



### Day 1:

| See Moodle for required pre-study day activities |   |
|--|---|
| Session Title                                    | Indicative Content  |
| Welcome  | • Introductions   |
|  | Moodle tour   |
|  | Module outcomes   |
|  | <ul> <li>Assessment for PCCS accreditation and overview of options for GICU, HDU and PICU nurses</li> </ul> |
|  | Expectations and Ground Rules   |
| ABG Analysis                                     | Acid Base Balance   |
|  | ABG Interpretation and considerations for practice  |
| <b>Respiratory Workshop</b>                      | Upper Respiratory Tract (URT) anatomy and physiology  |
|  | ABCDE - Airway and breathing assessment   |
|  | Common URT pathology seen in the PCCU including croup and asthma  |
| <b>Respiratory Workshop</b>                      | Lower Respiratory Tract (LRT) anatomy and physiology  |
|  | Common LRT pathology seen in the PCCU including bronchiolitis   |
|  | Respiratory distress leading to failure and ventilatory support including HFNC, BCPAP and intubation        |
|  | Principles and management strategies for mechanical ventilation   |
|  | Airway clearance manoeuvres + closed and open suction, nebs, positioning, proning                           |
| Assessment                                       | Poster presentation     GICU/PHDU formative Day 7 Presentation launch, opportunity to pair up and           |
| Introduction                                     | Competencies and PDP discuss initial ideas  |
|  | Mentorship  |
|  | Tutorials   |









### Day 2:

| See Moodle for required pre-study day activities |   |
|--|---|
| Session Title                                    | Indicative Content  |
| Searching the Evidence<br>Base                   | <ul> <li>How to perform an effective literature search and use the evidence in assignments</li> <li>GICU/PHDU nurses will spend time on BRHC PICU, completing activities on Moodle, working on D7 presentation</li> </ul> |
| Using the Evidence Base                          | Using the evidence base both in academic work and practice  |
| CXR Interpretation                               | Chest X-Ray Interpretation using an A-G approach  |
| LTV  | Long Term Ventilation   |
|  | Transitional care considerations  |
| <b>Respiratory Clinical Skills</b>               | Intubation scenario   |
|  | Endotracheal tube strapping   |
|  | Hand ventilation technique using anaesthetic bagging circuits, manometers, hyperinflation/decompression   |
|  | Tracheostomy care   |









### Day 3:

| See Moodle for required pre-study day activities |   |  |
|--|---|--|
| Session Title                                    | Indicative Content  |  |
| Cardiovascular<br>Workshop                       | <ul> <li>Cardiovascular anatomy and physiology</li> <li>+ Ethnic differences</li> <li>+ Haemodynamic monitoring including non-invasive and invasive pressure monitoring</li> <li>ABCDE - Cardiovascular assessment</li> <li>ECG Interpretation and arrhythmias</li> <li>Congenital Heart Disease and duct dependent lesions</li> <li>Fluids and vasoactive drugs</li> </ul> |  |
| Tutorial – Poster Ideas                          | Recap of assessment information     GICU/PHDU nurses will spend time completing activities on Moodle and/or working   |  |
|  | Group discussion of poster topic ideas     on D7 presentation   |  |









#### Day 4:

| See Moodle for required pre-study day activities |   |
|--|---|
| Session Title                                    | Indicative Content  |
| Neurology Workshop                               | <ul> <li>Neurological anatomy and physiology</li> <li>ABCDE - Disability assessment</li> <li>Neurological assessment and coma scoring</li> <li>Common pathology – Traumatic Brain Injury, hydrocephalus, non-accidental injury</li> <li>Raised Intracranial Pressure - monitoring, management and treatment</li> <li>Management of seizure disorders</li> <li>Status Epilepticus</li> </ul> |
| Trauma   | <ul> <li>Incidence and mechanism of polytrauma</li> <li>Key principles of PCC care of the trauma patient including         <ul> <li>Road Traffic Collisions (RTC'S)</li> <li>Near drowning/immersion</li> <li>Non-accidental injuries</li> </ul> </li> </ul>  |
| Mental Health in PCC                             | <ul> <li>Eating disorders – arrhythmias and refeeding</li> <li>Overdose, poisoning and toxins – acute kidney injury</li> <li>Self-harm, suicidal ideations, asphyxia, hanging and hypoxic injury</li> </ul>   |









### Day 5:

| See Moodle for required pre-study day activities |   |  |
|--|---|--|
| Session Title                                    | Indicative Content  |  |
| Fluid Management                                 | Fluid and electrolyte physiology  |  |
|  | Fluid management in critical illness  |  |
| Renal Workshop                                   | Renal anatomy and physiology  |  |
|  | Renal function including renal function markers and urinalysis              |  |
|  | Acute Kidney Injury and Renal failure                                       |  |
|  | Management of AKI, excluding renal replacement options                      |  |
| DKA  | Case study looking at the pathophysiology and management of DKA in children |  |
| <b>Nutrition in PCC</b>                          | Nutrition and feeding strategies – enteral and parental nutrition           |  |
|  | Special considerations for the critically ill child                         |  |









### Day 6:

| See Moodle for r            | equired pre-study day activities   |
|-----------------------------|--|
| Session Title               | Indicative Content   |
| Shock and sepsis            | Pathophysiology and management of shock  |
|                             | Pathophysiology and management of sepsis   |
|                             | Relevant infectious diseases   |
| Retrieval and Transport     | Preparing the child and family for transfer  |
| of the critically ill child | Retrieval and transfer of the critically ill child   |
|                             | Intra-hospital transfer e.g. transfers to MRI, CT and between ward areas   |
|                             | Stabilisation of the critically ill child  |
| Human Factors               | What are human factors?  |
|                             | How can human factors adversely affect care in PCC?  |
|                             | How can PCC nurses minimise the effects of human factors when caring for critically ill children?                        |
|                             | Communication with professionals and service users   |
|                             | Non-technical skills and team working – human factors + unconscious bias, equality and diversity                         |
| Care of a Critically III    | Care of a critically ill child with learning disabilities  |
| Child with a Learning       | Communication with non-verbal patients   |
| Disability                  |  |
| Group Tutorial              | PICU students come prepared to present their     GICU/PHDU nurses will spend time on BRHC PICU, completing activities on |
|                             | poster work in progress Moodle, working on D7 presentation   |









### Day 7:

| Pre-Study Day: Prepare case study presentations             |   |
|---|---|
| Session Title   | Indicative Content  |
| Supporting families in distress in paediatric critical care | <ul> <li>Holistic FCC and its implementation in PICU</li> <li>Preparing a child and family for end-of-life care and death</li> <li>Best practice guidance for withdrawal of treatment</li> <li>RCPCH guidance</li> <li>Ethical dilemmas within paediatric critical care</li> <li>The Wishes Document</li> </ul> |
| GICU Presentations  | Details as previously discussed in sessions   |
| <b>Evaluation and Close</b>                                 | Module evaluation   |



