| Г                          | Optimal Cord Management at preterm deliveries (<37 week   | (s)                           |
|----------------------------|---|-------------------------------|
|                            | using the standard resuscitaire   |                               |
| Equipment                  | <ul> <li>Standard resuscitaire</li> <li>Plastic suit / plastic bag ( ≤ 32 weeks)</li> <li>warmed towels (&gt; 32 weeks)</li> <li>Hat</li> </ul>   |                               |
| Prepare                    | <ul> <li>Check and set up resuscitaire</li> <li>Neopuff pressures set at 25/5</li> <li>Ensure room temperature 23-25 degrees</li> </ul>   |                               |
| Position                   | <ul> <li>Infants ≤ 32 weeks consider moving the resusciatire near to mothers bedside w tubing reaching mums perineum (if gas hoses and electric cable allow)</li> <li>C-section &lt; 32 weeks, option for neonatal doctor to scrub to help place baby in Neohelp suit, support airway positioning during DCC</li> </ul>   |                               |
| Communicate                | <ul> <li>Neonatal team to communicate plans for delayed cord clamping for 60 seconds</li> <li>Update parents (leaflet if avaliable)</li> </ul>  | 5                             |
| Delivery &<br>Fhermal Care | <ul> <li>Infant delivers, start clock</li> <li>Manage baby on mothers bed ensuring platform stable</li> <li>≤ 32 weeks place in plastic bag (sterile plastic suit for C-section)</li> <li>&gt; 32 weeks cover with warm towel (sterile towel for C-section)</li> <li>Dry head and place hat (hood of bag if C-section)</li> <li>&gt; 32 weeks consider skin to skin during DCC</li> <li>Assess babies colour, tone breathing, heart rate</li> </ul> | 60 seconds Dela               |
| Respiratory<br>Support     | <ul> <li>Airway positioing &amp; gentle stimulation</li> <li>if avaliable use Neopuff to support spontaneous breathing with PEEP or<br/>Inflation +/- ventilation breaths as per NLS guidlines</li> </ul>   | seconds Delayed Cord Clamping |
| Cord Clamped               | <ul> <li>After 60 seconds ask for cord to be clamped</li> <li>Move infant to standard resusciatire</li> <li>Apply saturations probe</li> <li>Stabilisation, thermal care and respiratory support continues</li> <li>Check temperature immediately after DCC and prior to transfer to NICU</li> <li>Update parents, delivery room cuddle if possible or show baby to parents</li> <li>Transfer to Neonatal Unit</li> </ul>                           |                               |

# **Optimal Cord Management at all preterm deliveries <37weeks**

Deferred cord clamping (DCC) should be performed at all preterm deliveries, for 60 seconds if there are no contraindications.

For babies  $\leq$  32 weeks - throughout this document highlighted in blue is the option to move the standard resuscitaire next to mother's bedside and support babies breathing with the Neopuff circuit. This is not essential, and deferred cord clamping can still be performed safely in this group without respiratory support.

## Duties and responsibilities for all staff

- All multidisciplinary staff involved in the delivery of preterm babies should assist in facilitating the practice of deferred cord clamping
- If possible, parents should be made aware prior to delivery that deferred cord clamping will take place (parent leaflet available)

## Responsibility of labour ward midwifes

- Inform neonatal team of preterm delivery
- Ensure resuscitaire is in the room and set up with appropriate equipment including plastic bag / plastic suit (≤ 32 weeks)
- Ensure room environment and temperature optimal, record room temperature

#### **Responsibility of NICU team**

- Ensure all eligible infants have DCC for 60 seconds, record length of deferred cord clamping and reason(s) if not achieved.
- For babies ≤ 30 weeks aim for maximum 60 seconds of DCC, for babies > 30 weeks DCC can be continued for up to 2 minutes
- For babies ≤ 32 weeks who may need respiratory support consider moving standard resuscitaire over to mother's bedside and stretch Neopuff circuit across to mother's perineum.
- Temperature check should be performed at 2 time points:
  1) After 60 seconds of DCC complete when on standard resuscitaire
  2) Before transfer to NICU

Appropriate measures should be taken to improve thermoregulation. Ensure optimal environment for preterm delivery, room temperature 23-25°C, fans off, pre warm towels and Neohelp suit / plastic bag on standard resuscitaire if possible.

