

Yorkshire and the Humber Adult Critical Care Escalation Framework

May 2014

Version 3

Prepared by the Operational Delivery Networks (ODN) of North Yorkshire, North Trent and West

Yorkshire Adult Critical Care with NHS England (North Yorkshire and Humber, West Yorkshire and

South Yorkshire and Bassetlaw area teams)

This document is based on the work of the Cheshire & Mersey, Greater Manchester and Lancashire & South Cumbria Adult Critical Care Operational Delivery Networks Major

Contingencies Plan developed on behalf of NHS North of England (NW region) (Oct 2013).

# 1. Summary

The principles of a Yorkshire and the Humber (Y&H) Critical Care escalation approach are:

 1.1. An Integrated model.

 1.2. Stepped increase in capacity in response to demand.

1.3. Preservation of the ‘standard’ clinical pathway for critically ill patients for as long as possible

1.4. Preservation of emergency, general and specialist services for as long as possible.

1.5. Paediatric patients will be admitted to PICU’s for as long as possible, using the national PICU bed stock as a resource. This framework does not include paediatric critical care services.

 1.6. Equity of access and treatment across Y&H.

1.7. Management of Y&H capacity as a single entity, recognising discrete conurbations and specialist centres but trying to keep the population as close to their home as possible.

1.8. At times of escalation there will be a requirement for an increase in the number of patients requiring inter-hospital transfer to access critical care and the distance travelled. This may occur early depending upon the nature of the escalation scenario as the Y&H units strive to maintain the standard of normal clinical pathways.

1.9. Stepped decrease in capacity and return to normal activity as soon as possible in response to demand.

1.10. These principles are based on the experiences from the Influenza outbreaks of 2009-10 and 2010-11, but can equally be applied to other scenarios that require critical care to escalate capacity.

1.11. The relationship between responsiveness of a system and the capacity is linked to the case-mix (% elective cases), the length of stay of that case-mix and any unfilled capacity. In our model the adult general level 3 critical care units are working at approximately 85% occupancy with a 10% elective throughput and a length of stay of approximately 4 days.

1.12. Depending upon the presenting clinical situation, patients who access critical care may have a median length of stay of approximately 6 days. It is therefore imperative that the triggers to activate additional capacity are sensitive enough to give sufficient time to free up beds before the system is grid locked. The Y&H Critical Care Operational Delivery Network’s (ODNs) will work closely with NHS statutory organisations and

the NHS Resilience Emergency Preparedness, Resilience and Response teams to optimise the prediction of a requirement for expansion of capacity.

1.13. This document provides a framework for the development and implementation of the critical care response to a significant incident or emergency which result in an increase in critical care activity across Y&H. It is based on a similar framework in place in the North West and meets the requirements of the national adult critical care escalation standard operating procedure (SOP)[[1]](#footnote-1).

1.14. This document is intended to be used by all acute trusts with critical care facilities on site to assist with planning for, and responding to, issues that will arise in the management of adults requiring critical care. It is intended that this guidance should be incorporated within local Trust escalation plans and should be viewed as part of the overall response.

1.15. Local escalation plans should include:

1.15.1.Local escalation triggers and actions

1.15.2.The relevant actions from the action cards included in the national SOP[[2]](#footnote-2)

1.15.3.Reference to the on call alerting arrangements

1.16. This document should be considered in line with the following documents:

1.16.1.NHS England incident response plan (IRP)

1.16.2.West Yorkshire adult critical care ODN critical care transfer guidelines

1.16.3.Trust incident and escalation plans

1.16.4.ICS Guidelines for the transport of the critically ill patient (3rd edition

2011)

1.17. Additional, complementary management of surge and escalation plans exist for regional and national specialist critical care services including:

1.17.1.Burns services (adults and children)

1.17.2.Adult respiratory extra corporeal membrane oxygenation (ECMO) services

1.17.3.Paediatric intensive care services

1.17.4.Paediatric ECMO services

# 2. Planning assumptions

2.1. NHS acute trusts in Y&H will collectively deliver a 100% increase in the number of adult level 3 critical care beds available at the height of escalation (level 6 – see section 13). This is identified in section 6.

