



Classification: Official

# **North East and Yorkshire Region. Adult Critical Care Surge Plan Guidance**

**Edition: January 2024**

# 1 Context and Purpose

- 1.1 The purpose of this guidance is to specifically set out:
- the process for the identification of current and potential Adult Critical Care capacity;
  - a consistent approach by which providers of Adult Critical Care Services can escalate **very high**<sup>1</sup> capacity pressures to commissioners and NHS England (NHSE) in the region;
  - how provider organisations, Adult Critical Care Networks, Integrated Care Systems (ICSs) and their stakeholders should act in response to such escalations; and
  - the anticipated escalation process locally, regionally, and nationally across NHSE in support of Adult Critical Care Networks (including the NHS Strategic Command arrangements to be implemented by NHSE should they be required).
- 1.2 For the purpose of this document, 'critically ill' is defined as requiring a level of care greater than that normally provided on a standard hospital ward.
- 1.3 Levels of care are defined based on the monitoring and support patients require, rather than the location in which they are receiving care. They have been developed by the Intensive Care Society and set out in their Levels of adult critical care Consensus statement as described in Table 1 (below):

## Ward Care

- Patients whose needs can be met through normal ward care in an acute hospital.
- Patients who have recently been relocated from a higher level of care, but their needs can be met on an acute ward with additional advice and support from the critical care outreach team.
- Patients who can be managed on a ward but remain at risk of clinical deterioration.

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<sup>1</sup> Very high local surge is defined as 100% baseline capacity occupied with no discharges in the previous 24 hours

### **Level 1 – Enhanced Care**

- Patients requiring more details observations or interventions, including basic support for a single organ system and those ‘stepping down’ from higher levels of care.
- Patients requiring interventions to prevent further deterioration or rehabilitation needs which cannot be met on a normal ward.
- Patients who require ongoing interventions (other than routine follow up) from critical care outreach teams to intervene in deterioration or to support escalation of care.
- Patients needing a greater degree of observation and monitoring that cannot be safely provided on a ward, judged on the basis of clinical circumstances and ward resources.
- Patients who would benefit from Enhanced Perioperative Care.

### **Level 2 – Critical Care**

- Patients requiring increased levels of observations or interventions (beyond level 1) including basic support for two or more organ systems and those ‘stepping down’ from higher levels of care.
- Patients requiring interventions to prevent further deterioration or rehabilitation needs, beyond that of level 1.
- Patients needing two or more basic organ system monitoring and support.
- Patients needing one organ systems monitored and supported at an advanced level (other than advanced respiratory support).
- Patients needing long term advanced respiratory support.
- Patients who require Level 1 care for organ support but who require enhanced nursing for other reasons, in particular maintaining their safety if severely agitated.
- Patients needing extended post-operative care, outside that which can be provided in enhanced care units; extended postoperative observation is required either because of the nature of the procedure and/or the patient’s condition and co-morbidities.
- Patients with major uncorrected physiological abnormalities, whose care needs cannot be met elsewhere.
- Patients requiring nursing and therapies input more frequently than available in level 1 areas.

### Level 3 – Critical Care

- Patients needing advanced respiratory monitoring and support alone.
- Patients requiring monitoring and support for two or more organ systems at an advanced level.
- Patients with chronic impairment of one or more organ systems sufficient to restrict daily activities (co-morbidity) and who require support for an acute reversible failure of another organ system.
- Patients who experience delirium and agitation to requiring level 2 care.
- Complex patients requiring support for multiple organ failures, this may not necessarily include advanced respiratory support.

*Table 1: levels of Care. From Intensive Care Society definitions.*

1.4 It is recognised that the escalation arrangements outlined in this guidance may not be required solely as a result of exceptional increased demand for Adult Critical Care Services, but also as a requirement to support increases in demand for interdependent services. Further information on these services can be found in section 8.

