Appendix A: Needs Assessment Questionnaire

**TRAINING NEEDS ASSESSMENT SURVEY FOR NURSES**

SECTION A: Background Questions for Practicing Nurses

1. Age (years)

* 24 and below
* 25-34
* 35-44
* 45-54
* 55-65
* Above 65

1. Sex:

* Male
* Female

1. What is your highest professional education?

* Certificate
* Diploma
* RN Diploma
* BSc
* Child Health MSc
* MSc (Other)
* PhD

1. Cadre

* Enrolled nurse/Midwife
* Nurse/Midwife technician
* Nursing Officer
* Senior Nursing Officer
* Principal Nursing officer
* Chief Nursing officer

1. Employment status

* Permanent
* Voluntary
* Locum
* Intern
* Upkeep
* Contract

1. How many years have you worked as a nurse/midwife?

* Less than 1 year
* 1-4
* 5-9
* 10-14
* 15-19
* 20 and above

1. What areas of nursing/midwifery have you worked in? Tick all that apply.

* Paediatrics
* Midwifery
* Community/ Occupational
* Adult Wards
* Psychiatric

1. Which ward/unit are you currently working? Tick all that apply.

* Paediatric A&E
* Paediatric Special Care Ward HDU
* Paediatric Nursery HDU
* Nutritional Rehabilitation Unit (NRU) HDU
* Main ICU
* Neurology HDU
* Chatinkha Nursery HDU
* Mercy James Centre – HDU
* Recovery
* Burns HDU
* Mercy James Centre ICU

1. What other paediatric critical care related training have you received? Tick all that apply.

* Advanced Burn Life Support (ABLS)
* Advanced Paediatric Life Support (APLS)
* Emergency Triage Assessment and Treatment (ETAT)
* Nursing Education Partnership Initiative Preceptor Training
* Bubble Continuous Positive Airway Pressure Training (BCPAP)
* Care of the Infant and Newborn Training (COIN)
* Basic Life Support (BLS)
* Palliative Care
* Other

1. If it were up to you, for how long would you want to stay in your current ward/unit:

* I want to leave soon
* 1 year or less
* 2-4 years
* more than 5 years

1. If funding allowed, would you be interested to pursue a MSc in Child Health Critical Care Nursing?

* Yes
* Maybe
* No

1. How do you like to learn new information? Tick all that apply.

* Reading
* Classroom/Video
* Hands-On Practice/Simulation
* E-learning
* Bedside teaching/learning

SECTION B: Current Level of Competencies (ABCDE Knowledge & Skills) in PCC Nursing

Please answer truthfully and to the best of your ability. Not all of the listed skills may be relevant to your specific work area, but please select an answer for each item.

AIRWAY

1. Assessment and management of airway (positioning, log rolling, jaw thrust, chin lift, and Heimlich manoeuvres)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision
* Confident: Could teach someone else

1. Endotracheal Tube / Tracheostomy: Securing, monitoring and management (Patency, correct length, cuff leakage)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision
* Confident: Could teach someone else

1. Safe Airway Suctioning and nebulization (naso/oropharyngeal, endotracheal tube, tracheostomy)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision
* Confident: Could teach someone else

BREATHING

1. Breathing assessment (Resp rate, oxygen sats, breathing problems and identification of abnormal sounds)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Management of poor breathing mechanisms (oxygen therapy, bag and mask ventilation)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. How to perform Respiratory Treatments or Therapies (i.e., metered dose inhaler, chest physiotherapy, nebulizing medication)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Arterial blood Gas: collecting blood sample, running a test and interpretation

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Mechanical Ventilation: Different modes, setting, responding, and addressing alarms on machine and troubleshooting.

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Mechanical Ventilation: connecting to a patient, monitoring, interpretation, management before and after extubating.

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. bCPAP: Indications for use, initiation, machine set-up including choice of nasal prongs, escalating and weaning treatment, proper documentation and troubleshooting.

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

CIRCULATION

1. Assessment, interpretation, management, and documentation of impaired circulation (warmth of extremities, capillary refill time, pulse, blood pressure)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Evaluating Electrocardiogram (ECG) for Rate and Rhythms (Normal, Arrhythmias)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. How to listen to heart sounds, interpretation, and documentation.

