NHS England North (Cumbria and North East)

North of England Critical Care Network:

Ethical framework for utilisation of critical care in response to exceptional demand

V4.0

Revised 07 October 2015

Including specific arrangements for [INSERT NAME OF TRUST]
### Document Management

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### Linked Plans:

- North of England Critical Care Network *Adult Critical Care Escalation Plan (ACCEP)*, October 2015
- North of England Critical Care Network *Paediatric Critical Care Escalation Plan (PCCEP)*, October 2015
- North of England Critical Care Network *Guidelines for Escalation of Ebola Virus Disease* October 2015
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This plan has been developed by the North of England Critical Care Network (NoECCN) which includes all the critical care units in the North East and the two units in North Cumbria Hospitals NHS Trust.

The Network is accountable to the NHS England North (Cumbria and North East).
Purpose of the framework
The purpose of this framework is to support the fair and effective use of critical care capacity in the event of exceptional demand. The framework is based on published national guidance and clinical workshops held in the north east during the influenza pandemic of 2009. It incorporates lessons learned during the period of exceptional demand on critical care in December 2010/January 2011.

Application of the framework
This Network framework will be adopted by NHS organisations. Each trust providing critical care services will complete Annex 1 summarising internal arrangements to support ethical decision making in situations of exceptional demand for critical care. No additional local plans will then be required.

Activation of the framework
By definition the framework will only be applied in situations of exceptional demand for critical care. Exceptional demand may occur due to a single catastrophic event with an overwhelming number of casualties who require intensive care or due to an ongoing “slow burn” event, which will most likely occur as a result of a novel infectious disease.

In the exceptional demand scenario, the available critical care resource is not sufficient and cannot be provided to all patients with ability to benefit. The threshold for access therefore rises. Decisions then need to be made against that higher threshold and in effect therefore between patients. The patient with the higher clinical likelihood of benefit then has to be given precedence.

The framework will be triggered:
- Where prioritisation decisions are being made in immediate exceptional demand circumstances within an individual trust or trusts.
- At Regional Adult Critical Care Escalation Plan (ACCEP) level 3
- At Regional Paediatric Critical Care Escalation Plan (PCCEP) level 3

1. Background

1.1 Response to pandemic influenza A (H1N1) 2009

The first illness caused by a new virus (initially called swine flu) was confirmed in the United Kingdom on 27 April 2009. The virus spread rapidly, with the World Health
Organization declaring the situation a global pandemic on 11 June 2009. This is the first influenza pandemic since 1969.

Multiagency and NHS specific pandemic influenza plans had been drawn up prior to the onset of pandemic influenza A (H1N1) 2009 which were based on Department of Health modelling of a severe infection, leading to high levels of morbidity and mortality and extreme pressures on healthcare and other services.

After the onset of the pandemic, it fairly rapidly became clear that most cases of illness were relatively mild. Hospital admissions were higher in younger age groups than for seasonal influenza, with a disproportionate number of these cases then requiring critical care. The highest hospital admission rate was in children.

In the north east a Paediatric Intensive Care (PIC) cell was established in August 2009, charged with developing staged increased capacity to meet escalation in demand in the anticipated second wave of the pandemic. At the same time the critical care network was tasked with developing staged increased capacity for adult intensive care. The plans were revised by NHS England CNTW and NHS England DDT North of England Critical Care Network in January 2014.

1.2 Ethical issues

A key component of both plans was identification of the need for explicit description of the ethical basis of decision making at high levels of demand and the need for further work on this.

Much of the current ethical guidance was found to relate to withholding or withdrawing treatment for an individual in relation to the individual’s clinical condition and the individuals (or proxy’s) expressed or known wishes, rather than the need to prioritise care due to serious and ongoing lack of resources.

The published pandemic guidance from WHO (2006) and the UK Committee on the Ethical Aspects of Pandemic Influenza (2007) was useful in describing broad principles but was not operational.

Over the pandemic period, additional guidance in relation to ethical issues and the pandemic was produced nationally by the Department of Health, the General Medical Council, the Nursing and Midwifery Council and latterly by the H1N1 Critical Care Group.

