



Yorkshire & Humber Paediatric Critical Care Operational Delivery Network

Management of Surge and Escalation in Paediatric Critical Care Services: Standard Operating Procedure

October 2018

Version 11.0

Prepared by the Y&H PCC Operational Delivery Network (ODN)
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1. Summary

The principles of this Standard Operating Procedure for Management of Surge and Escalation in Yorkshire and Humber (Y&H) Paediatric Critical Care (PCC) Services are:

- 1.1. An Integrated model across the North of England.
- 1.2. Stepped increase to capacity in response to demand.
- 1.3. Preservation of the 'standard' clinical pathway for critically ill children for as long as possible.
- 1.4. Preservation of emergency, general and specialist services for as long as possible.
- 1.5. Equity of access and treatment across Y&H and the North of England.
- 1.6. Management of Y&H PCC capacity as a single entity, in partnership with the North of England, recognising discrete conurbations and specialist centres but trying to keep the population as close to their home as possible.
- 1.7. 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 units strive to maintain the standard of normal clinical pathways.
- 1.8. Stepped decrease in capacity and return to normal activity as soon as possible in response to demand.
- 1.9. The Y&H PCC ODN will work closely with neighbouring networks as well as NHS statutory organisations including the NHS Emergency Preparedness, Resilience and Response teams and NHS Winter Team (when convened) in order to optimise the prediction of a requirement for expansion of capacity.

2. Introduction

- 2.1. The Yorkshire & Humber Paediatric Critical Care Operational Delivery Network ("the ODN") is committed to ensuring that a consistent approach is applied to the delivery of safe care.
- 2.2. Paediatric critical care services are inherently linked to the delivery of other specialised children's services. Paediatric Intensive Care Units (PICUs) will often experience increased demand for capacity due to the impact of one or more of these specialised children's services. This can

result in PICUs needing to open extra capacity which consequently has an affect on the availability of specialised staff and other necessary resources. When there is additional pressure on capacity, due to times of surge and extra demand, (e.g. during winter months), the PICUs may reach capacity and are not able to respond to the demand. This can result in critically ill children not being able to be placed in a paediatric critical care bed or being required to transfer a long distance to find one.

- 2.3. This document is intended to be used by all acute trusts with or without dedicated paediatric critical care facilities on site to assist with planning for, and responding to, issues that will arise in the management of children 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.

3. Purpose

- 3.1 This document sets out the background policy and process for managing surge in demand for paediatric critical care in Yorkshire and Humber. It describes how the organisations and post holders identified in the standard operating procedure should act.

4. Application

- 4.1 NHS England's requirements detailed within *Management of surge and escalation in critical care services: standard operating procedures for paediatric intensive care* (NHS England 2013) and *The Draft Paediatric Intensive Care Management of Surge & Escalation National Standard Operating Procedure – August 2015 along with the Paediatric Intensive Care North Region Process v5.1.1* (including subsequent revisions) will be met by the adoption of this plan by acute trusts, which form the Y&H ODN, alongside the on-going review of internal trust plans for surge capacity within paediatric critical care.

5. Planning assumptions

- 5.1 That supporting the delivery of paediatric critical care is a shared responsibility in Yorkshire & Humber and that Acute trusts will provide mutual aid to one another, thereby ensuring optimal use of the critical care capacity.
- 5.2 Increases in capacity will be stepped up according to demand.

- 5.3 De-escalation of additional capacity will occur at the earliest opportunity.
- 5.4 That PCC will be delivered to national clinical standards until fully staffed capacity is exceeded.
- 5.5 That an escalation plan will be implemented to deliver PCC to children able to benefit which will balance increased capacity with the minimum possible reduction in standards of care.
- 5.6 Children will continue to be admitted to PICUs for as long as possible, utilising regional and national PCC beds available as a resource.
- 5.7 That all clinical decisions will be underpinned by relevant local and national ethical guidance from (eg NHS England, General Medical Council, Nursing & Midwifery Council, Paediatric Intensive Care Society).
- 5.8 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.

