**Neonatal CPAP workshop**

**Response Booklet**

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Cultural acknowledgement

We acknowledge the Traditional Custodians of the land on which we work and pay our respect to the Aboriginal and Torres Strait Islander elders past, present and emerging.

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Abbreviations

|  |  |
| --- | --- |
| **CPAP** | Continuous positive airway pressure |
| **ELBW** | Extremely low birth weight |
| **ETT** | Endotracheal tube |
| **FiO2** | Fraction of inspired oxygen |
| **FRC** | Functional residual capacity |
| **HC** | Head circumference |
| **HHFNC** | Humidified high flow nasal cannula |
| **HMD** | Hyaline membrane disease |
| **ICC** | Intercostal catheter |
| **MAP** | Mean airway pressure |
| **MAS** | Meconium aspiration syndrome |
| **NEC** | Necrotising enterocolitis |
| **NIPPV** | Non-invasive positive pressure ventilation |
| **NPT** | Nasopharyngeal tube |
| **PaO2** | Partial pressure of arterial oxygen |
| **PEEP** | Positive end expiratory pressure |
| **PIE** | Pulmonary interstitial emphysema |
| **PPHN** | Persistent pulmonary hypertension of the newborn |
| **QCG** | Queensland Clinical Guidelines |
| **RDS** | Respiratory distress syndrome |
| **SpO2** | Peripheral capillary oxygen saturation |
| **SVB** | Spontaneous vaginal birth |
| **TLC** | Total lung capacity |
| **TTN** | Transient tachypnoea of the newborn |
| **TV** | Tidal volume |
| **VC** | Vital capacity |
| **VLBW** | Very low birth weight |

Definitions

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| **Anatomical dead space** | The volume of air that does not penetrate into gas exchange regions of the lungs. |
| **Absolute humidity** | The amount of water vapour per litre of gas volume. Measured in mg/L. |
| **Apgar** | A score given to a newborn baby as a method of evaluating condition at birth and adaptation to extra-uterine life. |
| **Atelectasis** | Alveolar collapse resulting in absent gas exchange. |
| **Broncho-pulmonary dysplasia (BPD)** | Chronic lung disease occurs in preterm babies due to the disruption of lung development and injury. Usually defined as requiring oxygen supplementation at either 28 postnatal days or 36 weeks postmenstrual age. |
| **Chest wall compliance** | A measure of the flexibility of the chest wall and rib cage to stretch and expand. Reduced in a newborn baby compared to the adult chest making it suspectable to alterations in lung function, and resulting in chest recession. |
| **Chest wall recession** | The highly compliant rib cage is drawn in during inspiration by the increased negative intrathoracic pressures required to expand poorly compliant lungs. May be sternal, suprasternal, intercostal and/or subcostal. |
| **Continuous positive airway pressure (CPAP)** | Distending pressure applied to the airways to maintain expansion of the alveoli by providing a constant pressure to the lungs. |
| **Corticosteroids** | Steroids administered antenatally to reduce neonatal mortality and morbidity including respiratory distress syndrome and intraventricular haemorrhage. They enhance maturation of the lungs, and improve surfactant production and lung function. |
| **Extremely low birth weight (ELBW)** | Newborn baby weighing less than 1000 g at birth. |
| **Functional (physiologic) dead space** | The portion of the air that reaches gas exchange regions of the lung but does not receive enough blood flow for gas exchange to occur. |
| **Functional residual capacity (FRC)** | The volume of gas that remains in the lungs after a normal expiration  (30 ml/kg in newborn term infants without lung disease). |
| **High frequency oscillatory ventilation** | Mechanical ventilation that uses small tidal volumes and rapid rates for babies with severe respiratory failure. |
| **Hyaline membrane disease (HMD)** | Respiratory distress syndrome in a newborn baby that is most common in preterm infants due to structural and functional lung immaturity. More commonly called respiratory distress syndrome. |
| **Intercostal catheter (ICC)** | A catheter inserted into the intercostal space to drain air or liquid. |
| **Mechanical dead space** | The first gas inhaled at the beginning of each respiratory cycle. As dead space volume increases less fresh gas can move into the lungs and excessive dead space may lead to increased retention of carbon dioxide. |
| **Nasal columella** | The area of tissue between the nostrils anterior to the nasal septum. |
| **Necrotising enterocolitis (NEC)** | An inflammatory disorder of the bowel which may lead to death of a portion of the colon, particularly seen in preterm infants. |
| **Needle thoracentesis** | Closed chest needle aspiration to remove air or fluid from the pleural space causing a tension pneumothorax. |
| **Oxygen saturation targets (SpO2)** | * 1. Targets after 10 minutes of age– * Term baby: 92–98% * Preterm baby: 90–95% |
| **Physiologic dead space** | The volume of gas within either the alveoli or pulmonary conducting airways that cannot engage in gas exchange. |
| **Positive end expiratory pressure (PEEP)** | The pressure in the lungs at the end of mechanical or spontaneous ventilation. |
| **Pierre-Robin sequence** | A rare genetic disease with orofacial abnormalities–micrognathia (small jaw), glossoptosis (downward displacement or retraction of tongue) and cleft palate resulting in airway obstruction. |