1.5 To align with the “system first” approach, this guidance sets out stepped thresholds for decision making for each defined phase of surge. As such, this guidance supplements and should be read in conjunction with:

- Local escalation plans for adult critical care services
- Local escalation plans for health and social care services.
- Standard operating procedures for adult critical care transfer and other interdependent services.
- Other critical care service operational policies together with national and professional bodies' guidance.

## Strategic Aims

1.6 This guidance aims to aid local planning for and operational responses to exceptional circumstances<sup>2</sup> when demand for critical care exceeds usual capacity.

1.7 The strategic aims of this guidance are to:

- **maintain a high quality of care to support the best possible outcomes for patients** with providers working collaboratively across an Integrated Care System (ICS) or region;
- **maintain timely access to Adult Critical Care for any patient that requires it** and thereby, prevent avoidable mortality and morbidity;
- **maximise capacity in the critical care system** in a range of scenarios through a coordinated escalation and de-escalation approach across geographical footprints;
- **avoid the transfer of critically ill patients wherever possible** by ensuring all options to increase capacity have been exhausted prior to the consideration of implementing capacity transfers\*<sup>3</sup>
- **ensure provision of critical care as close to home as possible**, whilst maintaining standards of care, including when the transfer of patients is necessary.
- **Ensure units within a Critical care network are never greater than 2 CRITCON scores apart.** This is the trigger to consider equalising pressure across the system.

## 2 Principles

### Core Principles

2.1 The following core principles should guide system responses when managing very high local surge and escalation pressures for Adult Critical Care Services:

- the stepped increase in capacity in response to demand must be fully aligned with Regional Emergency Preparedness Resilience and Response (EPRR) [principles](#);
- “Normal” clinical pathways for critically ill patients should be preserved for as long as possible.

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<sup>2</sup> Exceptional circumstances are defined as an increase in demand which results in 100% baseline occupancy with no discharges in the previous 24-hour period.

<sup>3</sup> Capacity transfers are defined as “transfers for non-clinical reasons” see glossary

- the provision of emergency, general and specialised services should be preserved for as long as possible.
- equity of access to treatment should be maintained.
- nationally recognised professional nursing and medical staffing ratios should be maintained wherever possible, in line with the Adult Critical Care Specifications.
- a 'system first' approach to the management of Adult Critical Care must be adopted to ensure that capacity is co-ordinated across the system to meet demand.

## Inter-hospital Mutual Aid

2.2 When there is persistent demand for critical care beyond usual capacity (i.e. surge conditions) inter-hospital mutual aid<sup>4</sup> may be required as necessary as a mechanism to manage supply and demand across an ICS/ Regional/inter-regional footprint.

2.3 A unit may require decompression for several reasons, this includes the maintenance of safe staffing ratios, inadequate capacity to accept emergency admissions and on rare occasions the need to undertake life limiting/lifesaving treatment of another patient.

2.4 Inter-hospital transfers may be considered in the following categories:

- **Clinical transfer:** a patient's own clinical care requires expertise unavailable in their current critical care unit or hospital
- **Repatriation:** the patient is being repatriated closer to home, family, friends, or carers ('repatriation')
- **Mutual aid or surge transfer:** the treating critical care unit is under extreme clinical pressure, beyond its usual capacity, and the patient is likely to benefit from moving to a less busy unit. The unit is likely to be 2 CRITCON scores higher than neighbouring units.
- **Capacity transfer:** the treating critical care unit needs to create capacity to facilitate emergency or urgent clinical care for another patient. This may occur outside surge conditions, in exceptional circumstances, to support

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<sup>4</sup> Mutual aid = sharing of resources between units, hospitals, trusts, systems or regions. This may occur outside surge conditions in times of shortages (e.g. medicines, equipment) but more usually refers to the requirements to 'level-load' during surges in demand which require expansion of services beyond their usual footprint.

urgent admission for another patient. An urgent intervention is considered to be P1 and P2 surgery, without which a patient is at risk of reduced survival or significant morbidity if surgery is delayed. Separate guidance on [capacity transfers](#) has been published by NHSE.