2.2. Acute trusts will provide mutual aid to one another, thereby ensuring optimal use of the critical care capacity.

2.3. Non-critical care trained nursing staff will be required to care for patients within critical care using a “buddy” system and should where possible be trained in this role in advance of a contingency occurring.

 2.4. Increases in capacity will be stepped according to demand.

 2.5. De-escalation of additional capacity will occur at the earliest opportunity.

2.6. All NHS acute trusts will be guided by their local command and control arrangements which are aligned to those of NHS England, thereby ensuring equity of access and treatment across Y&H.

2.7. The escalation in capacity is realistic and sustainable for relevant periods, for example 7 days for mass casualty response, many months for surge/rising tide events (e.g. influenza)

2.8. Difficult clinical decision making and implementation of policies in relation to triage and futility of patient interventions should only be made after consultation with the wider critical care community.

2.9. Ordinarily, within Y&H, local data is collected on the national electronic bed register held by NHS Pathways Directory of Services[[3]](#footnote-3) (DoS), supported by the Yorkshire Intensive Care Bed Bureua (YICBB) hosted by the Yorkshire Ambulance Service NHS Trust (YAS). See section 8.

2.10. In an escalation situation, local data collection will be complemented by a daily SITREP which may include Capacity Management data submissions and DH feedback from within England. This data is used to inform discussion and decision- making in NHS Strategic (Gold) Command about escalation of critical care capacity. This framework identifies level 4 (see section 13) as the level at which this SITREP will be required.

2.11. Unlike some other types of critical care services, adult critical care services does not have a national lead manager based within NHS England. This is because, unlike the paediatric and highly specialised critical care services, the majority of adult critical care services are commissioned by Clinical Commissioning Groups. This is in addition to a proportion of the specialised services care pathways which require postoperative adult critical care support commissioned by NHS England.

2.12. The levels of care (1, 2 and 3) are shown below

|  |  |
| --- | --- |
| **Level**  | **Definition**  |
| **Level 0**  | Patients whose needs can be met through normal ward  |
| **Level 1**  | Patients at risk of their condition deteriorating, or those recently relocated from higher levels of care, whose needs can be met on an acute ward with additional advice and support from the critical care team  |
| **Level 2**  | Patients requiring more detailed observation or intervention including support for a single failing organ system or post-operative care and those 'stepping down' from higher levels of care.  |
| **Level 3**  | Patients requiring advanced respiratory support alone or monitoring and support for two or more organ systems. This level includes all complex PATIENTS requiring support for multi-organ failure  |

Table 1: Definitions of level of care[[4]](#footnote-4)

# 3. Background and planning

3.1. A response requiring adult critical care escalation might be required in the event of a significant incident or emergency. A significant incident or emergency can be described as any event that cannot be managed within routine service arrangements. Each require the implementation of special procedures and may involve one or more of the emergency services, the wider NHS or a local authority. However, a significant incident or emergency to the NHS may not be any of these for other agencies, and equally the reverse is also true. A significant or emergency may include[[5]](#footnote-5);

3.1.1. Times of severe pressure, such as winter periods, a sustained increase in demand for services such as surge or an infectious disease outbreak that would necessitate the declaration of a significant incident however not a major incident;

3.1.2. Any occurrence where the NHS funded organisations are required to implement special arrangements to ensure the effectiveness of the organisations internal response. This is to ensure that incidents above routine work but not meeting the definition of a major incident are managed effectively.

3.1.3. An event or situation that threatens serious damage to human welfare in a place in the UK or to the environment of a place in the UK, or war or terrorism which threatens serious damage to the security of the UK. The term ‘‘major incident’’ is commonly used to describe such emergencies. These may include multiple casualty incidents, terrorism or national emergencies such as pandemic influenza.

3.1.4. An emergency is sometimes referred to by organisations as a major incident. Within NHS funded organisations an emergency is defined as the above for which robust management arrangements must be in place.

3.2. This framework considers two types of adult critical care escalation response; mass casualty (rapid) escalation and rising tide escalation.

3.3. The escalation approach taken in Y&H is in line with the REAP (resource escalation action plan) model adopted by ambulance services nationally.

