



# NENC Level 1 (Basic)

## Paediatric Critical Care Course

### Clinical Skills Proficiency Document

**Name:**

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**Clinical Educator:**

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**Ward/Department:**

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**Ward Manager:**

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**Supervisor:**

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## Introduction

This Paediatric Critical Care Course Clinical Skills Proficiency Document is a list of clinical skills considered essential for nurses working in Level 1 paediatric critical care environments (HRG classification 2007) across all areas of the North East & North Cumbria region.

All nurses registered with the NMC will hold basic skills in caring for ill children as defined in the Standards for pre-registration Nursing Education for Nurses (2010). This document is a record of skills which are additional to the basic skill set and necessary to care for children requiring basic or intermediate critical care (see table below). Skills are in line with those set out in the PCCS National Nursing Competencies - Caring for Babies, Children and Young People in Hospital.

The skill acquisition it sets out should be supported by the appropriate education, training and self-directed learning so that physiological knowledge underpins clinical care. These skills proficiencies are to be used in line with the PCCS accredited Level 1 (Basic) Paediatric Critical Care Course delivered by the North East & North Cumbria Paediatric Critical Care & Surgery in Children Clinical Network.

These proficiencies contain generic competencies and some speciality specific skills with mapping of skill level clearly outlined. There is an expectation that staff will access competency training in their own specialist areas in order to supplement the passport (e.g. Naso-gastric tube insertion and feeding). If this is unachievable within your area of clinical work, it can be mitigated through the taught content on the course - achieving level 2 advanced beginner only.

There are certain proficiencies that may not be achievable within your area of work due to the lack of exposure to these skills. In such cases the theoretical aspect of the competency should be completed. Where the proficiency is to demonstrate the skill, please put N/A in the signature box and an explanation added to the comments section of this document.

## Paediatric Critical Care Healthcare Resource group (HRG) Definitions

Level of Care	HRG Definition
Level 1	Basic Critical Care
Level 2	Intermediate Critical Care
Level 3 (PICU)	Advanced Critical Care 1
	Advanced Critical Care 2
	Advanced Critical Care 3
	Advanced Critical Care 4
	Advanced Critical Care 5

## Level 1 Paediatric Critical Care Interventions

- Oxygen therapy, pulse oximetry and electrocardiogram (ECG) monitoring. Includes 'high flow' nasal oxygen therapy.
- Arrhythmia management requiring IV anti -arrhythmic medication.
- Diabetic Ketoacidosis requiring continuous infusion of insulin.
- Severe Asthma requiring IV bronchodilator therapy.
- Reduced conscious level (Glasgow Coma Score (GCS) 12 or below) and hourly (or more frequent) GCS monitoring.
- Upper airway obstruction requiring nebulised adrenaline.
- Apnoea – recurrent.

## Level 2 Paediatric Critical Care Interventions

- Status epilepticus requiring treatment with continuous intravenous (IV) infusion (e.g. midazolam)
- Nasopharyngeal airway
- Long term ventilation via a tracheostomy or mask
- Arterial line
- Central venous pressure monitoring
- Epidural
- Care of tracheostomy (**first 7 days of episode only**)
- Acute non-invasive ventilation, including Continuous Positive Airway Pressure (CPAP)
- > 80 ml/kg fluid bolus in 24 hours
- Inotropic / vasopressor treatment
- Acute cardiac pacing
- IV thrombolysis

- Acute renal replacement therapy (Continuous Veno-venous Haemofiltration (CVVH) or Haemofiltration (HF) or Peritoneal Dialysis (PD))
- Intracranial pressure (ICP) monitoring and/or Extra Ventricular Drain (EVD)
- Exchange blood transfusion
- Plasma exchange
- CPR in past 24 hours

## Supervision

Prior to starting the course applicants should make arrangements to be supported in practice through mentorship by 2 experienced staff members one of whom should be their designated Clinical Educator or where this is not possible, a Band 6. These supervisors should have successfully completed a mentorship in practice programme and/or a recognised critical care education programme. These supervisors will assess skills and knowledge and sign off competencies.

By definition they should have:

- Practice Assessor or equivalent status
- A minimum of 2 years' experience in the same clinical environment as the student and is competent at delivering level 1 skills
- PBLS / PILS training completed within the last year.

## Assessment Standards

This novice to expert taxonomy provides a structured way of assessing and documenting a new starter's progress.