2.5 Key considerations prior to enacting mutual aid or capacity transfers include:

- No single unit within a network should be operating greater than 2 CRITCON scores from other units in the network.
- All patients should have equitable access to critical care when required
- If critical care capacity is limited by issues with patient flow (i.e. delayed discharges), these must be resolved before patient transfers are considered
- The referring Trust/system/region must have undertaken all reasonable measures to improve critical care capacity whilst maintaining safe staffing limits
- The decision to transfer a patient may be required in exceptional circumstances to facilitate another patient's life threatening/limiting surgery or intervention in the referring hospital when safe capacity in the critical care unit has, or is expected to be exceeded within hours
- Decompression of units can facilitate safe provision of critical care across a system when the system is faced with exceptional demand.
- The decision of who to transfer should be made on a case by case basis following discussions between clinicians on referring and receiving units.
- The reason for transfer should be explained clearly to the patient and family/next of kin in line with [Duty of Candour](#). Capacity transfers require patient consent or family/next of kin assent.

## Escalation factors

2.6 System approaches to co-ordination of the safe management of demand and capacity should be made in alignment to local command and control structures/governance and escalated to national levels in a consistent way.

2.7 It is imperative that the triggers to activate additional capacity are sensitive enough to give sufficient time to free up capacity before the system is grid locked.

2.8 It is recognised that the management of local surge and wider escalation pressures will be dependent upon the consideration of a number of factors. These factors include:

- the availability of suitably trained staff, and equipment and specialist

supplies. In the case of infectious disease outbreaks, this should include consideration of the additional workforce required to maintain safe staffing in separate cohorted areas;

- the case-mix of patients in local units;
- the expected length of stay of patients in local units;
- the available capacity (or forecasted);
- any underlying disease rates impacting on critical care admission rates; and
- the size of hospitals within systems and the capability to extend critical care or increase surge capacity.

### Transfer services

2.9 Within NEY there is currently a single dedicated Adult Critical Care Transfer Service (ACCTS). This is provided by the North East and Cumbria Transfer and Retrieval Service (NECTAR) and covers transfers in Cumbria and the North East.

2.10 In Yorkshire and the Humber adult transfers are currently undertaken by blue light ambulance services (mostly by Yorkshire Ambulance Service (YAS)) although plans are being developed to establish a dedicated ACCTS for Y&H.

## 3 Escalation Thresholds and Key Actions

3.1 Requirement to surge Critical Care capacity can be extremely rapid and can occur over a 48 to 72-hour period.

3.2 The description of Critical Care escalation phases are:

- **Pre-surge phase** occurs during most periods of higher activity (e.g. average winter) and is defined as the majority of critical care units within a system are declaring [CRITCON 0-1](#) (it is assumed that all units have all commissioned capacity open)
- **Surge phase** represents expected winter pressures where critical care units, systems and regions are operating within regional winter planning assumptions with the majority of units declaring [CRITCON 2](#)
- **Escalation phase** occurs when critical care units, systems and regions are operating above expected winter pressures with the majority of units declaring [CRITCON 2](#) and an increasing number of units declaring [CRITCON 3](#)
- **Heightened escalation phase** occurs when critical care units, systems and



regions are operating under severe pressures, and multiple capacity transfers are required within and between adjacent regions each day. There are an increasing number of tertiary units reporting [CRITCON 3](#).

3.3 Table 2 sets out more detailed threshold definitions and key actions to be taken at a local, regional, or national level to support escalation in response to surges in demand.

3.4 For consistency, the following definitions are used:

- **Baseline bed/funded bed:** any Adult Critical Care bed that is recognised in the commissioning arrangement for the Trust.
- **Surge bed:** any Adult Critical Care bed that is not usually recognised in the commissioning arrangement for the Trust but is opened to meet increased demand.
- **Open / Available bed:** any Adult Critical care bed that is staffed and able to accept a patient.