 3.4. The five levels of escalation are identified below:

|  |  |
| --- | --- |
| **Level**  | **Summary**  |
| Level 1  | Normal  |
| Level 2  | Concern  |
| Level 3  | Moderate Pressure  |
| Level 4  | Severe Pressure  |
| Level 5  | Critical  |
| Level 6  | Potential Service Failure  |

Table 2: Escalation levels and summary

3.5. **Mass casualty response (requiring sudden escalation of critical care capacity).**

3.5.1. A mass casualty response is triggered where an incident or simultaneous incidents result in more than 100 casualties. This framework also identifies a trigger of *“major incident involving large number of casualties requiring intensive care”* (level 5) where this number might not be reached. It is recognised that critical care capacity at the time will be an indicator of the casualty threshold at which escalation in line with this framework will be required.

3.5.2. It is clear that during any type of incident that produces mass casualties requiring critical care, managing capacity will be a significant challenge.

3.5.3. In a mass casualty response, where patient numbers will be in the hundreds, a significant number will require critical care support. For this to occur there is recognition that mutual aid across regions and even nationally will be required to accommodate demand – this is termed the ripple effect.

3.5.4. The table below provides planning assumptions that can be used to calculate the potential number of patients in each category related to patient condition.

|  |  |  |
| --- | --- | --- |
| **Category**  | **Patient condition**  | **% of total casualties**  |
| P1  | Casualties needing immediate life-saving intervention and/or surgery  | 25  |
| P2  | Stabilised casualties needing early surgery but delay is acceptable  | 25  |
| P3  | Casualties requiring treatment, longer delays are acceptable  | 50  |

Table 3: Planning assumption for mass casualty incidents

3.5.5. The ‘ripple effect’ principle of moving large numbers of patients to accommodate casualties is aimed at reducing the number of longdistance transfers and spreading the demand rapidly across ‘zones’ and large numbers of organisations.

3.5.6. Each trust will be required to identify patients suitable for transfer to another facility within a pre-determined time frame and radius. Each trust may well be classified as a receiving and a transferring trust, and arrangements need to be in place to ensure the pattern of ‘ripples’ is effectively communicated within the organisation.

3.5.7. Dependent on the nature of the incident, an increased demand on theatre services is anticipated. Consideration may be required if plans have previously identified critical care escalation to be accommodated in theatre areas.

##  3.6. Rising tide response

3.6.1. Depending on the presenting clinical condition the assumption is that the majority of patients will have a single organ failure and the clinical interventions required would span from simple oxygen therapy to conventional or advanced mechanical ventilation strategies. In the presence of particular diseases e.g. influenza, certain patient groups would appear to be more vulnerable e.g. paediatrics, pregnant women, obese patients and patients with pre-existing health problems (particularly respiratory disease and immunosuppression).

3.6.2. In the group of patients with refractory hypoxia, specialist ventilatory strategies such as inhaled nitric oxide and extracorporeal membrane oxygenation (ECMO) have been found to be of potential value. Such ventilatory strategies are available on limited sites throughout Y&H. The ECMO service is delivered by University of South Manchester with a catchment area which includes provision within Y&H.

3.6.3. To ensure that ECMO bed utilisation is optimal under such circumstances NHS England recommends the establishment of local rotas of High Volume Advanced Respiratory Centres within each Critical Care ODN. Nationally the use or not of High Volume Centres is under review. A national standard operating procedure for ECMO is available

3.6.4. Organisations should be prepared for a significant number of patients with refractory hypoxia, often of rapid onset related to some presenting clinical causes. Additionally, there may be a significant number of associated incidences of acute renal failure; therefore organisations should be aware of the need to escalate appropriate supportive therapies.

# 4. Current adult critical care provision

4.1. Critical care capacity is commissioned and provided across a variety of organisations. The sites providing adult critical care services are identified below. Specific, current, capacity is available on DoS.