5.8.1 The levels of PCC units are defined below:

PCC Level	Provided in	Description
1	All hospitals providing inpatient care to children.	Children who require monitoring of interventions defined by the Paediatric Critical Care Minimum Dataset (PCCMDS) HRG1. High dependency basic care.
2	May be specialist or non-specialist and provided in tertiary hospitals plus a limited number of DGHs.	Children who require monitoring of interventions defined by PCCMDS HRG2. Advanced high dependency care.
3	Located in tertiary or specialist centres.	Children who require ventilatory support or support of 2 or more organs/systems. Children at level 3 are usually intubated to assist breathing PCCMDS HRG3&4. Intensive care.
		Children undergoing complex monitoring &/or therapeutic procedures, including advanced respiratory support PCCMDS HRG5&6. Advanced intensive care.
4	Specialist centres	Children receiving treatment by extra-corporeal membrane oxygenation (ECMO). PCCMDS HRG7. Specialised intensive care.

6. Background

6.1 This Yorkshire & Humber Standard Operating Procedure for the Management of Surge & Escalation in Paediatric Critical Care Services is informed by the lessons learned regionally and nationally from managing the delivery of Paediatric Intensive Care (PIC) during the pandemic of influenza A (H1N1) in 2009 and the intervening years NHS Winter Resilience Plans.

6.2.1 It is based on the Operational Pressures Escalation Levels (OPEL) Framework, September 2017. This plan (v11.0) is under development and incorporates current NHS Guidance (Surge Standard Operating Procedures, November 2016) alongside recommendations/actions from NHSE (North) Winter Wash Up Meeting, Spring 2018.

7. Enabling measures

7.1 In order to maintain surge capacity these enablers will need to be maintained, held on standby or retained as procedures to be reactivated:

- Increasing the workforce by identification of staff that could be trained or retrained to work in PCC.
- Provision of training (content and materials).
- The Yorkshire and Humber Infant and Childrens Transport Service 'Embrace' will provide a service according to its '*Main Embrace Standard Operating Procedure*' *January 2014 version 2*, within the context of this Paediatric Critical Care Escalation Plan, taking into account their capacity, to include:
 - A single point of telephone contact for referring clinicians (0845 147 2472).
 - Access to immediate specialist advice.
 - Triage to an appropriate level of transport provision and dispatch of transport teams within a clinically appropriate time window.
 - Identification of a suitable cot or bed so that the most appropriate care is provided in the most appropriate location for any infant or child requiring specialist care in the Yorkshire and Humber region.
 - List of all children in region where PIC advice is sought with recording of decisions and outcome.
 - Terms of reference (Appendix 1) for the Yorkshire and Humber Critical Care Control Group (Y&HCCCG) which includes senior representation from Leeds Teaching Hospitals NHS Trust and Sheffield Children's Hospital NHS Foundation Trust.
 - Y&H ODN Operational matrix V14.0, November 2017.

8. Y&H Current PIC capacity

8.1 **Leeds Teaching Hospitals Trust (LTHT)** is the Regional ICU which provides up to Level 4 intensive care support for paediatric surgery and medicine, neuro, renal (including transplant), trauma and oncology. LTHT also offers specialist tertiary services for Liver and Cardiac.

8.2 **Sheffield Children's Hospital Foundation Trust (SCHFT)** ICU provides up to Level 3 intensive care support for paediatric medicine/surgery, neuro, trauma and oncology.

9. Surge capacity

9.1 Capacity across Y&H is currently restricted at both Tertiary units due to long term staffing issues. As a consequence there is an inability to increase capacity at present within the network.

9.2 The current level of critical care beds across Y&H is as shown in table 1 below:

Table 1: Current PIC capacity (October 2018)

	Level	LTHT	SCHFT	Total
Commissioned	2	12 (6+6)	8	20
	3	16	9	25
Current *	2	12	8	20
	3	12	9	21

*As at December 2017

10. Escalation & intervention

Nationally the levels of surge and escalation are now described using the OPEL definitions. The OPEL levels mirror systems already in use around the country, and aligns with the national Resource Escalation Action Plan2 (REAP) used by Ambulance trusts.

10.1 This plan will be activated in response to the triggers and levels identified in section 11.

10.2 Escalation to OPEL TWO is a decision as a result of a call conference between PCC Consultants on call for Leeds, Sheffield and Embrace to discuss possible options and agree the level of escalation.

- 10.3 Once the Yorkshire & Humber Critical Care Control Group (YHCCCG) is established at OPEL THREE, it becomes the source of advice to the Area Teams and NHS Strategic Command if established.
- 10.4 Escalation to OPEL THREE will in itself trigger the establishment of NHS strategic command, if this has not already been established in response to the underlying pressures/acute incident.
- 10.5 Further escalation to OPEL FOUR will be determined by the NHS Strategic Command structures.
- 10.6 De-escalation decisions are made by the group responsible at the higher level, for example at OPEL TWO the YHCCCG would determine de-escalation to OPEL ONE. This will be based on clinical advice.