3.5 The number of overall beds is defined by those open i.e. staffed and available on the day of reporting. It excludes those beds ring-fenced for elective surgery (green pathways) and those ring-fenced for specialised services (where these are in place). It is therefore expected that the denominator will change over time.

3.6 At times of very high demand, consideration should be given as to whether some beds should be ring-fenced to protect P1 and P2 surgical activity, in order to protect the interests of patients who have life-threatening conditions not related to the cause of surge.

3.7 The impact and decisions set out in the escalation levels below aim to ensure the continued provision of treatment for life limiting/threatening conditions (including P1 and P2) for as long as possible.

3.8 The nominal commissioned bed base in each unit / network is described in section 11

Table 2: Surge thresholds and action

	CRITCON & OPEL	Descriptor	Actions
<b>Pre-surge Sustain</b>	Majority of units reporting CRITCON 0 to 1	<ul style="list-style-type: none"> <li>– <b>&lt;100% of baseline beds occupied and &lt;50% of baseline beds occupied by patients requiring cohorting for any reason</b></li> <li>– Treatment available and supply is greater than demand</li> <li>– Normal, able to meet all critical care needs, without impact on other services</li> <li>– Typical winter levels of capacity transfer and other overflow activity.</li> </ul>	<p><u>System and regional action</u></p> <ul style="list-style-type: none"> <li>– None except for usual monitoring via ODNs</li> <li>– ODNs must ensure DOS is updated twice daily by Trusts within Network and region</li> </ul> <p><u>National action</u></p> <ul style="list-style-type: none"> <li>– No national input required</li> </ul>
<b>Surge Monitor</b>	Majority of units reporting CRITCON 2 OPEL 1 <sup>5</sup>	<ul style="list-style-type: none"> <li>– <b>Up to 100% of baseline beds which are staffed and occupied and implications of cohorting impacts on capacity</b></li> <li>– Expected winter pressures</li> <li>– Operating within regional winter planning assumptions</li> <li>– Some usual high dependency unit (L2) beds may be converted to L3</li> <li>– Enhanced Care beds are used optimally (if available)</li> <li>– Usual funded critical care capacity full. Some capacity transfers</li> </ul>	<p><u>Trust actions</u></p> <ul style="list-style-type: none"> <li>– May require redeployment of support staff to enable cohorted capacity and increased acuity of patients and maintain acceptable staffing ratios.</li> <li>– Potential temporary reduction in elective surgery activity</li> <li>– Peri-operative pathways altered for some lower acuity patients to be cared for outside of level 2/3 adult critical care settings</li> </ul> <p><u>System and regional actions</u></p> <ul style="list-style-type: none"> <li>– UEC monitoring and reporting of capacity and demand within Trusts and systems as part of usual winter pressures process</li> <li>– Consider standing up local Critical Care monitoring and reporting arrangements at regional level such as the Cell structures defined in the NHS Resilience structure</li> <li>– Regions preparing to increase capacity to meet regional surge plan levels</li> </ul> <p><u>National action</u></p> <ul style="list-style-type: none"> <li>– Critical Care Capacity Panel (CCCP) meetings in place</li> <li>– Monitoring of interdependent services</li> </ul>

<sup>5</sup> <https://www.england.nhs.uk/wp-content/uploads/2019/02/operational-pressures-escalation-levels-framework-v2.pdf>