 4.2. In line with planning to date, Trusts within Y&H have plans in place to increase level 3 capacity. This is identified below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ODN  | Trust  | Adult Critical Care Beds  | % increase achievable within 1 week  | % increase achievable within 4 weeks  |
| Total Beds = 139West Yorkshire  | Airedale  | 7 | 50%  | 100%  |
| Bradford  | 16 | 50%  | 100%  |
| Calderdale and Huddersfield  | 13 | 50%  | 100%  |
| Leeds  | 93 | 50%  | 100%  |
| Mid Yorkshire  | 23 | 50%  |  100% |
| Total Beds = 83North Yorkshire  | Harrogate  | 8 | 50%  | 100%  |
| York and Scarborough | 21 | 50%  | 100%  |
| Hull and East Yorkshire  | 40 | 50%  |  100% |
| North Lincolnshire and Goole  | 14 | 50%  | 100%  |
| Total Beds = 137North Trent  | Barnsley  | 11 | 50%  | 100%  |
| Doncaster and Bassetlaw  | 26 | 50%  | 100%  |
| Rotherham  | 13 | 50%  | 100%  |
| Sheffield  | 87 | 50%  | 100%  |

Table 4: Critical care provision across Y&H and expanded capacity expectations

4.3. This expansion in capacity will be triggered by a variety of indicators, in a tiered approach as identified in the operational escalation matrix (section 13). Local bed pressures will be managed through existing and well established arrangements already in place (level 1).

4.4. If this expanded capacity is to be utilised efficiently to meet expectations and clinical need across the NHS the following areas have been identified which Trusts should consider in planning their expanded capacity:

4.4.1. It is imperative that real-time local data collection systems are fully exploited during period of normal service delivery so that these are embedded and understood for an escalation situation (for example, disciplined approach to completing DoS six hourly).

4.4.2. Escalation plans to deliver expanded capacity locally need to identify sites and resources required for additional capacity dependent on whether the trigger is a sudden surge requiring rapid escalation or a slow and prolonged rise in demand. For example; clinical areas which will assume a critical care facility role will need to have appropriate equipment and consumable supplies. Good practice identifies that action cards within each Trust helps to support staff in ensuring timely actions

4.4.3. Trusts should identify step-down facilities between critical care and the wards where high flows of oxygen and sufficient monitoring can be provided. General wards will frequently have a limitation of the flow rate of oxygen, which precludes certain clinical therapies being used in these areas. Theatre Recovery will not have these restrictions and will often be the only practical option available.

4.4.4. During escalation flexible working patterns including removal of any staff overtime bans should be implemented.

4.4.5. Consideration should be given to increasing both Consultant and trainee medical staffing of critical care rotas in proportion to escalation. Available Anaesthetic staff as a result of surgery cancellation during escalation should be utilised to enhance the critical care service, with priority given to releasing those with sessional commitment to critical care or with recent experience in critical care.

4.4.6. Trusts’ planning assumptions need to take account of the anticipated increased level of staff sickness during particular instances of clinical events, as experienced during the Influenza outbreaks, and nurse/patient ratios employed for critically ill patients will therefore need to be flexible. The flexibility will be achieved through utilising nursing staff without recognised critical care competencies and/or experiences working under the supervision of colleagues who possess critical care knowledge and skills. The point above is particularly pertinent where critical care nursing staff is under high pressure.

4.4.7. Identification, in advance, of appropriately skilled staff, who are able to be deployed to critical care areas and step-down facilities if required. A regularly reviewed register of these staff and their skills is good practice.

4.4.8. Adequate equipment and consumables are available to support the use of level 2 beds to enable Level 3 functionality.

4.4.9. Identification of additional equipment requires effective planning and if necessary procurement, in advance of any anticipated escalation process. If additional equipment is required to optimise level 3 critical care capacities across Y&H, the following principles should be used to guide the commissioning process:

* There should be no staffing problems that would preclude theimmediate use of the equipment.

* The proposed use of such equipment should be appropriate and complement existing Acute Trust and wider Y&H plans.

* Trusts should give special consideration to equipment needed to support paediatric critical care delivery outside of tertiary centres.

* Priority should be given to equipping un-commissioned bed spaces in existing Level 3 facilities.

* Additional consumables should be made available on a 24/7 basis during escalation.

