

Paediatric Intensive Care Winter Surge Standard Operating Procedure

Contents

Heading 1**Error! Bookmark not defined.**

1. Introduction

Delivering critical care services through winter during the COVID-19 pandemic presents an extra challenge over and above the expected usual surge in demand.

This Standard Operating Procedure (SOP) provides a framework to support the production of Regional Paediatric Critical Care Operational Delivery Network (ODN) Winter Surge Management Plans (Regional/ODN Surge Plans). Together with the Regional/ODN surge plans this SOP supports the management of escalating and unplanned peaks in demand for paediatric intensive care beds (surge) linked to the onset of the bronchiolitis/respiratory virus season that places services under considerable pressure every winter. The term surge is used to describe the pressure on the overall paediatric system.

This SOP forms part of a suite of NHS England and Improvement published SOPs that cover the following services:

- Adult respiratory extra corporeal membrane oxygenation
- Paediatric respiratory extra corporeal membrane oxygenation

This SOP is intended for use by all NHS acute hospital providers with paediatric intensive care facilities, Specialised Services Regional Commissioning Teams, Paediatric Intensive Care ODNs, NHS England National and Regional Incident Co-ordination Centres (ICC) Urgent and Emergency Care (UEC) Operational Teams and Emergency Preparedness Resilience Response Teams (EPRR).

This SOP should be read with reference to individual provider escalation plans and Regional/ODN Surge Plans.

2. Context

Whilst delivered regionally, paediatric intensive care resources are linked to a national system of planning and utilisation and are a national resource. Pressure on regional intensive care systems can be mitigated by access to services in different parts of England and arrangements are in place in the form of NHS England and Improvement's Regional and Incident Co-ordination teams to support the needs of children in the event that local services are not available. Appendix one describes the 22 level 3 Paediatric Intensive Care Units in England. The paediatric critical care pathway includes level one, two and three care. (Appendix two describes the definitions for all three levels). The whole pathway of care includes specialist paediatric transport services. This SOP focusses on capacity and flow related to children requiring paediatric intensive care at level 3.

This SOP refers to the National Operational Pressures Escalation Levels Framework and the four Operational Pressures Escalation Levels (OPEL) contained within it.

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

3. NHS England Regions and Paediatric Critical Care Operational Delivery Networks

Paediatric Critical Care Operational Delivery Networks (ODNs) are responsible for the development, production and delivery of regional/ODN Surge Plans and the ongoing review of internal trust plans for surge capacity within paediatric critical care. Appendix three describes the NHS England and Improvement Regional Teams, their respective ODNs and the Supra- Regional arrangements.

The Regional/ODN Surge Plans are underpinned by the following principles:

- All acute trusts with or without dedicated paediatric critical care facilities will assist with planning for and responding to the issues that will arise in the management of children requiring critical care.
- An integrated model should be developed for supporting a stepped increase to capacity in response to demand, the preservation of the standard clinical pathway for critically ill children and emergency, general and specialist services.
- Aiming to keep children as close to home as possible.
- The guidance and planning set out in the Regional/ODN Surge Plans are incorporated into local Trust Escalation Plans.
- The Regional/ODN Surge Plans and the respective local Trust Escalation Plans describe how the organisations and post holders should respond to escalation and local specific intervention triggers linked to OPEL.

ODNs and Individual Trusts are responsible for preparing for PIC surge. This includes:

- agreement across local systems to enable documented Regional/ODN Surge Plans and escalation plans describing Regional and Supra- Regional surge arrangements, cancellation criteria for elective surgery, the movement of staff and plans for increasing capacity and agreed triggers for escalation linked to OPEL.
- ODNs working with Providers, Congenital Heart Disease Networks, Adult and Neonatal Critical Care Networks, and local Integrated Care Systems to plan resource capacity (workforce/bed and consumables) for winter surge pressures.
- ODNs and Regional Specialised Commissioning Teams having in place processes to understand and assess capacity, to make decisions about PIC OPEL levels and respond to these, accordingly, including joint Supra-Regional ICC arrangements with links to the National ICC.