Definitions (continued)

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| **Pneumo-mediastinum** | Air in the mediastinal space. |
| **Pneumo-pericardium** | Air surrounding the pericardium that may cause cardiac tamponade. |
| **Pneumothorax** | Air in the pleural space caused by extra pleural pressure exceeding intrapleural pressure. It may be asymptomatic and may occur spontaneously. |
| **Pulmonary compliance** | Refers to the elasticity of the lung. It also refers to the relationship between a given change in volume and the pressure required to produce that change. |
| **Pulmonary conducting airways** | The airway structures that connect the gas exchange units to the outside air and include the nasal passages, pharynx, larynx, trachea, bronchi and bronchioles. |
| **Pulmonary interstitial emphysema (PIE)** | Air trapped in the perivascular tissues resulting in decreased pulmonary compliance and overdistention of the lungs. |
| **Relative humidity** | Measured as a percentage this is the actual water vapour in a gas relative to its capacity to hold water vapour. |
| **Respiratory distress syndrome (RDS)** | Respiratory disease in the newborn baby presenting with increased work of breathing, cyanosis or hypoxia, diminished breath sounds and ground glass on x-ray. |
| **Surface tension** | A force at the interface between air and liquid molecules in the alveoli, that has an impact on the ability of the lungs to maintain FRC. It is primarily governed by the presence or absence of surfactant. |
| **Surfactant** | Surfactant is a mixture of at least six phospholipids and four apoproteins produced by Type II pneumocytes. It provides a coating in the alveoli to allow for gas exchange. Surfactant deficiency is the underlying cause of RDS in preterm infants. |
| **Tidal volume (TV)** | The volume of air that moves into or out of the lungs with each breath  (6 ml/kg in well baby). |
| **Total lung capacity (TLC)** | The volume of air contained in the lung after a maximal inspiration  (63 ml/kg in well baby). |
| **T-piece** | Gas driven (air and oxygen) resuscitator designed to provide consistent peak inspiratory pressure and positive end expiratory pressure. |
| **Transillumination** | Illumination of the chest from a fibre optic light to identify air in the pleural space. |
| **Treacher Collins Syndrome** | A genetic disorder with deformities of the ear, eyes, cheek bones and jaw, and often cleft palate potentially affecting the airway and causing respiratory problems. |
| **Very low birth weight (VLBW)** | Newborn baby weighing less than 1500 g at birth. |
| **Vital capacity (VC)** | The volume of air maximally inspired and expired (40 ml/kg in well baby). |
| **Work of breathing** | Tachypnoea, chest recession (sternal, intercostal, subcostal), nasal flaring and expiratory grunt. |

Overview

This response booklet is to be used in conjunction with the *Respiratory distress and CPAP* clinical learning resource (CLR). Review the CLR and write the responses to the activities in this booklet.

How to use this response booklet

Complete the :

* Book of readings and related policies, procedures and guidelines
  + Readings may also be complemented by your own neonatal textbooks
* Written activities and discuss your answers with a resource person
* Clinical skills assessment

* + Appendix A Clinical skills assessment tool
  + Appendix B Clinical learning resource package final assessment

Resources required to complete the package

The following resources will assist with completion of this CLR:

* Current Queensland Clinical Guidelines: *Respiratory distress and CPAP* guideline1
* Recommended readings and textbooks
  + May be complemented by your own neonatal textbooks and readings
* Queensland Health Electronic Publishing Service (QHEPS)
* Clinician Knowledge Network (CKN)
* Local policies, procedures and guidelines
* Nurse educator, clinical facilitator/coach/nurse or other resource person

Units of study

There seven units of study to complete with associated readings and activities, and opportunity for reflection on practice.