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Vasoactive Medications: preparation, administration, Monitoring (e.g., Adrenaline, Dopamine),

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Arterial lines: knowledge of equipment, assessment, and interpretation

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Arterial lines: Management (sample collection, changing dressing, infection prevention, oedema, extravasation, safe removing, troubleshooting)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Central lines: knowledge of equipment, assessment, and interpretation

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Central lines: Management (sample collection, changing dressing, infection prevention, oedema, extravasation, safe removing, troubleshooting)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Peripheral IV cannula: Insertion, assessment, monitoring and management (tissuing/ extravasation, dislodgement or leaking, infection prevention, removal).

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Intraosseous cannula: Insertion, assessment, monitoring and management (tissuing/ extravasation, dislodgement or leaking, infection prevention, removal).

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Chest Tubes: Indications/ Use, monitoring, interpretation, management. (accidental removal, securing and troubleshooting)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Fluid Status: assessment and treatment of dehydration

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Fluid Status: assessment and treatment of fluid overload

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Urinary catheters: Insertion, management, and removal.

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Urine Output: Assessment, interpretation, management

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

DISABILITY

1. Neurological status: Assessment, monitoring, interpretation, and management (AVPU, Blantyre Coma Score, Glasgow Coma Score, reflexes, pupil reactions, warning signs).

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Blood Glucose: assessment Monitoring, interpretation, and management (hypo/hyper glycaemia, sliding scale)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Nasogastric Tube Insertion and Assessment for proper placement and management

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Total Parenteral Nutrition: preparation, administration, monitoring and management

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Pain assessment and interpretation, monitoring and management

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Sedation assessment, interpretation, monitoring and management

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

EXPOSURE

1. Assessment and management of hypothermia

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Assessment and management of hyperthermia

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Skin integrity: Patient turning and positioning, mouth care, pressure area care

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Head to Toe assessment and management (Injury)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

EMERGENCY PREPAREDNESS

1. How confident are you to access supplies in your unit in an emergency situation (intubation equipment, ETTs, oral airways, ambu bags, etc.)?

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. How confident are you to recognize and resuscitate a deteriorating child? (Airway, Breathing, Circulation, Coma, Convulsions, Dehydration)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

INFECTION PREVENTION

1. Knowledge of 5 Moments of hand hygiene and how to perform proper hand hygiene according to WHO guideline.

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. How and when to don and doff protective wear (gloves, mask, Apron)

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

1. Cleaning and decontamination of equipment according to national IP guidelines

* Unsure / Don’t Know
* Not confident: Could not safely do on your own
* Somewhat confident: Would perform with help or under supervision (regardless of actual help available)
* Confident: Could teach someone else

FAMILY EDUCATION

1. Assess, identify, and meet the educational needs of the family/caregiver and counsel them accordingly

* Unsure / Don’t Know
* Not confident:(Could not safely do on your own)
* Somewhat confident:(Would perform with help or under supervision)
* Confident:(Could teach someone else)

SECTION C: Work environment

1. How many patients do you manage individually during day shift (before COVID-19 pandemic)?

* 1-3
* 4-6
* 7-10
* 11-13
* 14-16
* over 17

1. How many patients do you manage individually during night shift (before COVID-19 pandemic)?

* 1-3
* 4-6
* 7-10
* 11-13
* 14-16
* over 17

1. Do you feel the number of staff (including support staff such as hospital cleaners, patient attendants, etc.) is adequate to meet the needs of the patient on the average shift (before COVID-19 pandemic)?

* Yes
* Somewhat
* No

1. Do you have adequate equipment you need to do your work?

* Yes
* Somewhat
* No

1. If “No” or “Sometimes” to Question 57, which equipment is most often or missing? Write your response on the space provided
2. Does the equipment work properly?

* Yes
* Somewhat
* No

1. Do you have to use equipment that is not properly working e.g., ambu bags, oxygen concentrators and bCPAP machines?

* Yes
* Somewhat
* No

1. Do you feel you have enough supplies to do your work, e.g., aprons, gloves, masks, patient medications, lab supplies, etc.?

* Yes
* Somewhat
* No

1. If the answer to question 61 was “No,” which supplies are missing?
2. Are you comfortable asking a colleague or supervisor questions about patient care?

* Yes
* Somewhat
* No

1. Are you comfortable to ask the medical doctor in charge when you have questions about a patient?

* Yes
* Somewhat
* No