

## UHL EMERGENCY BLOOD SHORTAGE POLICY

### Contingency Arrangements for Blood Shortages

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### Review date and Details of changes made during review:

- Correction of National Blood service to NHS Blood and Transplant
- Silver command changed to UHL Tactical Commander
- Gold Command changed to UHL Strategic Commander/ Director On call
- Additional of Emergency Framework for Blood Rationing in the context of severe national shortage- Algorithm for Triage Team (Part 1)
- Additional of Emergency Framework for Blood Rationing - Algorithm for Triage Team (Part 2)
- Minor formatting changes

## 1. INTRODUCTION

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- 1.1. This document sets out the University Hospitals of Leicester (UHL) NHS Trusts integrated plan to work with NHS Blood and Transplant (NHSBT) to ensure that if blood stocks fall to low levels, blood will be available for essential transfusions and priority given to the most urgent cases.
- 1.2. The procedures set out in this document, which must be considered in its entirety, constitute the UHL NHS Trust policy for the management of national blood shortages. The contents of this policy have been produced in conjunction with the Department of Health (DoH) guidance to NHS Trusts.
- 1.3. The UHL contingency arrangements are based around two main requirements; a reduction in **stocks** and a corresponding reduction in **usage** prioritised by patient needs. Alternatives to Transfusion will be identified and used where appropriate.
- 1.4. The plan is structured to provide a framework of actions for the NHS Blood and Transplant (NHSBT) and UHL at three phases-
  - o **Green**: normal circumstances where supply meets demand (normal stock).
  - o **Amber**: reduced availability of blood for a short or prolonged period (reduced stock).
  - o **Red**: severe, prolonged shortages (emergency stock only).
- 1.5. The plan includes managing blood shortages in a variety of situations including:
  - Short term shortages, caused by bad weather or an influenza outbreak
  - Prolonged blood shortages caused by issues which may prevent donors coming forward to donate.
  - Unexpected sudden increase in demand, caused for example by a major incident.

Blood shortages are rare in the UK. However, there are seasonal shortages of specific blood groups such as group O D Negative from time to time (e.g. during the winter months).

## 2. POLICY SCOPE

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- 2.1. The Trust aims to have an Emergency Blood Shortage Plan (EBSP) in place to ensure that any shortage of blood is managed
- 2.2. The aim of the Emergency Blood Shortage Plan is to ensure that where possible the Trust continues to function and that patients requiring blood/blood components receive their transfusions in a controlled prioritised manner.
- 2.3. In preparation for the possibility of a prolonged and severe shortage of blood there must be a well outlined contingency plan
- 2.4. This policy applies to all health care professional staff caring for patients within the University Hospitals of Leicester (UHL) NHS Trust.
- 2.5. This policy applies to all UHL NHS Trust employees who have involvement in the transfusion process.
- 2.6. This policy is supported by several appendices which must be used in conjunction with it.

### 3. DEFINITIONS

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EBMG Emergency Blood Management Group

EBSP Emergency Blood Shortage Plan

### 4. ROLES AND RESPONSIBILITIES

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The contingency arrangements for UHL will be overseen by members of the Emergency Blood Management Group (EBMG) or acting deputies. Each member should have a delegated alternative with the authority to make decisions appropriate to their role.

**Emergency Blood Management Group (EBMG) members:-**

Medical Director/Representative

Clinical Lead for Blood Transfusion/ Consultant Haematologist on call (out of hours)

Transfusion Laboratory Manager (Pathology Duty Manager out of hours)

Chair of Hospital Transfusion Committee (HTC)

For short-term shortages, the UHL Tactical Commander (for long-term shortages, this will be covered by the Medical Director)

Clinical Representative from ED / Trauma Group

Lead Transfusion Practitioner

Clerical support from CSI

**The roles and responsibilities for the different professional groups are summarised below:**

#### 4.1 Lead BMS on Duty for Blood Transfusion LRI (Day or Night)

- Forward the e-mail/phone message details received in **Blood Bank LRI** from the NHS Blood and Transplant (NHSBT) to:
  - a. **Pathology Duty Manager**
  - b. **Clinical Lead for Blood Transfusion/Consultant Haematologist on Transfusion Rota**
  - c. **Blood Transfusion Laboratory Manager**
- If appropriate, the Pathology Duty Manager will activate the next cascade and inform:
  - a. **Clinical Support Team Lead**
  - b. **UHL Tactical Commander**
  - c. **Medical Director/UHL Strategic Commander**
- If appropriate Clinical Support Team will activate the cascade and inform EBMG to convene in the Samuel Jordan Room, Level 3 Balmoral Executive Offices.