# 5. Clinical judgement and decision making

5.1. It is imperative that the standard clinical pathway for critically ill patients, including the use of decision making tools, is maintained for as long as possible even when trained critical care nurses are supported by trained nurses from other clinical areas. It may however be necessary to escalate to a level which would require difficult triage and end of life decisions to be made. These may lie outside the scope of normal practice. In this scenario it is recommended that decision logs are maintained for both major organisational decisions and also for individual patients in line with Trusts record keeping and major incident logging arrangements.

5.2. Organisational decisions will be made with a high degree of collective responsibility. It is recommended that a framework should be used to provide similar collective responsibility and decision support for clinicians making referral, admission, discharge and treatment

withdrawal decisions. This has been termed the ‘three wise men’ approach. The clinical and logistical context at the time the decision is made should be clearly documented. At this stage clinical judgement should be used to make admission, treatment and discharge decisions. Thresholds may change significantly from hour to hour or day to day due to staff and resource availability.

5.3. Critical Care clinicians are experienced in determining withdrawal of treatment that is ineffective in sustaining life, and it is likely that active withdrawal of treatment will be more prevalent at escalation levels 5 and 6 (section 13).

5.4. Reverse triage must not be implemented unless authorised by NHS England and will be implemented only after all available critical care capacity is saturated.

# 6. Data sources

6.1. There has, in the past, been a notable difference in information alongside the more reliable DoS (previously CMS). During periods of escalation the ODNs will ensure information presented is as accurate as possible from all sources.

6.2. YICBB is a local service that currently manages the adult critical care capacity data held on DoS and inputted by individual critical care units. YICBB monitor the completeness of data and follow up any delayed or unusual submissions. Units are familiar with this system and update their information every six hours during normal service delivery. This is required more frequently during escalation to the point of being updated every time their capacity changes (retaining a minimum of six hourly updates).

6.3. The ODNs coordinates the auditing of the quality of inter-hospital critical care transfers and report on clinical and non-clinical transfer data.

6.4. In escalation, Trusts will be responsible for collecting additional data to inform more regular SITREPS

6.5. Critical Care patient information systems, such as MIDAS and Ward Watcher, can assist in the profiling of patients admitted to critical care units.

6.6. The collection of clinical data during some clinical situations may be required to help guide successful treatment strategies and trusts must prioritise resources to facilitate this.

6.7. In specific incidents, Public Health England (PHE) may require a full dataset for each patient; Trusts should be prepared to respond to these requests as required.

# 7. Escalation

7.1. The decision to activate this escalation framework will be taken between the NHS commanders (NHS England area teams’ directors on call) or on direction, nationally. Where possible, these decisions will be informed by the advice and expertise of the ODN managers and Trust medical directors.

7.2. Local capacity or surge pressures often require Trusts’ critical care escalation plans may be activated without the need to activate this framework. However, where the triggers for level 2 (section 13) have been reached, local escalation plans should be activated.

7.3. As soon as the Y&H escalation framework is activated, Trust emergency planning leads should engage with critical care clinicians, trust management executives and NHS England Commanders (in line with the command and control arrangements in place) to ensure that there is full appreciation of the seriousness of capacity pressures and an understanding of its significance.

7.4. Trust Chief Executives are accountable for the implementation of escalation processes within their organisations.

##  7.5. Rapid escalation response

7.5.1. Where a rapid escalation has been triggered by an incident resulting in large numbers of casualties requiring intensive care this framework identifies immediate escalation to level 5. It is recognised that an incident which has the potential to result in a large number of casualties requiring intensive care will also trigger level 5 escalation.

7.5.2. A rapid escalation is likely to have been triggered by a situation that also requires the activation of other (major) incident response plans. Critical care units should have department specific action cards available in this situation.

7.5.3. However, if the incident has happened outside of Y&H it is possible that the Trust’s incident response plans might not have been activated. Recognising the “ripple effect” principle outlined above (section 4.4.5), critical care units might be expected to receive patients requiring treatment that have not been involved in the incident.

7.5.4. Communications between organisations during a rapid escalation response will follow those mechanisms and channels

7.5.5. As identified at levels 2 to 4, specific actions to generate capacity will be undertaken but will be completed in a more rapid timescale. These actions are identified below (section 13).