A draft framework (Ethical framework for utilisation of critical care in response to pandemic influenza A/H1N1) was developed based on the available guidance and an iterative process with clinicians in the region.
2. Development of the framework

2.1 Children

A workshop was held on 17 September 2009, attended by paediatric clinical directors, paediatricians with specific roles in relation to disability and end of life care, PIC clinicians from Newcastle and South Tees and facilitated by a lecturer in health care ethics. Current ethical guidance in relation to the pandemic and wider issues was presented. There was considerable debate and a number of issues were highlighted for further consideration.

Based on that discussion, published guidance and work done on end of life care, a framework was agreed which was incorporated in the North of England Critical Care Network Paediatric Critical Care Escalation Plan V4.0 revised October 2015.

2.2 Adults

The North East Adult Critical Care plan in response to pandemic influenza A/H1N1v 27 October 2009 included a section on ethical considerations and provides an outline framework for decision making.

A second workshop was held on 22 October 2009 which included representatives from most acute and mental health trusts. This focused on decision making in relation to adult intensive care. Particular concerns were:

- There may be an untested but implicit assumption that children would be given preferential access compared with adults;
- Reliance may be made on adult triage systems such as SOFA which are not reliable;
- There may be discrimination against people with mental health problems, particularly those with severe and enduring mental illness who have high care needs;
- There may be discrimination against people in prison or receiving forensic psychiatric care;
- Social value judgements may be made, rather than judgements based on clinical ability to benefit;
- Decisions may be made differently across the north east with resulting inequity;
• Decisions may be made across the north east without a full understanding of the regional bed status/clinical condition of patients in the existing occupied beds;
• Some clinicians may “refuse” to make / participate in decisions restricting care, resulting in an iniquitous burden on other clinicians.

2.3 Critical care workshop 5 November 2009

The draft Ethical framework for utilisation of critical care in response to pandemic influenza A/H1N1v incorporating the output from the 22 October 2009 meeting was then discussed at the final critical care workshop. At that stage it was becoming clear that major pressure on critical care leading to restriction of access was unlikely to occur during the second wave of the pandemic.

2.4 Linking to the North East escalation plan (NEEP) and revised critical care plans

As part of the pandemic flu debriefing process which started on 3 December 2009, it was agreed that the ethical framework should be finalised to inform the response to any situation of exceptional demand for critical care, linking to the overall North East escalation plan and the revised specific escalation plans for critical care.

2.5 Learning from winter 2010/11

There were unprecedented pressures on adult critical care capacity due to influenza A (H1N1)2009 in winter 2010/11. The North of England Critical Care Network Adult Critical Care Escalation Plan (ACCEP) was amended in tandem with the North of England Critical Care Network Paediatric Critical Care Escalation Plan (PCCEP) to ensure compatibility. Both the ACCEP and PCCEP were underpinned by the revised Ethical framework for utilisation of critical care in response to exceptional demand. These were all published as working documents by mid December 2010 to support response to the emerging pressures on critical care. Further revisions were incorporated from lessons learned from the formal debrief meeting on 8 March 2011.

This plan (V4.0) has now been further revised to incorporate changes within the NHS structure and underpins the North of England Critical Care Network Adult Critical Care Escalation Plan V5.0, the North of England Critical Care Network Paediatric Critical Care Escalation Plan V4.0 and the North of England Critical Care Network Guidelines for Escalation of Ebola Virus Disease V2.0, all revised 07 October 2015.
3. **Statement of ethical principles**

The following principles apply equally to adults and children:

- Every human life\(^{viii}\), regardless of age, gender, race, ethnicity, religion, political affiliation, social or economic status, or disability is considered equal.

- There is an ethical duty to allocate limited resources (critical care) where they can be of greatest benefit. This means that resources are allocated to ensure the greatest number of lives can be saved.

- It is unethical to allocate limited healthcare resources to those who cannot realistically be expected to benefit from them.

- The overarching aim is to provide the "most for the most" in situations where resources are scarce.

- All people in the north east must have equitable access to critical care, determined only by clinical assessment of the benefit to the individual, but with explicit understanding that the threshold for benefit (for all people) will increase as available critical care capacity reduces.

- When it is decided that resources (critical care) are to be allocated preferentially to individuals with lower levels of pre-existing healthcare need, this must be because these individuals have a greater chance of recovering from the illness and benefiting from the allocation of available resources.

- It is the overarching duty of all healthcare professionals to ensure maximum quality of life and to minimize pain and suffering. This duty of care applies regardless of any decision regarding allocation of limited healthcare resources.