The expected stage is stated for each competency

Level	Stage	Knowledge
1	<b>Novice</b>	The nurse has no experience in the situation in which they are expected to perform. They require continual and verbal cues. They have an incomplete understanding and approaches tasks mechanically, <b>requiring direct supervision</b> to complete them.
2	<b>Advanced Beginner</b>	The nurse demonstrates efficiency and skill in parts of the practice area, requiring occasional supportive cues. They have a working understanding to enable them to implement the knowledge gained from taught content. They can <b>complete simpler tasks without supervision</b> .
3	<b>Competent</b>	The nurse has a good working knowledge and background understanding of care provided. They can be pro-active and complete work independently to an acceptable standard. The nurse has confidence in their actions whilst at the same time recognising their limitations. Care is <b>completed in a timely manner without verbal cues</b> .
4	<b>Proficient</b>	The nurse routinely achieves a high standard of evidence based holistic care. They can give rationale for actions and evaluate care given, <b>anticipate events and make appropriate decisions</b> based on clinical need. Can prioritise and confidently escalate a situation to colleagues when appropriate.
5	<b>Expert</b>	The nurse demonstrates <b>critical thinking and analysis of complex situations</b> whilst providing a high standard of clinical care. They show flexibility and adaptability with an enhanced situational awareness. They can manage and lead a clinical situation.

Competency Number	The Practitioner can...	Minimum L1 Course Assessment Standard	Standard achieved (Self-assessed)	Date and signature of Nurse	Date and signature of Assessor
<b>1.0</b>	<b>ESSENTIAL PATIENT</b>				
	<i>Example competency</i>	3	3 4 5	<b>Nurse signature</b>	Assessor signature
1.1	Perform bedside safety checks and prepare a bed space as per local guidance	3	3 4 5		
1.2	Demonstrate appropriate use of monitoring equipment including: <ul style="list-style-type: none"> <li>• Correct use and placement of 3-lead ECG electrodes</li> <li>• Correct use and placement of saturation monitoring probes</li> <li>• Correct sizing and placement of BP cuffs</li> </ul>	3	3 4 5		
1.3	Demonstrate equipment safety checks for any medical devices used	3	3 4 5		
1.4	Perform a structured and systematic A-E patient assessment	3	3 4 5		
1.5	Assess and recognise changes in the child's clinical condition	3	3 4 5		
1.6	Complete early warning score and escalate appropriately	3	3 4 5		
1.7	Effectively use SBAR communication tool	3	3 4 5		
1.8	Demonstrate appropriate decision making and effective time management skills	3	3 4 5		
1.9	Demonstrate the ability to care for a critically unwell child and their family	3	3 4 5		
1.10	Complete the appropriate nursing documentation	3	3 4 5		
<b>2.0</b>	<b>PROFESSIONAL WORKING</b>				
2.1	Identify local and national policies relevant to critical care and the implications for practice	3	3 4 5		
2.2	Discuss the importance of multi-disciplinary communication between hospital and community settings as well as between hospitals and hospital services.	3	3 4 5		
2.3	Discuss how evidence-based practice impacts on the care of the unwell child	3	3 4 5		

<b>3.0</b>	<b>RESUSCITATION TRAINING</b>				
3.1	Evidence of successful and up to date completion of appropriate paediatric resuscitation training	3	3 4 5		
<b>4.0</b>	<b>ASSESSMENT AND MANAGEMENT OF AIRWAY AND BREATHING</b>				
4.1	Demonstrate assessing patency of airway and consider appropriate airway opening manoeuvres	3	3 4 5		
4.2	Accurately assess and discuss: <ul style="list-style-type: none"> <li>• Respiratory noise / wheeze / stridor / grunting</li> <li>• Respiratory rate</li> <li>• Effort of breathing</li> <li>• Efficacy of breathing</li> <li>• Chest movement</li> </ul>	3	3 4 5		
4.3	Demonstrate sizing and insertion of an oro-pharyngeal airway	3	3 4 5		
4.4	Discuss the indications and contraindications for the use of a nasopharyngeal airway	3	3 4 5		
4.5	Discuss/demonstrate sizing and inserting a naso-pharyngeal airway	3	3 4 5		
4.6	Discuss/demonstrate care of a nasopharyngeal airway	3	3 4 5		
4.7	Demonstrate selection of the correct face mask for ventilation	3	3 4 5		
4.8	Demonstrate effective hand ventilation using mask and self-inflating bag (BVM)	3	3 4 5		
4.9	Discuss the limitations of SpO2 monitoring and ways of determining its accuracy	3	3 4 5		
4.10	Demonstrates the correct technique for chest auscultation and is able to describe normal findings	3	3 4 5		

5.0	CARE OF THE CHILD WITH UPPER AIRWAY OBSTRUCTION				
5.1	Discuss/demonstrate how to recognise a partially and totally obstructed airway and appropriate action to take	3	3 4 5		
5.2	Discuss the need for effective positioning and minimal handling of a child with an obstructed airway	3	3 4 5		
5.3	Discuss the use of nebulised adrenaline/budesonide, and steroids noting the expected changes in condition associated with their use	3	3 4 5		