Assessment

Assessment is by successful completion of specific activities using the resources provided or identified throughout the CLR. Nurse educators, clinical facilitators/coaches/nurses or other resource person will review and discuss the responses of all activities listed in the CLR to determine knowledge and awareness of the specific issues addressed. There is also a clinical skills assessment that covers all units of study.

To gain competency for administering CPAP to newborn babies, complete the following:

* CLR and response booklet
* Successful clinical skills assessment by direct supervision from a nurse educator, clinical facilitator/coach/nurse or other resource person who is competent in the care of the newborn baby having CPAP

1. Physiology of respiratory distress of the newborn
   1. Respiratory distress

Answer the following in your response booklet:

1. Identify the clinical signs of respiratory distress of the newborn
2. List the major causes and pathophysiology of respiratory distress in the newborn baby
   * 1. Signs of respiratory distress

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| **Signs of respiratory distress of the newborn** | |
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* + 1. Causes and pathophysiology of respiratory distress

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| **Cause of respiratory distress** | **Pathophysiology** |
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1. Continuous positive airway pressure (CPAP)

**Clinical scenario**

Lucy was born at 31 weeks gestation by spontaneous vaginal birth (SVB) after the onset of preterm labour. Due to the precipitous nature of Lucy’s birth, her mother did not receive adequate corticosteroids to assist with the maturation of Lucy’s lungs. Shortly after birth Lucy developed respiratory distress and was transferred to the nursery for further assessment and management. She is subsequently started on CPAP.

* 1. CPAP physiology

Answer the following with reference to the clinical scenario:

1. List the indications for CPAP
2. Identify the physiological changes relevant to CPAP that may improve Lucy’s condition
   * 1. Indications for CPAP

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* + 1. CPAP physiology

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1. CPAP Administration
   1. CPAP devices and interfaces

Clinical Scenario

As the nurse allocated to care for baby Lucy you are required to apply a CPAP interface and choose a CPAP generating device.

Use an evidence-based approach:

1. Answer the following multi-choice questions in the response booklet by circling the correct answer.
   * 1. CPAP devices and interfaces
2. What are the main advantages to using binasal prongs?

1. Reduced rates of extubation failure
2. Reduced airway resistance
3. Nasal dilatation
4. Less invasive and less painful
5. a) b) and d)
6. All of the above
7. What are the main advantages to using the mask interface?
8. Obscures view of face more than other types of binasal interfaces
9. Provides a change in pressure generated around the nasal structures
10. Pressure areas may develop over the bridge or tip of the nose
11. No nasal dilatation
12. b) and d)
13. What are the main disadvantages to the bubble device?
14. Loss of pressure does not generate an audible alarm
15. Less expensive than ventilator generated CPAP
16. Less noisy than ventilator generated CPAP
17. Oscillatory effect may improve gas exchange
18. All of the above
19. What are the main advantages to ventilator generated CPAP?
20. Audible alarm alerts to loss of pressure
21. Able to monitor mean airway pressure (MAP)
22. More expensive than the bubble device
23. Able to provide non-invasive positive pressure ventilation (NIPPV)
24. Noxious noise from alarms
25. b) and d)
26. What are the main disadvantages to CPAP via an endotracheal tube (ETT)?
27. Increase in airway resistance
28. Increase in airway secretions
29. Risk of laryngeal oedema or dysfunction post extubation
30. Risk of infection
31. All of the above

* 1. Measurements for CPAP interface

Describe the measurements required for determining the appropriate equipment size to minimise trauma and maximise the efficacy of CPAP.

Note: This is not an exhaustive list of CPAP interfaces available. Also consider the devices available in your unit.

* + 1. Measurements

|  |  |
| --- | --- |
| **CPAP interface** | **Measurements required prior to CPAP application** |
| **Nasal prongs (e.g.TeleFlex Hudson prongs®)** |  |
|  |
|  |
|  |
| **Midline prongs  (e.g. Fisher & Paykel Healthcare FlexiTrunk®)** |  |
|  |
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|  |
| **Mask CPAP  (e.g. Fisher & Paykel Healthcare FlexiTrunk®)** |  |
|  |

Reflection

Reflect on your current practice and think of instances where you have addressed the issue of airway resistance. You may be able to add to the list in the CLR.

1. Humidification
   1. Humidification

Inadequately humidified ventilatory gases delivered to infants receiving respiratory support can cause significant respiratory morbidity.