			<ul style="list-style-type: none"> <li>– Consideration of any cross-region capacity transfer requests</li> </ul>
<b>Escalation Protect</b>	Majority of units declaring CRITCON 2 and an increasing number of units declaring CRITCON 3 OPEL 2	<p><b>– 100% to 150% of capacity occupied</b></p> <ul style="list-style-type: none"> <li>– Exceeding expected winter pressures</li> <li>– Expanded in to enhanced care areas or expanded into next identified surge area</li> <li>– Usual funded critical care capacity full – overflow into quasi-critical care areas or identified surge areas</li> <li>– Increased conversion of L2 to L3 beds</li> <li>– High level of non-clinical transfers</li> <li>– Trusts beginning capacity transfers and other mutual aid</li> <li>– Treatment currently available within the system utilising surge areas in trusts but majority of units maybe declaring CRITCON2</li> <li>– There may be pressures on critical care resources, e.g. Renal replacement therapy or particular medicine</li> </ul>	<p><u>System and Region actions</u></p> <ul style="list-style-type: none"> <li>– Regional Command and Control structures in place</li> <li>– Cancellation of elective surgery in line with clinical prioritisation to commence</li> <li>– Capacity transfers and other mutual aid across systems and within regions</li> <li>– Surge beds to be used optimally</li> <li>– Critical care cells meeting regularly</li> <li>– Enhanced monitoring and reporting by ACC commissioners and UEC winter teams</li> <li>– Daily submission of Regional transfer requirements</li> <li>– Daily reporting and review of ACC occupancy at a system and regional level</li> <li>– Maintaining acceptable staffing ratios through redeployment of non-critical care staff although these may not be GPICS<sup>6</sup> compliant</li> </ul> <p><u>National actions</u></p> <ul style="list-style-type: none"> <li>– Increased national and regional commissioning input may be required</li> <li>– national Critical Care Capacity Panel (CCCP) to provide strategic direction for inter-regional capacity transfers</li> </ul>
<b>Heightened escalation</b>	Increasing number of tertiary units reporting CRITCON 3 Some units at risk of moving to CRITCON 4 OPEL 3	<p><b>150% to 200% of capacity occupied</b></p> <ul style="list-style-type: none"> <li>– Expanded into identified suitable surge areas AND</li> <li>– Expanded into non-conventional areas (if applicable) OR</li> <li>– In final expansion area (for local escalation)</li> <li>– Expansion into non-critical care areas (eg wards) and/or use of paediatric facilities for adult critical care where appropriate.</li> <li>– Trust operating at or near maximum physical capacity.</li> <li>– Maximum capacity transfers between Trusts, with network and regional NHSE co-ordination.</li> </ul>	<p><u>System and Region actions</u></p> <ul style="list-style-type: none"> <li>– Regional Command and Control structures in place</li> <li>– All non-life threatening/lifesaving elective inpatient surgery to stop.</li> <li>– Review of prioritisation and cancellation of some specialist elective surgery</li> <li>– Mutual aid and capacity transfers across systems to maintain urgent activity.</li> <li>– Daily identification of suitable patients for inter-regional transfer by regions under surge (as per guidance)</li> </ul>

<sup>6</sup> [gpics-v2.pdf \(ficm.ac.uk\)](https://www.ficm.ac.uk/gpics-v2.pdf)

		<ul style="list-style-type: none"> <li>– The prime imperative in CRITCON 3 is to prevent any single trust entering CRITCON 4</li> </ul> <p>CRITCON 4:</p> <ul style="list-style-type: none"> <li>• Resources overwhelmed. Possibility of triage by resource (non-clinical refusal or withdrawal of critical care due to resource limitation).</li> <li>• This must only be implemented on national directive from NHSE and in accordance with national guidance.</li> <li>• Treatment available but in very limited supply across a region. Systems unable to maintain segregation and to continue priority elective work.</li> <li>• Inter-system mutual aid and capacity transfers are required, facilitated by Regional Transfer sub-group. Capacity may soon be exceeded if demand increases further.</li> <li>• Full use of surge staffing ratios and cross skilling</li> </ul>	<ul style="list-style-type: none"> <li>– GPICS staffing ratios may not be maintained in some clinical areas (eg multi-bed cohorted areas) (see footnote <sup>11</sup>)</li> </ul> <p><u>National action</u></p> <ul style="list-style-type: none"> <li>– Escalation of need for inter-regional capacity transfers to decompress multiple hospital sites</li> <li>– Enhanced monitoring and reporting will be in place</li> <li>– Enhanced national and regional commissioning support will be required.</li> <li>– Monitoring and co-ordination of escalation of interdependent services</li> <li>– Potential for devolved nation engagement for mutual aid and capacity transfers</li> <li>– Increased frequency of CCCP meetings</li> </ul>
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### 3.9 In particular, this guidance requires:

