

## **Respiratory Physiologists and Scientist Skill Mix**

### **Current skills**

#### **Critical care**

- Understanding and application of respiratory physiology and applying the science to the treatment of the patient
- Understanding and application of disease influences the respiratory system and treatment for respiratory support
- Interpretation of blood gas tensions and how to rectify abnormalities
- Understanding and application of ventilation treatment in the context of the patient
- Interpretation of sleep and ventilation treatment, including effects of differing modes, circuits used, physiological parameters e.g. use of longer inspiratory time, pressure and volume prescriptions and considerations, vented and non vented circuits and effects on FiO<sub>2</sub>
- Invasive and non-invasive ventilation
- Vital sign observations e.g. respiratory rate, SpO<sub>2</sub>, pulse rate, blood pressure
- Recognition of signs of hypoxaemia and cyanosis
- End of life care, some senior physiologists/scientists will be involved in removal of treatment and the importance of palliative care. This also highlights the range of our role and ability to apply care and compassion

#### **Step down**

- Understanding and application of sleep treatment in the context of the patient
- Understanding and application of oxygen therapy in the context of the patient, using various modes e.g. cannulae, venturi
- Vital sign observations e.g. respiratory rate, SpO<sub>2</sub>, pulse rate, blood pressure

#### **Critical care and step down**

- Excellent communication skills
- Experience with lots of technology and able to use previous experience to apply to other technologies
- Versatile and flexible and can apply our physiology knowledge to learn new applications, techniques

### **Relevance to activity in the field hospital**

Respiratory disease requires the understanding of the impact on the respiratory system affecting the physiology, this is our expertise. We are able to use our underpinning knowledge and experience in ventilation and respiration and apply this to any areas we are asked to upskill in.

### **Any further training needs/requirements**

- Equipment specifically selected for the field hospital; the theory will be the same it is just familiarising oneself with different equipment

If required to support critical care, can be considered to upskill in:

- Differing types of airway management
- Preparation of intubation equipment
- IV administration
- Haemodynamic observations