

Classification: Official

Publications approval reference: 001559

30 October 2020

Wave 2 Surge Plan & Checklist

Respiratory Extracorporeal Membrane Oxygenation (ECMO)

The Respiratory Extracorporeal Membrane Oxygenation (ECMO) Surge Plan is one of three specialised services surge plans that have been developed in discussion with NHS England and NHS Improvement's national clinical and commissioning leads. The plans aim to aid local and regional discussions and to act as a brief guide and checklist in support of planning for a potential rise in hospitalisations due to COVID-19 infection.

The three plans – covering Adult Critical Care, Respiratory Extracorporeal Membrane Oxygenation (ECMO) and Renal Replacement Therapy in Critical Care - have been developed for those specialised services which would provide direct care to a rapidly rising number of patients within the adult critical care setting, in a surge scenario.

Surge Plan:		Respiratory Extracorporeal Membrane Oxygenation (ECMO)
National Leads:	Alain Vuylsteke (Clinical)	Nicola Symes (Commissioning)
Summary of Approach to Surge	<ul style="list-style-type: none"> • Opportunity to plan to surge respiratory ECMO capacity with a 2-week time lag from critical care surge, with around 2% of critical care patients requiring ECMO as identified in wave 1. • 5 routinely commissioned centres can surge up to 100 beds. • 2 additional surge centres may be commissioned to support the service if bed occupancy exceeds 80 beds - (Newcastle and Barts Health, potential to create an additional 20-25 beds). • National referral portal in place – using access criteria refined in wave 1. • While not currently anticipated, if demand is expected to exceed supply, tightened access criteria will be enacted. • There may be some limited opportunities to establish additional ECMO beds subject to local / network intensive care unit (ICU) capacity, staff and equipment availability. • National multi-disciplinary team (MDT) is in place to ensure consistent application of access criteria. • Subject to capital investment, a pooled additional resource of equipment and consumables will be established to reduce the need for mutual aid and impact on protected services (e.g. cardiac surgery and paediatric ECMO). 	
Key Considerations	<ul style="list-style-type: none"> • Timing of capital / equipment investment and equipment availability. • Potential for double count with ICU surge / transport assumptions. • Impact of surge on other services e.g. cardiac surgery, transplant. • Increased clinical risks associated with revised staffing / equipment ratios. 	
Supporting Data	Improved referral and activity monitoring data is now available through the referral portal and critical care bed dashboard to provide early warning of potential surge for ECMO (critical care data provides circa 2 week warning of likely surge in ECMO demand, and ECMO demand circa 2% of overall critical care numbers).	
Inequalities Considerations	Equitable geographical access and application of referral criteria (captured in specialty guide) – supported by central referral portal and MDT.	
Mechanism for Escalation of Issues <i>(Where Local Resolution Not Possible)</i>	<p>Point of contact: england.ncpt@nhs.net</p> <p>Regular calls with ECMO teams during surge. ECMO covered within newly established Severe COVID Response Cell.</p>	

ACTION CHECKLIST	
ECMO Providers:	
Establish trust level surge plan inclusive of workforce to maximise number of ECMO beds available for national delivery, protected from local COVID demand management.	√
Identify maximum surge capacity and share with national network.	√
Identify equipment requirements for surge and share with national network.	√
Escalate to local incident management team (IMT) and national network if local hospital outbreak affecting service delivery.	√
National ECMO Service:	
Completion of quality assurance and any associated actions required for the 2 additional surge centres.	√
Work with national expert clinicians to finalise tightened criteria to be enacted if required.	√
Deliver single national referral management model to ensure consistency in decision making and enable sharing of national clinical resource.	√
Monitor service demand, capacity and activity across each centre.	√
Coordinate national clinical MDT to discuss and review complex cases.	√
Ensure effective communication with referrers and referral networks to support timely requests for support and advice.	√
Develop a simple guide to management of the complex respiratory patient.	√
Collect and summarise activity and outcome information in liaison with the Intensive Care National Audit and Research Centre (ICNARC).	√
Review specialty guide and undertake any revisions as required.	√
Regions:	
Regional IMT escalate issues directly to Specialised Services Cell.	√
Coordinate mutual aid of staff and equipment across systems.	√
National:	
Assure national surge plan with the Severe COVID Response Cell and National Incident Response Board (NIRB).	√
Manage equipment and consumable funding, supply and pooling with the Department of Health and Social Care (DHSC).	√