubator temperature to original level</td>
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<td>10.</td>
<td>Check PA temp in 1 hour</td>
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