##  7.6. Rising tide response

7.6.1. Rising tide incidents which require or might require escalation of adult critical care services in line with this framework are more likely to include a period of surveillance and preparation

7.6.2. Levels 2 to 4 identify specific actions to generate capacity within critical care in response to increased demand. Minimal actions are summarised within the operational escalation matrix (section 13) and further detail is given below (section 9.7):

##  7.7. Actions to generate capacity

7.7.1. Actions to generate capacity are identified below. These will be undertaken at a pace and scale in line with requirements of the incident.

* Suspension of elective surgery, including that in standalone specialist setting (where the treatment pathway contingency includes transfer to a critical care environment). See section 9.7.2 below.

* Review of surgery and any known in-patient emergencies to maximise theatre availability.

* Rationalisation of staff in theatre to maximise availability, particularly of senior staff and those with critical care experience.

* All current critical care patients to undergo review and wherever possible discharged to an alternative, stepped down but appropriate level of care.

* Identification and transfer of those patients that still require critical care but could be appropriately care for in another facility.

* Suspension of elective cardiac and neuro-surgical programmes and conversion of beds and staff to general critical care use. Priority should be given to transferring appropriate patients from elsewhere into these escalated beds rather than to local escalation.

* Staff made available throughout the trust and any associated ‘cold site’, and allocated appropriately to support critical care and other receiving areas in line with Trust’s incident response procedures.

* The critical care unit to be secured as far as practical and all visitors asked to leave immediately. This is to enable staff to operate effectively in a more pressurised environment without unnecessary hindrance or distraction.

* Equipment and consumables made available from stores, pharmacy and elsewhere for critically ill patients.

* Allocation of anaesthetists for emergency treatment (surgery) of casualties to be done in conjunction with support for critical care.

* Identification of suitable beds to supplement level 2 capacity will also be necessary to ensure patient flow. Some clinical areas have logistical barriers relating to the presence of piped gases and limitations on total oxygen supply to a clinical area. This is particularly relevant to general ward areas and by default theatre recovery will often be the only area suitable to establish a temporary level 2 area.

* Redeployment of non-critical care trained staff to reinforce critical care colleagues (medical, nursing, ODP) to provide direct care for patients. For the nursing staff a “buddy” system is recommended.

7.7.2. The decision to divert resources from routine work across Y&H as a response to the increasing number of patients presenting with a clinical event impacting on critical care capacity, will be taken in line with the NHS command and control structure.

7.7.3. Temporary suspension of elective activity will be implemented (as clinically appropriate) on the following phased basis:

Step 1 – temporary cancellation of all elective non-life threatening adult nononcology surgery, where it is expected the patient will require Adult Critical Care Service support in the immediate post-operative period;

Step 2 – as step 1 but also the temporary cancellation of all elective non-life threatening adult surgical and cardiothoracic surgery, where it is expected the patient will require Adult Critical Care Service support in the immediate post-operative period;

Step 3 – as step 1 and 2 but also the temporary cancellation of all elective major adult oncology and cardiothoracic surgery where it is expected the patient will require Adult Critical Care Service support post-operatively.

# 8. De-Escalation

8.1.1. There is recognition of the need for organisations to return to normal function as soon as possible to enable everyday Trust activity; however this should not impact negatively on the ability to provide mutual aid across Y&H in the event there are continuing localised pressures. It is important that local identification and discussions on

the ability to de- escalate is directed by NHS England and the ODNs in line with the command and control arrangements

8.1.2. If any organisation or individual requires clarification about implementation at any stage this should be sought at the earliest opportunity to assure effective, equitable use of limited resources across the health economy.

# 9. Diverting resources from elective work and related performance implications

9.1. It is expected that providers and commissioners will develop a consistent approach to funding additional costs resulting from escalation and the necessary postponement of elective work. This is likely to be influenced by scale of the response.