6.0	SUCTIONING				
6.1	Demonstrate effective suctioning using the correct pressure, suction catheter and technique: <ul style="list-style-type: none"> <li>Oropharyngeal suctioning</li> <li>Nasopharyngeal suctioning</li> </ul>	3	3 4 5		
		3	3 4 5		
6.2	Discuss assessing type and frequency of secretions and the implications of any abnormalities	3	3 4 5		
6.3	Discuss the potential complications of suctioning	3	3 4 5		

7.0	CARE OF THE CHILD REQUIRING OXYGEN THERAPY				
7.1	Identify and discuss use of appropriate oxygen therapy: <ul style="list-style-type: none"> <li>Face mask with and without reservoir bag</li> <li>Nasal cannula</li> <li>High flow nasal cannula oxygen</li> </ul>	3	3 4 5		
		3	3 4 5		
		3	3 4 5		
7.2	Demonstrate set up of High flow nasal cannula oxygen	3	3 4 5		
7.3	Discuss the appropriate flow rates for commencing and weaning high flow nasal cannula oxygen	3	3 4 5		
7.4	Discuss the need for humidified oxygen and demonstrate correct set up of a humidification system	3	3 4 5		
7.5	Discuss the nursing care required by a child receiving oxygen	3	3 4 5		

<b>8.0</b>	<b>CARE OF THE CHILD WITH APNOEIC EPISODES</b>				
8.1	Discuss the underlying causes of apnoea (age / disease associated)	3	3 4 5		
8.2	Discuss/demonstrate an initial response to an apnoeic episode	3	3 4 5		
8.3	Discuss the treatment for recurrent apnoea's	3	3 4 5		
<b>9.0</b>	<b>BLOOD GAS ANALYSIS</b>				
9.1	Discuss the indications for performing blood gas analysis	3	3 4 5		
9.2	Demonstrate capillary blood gas sampling	3	3 4 5		
9.3	Identify and interpret normal values	3	3 4 5		
<b>10.0</b>	<b>CARE OF THE CHILD WITH ACUTE ASTHMA / WHEEZE</b>				
10.1	Demonstrate an understanding of asthma management	3	3 4 5		
10.2	Demonstrate knowledge of guidelines and pathways	3	3 4 5		
10.3	Discuss use and side effects of IV Salbutamol, Aminophylline and Magnesium	3	3 4 5		
10.4	Demonstrate correct calculation of IV Salbutamol and Aminophylline	3	3 4 5		
10.5	Discuss nursing interventions which may help with symptom relief	3	3 4 5		
<b>11.0</b>	<b>CARDIOVASCULAR STATUS</b>				
11.1	Demonstrate accurate measurement of heart rate and palpate pulses as per guidance	3	3 4 5		
11.2	Auscultate heart sounds and use as a way of checking heart rate	3	3 4 5		
11.3	Demonstrate accurate assessment of capillary refill time, perfusion, colour, and temperature	3	3 4 5		
11.4	Demonstrate correct blood pressure measurement using electronic monitoring	3	3 4 5		

11.5	Recognise sinus rhythm and discuss the significance of the complexes	3	3 4 5		
11.6	Discuss abnormal ECG rhythms and how to escalate concerns	3	3 4 5		
11.7	Discuss when to perform a 12 lead ECG	3	3 4 5		
11.8	Demonstrate correct placement of 12 lead ECG and can carry out the recording	3	3 4 5		

<b>12.0</b>	<b>DEFIBRILLATOR</b>				
12.1	Locate nearest device and demonstrate operational and safety checks	3	3 4 5		
12.2	Demonstrate correct positioning of Pads and connect leads	3	3 4 5		
12.3	Demonstrate how to use defibrillator in monitor only mode	3	3 4 5		
12.4	Demonstrate awareness of shockable rhythm algorithm	3	3 4 5		
12.5	Demonstrate awareness of cardioversion algorithm	3	3 4 5		
12.6	Discuss safety aspects of delivering a DC shock	3	3 4 5		

<b>13.0</b>	<b>CARE OF THE CHILD WITH A NEUROLOGICAL CONDITION</b>				
13.1	Discuss physiological signs of neurological dysfunction	3	3 4 5		
13.2	Demonstrate assessing, interpreting, documenting AVPU and GCS scores and act on both	3	3 4 5		
13.3	Demonstrate the ability to take appropriate action when conscious level alters	3	3 4 5		
13.4	Identify seizure activity and implement appropriate management	3	3 4 5		
13.5	Discuss / demonstrate the ability to take appropriate action during seizure activity	3	3 4 5		
13.6	Discuss the actions and side effects of common anti-convulsant medications	3	3 4 5		
13.7	Recognise signs and symptoms of raised ICP	3	3 4 5		
13.8	Discuss appropriate management of the child with raised ICP	3	3 4 5		