- Adult Critical Care Units to submit information on their bed capacity through NHS Pathways [Directory of Services](#) (DoS) twice daily at 8am and 8pm
- Groups of Adult Critical Care Units to work jointly together through a networked approach co-ordinated by Adult Critical Care Operational Delivery Networks (ODNs). The use of local “bubbles” or joint working systems between Trusts may be appropriate
- Region and ICSs to be assured that all Adult Critical Care Units and Trusts in their locality have adequate escalation and business continuity plans in place. These plans are required to have clear escalation triggers to EPRR structures.
- ACC services to work with relevant other services, including Paediatric Critical Care services and Children and Young People Operational Delivery Networks, to ensure that surge plans are developed which consider if and how reciprocal support will be provided in the event of “Protect” escalation being reached (table 2).

### **Alignment with system, regional and national incident management**

- 3.10 Early warning triggers to help anticipate the consequences of surge should be put in place. This mechanism should take into consideration the size of the system, the bed stock, size of units, the aetiology of the need to surge and maximum potential surge capacity. The availability of suitably trained staff and readiness to respond should also be considered.
- 3.11 Ongoing acute surge of all types is best coordinated via the System Control Centres (SCC) within each ICB, where there is oversight of all aspects of the Urgent and Emergency Care (UEC) system. SCCs have access to the ACC Directory of Service (DoS) dashboard and, during their hours of operation, can support ACC ODNs, Trusts or units to escalate concerns and seek mutual aid.
- 3.12 Where the surge in demand is more rapid or impacting across multiple regions EPRR teams are key to assisting hospitals in the management of surge in acute demand. ODNs and regional Critical Care Cells act as a conduit to ensure a coordinated regional response. Where a national response is required, National Critical Care Panel could be stood back up.
- 3.13 Regions and Systems will use appropriate structures to ensure escalation through the levels is understood and enacted consistently; and to ensure mutual aid and capacity transfers are enacted appropriately.

## 4 Inter-regional Mutual Aid

- 4.1 Any region can make a request to the national Critical Care Capacity Panel for inter-regional mutual aid and/or capacity transfers as part of the surge escalation process. These will be considered by regional comparison of key criteria including:
- Critical Care occupancy
  - Surge capacity and potential to increase surge provision.
  - Staffing ratios
  - Tertiary and specialist occupancy
  - CRITCON score
  - Local intelligence including the balance of emergency vs. elective activity.
- 4.2 If transfers be agreed, the process outlined in the national service specification for [adult critical care transfer](#) will be enacted.

## 5 Impact on Elective Activity

- 5.1 During periods of heightened pressure, the NHS sometimes makes decisions to postpone elective activity and redeploy staff to support other services, including the sickest patients in adult critical care. These decisions should be made at a system level in discussion with NHS England regional team and take into consideration:
- a) Elective activity priorities must be determined across a system and applied to the system as a whole and not as single sites
  - b) The system approach may relocate some or all elective activity to other providers within a system, including the independent sector.
- 5.2 Clinical validation of waiting list should be undertaken when elective activity is impacted and should be regularly reviewed.
- 5.3 The prioritisation categories are based on the prioritisation tool produced by the Federation of Surgical Specialty Associations and endorsed by all surgical colleges. The prioritisation of elective surgery should continue to be carried out at a Trust level based on [FSSA guidance](#):