#### 4.2 Transfusion Laboratory Manager

- Blood Transfusion Laboratory Manager (Pathology Duty Manager out of hours) must delegate a staff member to check the current blood stock level (All UHL sites).
  - a. Update the EBMG with current stock levels and all communications to and from NHSBT
  - b. Initiate all unused blood returned to stock 24hrs from request.
  - c. Reserved units of blood components may be recalled to stock and reallocated as prioritised.
  - d. Forward excessive or inappropriate requests to EBMG Clinical Support, Samuel Jordan Room.

#### 4.3 UHL Tactical Commander

- a. To attend the EBMG meetings
- b. To be the liaison between the EBMG and the Medical Director/UHL Strategic Commander /Director on call.
- c. To escalate internal communication to users when required via email communications and live a live message board on the desktop.
- d. To organise a loggist for the EBMG as per the Trusts incident response plan via

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CSI.

#### 4.4 Medical Director or Nominated Deputy

- a. On receiving the National Blood Shortage Alert, activate UHL blood shortage plan and call an urgent meeting of EBMG.
- b. Agree specific actions required to manage blood shortage, depending on the severity and anticipated duration of blood shortage.
- c. Act as final arbitrator for dispute resolution whilst prioritising allocation of blood components.

#### 4.5 Clinical Lead/ Haematology Consultant on call for Blood Transfusion

- a. Review all requests for blood components.
- b. Ensure the criteria for blood issue against clinical details for transfusion are appropriately assigned and decisions recorded.
- c. Ensure Cell Salvage could be used for emergency/planned procedures. (This will require theatre team leaders ensuring cell salvage trained staff are on duty).
- d. Ensure all available blood conservation strategies are being implemented where appropriate.

#### 4.6 Transfusion Practitioner

- a. Support On-call Haematology Consultant.

#### 4.7 Clinical Representative from ED / Trauma Group

- a. Act as a link between EBMG and clinical teams in ED.

#### 4.8 Responsibilities of communication with stakeholders

- 4.8.1 If national blood stocks fall to a pre-determined level the NHSBT will communicate a move to the Amber or Red phase. This communication will come directly to the LRI Hospital Blood Transfusion Laboratory via several channels e.g. online blood ordering messaging screen, e-mail, telephone call.
- 4.8.2 The Transfusion Laboratory Manager (or nominated deputy if out of hours) will immediately notify the Clinical Lead/Consultant Haematologist responsible for Blood Transfusion (or the on-call Consultant Haematologist if out of hours), chair of the hospital committee and the Pathology Duty Manager.
- 4.8.3 The Clinical Lead/Consultant Haematologist will notify:
  - a. The Medical Director or his nominated Deputy.
  - b. The Chair of the Hospital Transfusion Committee.
  - c. The Clinical Director of CSI CMG) or
  - d. The hospital Director on call during out of hours.
  - e. UHL Tactical Commander
- 4.8.4 The Medical Director or nominated Deputy will assess the degree of escalation in consultation with Consultant Haematologist on call, and will decide if it is necessary to call an urgent meeting of the **Emergency Blood Management Group** (EBMG). This group would meet frequently throughout the period of shortage.
- 4.8.5 The EBMG team will draft a communication message based on information provided by NHSBT for communication to internal service users.
- 4.8.6 The office of the Medical Director or nominated Deputy will arrange for all Consultants and Head Nurses / Matrons to be notified by e-mail of a move to the Amber or Red phase and arrange for a corresponding message to be posted on the UHL INSITE homepage, with a link to this document and to a Blood Status Report from the EBMG.
- 4.8.7 All key decisions from initial activation to stand down will be recorded in line with that which is

detailed in the Trust's Incident Response Plan.