- Not being admitted to intensive care does not mean no treatment. Appropriate supportive or end of life care must be available.

- It is difficult to plan for withholding intensive care/restricting access/limiting duration or type of interventions. However it would be unethical not to plan.

4. **Applying the principles**
All decisions must be reasonable and guided by the principles. There are a number of issues to address to ensure decision making is reasonable:

- The *exceptional demand* scenario;
- Who should make the decision;
- How should the decision be made (and reviewed);
- How will this be recorded;
- How will this process be quality assured;
- Support structures for clinical staff involved in decision making.

### 4.1 The *exceptional demand* scenario

Exceptional demand may occur due to a single catastrophic event with an overwhelming number of casualties who require intensive care or due to an ongoing “slow burn” event, which will most likely occur as a result of a novel infectious disease.

In the exceptional demand scenario, the available critical care resource is not sufficient and cannot be provided to all patients with ability to benefit. The threshold for access therefore rises. Decisions then need to be made against that higher threshold and in effect therefore between patients. The patient with the higher clinical likelihood of benefit then has to be given precedence.

### 4.2 Who makes the decision?

As the decision is predicated on ability to benefit from a clinical intervention then only clinicians can make the decision on access to critical care. This is the usual process, occurring every day when clinicians determine if a patient with specific clinical needs can benefit or not from critical care support. However in the exceptional demand situation the decision is made against a much higher threshold of ability to benefit.

Many of these decisions will need to be made urgently and out of hours.

The following should be in place:
Decisions not to accept a person for intensive care in an exceptional demand scenario will be made by two Consultants and will be reviewed (see quality assurance) to ensure fairness and to protect the individual clinicians.

There must be a shared understanding of the ethical principles across the region in clinical teams in the critical care units and referring clinical teams in acute hospitals.

Some members of the clinical teams (who are rightly fully focussed on the needs of the person they are caring for) will find decisions on withholding or restricting treatment to be very difficult. Decision making in relation to access to critical care will need to be supported by all staff and staff will need to be supported in implementing the decisions.

4.3. How will decisions be made at clinical level?

Appendix 1 is an algorithm of the decision making process. The difficulties arise at the final stages:

- Assessing “net benefit” ie how to determine who can benefit most clinically from provision of critical care;
- Making a choice when there is no difference in terms of ability to benefit.

Assessing ability to benefit

- Clinical ability to benefit is the likelihood of recovery to “normal” ie with no worse status than before the illness episode started. It would be discriminatory to refuse critical care on the basis of pre-existing disability.
- However, it is essential to take in to account that the ability to benefit may well be reduced in an individual with pre existing clinical conditions.
- When it is decided that resources (critical care) are to be allocated preferentially to individuals with lower levels of pre-existing healthcare need, this must be

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1This will usually be the Consultant Anaesthetist/Intensivist who would be receiving the patient in discussion with a colleague on the unit or in the Critical Care Control Group. Out of hours or when services are stretched then this discussion may be with the Consultant referring the patient or another identified Consultant.
because these individuals have a greater chance of recovering from the illness and benefitting from the allocation of available resources.

- A number of triage systems have been proposed for use during a pandemic or similar situation (e.g. SOFA scores), however the use of these remain controversial.

- The clinical evidence to support the use of such triage systems is limited.

- New clinical evidence is emerging and it may be that subsequent triage systems are more robust.

- There are currently no triage systems for paediatric intensive care.

- Ultimately a clinician needs to defend a decision as being fair, based upon the patient’s clinical condition and his/her professional judgement at the time, usually after discussion with the clinical team.

Making a choice when there is no difference in terms of ability to benefit

The most likely situation is the difficulty in applying the last remaining resource when the individuals are of widely varying age e.g. choice between a 12 year old and a 64 year old both with similar disease severity and pre existing conditions.

There are additional ethical factors which may be considered. “Fair innings” is the approach strongly supported by work with older people which gives a child a higher value than an adult. Application of “fair innings” may be appropriate at extreme levels of pressure but not at lower levels of pressure. It should not override clinical ability to benefit.

Finally, when there are large numbers competing on an equal clinical need basis for a single resource, a random allocation process is fairest. In reality “fist come first served” is likely to happen by default.