<b>14.0</b>	<b>PAIN AND SEDATION</b>				
14.1	Demonstrate appropriate pain assessment with the use of an appropriate pain tool.	3	3 4 5		
14.2	Demonstrate ability to identify correct choice of analgesia taking into account non-pharmacological measures	3	3 4 5		
14.3	Discuss ways to recognise symptoms of withdrawal from analgesia/sedation using appropriate tools	3	3 4 5		

<b>15.0</b>	<b>CARE OF THE CHILD REQUIRING FLUIDS AND RENAL MONITORING</b>				
15.1	Discuss the importance of fluid and electrolyte balance taking into account: <ul style="list-style-type: none"> <li>• Input/output</li> <li>• Medications and flushes</li> <li>• Nasogastric aspirates and replacement fluid</li> <li>• Drain losses</li> <li>• Stoma/ intestinal losses</li> <li>• Colloid and crystalloid fluid</li> </ul>	3	3 4 5		
15.2	Demonstrate recording and interpreting blood glucose measurements using an appropriate monitoring device	3	3 4 5		
15.3	Demonstrate accurate calculation of the child's fluid requirement and timely documentation	3	3 4 5		
15.4	Discuss safe administration of fluids containing additional electrolytes i.e. potassium	3	3 4 5		
15.5	Demonstrate / discuss how to calculate and administer fluid in an emergency situation	3	3 4 5		
15.6	Demonstrate knowledge of the fluids used in resuscitation	3	3 4 5		
15.7	Discuss normal electrolyte values and their importance	3	3 4 5		
15.8	Demonstrate documentation of an accurate urine output in ml/kg/hr and identify normal output based on age	3	3 4 5		

15.9	Discuss the indications and contra-indications for urinary catheter insertion	3	3 4 5		
15.10	Demonstrate urine sampling using ANTT	3	3 4 5		
15.11	Demonstrate correct procedure for flushing a urethral catheter	3	3 4 5		
15.12	Demonstrate / discuss correct procedure for removing a urethral catheter	3	3 4 5		
15.13	Demonstrate correct procedure for performing catheter care	3	3 4 5		

<b>16.0</b>	<b>NUTRITION</b>				
16.1	Completed local NG feeding competencies and provide evidence of such	3	3 4 5		
16.2	Discuss the importance of nutrition in the care of the critically ill child and ways of maximising this	3	3 4 5		
16.3	Discuss different enteral feeding methods including when feeding is not beneficial to the patient	3	3 4 5		

<b>17.0</b>	<b>CARE OF A CHILD IN DKA</b>				
17.1	Demonstrate/discuss knowledge of the DKA protocol and its clinical indication for use	3	3 4 5		
17.2	Discuss the importance of accurate weight measurement for the child in DKA	3	3 4 5		
17.3	Discuss the levels of severity of DKA, how this is determined and the correct management for each level	3	3 4 5		
17.4	Discuss / demonstrate safe management of a child with DKA requiring continuous IV insulin infusion	3	3 4 5		
17.5	Demonstrate accurate calculation of fluids for a child in DKA using available tools	3	3 4 5		
17.6	Discuss complications of DKA and the importance of GCS monitoring	3	3 4 5		
17.7	Discuss the potential expected recovery pathway of a patient with severe DKA	3	3 4 5		

<b>18.0</b>	<b>CARE OF THE INTUBATED CHILD AWAITING TRANSFER</b>				
18.1	Discuss where to source appropriate equipment and documentation required for an intubated/ventilated child	3	3 4 5		
18.2	Discuss the appropriate pathway for a referral to NECTAR	3	3 4 5		
18.3	Discuss the resources available from NECTAR and where to find them	3	3 4 5		
18.4	Use the NECTAR drug chart effectively to commence and deliver maintenance infusions required such as <ul style="list-style-type: none"> <li>• Morphine</li> <li>• Midazolam</li> <li>• Rocuronium</li> <li>• Adrenaline</li> <li>• Noradrenaline</li> </ul>	3	3 4 5		
18.5	Discuss what is a safe/appropriate environment in which to care for the ventilated child awaiting transfer with NECTAR	3	3 4 5		





## Declaration of competency from Learner

Can confirm that I have achieved the required competency levels to successfully complete the Level 1 Critical Care Skills Passport

Candidate signature: .....

Date .....

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## Declaration of competency from Supervisor

I ..... Designation ..... Ward .....

Can confirm that ..... has achieved the required competency levels to successfully complete the Level 1 Critical care skills passport.

Supervisors signature .....

Date .....

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## Declaration of competency from Paediatric Clinical Nurse Educator

I ..... Designation ..... Ward .....

Can confirm that ..... has achieved the required competency levels to successfully complete the Level 1 Critical care skills passport.

Clinical Nurse Educator's signature .....

Date .....