Regional/ODN Surge Plans must be agreed by Regional Specialised Commissioning governance arrangements and shared with National and Regional UEC Operational Teams, EPRR Teams and Regional and National ICCs.

Regional/ODN Surge and Trust escalation plans should describe how at all times, the clinical teams remain responsible for the management and decision making of patient care. Providers must work together and in collaboration with their ODNs to ensure that optimal care is delivered across the pathways. Consultant to Consultant discussions regarding clinical decision making and patient flow between units has been identified as imperative for the management of surge.

ODNs and Regional Specialised Commissioning Teams must inform their respective UEC Operations teams and EPRR where challenges occur that might impact performance and/or patient safety and where surge occurs out-of-hours the national UEC Operations On-Call Director should be informed.

The EPRR team will consider information regarding capacity issues in PIC to assess the impact on concurrent major incident responsibilities and where necessary, escalate the perceived regional impact on concurrent major incident responsibilities to the National EPRR team.

4. Surge and Escalation Management Arrangements

The levels of surge and escalation are described using the PIC OPEL levels as shown below in table one. For each PIC OPEL level there is an associated trigger and action to be followed and these are set out within individual ODN Surge Plans and Trust escalation plans.

Table 1 Operational Pressures Escalation Levels

| OPEL | DESCRIPTION | OPEL LEVEL RESPONSE |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 1 | PIC Service is able to meet all paediatric critical care capacity requirements without impact on other services. Working within PIC Baseline Bed Capacity | Paediatric Intensive Care Unit Level |
| 2 | The service's bed capacity across the region is becoming limited - Unable to admit pending patients within 6 hours unless surge beds opened within regional units | Regional level Managed by Regional/ODN team and Regional ICC |
| 3 | Actions at OPEL TWO failed to deliver the required PIC Surge Capacity. Capacity across the region and staff ratios are at maximum capacity - units are unable to accept new referrals within 6 hours | Regional level Managed by Regional/ODN Teams and Regional ICC |
| 4 | Actions at OPEL THREE failed to deliver the required capacity - PIC Surge Capacity across the region and supra-region is at maximum capacity and units are unable to accept new referrals within 6 hours | Supra- regional level Managed by Supra-Regional/ODN and Supra-Regional ICC with direct links to National ICC |

OPEL 1 The PIC Service is able to meet all paediatric critical care capacity requirements without impact on other services and working within PIC baseline bed capacity

PIC services will:

- update the Directory of Services (see section 7);
- meet with Trust bed managers in line with Trust policy to discuss the management of bed capacity and capability (skill mix of staff);
- review the Directory of Service to consider regional bed availability to inform their own planning decisions;
- ensure that PIC capacity is reviewed as part of the wider Trust capacity at an operational level including all Trust Central bed meetings.

PCC ODNs and Specialised Commissioning Teams will:

- monitor bed capacity using the Directory of Services;
- meet weekly in the PCC ODN Group meeting which will be in place from the 23 October 2020 until the 26 February 2021.

OPEL 2 The service's bed capacity across the region is becoming limited and it is unable to admit pending patients within 6 hours unless surge beds are opened

PIC services will:

- update the Directory of Services (see section 7);
- inform the specialist paediatric transport service;
- review PIC capacity as part of the Trust bed management and discuss the management of capacity, elective admissions and workforce pressures;
- review PIC capacity as part of the wider Trust capacity at an operational level including all Trust central bed meetings. This will trigger Trust escalation procedures to ensure that appropriate action is taken (e.g.

maximise repatriations and ward discharges to general paediatric or neonatal care);

- review elective admissions for the next 24-hour period;
- update PCC ODN and specialised services commissioners of OPEL status.

PCC ODNs and Specialised Commissioning Teams will:

- monitor bed capacity using the Directory of Services;
- meet weekly in the PCC ODN Group meeting which will be in place from the 23 October 2020;
- update Regional ICC of PIC capacity issues;
- update UEC (in and out of hours teams);
- update EPRR.