11. Triggers, levels and actions

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

11.2 Assumptions

- All clinical decisions will be based upon appropriate ethical and legal assumptions.
- Paediatric Intensive Care Units are recognised as having an expected winter pressure or low surge that is considered to be 'normal' as thus the OPEL level remain as ONE. Escalation to higher OPEL levels are defined in relation to a rapidly progressive increase in demand for PIC. The most likely scenario would be an outbreak of serious communicable disease such as a pandemic influenza virus of greater severity than pandemic influenza A (H1N1).
- All trusts will refer to their own MAJAX policies as required.
- The PIC actions relate to a situation where there is excessive demand for PIC but **not** adult critical care. Where there is also excessive demand for adult critical care actions will have to be modified. This is likely to cause a more rapid escalation to a higher OPEL level.
- The care of mothers and babies in peri natal services will continue but in some scenarios, particularly excessive demand for adult critical care, the provision may come under pressure.

11.3 Role of the Yorkshire & Humber Critical Care Group

- There are "Terms of Reference" for the Y&H Critical Care Control Group (YHCCCG) which includes senior representation from the Y&H ODN, Leeds General Infirmary PICU and Sheffield Children's Hospital PICU – appendix 1.

- At specified escalation levels (OPEL TWO and above) in relation to PIC across the Network, the YHCCCG will (usually by teleconference):
 - Make decisions on escalation in keeping with this plan.
 - Report daily or more frequently as required through the YHCCCG to address critical care capacity.
 - Make decisions in relation to admission and discharge criteria in keeping with this plan.
 - Support clinicians in making individual case decisions.
 - Monitor cases being managed outside of PIC units.
 - As soon after de-escalation as is practical review any Exceptional Reports with appropriate additional provider input and disseminate 'lessons learnt' as part of this process.

11.4 OPEL triggers, levels and actions.

OPEL ONE

Triggers

- Bed capacity is limited but managed within usual winter planning arrangements
- No regional or national concerns regarding PIC beds

Actions : In hours

- Standard operating procedures apply
- Ongoing monitoring of capacity
- Prior to anticipated winter pressure, review triggers and actions, reissue escalation plans
- Embrace to provide to complete CMS 2, 6 hourly
- ODN to provide weekly SITREP at agreed time
- Units/ODN to inform NHS Winter Team of any delayed transfers with no bed available within 12 hours

Actions: Out of hours

- Ongoing monitoring of capacity
- Embrace to provide to complete CMS 2, 6 hourly

OPEL TWO

Triggers

- Actions at OPEL ONE failed to deliver required capacity
- No beds in network and patients waiting for a PIC bed
- Regional concerns regarding PIC beds
- Increasing requests for transfer from out of region because of national concerns regarding PIC beds

Actions: In hours

- Discuss any concerns with ODN Lead Nurse
- Children stabilised in outlying units if they present there
- Clinical advice on resuscitation and stabilisation by PICU via Embrace
- Maximise repatriation and transfers by Embrace
- Maximise utilisation of local paediatric HDU capacity including use of CPAP for infants with respiratory failure
- Matron to matron discussions within each unit regarding the appropriate moving and utilisation of nursing staff to support admissions
- Internal unit specific review of paediatric elective surgery requiring PIC, cancelling on basis of lower clinical need
- Careful consideration of impact on specialised services based on clinical decisions through YHCCG; supra regional service provision will require national discussion
- ODN/Embrace to contact NHSE Y&H Assistant Director on 07860 177 983

Actions: Out of hours

- Call conference between PCC consultants on call for Leeds, Sheffield and Embrace to discuss possible options and agree level of escalation
- Activation of YHCCCG
- Embrace to contact NHSE Regional Specialised Commissioner on 0191 430 2453 (back up 0191 430 2498)

OPEL THREE

Trigger

- Actions at OPEL TWO failed to deliver the required capacity
- National concerns regarding PICU capacity
- National surge protocol activated by NHSE

Actions: In hours

- Discuss any concerns with ODN Lead Nurse
- Activation of Y&H Critical Care Control Group (YHCCCG)
- Ensure SITREP is up to date
- Relevant participation in regional/national surge calls