1. Link the respiratory changes caused by inadequate humidification with the pathophysiology.
   * 1. Humidification

|  |  |  |  |
| --- | --- | --- | --- |
| Respiratory change | | Pathophysiology | |
| **1** | **Thickened secretions** | **A** | * Inadequate humidification leads to increase in risk of obstruction * Complete or incomplete obstruction of a breathing apparatus increases airway resistance and therefore work of breathing |
| **2** | **Compromised mucociliary transport system** | **B** | * Secretions will be dried as moisture is taken from them * This will make them thick and difficult to suction |
| **3** | **Reduced airway defence** | **C** | * Inadequate humidification may lead to inflammatory changes with resulting epithelial flattening and denudation, and loss of goblet cells and cilia |
| **4** | **Energy loss** | **D** | * The gel layer will become dry and thick and difficult to move * The aqueous layer will reduce, and the cilia will not be able to beat * This may lead to mucous pooling in the lower airways, and eventually cell damage |
| **5** | **Airway patency and resistance** | **E** | * Surfactant production is inactivated resulting in decreased lung compliance |
| **6** | **Inflammation and necrosis of the airway epithelium** | **F** | * Airway defence is reduced in intubated patients as the artificial airway bypasses the filtering process that usually occurs in the nose * Defence is reduced further if the delivery of inspiratory gases is less than core temperature as this slows mucociliary transport, and compromises trapping and expulsion of pathogens |
| **7** | **Impaired surfactant activity** | **G** | * With inadequate humidity, water is stripped from the airway mucosa and is converted into vapour * Calories used to facilitate this process are unavailable for thermoregulation and growth |

|  |  |
| --- | --- |
| Respiratory change NUMBER | Matching pathophysiology LETTER |
| 1 |  |
| 2 |  |
| 3 |  |
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| 7 |  |

* 1. Management of humidification

Consider the management of heated humidification for ventilation of gases in the nursery where you work.

1. Review the local policies, guidelines and practices, and examine the configuration of the circuit and humidifiers used in the nursery to answer the questions in your response booklet about humidification.
   * 1. Management of humidification
2. Where is/are the heater wire/s located in the circuit? Where is the gas temperature probe positioned? Why?

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1. Which of the inspiratory and expiratory limbs is positioned uppermost at the manifold? Why?

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1. What is the set temperature for the water chamber/inspiratory gas?

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1. Is there a deliberate differential? Why?

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Reflection

Humidifier and circuit technology are evolving in response to the difficulties managing rainout in neonatal units. Reflect on the humidifier and circuits available in the unit where you work.

How does varied technology work to reduce rainout and provide consistently heated and humidified gases?

* 1. Condensation



1. Identify the circumstances when rainout (condensation) may occur
2. Discuss how it can be corrected
   * 1. Circumstances where rain-out occurs

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* + 1. How rain-out can be corrected

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1. Complications of CPAP
   1. Pulmonary air leaks

Clinical scenario

Lucy continues on a CPAP of 8 cmH2O but has an increasing oxygen requirement currently at 40%. Her work of breathing has increased, and she is struggling to maintain her oxygen saturations within normal parameters. Lucy’s pulse oximeter has started to alarm showing a sudden desaturation to the 73–75 %. Upon closer inspection, you observe that although Lucy is still breathing, she has cyanotic lips and a general dusky appearance. You check whether Lucy is achieving her prescribed CPAP, dial up the FiO2 and suction her mouth. Lucy’s SpO2 does not improve, and you press the emergency alarm, and the paediatrician/nurse practitioner attends. A chest x-ray is ordered while she is being examined. On examination there is slight chest asymmetry and on auscultation there were decreased breath sounds on the right side. The chest x-ray confirms the diagnosis of tension pneumothorax and a needle thoracentesis is performed. An intercostal catheter (ICC) that stays in for two days is inserted using a sterile technique, and Lucy is later weaned back to 21% oxygen.

Consider the clinical scenario.

1. Identify the clinical signs of a pneumothorax
2. Discuss the required nursing care of Lucy after insertion of an ICC
   * 1. Clinical signs of a pneumothorax

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* + 1. Nursing care after ICC insertion

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Reflection

Reflect on current practice in the unit where you work. Is gastric venting a routine procedure? How would you differentiate between “CPAP belly” and NEC?

* 1. CPAP failure



Review Queensland Clinical Guidelines *Respiratory distress and CPAP1* guideline (Reading 5).

