Mobile Endotracheal Intubation Teams (MErIT) team

Composition of teams

Teams to be created from a pre-designated pool of anaesthetists and anaesthetic nurses. The team members should:

- Have passed Fit testing for FFP3 masks
- Undergone simulation training for donning and doffing PPE
- Have experience in the management of the difficult airway
- Be familiar and experienced with the intubation equipment provided for COVID19 cases
- Be familiar with the protocols and action cards for PPE, aerosol generating procedures (AGPs) and transfers.

Role of team

The MErIT team is to be used to support the CRT team with the endotracheal intubation of patients with severe respiratory failure as they present in the emergency department (ED) or on the wards.

The MErIT team should *not* be used to provide ongoing critical care for the ventilated patient. Expeditious release of the team is essential to allow continuation of the service.

Managed phase:

- Likely one MErIT team per shift comprised of a limited pool of consultant anaesthetists and anaesthetic nurses

Surge phase:

- Multiple teams may need to be created and deployed to cope with increased numbers of patients. These teams may be comprised of anaesthetists with less difficult airway experience.

Activation of MErIT teams

The decision to ventilate and accept a patient with severe respiratory failure to critical care remains with the CRT team. All referrals should go though the CRT team who can be contacted on:

- Bleep 0610 and WiFi phone ext 58913

The CRT team can contact the MErIT team to deploy to the location of the patient. Contact method for the MErIT team:

Managed phase 0153
Surge phase: Operational Command for Theatres NUMBER

A Representative from operational command for theatres or 0153 to attend the twice daily CRT team huddle at 09:30 and 21:30 in:

- North Wing Theatres Meeting Room or
- If room unavailable move to TAP GMs office

This is essential to establish direct lines of communication in emergencies and for status updates.

Deployment of MErIT teams
The team will deploy to the location of the patient with the required PPE, medical equipment.

Emergency Department
Resus will remain the designated area for all patients who are critically ill. Resus cubicle 3 is a negative pressure room. All resus cubicles have monitoring, ventilators and airway trolleys. A difficult airway trolley and glidescope is available.

The ED is cohorting patients with respiratory illness in Majors. The most unwell are being managed in the majors negative pressure cubicle 3. There is monitoring, wall oxygen and suction in the majority of the cubicles.

Wards
Most likely in surge situation. Likely wards are Hillyers, Edward and Sommerset.

Procedures

Procedures to be carried out in accordance with the most recent iterations of the following action cards:

Preparation

- Aerosol generating procedures (action card 8d)
- Confirmed COVID-19: personal protective equipment (PPE) (action card 8a). This card is to be used for aerosol generating procedures (AGP) for suspected COVID-19 cases as well.
- Confirmed COVID-19: Failed fit testing - personal protective equipment (PPE) (action card 8c). This card is to be used for aerosol generating procedures (AGP) for suspected COVID-19 cases as well.

Intubation

- Preparation for intubation of a COVID-19 patient (action card v0-7) draft currently
- Intubation of a COVID-19 patient. (action card v0-7) draft currently
- OR Critical Care intubation checklist
- Routine induction / maintenance – propofol / fentanyl / maintain neuromuscular blockade throughout
- Maintain cardiovascular stability; favour an approach of early vasopressors to avoid excessively positive fluid balance after initial volume resuscitation phase.

Ventilation

- Use anti-viral filter on Water's circuit (immediately after angle piece, before expiratory APL valve / ventilator circuit. Standard HME provides 99.99% protection.
- First line ventilator should be Oxylog 3000 due to potential numbers required and for familiarity of majority of clinicians.
- $ETCO_2$ on the clean side of the HME
- Avoid disconnections – tape joins
- Standard ventilation for ARDS patient; PCV; moderate to high PEEP; driving pressure < 15cmH2O; Pplat <=30cmH2O; Vt 6ml/kg; Permissive hypercapnia. If difficulty maintaining SaO2 > 90% or pH > 7.2 (respiratory) for early re-discussion with CRT Consultant for escalation to SRF / ECMO team

Transfer and on-going care

- Aim for early transfer to definitive care in ICU
- CRT Consultant will determine best receiving area (e.g. EW6 / EW1) in conjunction with HCID team / Critical Care Matron
- Unless clinically essential aim to avoid secondary transfers to CT en-route to ICU. Preference is to stabilise on ICU and to conduct planned transfer to Lambeth Wing CT at the end of the working day