Action: Out of hours

- Relevant participation in regional/national surge calls
- ODN Lead Nurse to be informed (via email) of agreed national actions taken

OPEL FOUR

Trigger

- Actions at OPEL THREE failed to deliver the required capacity
- Severely limited capacity nationally
- National Surge Protocol activated by NHSE
- All previous operational actions have had no impact

Actions: In hours

- Discuss any concerns with ODN Lead Nurse
- YHCCCG meets daily
- Ensure SITREP is up to date
- Relevant participation in regional/national surge calls

Actions: Out of hours

- Relevant participation in regional/national surge calls
- ODN Lead Nurse to be informed (via email) of agreed national actions taken

12 De-escalation

12.1 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.

13 Exception Reporting

13.1 As soon after de-escalation as is practical following surge an exception report must be completed (appendix 2) and returned to the Lead Nurse, Y&H PCC ODN for any child that has been cared for at a location other than is 'normal' practice.

14 Diverting resources from elective work and related performance implications

14.1 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.

15 Staff indemnity

15.1 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 the scope 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/lower 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.

15.2 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.

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

16 Intentions

16.1 Continue to review and amend current policies to ensure robust and effective systems are in place that are 'fit for purpose' and meet the needs of patients for which the service exists,

16.2 Collaborative working with the North of England NHSE representatives, neighbouring PCC ODNs Yorkshire & Humber Neonatal and Adult CC ODNs to ensure that there is efficient use of all critical care resources within the region,

17 Operational escalation matrix

OPEL LEVEL	Triggers	ACTIONS	
		In Hours	Out of Hours
ONE	<ul style="list-style-type: none"> Bed capacity is limited but managed within usual winter planning arrangements 	<ol style="list-style-type: none"> On-going monitoring of capacity. Embrace to complete CMS 2 – 6 hourly. ODN to provide weekly SITREP at agreed time. Units/ODN to inform NHSE Winter Team of any delayed transfers with no bed available within 12 hours. 	<ol style="list-style-type: none"> On-going monitoring of capacity. Embrace to complete CMS 2 – 6 hourly.
TWO	<ul style="list-style-type: none"> No beds in network and patients waiting for a PIC bed Regional concerns regarding PIC beds Increasing requests for transfer from out of region because of national concerns regarding PIC beds 	<ol style="list-style-type: none"> Discuss any concerns with ODN Lead Nurse. Children stabilised in outlying units if they present there. Clinical advice on resuscitation and stabilisation by PICU via Embrace Maximise repatriation and transfers by Embrace. Maximise utilisation of local paediatric HDU capacity including use of CPAP for infants with respiratory failure. Matron to matron discussions within each unit regarding the appropriate moving and utilisation of nursing staff to support admissions. Internal unit specific review of paediatric elective surgery requiring PIC, cancelling on basis of lower clinical need. Careful consideration of impact on specialised services based on clinical decisions through YHCCCG; supra-regional service provision will require national discussion ODN/Embrace to contact NHSE Y&H Assistant Director on 07860 177 983. 	<ol style="list-style-type: none"> Call conference between PCC Consultants on call for Leeds, Sheffield and Embrace to discuss possible options and agree level of escalation. Activation of Y&H Critical Care Control Group (YHCCCG). Embrace to contact NHSE Regional Specialised Commissioner on 0191 430 2453 (back up 0191 430 2498)
THREE	<ul style="list-style-type: none"> National concerns regarding PICU capacity. National Surge Protocol activated by NHSE. 	<ol style="list-style-type: none"> Discuss any concerns with ODN Lead Nurse. Activation of Y&H Critical Care Control Group (YHCCCG). Ensure SITREP is up to date. Relevant participation in regional/national surge calls. 	<ol style="list-style-type: none"> Relevant participation in regional/national surge calls. ODN Lead Nurse to be informed (via email) of agreed national actions taken.
FOUR	<ul style="list-style-type: none"> Severely limited capacity nationally. National Surge Protocol activated by NHSE. All previous operational actions have had no impact. 	<ol style="list-style-type: none"> Discuss any concerns with ODN Lead Nurse. Activation of Y&H Critical Care Control Group (YHCCCG). Ensure SITREP is up to date. Relevant participation in regional/national surge calls. 	<ol style="list-style-type: none"> Relevant participation in regional/national surge calls. ODN Lead Nurse to be informed (via email) of agreed national actions taken.