## 6 Workforce considerations

- 6.1 Workforce of all specialties including medical, nursing, pharmacy and allied health professionals are integral to the implementation of any surge plan. As such, consideration of the ability to flex staffing levels<sup>7,8</sup> to meet rising demand whilst maintaining safe, quality care for patients is central to implementing this guidance.
- 6.2 Key considerations are:
- a) The need to maintain safe staffing.
  - b) the availability of suitably trained staff, equipment, and specialist supplies.
  - c) ensuring all critical care nurses are trained and competent to care for level 3 patients to build flexibility within the workforce to meet increased case mix acuity within the unit.
  - d) redeployment of support staff and non-critical care staff, to enable cohorted capacity, and to meet increased demand in number or acuity of patients.
- 6.3 Surge conditions can contribute to poor mental health and wellbeing in critical care staff and surge support staff. Support should be in place to provide mental health and wellbeing support, including highlighting local, regional and national resources. Means of accessing local psychology and mental health services should be highlighted.
- 6.4 Primary prevention of mental health and wellbeing challenges may be supported by ensuring training and support is provided to surge staff, ensuring time is provided for debriefs and reflection even during surge conditions, and enabling mental health support staff within units (e.g. Professional Nurse Advocates) to deliver their duties.

## 7 De-escalation and Debrief

- 7.1 As pressure and demand on Adult Critical Care services reduces there should be a clear staged approach to de-escalation across systems and the production of lessons learnt documentation for cascade. An essential part of this process is to ensure all staff are able to participate in reflective debrief sessions to identify good practice, to set out opportunities for learning and to ensure staff are able to access health and wellbeing support. Feedback from the debrief sessions should be used to update plans to ensure continuous improvement and ideally lead to a reduction in future occasions where escalation plans need to be activated.

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<sup>7</sup> [https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/12/C0833\\_advice-on-acute-sector-workforce-models-during-COVID\\_with-apps\\_10dec.pdf](https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/12/C0833_advice-on-acute-sector-workforce-models-during-COVID_with-apps_10dec.pdf)

<sup>8</sup> [https://www.baccn.org/static/uploads/resources/UKCCNA\\_position\\_Sep\\_2021\\_FINAL.pdf](https://www.baccn.org/static/uploads/resources/UKCCNA_position_Sep_2021_FINAL.pdf)

## 8 Interdependent services

- 8.1 It is recognised that there are complex interdependencies between Adult Critical Care and other services, which require close oversight and coordination at a national, regional and system level (e.g. ECMO or PICU). When one service is experiencing increased demand, it is likely that other or all services will be under the same level of increased pressure.
- 8.2 The coordination of capacity for interdependent services is a responsibility of the national Adult Critical Care Capacity Panel. As such capacity and demand for the interdependent services will be reported by Regions to this group, escalating concerns at the earliest opportunity. This will enable the coordination and prioritisation of staffing resource and estate capacity to maintain equitable service provision.
- 8.3 Plans have been developed for the six interdependent specialised services which would provide direct care to a rapidly rising number of patients within an adult critical care setting, in a surge scenario. They are listed here and links to further information are included.
- a) [Respiratory Extracorporeal Membrane Oxygenation](#) (ECMO)
  - b) [Renal Replacement Therapy in Critical Care](#)
  - c) [Burns](#)
  - d) [Paediatric Intensive Care](#)
  - e) [Adult Transfer Services](#)
  - f) [Solid Organ Transplant services](#)

## 9 Supporting information

- 9.1. OPEL and CRITCON score and definitions.
- [OPEL definitions](#)
  - [CRITCON definitions](#)