#### Preparation

- NICU nurse to attend all preterm deliveries ≤ 32 week to support DCC
- Ensure resuscitaire & equipment checked
- Use plastic bag / Neohelp suit routinely for all babies ≤32 weeks, for babies >32 weeks cover with warm towels, skin to skin if appropriate (warm towels under resuscitaire radiant heater)

#### Communication

- NICU doctor to inform all staff that DCC will be done and check for contraindications
- DCC to be mentioned during WHO checklist in theatres (for section)
- Inform parents that DCC will be done (parent leaflet)

#### Layout:

- For babies ≤ 32weeks consider moving the standard resuscitaire over to mother's bedside and stretch Neopuff circuit across to mother's perineum and agree position with obstetric / midwifery team
- In section, neonatal doctor may scrub and assist in placing the baby in the sterile plastic suit or wrap and to support in airway positioning.

#### Role allocation in set up

| NICU nurse   | NICU doctor/ANNP  |  |  |
|--|---|--|--|
| <ul> <li>Ensure resuscitaire is checked<br/>appropriately and pre warmed,</li> <li>Prepare Plastic bag / Neohelp suit<br/>for babies ≤ 32 weeks and warm<br/>towels</li> </ul> | <ul> <li>Check resuscitaire &amp; equipment, pressures set at (25/5)</li> <li>Communicate to team and parents regarding DCC</li> <li>Agree positioning of the resuscitaire, if moving, next to mother's bedside.</li> </ul> |  |  |
| In Theatre   | In Theatre  |  |  |
| <ul> <li>If required open Neohelp suit or<br/>sterile plastic wrap and pass to<br/>scrubbed obstetric team</li> <li>Ensure towels warming</li> </ul>                           | <ul> <li>Continual assessment from end of<br/>bed whilst obstetrician places baby<br/>into bag</li> </ul>   |  |  |
|  | Option to Scrub   |  |  |
|  | <ul> <li>Help to place baby into sterile<br/>Neohelp suit or sterile plastic wrap</li> <li>Airway positioning, gentle<br/>stimulation and assessment</li> </ul>   |  |  |

# Role allocation in stabilisation of baby

| Obstetrician/ Midwife  | Lead Neonatal doctor/ANNP   | NICU nurse / SHO   |
|--|---|--|
| <ul> <li>Help place baby on<br/>inside plastic bag /<br/>plastic suit (≤32<br/>weeks)</li> <li>Ensure cord is not<br/>kinked, do not<br/>handle cord<br/>unnecessarily</li> <li>No need to check<br/>for arterial<br/>pulsations, as DCC<br/>is about venous<br/>return from<br/>placenta to baby</li> <li>Cut cord at 60<br/>seconds</li> </ul> | <ul> <li>Help place baby on<br/>inside plastic suit /<br/>plastic bag (≤ 32<br/>weeks). At normal<br/>deliveries, &gt; 32 weeks<br/>use heated towels to<br/>cover baby +/- skin to<br/>skin.</li> <li>Airway positioning<br/>gentle stimulation.<br/>Assess colour, tone<br/>breathing, heart rate</li> <li>If Standard<br/>resuscitaire next to<br/>mother bedside<br/>support breathing<br/>with Neopuff.</li> </ul> | <ul> <li>Start timer on<br/>standard resuscitaire</li> <li>Note APGAR score</li> <li>Assist stabilisation</li> <li>Check to heart rate</li> <li>Inform team at 1<br/>minute timer</li> <li>Check temperature         <ol> <li>After DCC</li> <li>Before transfer to<br/>NICU.</li> <li>Take action if<br/>temperature &lt;36.5°C<br/>or &gt; 37.5°C</li> </ol> </li> </ul> |

### **Auditable Standards**

- 1. Number of babies (<37 weeks) who have 60 seconds of deferred cord clamping
- 2. Babies temperature on delivery suite and on admission to NICU