OPEL 3 Actions at OPEL 2 failed to deliver the required PIC surge capacity. Capacity across the region and staff ratios are at maximum capacity. Units are unable to accept new referrals within 6 hours

PIC services will:

- update the Directory of Services (see section 7);
- inform the local specialist paediatric transport teams, PCC ODN and specialised commissioners of OPEL status;
- maximise repatriations and ward discharges to general paediatric services and neonatal care;
- request Trust Chief Operating Officers and Clinical Directors to review paediatric surgery requiring PIC level 3 against all current unplanned demand;

- consider cancellation of study leave/annual leave for PIC trained medical, nursing and key support staff;
- consider skill mix and resource allocation (e.g. doubling patients post risk assessment);
- inform Trust operational meetings that the PIC Unit has reached capacity and is unable to admit within 6 hours and trigger local escalation procedures to ensure appropriate action taken is taken.

PCC ODN and Specialised Commissioning Teams

- update Regional ICC of PIC capacity issues;
- update UEC (in and out of hours teams) and EPRR;
- confirm adoption of Supra- Regional escalation plans.

OPEL 4 Actions at OPEL 3 failed to deliver the required capacity across the region and capacity across the Region and Supra- Region is at maximum and units are unable to accept new referrals within 6 hours

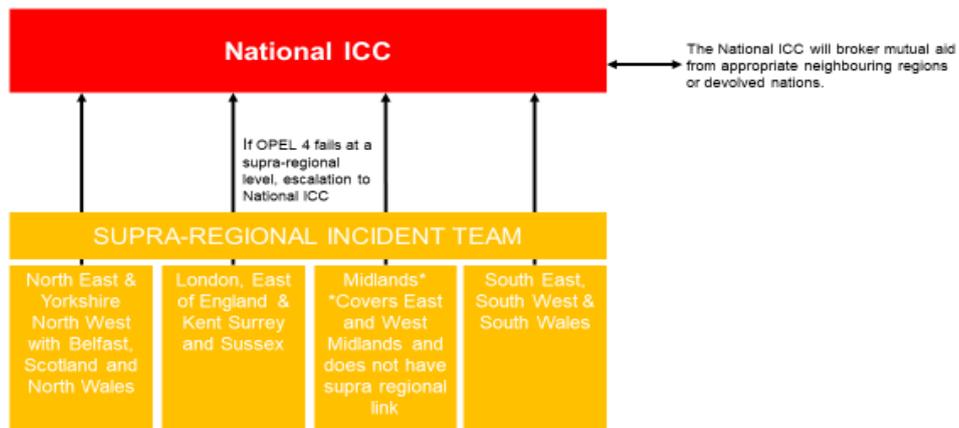
If Regional and Supra- Regional capacity is at a maximum the decisions to activate OPEL 4 will be made by the Regional Directors within the Supra- Regional groups, in partnership with the NHS England and Improvement Regional and National ICC. The UEC in and out of hours teams and EPRR must also be informed.

The National ICC will broker mutual aid from other regions or devolved nations (see diagram one below).

As outlined above, PIC capacity is a national resource and to support the decision-making process at OPEL 4, a national PCC ODN Group is in place to share intelligence between networks, clinicians and Regional and National commissioners. For the duration of the Winter Surge Period, the national PCC ODN Group will meet weekly, flexing frequency according to need. The following email address can be used to raise issues with the national PCC ODN Group: england.npoc-womenandchildren@nhs.net.

In addition to the PCC ODN Surge Group, the Paediatric Intensive Care Clinical Reference Group (CRG) will be called upon to provide expert advice at OPEL 4.

Diagram one – Regional, Supra-Regional and NICC paediatric intensive care incident management



5. Requests by adult critical care for PIC resource support

The responsibility for managing adult critical care capacity and patient flow remains with adult clinical services, NHS England and Improvement Regional Teams supported by the Safer Hospitals and UEC Team.

An Adult Critical Care Panel has also been established to support regions to move adult critical care patients from areas where capacity is exceeded or expected to, to other regions where capacity could be made available.