## 10 Glossary

Phrase	Definition
Adult Critical Care	As set out in ICS Consensus statement included on page 3
Baseline beds	The total number of adult critical care beds usually commissioned
Capacity	The total number of staffed beds which could accept a patient requiring critical care
Capacity transfer	The transfer of a patient for non-clinical reasons to create capacity for other patients.
Casemix	The clinical profile of patients within a service
Clinical transfer	The transfer of a patient for clinical reasons
Critical Care Capacity Panel	National meeting to oversee management of critical care capacity across regions and cross regional mutual aid. Decision making informed by community infection rates, Adult Critical Care data, interdependent service demand and capacity and availability of resources including equipment
Critical Care Cells	Provide regional oversight of operational delivery and are the first escalation point within systems. The membership includes ODNs, medical leads and commissioners. This group reports in to UEC and EPRR structures
Decompression	This includes a range of measures to reduce the pressure on capacity within a Critical Care unit or system.
NHS Resilience	Emergency Preparedness Resilience and Response teams as set out in <a href="https://www.england.nhs.uk/ourwork/eprp/qf/">https://www.england.nhs.uk/ourwork/eprp/qf/</a>
Local escalation plans	Plans that are agreed by leaders at a system or regional level
Mutual aid	Sharing of resources between units, hospitals, trusts, systems, or regions. This may include staff redeployment, sharing of medicines or equipment. It may also include the transfer of patients from one unit to another to better balance service pressures
Normal clinical pathways	Existing treatment and care process for patients that have not been implemented solely as a response to the pandemic
Operational Delivery Networks (ODNs)	Commissioned to provide coordination and oversight of Adult Critical Care within systems (or specified regional areas). Reporting into Critical Care Cells and regional EPRR structures
Surge	Increasing capacity beyond usual footprint to meet increasing demand
Staffing ratios	As set out in GPICS published guidance
Secondary care	Secondary care, which is sometimes referred to as 'hospital or acute care', can either be planned (elective) care, or urgent and emergency care (non-elective)
System first	Decisions made at a local level within an Integrated Care System as the first level response
Tertiary services	Tertiary care refers to highly specialised treatment
Very high local surge	100% baseline capacity occupied with no discharges in the previous 24 hours

## 11 Commissioned Capacity

North of England				
Trust	Commissioned Beds	Level		Total Level 3 equivalent
		2	3	
North Cumbria Integrated Care FT	15	6	9	11
Newcastle Upon Tyne Hospitals FT	86	40	46	66
Northumbria Healthcare NHS FT	15	8	7	11
South Tyneside & Sunderland FT	22	10	12	17
Gateshead Health FT	12	6	6	9
County Durham & Darlington FT	21	10	11	16
North Tees & Hartlepool FT	16	6	10	13
South Tees FT	61	32	29	36
<b>Totals</b>	<b>248</b>	<b>118</b>	<b>130</b>	<b>179</b>

West Yorkshire				
Trust	Commissioned Beds	Level		Total Level 3 equivalent
		2	3	
Airedale NHS FT	7	4	3	5
Bradford Teaching Hospitals NHS FT	16	8	8	12
Calderdale & Huddersfield NHS FT	13	4	9	11
Mid Yorkshire teaching Hospital NHS F	20	6	14	17
Leeds Teaching Hospitals NHS FT	64	34	30	47
Harrogate & District NHS FT	7	4	3	5
<b>Totals</b>	<b>127</b>	<b>60</b>	<b>67</b>	<b>97</b>

South Yorkshire & Bassetlaw Yorkshire				
Trust	Commissioned Beds	Level		Total Level 3 equivalent
		2	3	
Barnsley Hospital NHS FT	13	5	8	10.5
Doncaster & Bassetlaw Hospitals NHS FT	26	12	14	20
Sheffield Teaching Hospitals NHS FT	76	39	37	56.5
Rotherham NHs FT	13	8	5	9
<b>Totals</b>	<b>128</b>	<b>64</b>	<b>64</b>	<b>96</b>

North Yorkshire & Humber				
Trust	Commissioned Beds	Level		Total Level 3 equivalent
		2	3	
Hull Royal Infirmary	22	10	12	17
Castle Hill	22	12	10	16
York	16	8	8	12
Scarborough	8	4	4	6
Grimsby	13	8	5	9
Scunthorpe	8	2	6	7
<b>Totals</b>	<b>89</b>	<b>44</b>	<b>45</b>	<b>67</b>