# 10. Staff indemnity

10.1. As the escalation response continues, it is recognised that all groups of clinical staff (medical, nursing and allied health professionals) are likely to be expected to work outside of their usual working practices. Examples of this include:

* Caring for greater numbers of patients than is recognised to be acceptable and safe by medical and nursing professional bodies.
* Non-critical care trained staff working alongside critical care trained colleagues, caring for critically ill patients.
* Working for longer hours than is stipulated by the European Working Time Directive.
* Staff providing a limited standard of critical care than is normally

considered acceptable particularly during higher levels of escalation.

* Medical staff having to adjust their decision-making process for admission and treatment withdrawal, in times of extreme capacity limitations.

* 1. Trust plans and policies should ensure that staff are supported and protected in adopting the flexibility required to deliver the escalation expectations within this framework. Where possible these plans and policies should be consistent across Y&H organisations.

* 1. Changes to working practices in response to an escalation situation should be documented and communicated to affected staff. These changes should be regularly reviewed.

# 11. Operational escalation matrix

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Level**  | **Summary**  | **Trigger**  | **Action**  | **Communication**  | **SOP Phase**  |
| **Level 1**  | **Normal**  | Business as usual - more than 4 beds available in each network  | 1. Standard operational procedures
2. DoS maintained 6 hourly (minimum)
3. Prior to anticipated seasonal pressure, review triggers and actions and reissue escalation CONOPS and review
 | 1. *In hours:* ODN – daily monitoring of DoS
2. Area team – ad hoc monitoring of DoS
3. *Winter – ODN update to weekly, area team, teleconferences*
 | Normal Business / Pre-Surge  |
| **Level 2**  | **Concern**  | Low bed alert (LBA) activated - less than 4 beds available for 24 hours across one or more network  | 1. DoS maintained 6 hourly (minimum)
2. Yorkshire Intensive Care Bed Bureau (YICBB) distribute low bed alert notification
3. Units to review level 1 delayed transfers
4. Units to ensure sufficient staffing for forthcoming shifts (to enable all funded capacity to be opened)
5. *In hours: ODN proactive support to units*
 | 1. YICBB - Low bed alert notification to partners across affected network
2. IC units – internal messages to advise of position and actions required
 | Local Surge and Escalation  |
| **Level 3**  | **Moderate Pressure**  | All beds open in Unique Transfer Group (UTG) but none available for 48 hours and all level 1 delayed transfers discharged out of units  | 1. Previous level actions continue (DoS updated as changes occur)
2. DoS updated as and when changes occur
3. Consider actions to generate capacity including:
	1. Units to increase beds and staffing
	2. Ventilation of patients outside of unit
4. All Y&H network beds to be opened in support of affected area
5. Activation of Trust BC plans to release staff to support intensive care
6. Units – ensure sufficient access to supplies
7. Consider inter-Trust partners’ teleconference (e.g. Medical Directors)
8. Out of network transfers
 | 1. YICBB – maintain 6 hourly LBA notifications
2. YICBB – LBA notification to EMAS, YAS and NEAS (out of network transfers may be required / increase)
3. IC units – internal messages (as per local plan) to advise of position and actions required
4. Area team – notification to other Y&H area teams, on call team, lead commissioning CCGs and North region
5. If out of network transfer, unit - notification to ODN
6. *In hours: 3xODN discussions to ensure actions are completed and identification of further actions*
 |
| **Level 4**  | **Severe Pressure**  | All beds across 3 Y&H networks open but none available for 24 hours and patients ventilated out of units  | 1. Previous level actions continue
2. Identify lead ODN (in hours) and lead area team
3. Lead area team to confirm Y&H teleconference with partners 4. Consider actions to generate capacity including:
	1. Units to increase beds and staffing (to 50% additional capacity)
	2. Network wide cancellation of non-urgent elective likely to require critical care
	3. Ventilation of patients outside of unit 5. Intra-region transfers
4. Holding statements for media interest prepared in anticipation
5. Escalation Capacity SITREP completed
6. Command and control arrangements initiated (led by lead area team)
 | 1. Area team – maintain communications with North region
2. Area team – liaison with NME communications
3. Teleconference with partners
4. Escalation Capacity SITREP completed by Trusts
5. Incident response approach to communications initiated
 | Wider Escalation  |
| **Level 5**  | **Critical**  | All beds across 3 Y&H networks open but none available for 48 hours  Major incident involving large number of casualties requiring intensive care  | 1. Previous level actions continue
2. Units supported to move towards 100% additional capacity 3. Incident response plans activated
 | 1. Previous level actions continue  |
| **Level 6**  | **Potential** **Service Failure**  | 100% additional capacity achieved but level 5 triggers remain for 24 hours  Regional or national pressure  | 1. Previous level actions continue
2. Dynamic identification of further actions
3. Regional coordination as part of command and control arrangements
 | 1. Previous level actions continue |