1. Identify the signs of failure of CPAP as described in the guideline
2. Describe the nursing actions that would be initiated
   * 1. Signs of CPAP failure

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* + 1. Nursing actions

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* 1. Maintaining pressure

Clinical scenario

During your shift you notice that Lucy’s CPAP is not bubbling. You inspect the circuit, and nothing appears to have disconnected, and the flow is correct.



Consider the troubleshooting measures to ensure that Lucy receives her prescribed CPAP pressure.

1. Answer the questions the following questions.
   * 1. Maintaining pressure
2. **What strategies will you use to ensure the prongs remain in the nares?**

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1. **How will you assess the fit of the prongs to minimise air leak?**

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1. **How will you address and minimise oral air leaks?**

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* 1. Deterioration

Clinical scenario

You continue to care for Lucy and have had a challenging day managing her seal and achieving her mean airway pressure. You have had to enter Lucy’s incubator several times to troubleshoot her CPAP, and over the remainder of your shift you observe that Lucy is having increasing periods of apnoea and desaturation. You update the medical officer/nurse practitioner about her condition, and it is suggested that the pressure and oxygen are increased. Despite the increased pressure baby Lucy shows no signs of immediate improvement.



Using the information provided in your readings and throughout the resource package answer the following questions.

1. Identify why baby Lucy may be experiencing a deterioration in her health status.
2. Identify how CPAP may reduce apnoea in preterm babies.
   * 1. Deterioration in health status

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* + 1. How CPAP reduces apnoea in preterm babies

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* 1. Nasal trauma

Clinical scenario

You are allocated to care for Lucy who has now been on CPAP for four days. During handover the nurse on the previous shift mentions that she had noticed bruising on Lucy’s septum when she removed the CPAP interface for cares.

Regarding management strategies for minimising nasal trauma to Lucy:

1. Refer to Reading 11 Guay (2018) and Reading 12 Haymes (2020) to answer the following questions.

* + 1. Nasal trauma

1. How will you evaluate if the prongs fit correctly?

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1. What is the optimal position of the prongs to reduce or prevent pressure injury?

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1. How will you monitor pressure areas including the fit of the hat?

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1. How will you ensure movement of the prongs and CPAP interface are reduced?

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1. How will you position baby Lucy for comfort and containment?

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1. What strategies will you use to prevent ‘drag’ on the nares by the circuit tubing?

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1. Special considerations

Consider the following statements:

1. Answer true or false and provide a reason or rationale for your answer in the response booklet.
   * 1. Special considerations

|  |  |
| --- | --- |
| **Statement** | **True or false/rationale** |
| NPT CPAP is suitable for routine use in a baby requiring respiratory support after birth |  |
| An NPT increases the work of breathing |  |
| CPAP is suitable in a baby with a diaphragmatic hernia |  |

1. Developmental care and positioning

Reflection

Following the Reading 13 (Griffiths et al 2019) spend a moment considering how these strategies are used in your day to day care of newborn babies.

* 1. Care plan

Use the readings, and local policy, guidelines and procedure, and your clinical experience.

1. Formulate a plan of care for Lucy. Some headings have been suggested but you may wish to add others.
   * 1. Care plan for Lucy

|  |  |
| --- | --- |
| **Care consideration** | **Plan** |
| **Cardio-respiratory assessment** |  |
| **Ventilator/CPAP management** |  |
| **Gastric venting** |  |
| **Analgesia** |  |

Care plan (continued)

|  |  |
| --- | --- |
| **Care consideration** | **Plan** |
| **Skin assessment** |  |
| **Suctioning** |  |
| **Frequency of position changes** |  |
| **Cares on CPAP** |  |

Care plan (continued)

|  |  |
| --- | --- |
| **Care consideration** | **Plan** |
| **Feeding** |  |
| **Communication with family** |  |
| **Kangaroo cuddles** |  |
|  |  |
|  |  |