4.4 Ensuring equity of decision making across the Network

Within each trust, the critical care control group\(^2\) (CCCG) will support individual case decision making:

\(^2\) Suggested terms of reference for a trust based Critical Care Control group are included in Appendix 4 of the North of England Critical Care Network Adult Critical Care Escalation Plan V5.0 Revised October 2015
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- Decisions to suspend some or all non urgent surgery requiring critical care will be made in keeping with the ACCEP level (PCCEP level for children) by the CCCG.

- Progressive decisions to suspend urgent surgery will be made by the CCCG. Individual cases will be prioritised in keeping with this ethical framework.

- Once established, the Network critical care control group (NCCCG) will assess overall adult critical care capacity in the region to ensure fair consideration is given to patients requiring access to regional specialist (such as cardiothoracic) and quaternary services (such as transplantation) and to those requiring critical care support for other reasons.

- Decisions to cease quaternary services will be made by the NCCCG within overall NHS Gold Command structures.

4.5 How will this be recorded?

In order to ensure fairness and protect clinicians, decision making must be recorded in addition to and separately from the individual clinical record for specific patients.

For paediatric intensive care, the PIC unit in Newcastle will maintain, for the north east and N Cumbria:

- A line list of all children in the region where PIC advice sought with recording of decisions and outcomes.
- A line list of all treated cases with location, supervision and outcome.

For adults this is much more complex and record keeping will need to be at unit or Trust level. Again a line list of all adults where critical care advice is sought is needed with recording of decisions and outcomes.

4.6 How will this process be quality assured?

For paediatric intensive care all clinical decisions and the line list be will be reviewed daily by the critical care control group (CCCG) based at Newcastle Hospitals. This group will review all critical care (adult and paediatric and specialist) in Newcastle Hospitals. For the paediatric component, the PIC clinical leads from James Cook, South Tees, will be a part of the group as this is a regional process.
For adult critical care a critical care control group (CCCG) will need to be established in each NHS trust.

Once established, the Network critical care control group (NCCCG) will lead daily status (trust triggers/levels/actions) report teleconferences. This will include regional paediatric intensive care status via the Newcastle Hospitals CCG. The NCCCG is accountable to the NHS England North (Cumbria and North East) Medical Director until regional NHS Gold is established and then to the NHS Gold Commander.

The NCCCG will manage queries/issues arising from individual trust Critical Care Control Groups.

The NCCCG will issue clear statements supporting ethical and equitable decision making, endorsed through NHS gold command.

5. Support structures for clinical staff involved in decision making

Staff involved in decision making and staff implementing these difficult decisions, need access to support. Although individual trusts have various support mechanisms in place for staff, these will need to be more explicit and accessible.
Appendix 1: Decision making algorithm

(Based on Ardagh M. Criteria for prioritising access to healthcare resources in New Zealand during an influenza pandemic or at other times of overwhelming demand. NZMJ 119; 1243: October 2006
http://www.nzma.org.nz/journal/119-1243/2256/  Add ebola

**PATIENT ACCESS TO LIMITED RESOURCES**

1. Does the patient meet the normal clinical criteria for access to the resource?
   - **NO**: Patient denied access
   - **YES**

2. Are there other patients competing for the same limited resource?
   - **NO**: Patient given access to the resource
   - **YES**

3. Can any of these competing patients be given alternative therapy with similar benefit?
   - **YES**
   - **NO**: Deferral of access

4. Can the treatment for any of these patients be deferred without significant harm?
   - **YES**: Deferral of access
   - **NO**

5. Can the treatment resource be expanded to increase access?
   - **YES**: Expand resource
   - **NO**

6. Can (some) patients be ranked to clearly indicate net benefit?
   - **YES**: Highest ranked patients access the limited resources
   - **NO**: Access by 'first come, first served' or 'lottery'

7. Estimate the Net Benefit from the resource for all patients needing or currently using the resource.
References:


http://www.nmc-uk.org/aArticle.aspx?ArticleID=3897

Letter from the National Director of NHS Flu Resilience (Gateway Reference: 13140). *Advice from the H1N1 Critical Care Clinical Group* (see appendix B). December 2009.

http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Dearcolleagueletters/DH_109457

Article 2 of the EHR Act states “Everyone’s right to life shall be protected by law. No one shall be deprived of his life intentionally”
Annex 1 Decision making arrangements in [name of trust]