The use of paediatric intensive care resources for adult critical care is not expected.

If requests are made to PIC services to provide support for adult critical care, the responsibility for patient decision making is a clinical one supported by the NHS England and Improvement Regional Team and the Safer Hospitals and UEC Team.

The use of PIC resources to support adult critical care should be a temporary situation and all efforts should be made to repatriate adult patients to adult ICU beds at the earliest opportunity.

PIC services will:

- update PCC ODN and Specialised Commissioning Teams;
- update the DoS.

PCC ODN and Specialised Commissioning Teams will:

- update the PIC Services Cell of the details of the request and outcome of the clinical decision, outlining the likely duration and impact of the request on Regional and Supra-Regional PIC resources.

6. Data Sources - NHS Pathways Directory of Service (PICU DoS) and reporting

The Directory of Services (DoS) is an online bed state reporting system that is used by paediatric critical care teams, paediatric transport teams and commissioners to monitor the paediatric intensive care capacity across the country and will support Regional, Supra- Regional, NHS England and Improvement Regional ICC and National ICC decision making processes and associated UEC and EPRR escalation.

PCC ODNs have put in place arrangements for PIC units and individuals to register on the DoS in order to be able to input data at 10.00am and 10.00pm. Transport teams will be updating the transport indicators contained with the DoS.

Appendix 1

Paediatric Intensive Care Units

North East Yorkshire and Humber Region

Leeds Teaching Hospitals NHS Trust

Royal Victoria Infirmary at Newcastle Upon Tyne Hospitals NHS Foundation Trust

The Freeman Hospital at Newcastle Upon Tyne Hospitals NHS Foundation Trust

Sheffield Children's NHS Foundation Trust

North West Region

Central Manchester & Manchester Children's University Hospitals NHS Foundation Trust

Alder Hey Children's NHS Foundation Trust

Midlands Region

Nottingham University Hospitals NHS Trust

Glenfield Hospital at University Hospitals of Leicester NHS Trust

Leicester Royal Infirmary at University Hospitals of Leicester NHS Trust

University Hospitals of North Midlands NHS Trust

Birmingham Children's Hospital NHS Trust

East of England Region

Cambridge University Hospitals NHS Foundation Trust

London Region

Barts Health NHS Trust

Imperial College Healthcare NHS Trust

Royal Brompton & Harefield NHS Foundation Trust

Guy's & St. Thomas' NHS Foundation Trust

Great Ormond Street Hospital for Children NHS Trust

King's College Hospital NHS Trust

St. George's Healthcare NHS Trust

South West Region

University Hospitals Bristol and Weston NHS Foundation Trust

South East Region

University Hospitals Southampton NHS Foundation Trust

Oxford University Hospitals NHS Trust

Appendix Two

Critical Care Definitions

The paediatric critical care pathway includes level one, two and three care. Levels 1 and 2 maps to high dependency care and level 3 relates to paediatric intensive care.

In the Paediatric Critical Care (PCC) Healthcare Resource Group (HRG) classification levels 1, 2 and 3 paediatric critical care are also known as:

- Level 1 critical care: Basic Critical Care
- Level 2 critical care: Intermediate Critical Care
- Level 3 critical care: Advanced Critical Care

Appendix 3

Supra- Regions, Regional Teams and ODNs

North Supra- Region

| | |
|-----------------------------------------------|----------------------------|
| North East Yorkshire and Humber Regional Team | North East and Cumbria ODN |
| | Yorkshire and Humber ODN |
| North West Region | North West ODN |

Midlands Supra- Region

| | |
|------------------------|-------------------|
| Midlands Regional Team | East Midlands ODN |
| | West Midlands ODN |

East of England and London Supra- Region

| | |
|------------------------|---------------------|
| London Regional Team | North Thames ODN |
| | South Thames ODN |
| East of England Region | East of England ODN |

South Supra- Region

| | |
|---------------------------------|----------------------------|
| South West Regional Team | South West ODN |
| South East Region Regional Team | Thames Valley & Wessex ODN |

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