18 Glossary

Area team	The local team for NHS England (South Yorkshire and Bassetlaw)
Adult CC	Incorporates North Trent, West Yorkshire and North Yorks & Humber Adult Critical Care Networks
DGH	District General Hospital
EMBRACE	Yorkshire & Humber Specialist Transport Service
GICU	General Intensive Care Unit
ODN	Operational Delivery Network
PCCU	Paediatric Critical Care Unit
PICU	Paediatric Intensive Care Unit
SOP	Standard operating procedure
Y&H	Yorkshire and the Humber geographical area
YHCCCG	Yorkshire & Humber Critical Care Control Group

19 Bibliography

- Management of surge and escalation in critical care services: standard operating procedures for paediatric intensive care, NHS England 2013.
- Draft Paediatric Intensive Care Management of Surge & Escalation National Standard Operating Procedure – August 2015
- Paediatric Intensive Care North Region Process V5.1.1
- 'Main Embrace Standard Operating Procedure' January 2014 version 2 The Yorkshire and Humber Infant and Childrens Transport Service 'Embrace'
- 'Operational Policies and Clinical Guidelines for Referral and Care of Critically Ill Children within Yorkshire and the Humber', 2013 edition, August 2013.

<http://www.sheffieldchildrens.nhs.uk/refer-to-us/embrace/documents>

Appendix 1 - Terms of Reference and Membership

Yorkshire & Humber Critical Care Control Group (YHCCCG)

Paediatric Critical Care

Purpose:

To co-ordinate, monitor and direct a region wide (Yorkshire and Humber) response to an increasing demand for Paediatric Critical Care.

Membership (or nominated deputies):

- Clinical Leads
 - Tim Haywood PICU LTH 07786250736
 - Cliff Bevan PCCU SCH 0114 2712119 (Embrace have mobile)
- Lead Nurses
 - Donna Webb PICU LTH 07770581480
 - Angela Hughes PCCU SCH 07879346746
- Managerial Lead
 - Alec Musson (SM) LTH 07967 096885
 - Anne Stanton HON LTH 07789 174376
 - Jim Butler AD 0794372453
- Clinical Leads Embrace
 - Steve Hancock (paediatrics) 07768261489
 - Cath Harrison (Neonates) 07968491305
- Lead Nurse Embrace
 - Jo Whiston 07971956979
- Core Team PCCODN
 - Karen Perring Lead Nurse 07930683866
 - Rum Thomas Clinical Lead 07786577969
 - Sian Cooper Clinical Lead 07557396565
- Network Manager (? Chair)
 - Emma Andrews 07747611595
 - Helen Brown 0114 3053610 or 07792290728

- This group is expected to work in close co-ordination with the Y&H Neonatal and Adult CC ODNs

Operation of the Group

- Escalation to OPEL TWO will be agreed at a Call conference between PCC consultants on call in Leeds, Sheffield and Embrace.
- Embrace to send out a text message to YHCCCG to inform them that the teleconference will take place at 10:30am the next working day. Details of message to include dial in details are 0800 9171950 and Participant Passcode 98693425#
- *Call conference to be recorded / documented*
- The Chair of the group will report to NHS England

Call conference agenda

1. Chair to introduce group and apologies noted
2. Agreement of escalation level made by group
3. Clarification that all required actions at Level 2 (OPEL 2) have been taken
4. Go through action points for Level 3 (OPEL 3) and agree actions
5. Any other issues
6. Summary of actions and who is responsible
7. Date/time of next call and close

These Terms of Reference for the YHCCCG will remain in draft until tested by virtue of need to convene this group.

Appendix 2 - Exception Report Template



Yorkshire & Humber Paediatric Critical Care Operational Delivery Network



Surge & Escalation Exception Report

Hospital Trust:

Date:

Name of person Completing the Form:

Contact email:

Patient Details:

Name:

Age:

NHS number:

Location:

Purpose	An exception report must be completed for any child that has been cared for at a location other than is 'normal' practice to enable a case review to take place following de-escalation. Please refer to Y&H Paediatric Critical care ODN Management of Surge & Escalation Standard Operating Procedure V11.0 October 2018
Description of exception	
Parties involved in descision	
Escalation / Critcon Level at time of decision	
Action / Outcome	

Please return completed form to Karen Perring Lead Nurse Y&HPCCODN

Karen.perring@sch.nhs.uk

DRAFT