Version: 3 Page **18** of **19**

12. Glossary

|  |  |
| --- | --- |
|  Area team  | The local team for NHS England (West Yorkshire, South Yorkshire and Bassetlaw, North Yorkshire and Humber)  |
| BC  | Business Continuity  |
| CCGs  | Clinical Commissioning Groups. The lead commissioning groups for trusts with critical care units are identified in the contacts section (XX)  |
| CONOPs  | A Concept of Operations describes a system and the capabilities, roles and responsibilities that will be used in responding in that system (in this instance, adult critical care escalation across Yorkshire and Humber)  |
| DoS  | NHS Pathways Directory of services. This system provides a single portal for bed capacity. The information is maintained by the individual units 6 hourly. The system is managed by YICBB.  |
| DTOC  | Delayed transfers of care. With regards to intensive care, this refers to patients who are being managed in an intensive care setting but could be safely cared for in a another environment  |
| EMAS  | East Midlands Ambulance Service NHS Trust  |
| Low Bed Alert (LBA)  | A low bed alert is triggered when there are four or less beds available in a single network for 24 hours. These are issued by YICBB  |
| NEAS  | North East Ambulance Service NHS Trust  |
| North region  | The regional team for NHS England  |
| ODN  | Operational Delivery Network. There are three ODNs for Yorkshire and the Humber for critical care. West Yorkshire, North Yorkshire and Humber, North Trent. There are also ODNs for trauma, burns and paediatric critical care. ODNs are focussed on coordinating patient pathways between providers over a wide area to ensure access to specialist resources and expertise.  |
| SOP  | Standard operating procedure. For the purposes of critical care escalation, this refers to the *Management of surge and escalation in critical care services: standard operating procedure for adult critical care (NHS England, 2013)*  |
| Y&Ha | Yorkshire and the Humber geographical area  |
| YAS  | Yorkshire Ambulance Service NHS Trust  |
| UTG  | Unique Transfer Group. This is the agreed transfer routes for each Critical Care unit, defined in appendix A.  |
| YICBB  | Yorkshire intensive care bed bureau. This team are hosted by YAS and support the intensive care units across Yorkshire and the Humber by managing DoS. They proactively encourage units to update their bed capacity situation every six hours.  |

1. NHS England, 2013. *Management of surge and escalation in critical care services: standard operating procedure for adult critical care.* Available online at: [http://www.england.nhs.uk/wpcontent/uploads/2013/11/sop-adult-cc.pdf](http://www.england.nhs.uk/wp-content/uploads/2013/11/sop-adult-cc.pdf) [accessed 23.05.2014]. [↑](#footnote-ref-1)
2. Ibid [↑](#footnote-ref-2)
3. Available at <https://nww.pathwaysdos.nhs.uk/app/controllers/login/login.php> [↑](#footnote-ref-3)
4. Defined by the Health and Social Care Information Centre (HSCIC). Available at

[http://www.datadictionary.nhs.uk/data\_dictionary/attributes/c/cou/critical\_care\_level\_de.asp?shownav](http://www.datadictionary.nhs.uk/data_dictionary/attributes/c/cou/critical_care_level_de.asp?shownav=1)

[=1](http://www.datadictionary.nhs.uk/data_dictionary/attributes/c/cou/critical_care_level_de.asp?shownav=1)  [↑](#footnote-ref-4)
5. NHS England EPRR Framework 2013 (available at [www.england.nhs.uk/ourwork/eprr)](http://www.england.nhs.uk/ourwork/eprr) [↑](#footnote-ref-5)