Appendix A Clinical skills assessment tool

**Nursing care of the baby with respiratory distress requiring CPAP**

|  |  |  |
| --- | --- | --- |
| **Prior to clinical assessment** | | |
| Neonatal respiratory distress and CPAP CLR completed | | |
| **Objective of clinical assessment** | | |
| The participant will demonstrate:   1. The ability to correctly assess the baby with respiratory distress 2. Demonstrate the clinical skills required to manage the baby requiring CPAP in a safe manner | | |
| **Performance criteria** | **Achieved** | **Not achieved** |
| Demonstrated awareness of and performs in accordance with current research, local policies, procedures and guidelines and Queensland Clinical Guidelines: *Respiratory distress and CPAP* and other relevant guidelines by identifying the following:   * Frequency of observations * Signs and symptoms of respiratory distress * Management of oxygenation * Blood glucose management * Thermoregulation * Frequency of cares required and rationale including rationale for 1 or 2 person cares * Indications and contraindications to CPAP use * Differences, benefits and risks associated with varying types of CPAP interfaces * Familiarity with available CPAP generator/s, manipulation of settings and relevant safety aspects * Rationale for humidification of the CPAP circuit * Management of CPAP complications including air leaks, pressure injury, abdominal insufflation and hyperinflation * Emergency equipment required for pneumothorax management * Signs of CPAP failure * Guidelines for weaning and ceasing CPAP * Process for consultation and referral to a tertiary centre |  |  |
| Demonstrated ability to correctly set up CPAP generator with appropriate circuit and humidification |  |  |
| Demonstrated ability to correctly measure and fit CPAP interface |  |  |
| Demonstrated knowledge of:   * Respiratory distress physiology in the newborn * How CPAP supports the anatomical and physiological difficulties experienced by these babies |  |  |
| Performed a safety check at the cotside at the commencement of the shift   * Safety and resuscitation equipment available and functional, alarm parameters correctly set, CPAP settings as per written orders, fluids infusing as per fluid orders, floors clear of spills/cords * Aware of the evacuation procedure for the unit |  |  |
| Performed a comprehensive physical assessment of the baby   * Systematic approach * Utilises other relevant information to inform assessment , e.g. antenatal and perinatal history, blood gas, biochemistry, haematology, microbiology, chest x-ray, CT/MRI scans |  |  |

|  |  |  |
| --- | --- | --- |
| **Performance criteria** | **Achieved** | **Not achieved** |
| Formulated an individualised plan of nursing care including:   * Involved family in care plan development including religious or cultural needs * Used assessment data as a basis for the plan * Formulated predicted outcomes of the nursing care plan * Developed criteria for evaluation of predicted outcomes * Identified potential problems that may adversely affect the baby * Formulated nursing interventions/activities to support neurodevelopment * Identified nursing interventions to address potential problems and provided rationale * Contributed to and participates in decision making on the ward round * Involved members of the health care team (e.g. physiotherapist, social worker, stomal therapist, pharmacist) * Recognised own abilities and incorporates other nursing staff to assist or provide guidance if necessary |  |  |
| Documentation is correct and precise and incorporates all aspects of care including assessment findings, baby’s response to handling, nursing care provided and any relevant changes to baby’s status or care |  |  |
| Demonstrated evidence of therapeutic interaction by:   * Used the correct patient identification process * Provided privacy as able * Explained any procedures to the family * Obtained informed consent from the parents as appropriate |  |  |
| Positioned the baby in accordance with developmental care principles also considering the disease process |  |  |
| Aligned practice to local policy, procedures and guidelines, and Queensland Clinical Guidelines: *Respiratory distress and CPAP* guideline |  |  |
| Applied principles of hand hygiene and aseptic non-touch technique (ANTT) throughout the procedure |  |  |
| Disposed of waste in line with the infection control policies, procedures and guidelines |  |  |
| **Completion of clinical assessment** | | |
| **Achieved/Not achieved (please circle)** | | |
| **Comments:** | | |
| **Name of participant:**  **Signature:** | **Date:** | |
| **Name of assessor:**  **Signature:** | **Date:** | |

Appendix B Clinical learning resource package final assessment

|  |  |
| --- | --- |
| **Name of participant:** | **Participant signature:** |
| **Position:** | **Work Unit:** |
| **Assessor name:** | **Date:** |

This assessment sheet is evidence of completing of the *Respiratory distress and CPAP* clinical learning resource (CLR) workbook and clinical skills assessment equivalent to 28 hours of continuing professional development.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component of competency** | **Date/s of completion** | **Assessor’s name** | **Assessor’s position** | **Assessor’s signature** |
| CLR workbook |  |  |  |  |
| Clinical skills assessment |  |  |  |  |

|  |  |
| --- | --- |
| **The participant has met expected standard for competency**  **Yes  No** | |
| **If expected standard not met, further evidence required:** | |
| **Complete when further evidence provided:** | |
| **Participant’s signature:** | **Date:** |
| **Assessor’s signature:** | **Date:** |

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