- 4.8.8 CMG leads are responsible for cascading the information to their clinical areas and departments throughout the hospital.
- 4.8.9 Consultants are responsible for cascading this information to their medical staff and clinical teams.
- 4.8.10 It is possible that a move to the Amber or Red phase will be indicated for one or more blood type only with different blood types simultaneously at different phases. To avoid confusion, the Status report will outline the arrangements for all blood types if any one type moves out of the Green Phase.
- 4.8.11 Enquiries from the press should go to the communications team. Enquiries from the public about whether or not their procedure will take place should be directed to contact the Medical Secretary of their Consultant

## 5. ACTIVATION OF UHL BLOOD SHORTAGE MANAGEMENT PLAN

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- 5.1. NHSBT will have already sent out previous communications to alert hospitals to a potential blood shortage. NHSBT would notify the Transfusion Laboratory Manager, Transfusion Practitioner and Consultant Haematologist (Transfusion Laboratory out of hours) at UHL by e-mail to declare national blood shortage and implement the Emergency Blood Management arrangements. Blood shortages will also be declared on the OSBOS and the Hospitals and Sciences website to support these email communications. Depending on the phase declared the following will occur:
  - **Green Phase:** NHSBT may issue a precautionary notification to hospitals informing them of potential supply chain issues and asking hospitals to take appropriate action to protect the supply chain. This action is intended to prevent the requirement to move to amber phase.
  - **Amber Phase:** NHSBT may activate shortage plans which may apply to a single blood group or all blood groups. Hospitals may be expected to revise their stock holding during this phase.
  - **Red Phase:** Response may require reduction on both blood stocks and blood use
- 5.2. The Transfusion Laboratory Manager (or Lead BMS out of hours) will escalate the message to the Clinical Lead in Blood Transfusion.
- 5.3. The Clinical Lead will contact the medical director / UHL Tactical commander/ UHL duty manager to declare the activation of the UHL blood shortage management plan and explain what actions they must take in response.

## 6 EDUCATION AND TRAINING

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Training requirements and competency not required for this policy.

## 7 PROCESS FOR MONITORING COMPLIANCE

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### 7.1 Reduction in Blood Stocks:

- a. The Transfusion Laboratory Manager will ensure stocks are reduced to the levels designated by the NHSBT. (Appendix 2 and Appendix 5).
- b. The Transfusion Laboratory Manager will prepare and update regularly the information on status and stock levels of different blood types in advance of the EBMG meeting, in order to provide accurate data for the Blood Status Report.

## 7.2 Reduction in Blood Usage:

- a. The EBMG will decide which categories of patients will have access to blood transfusion. In the Amber phase it may be necessary to limit or cease procedures for patients in category 3, but this will depend on the required reductions in stock levels.
- b. In the Red phase, transfusion will be immediately restricted to category 1 and 2 patients. If very significant stock reductions are required, transfusion may be limited to category 1 patients only.
- c. In the Red phase, priority must be directed towards the early identification of those patients who may need a massive transfusion and to triage patients to optimise for transfusion support. Guidance on triaging patients is shown in Appendix 6a and 6b.

1. **Patients triaged to no Blood components:**

These patients should be reassessed at a minimum of every 24 hours.

2. **Patients Triaged to Blood components:**

Patients triaged to active transfusion care should be reassessed at the start of massive haemorrhage resuscitation, and after a minimum of every 8 units or red blood cells (adjusted for patient size) or every 24 hours for patients receiving less than 8 units or until cessation of haemorrhage. If there is persistent bleeding following surgical intervention, there should be close attention to the correction of coagulopathy and consideration of return to theatre.

At each assessment, the triage team should assess and document the patient's status and overall suitability for continuation of active treatment using the following variables to guide their decisions on the value of continued transfusions:

- i) Sequential organ failure assessment (SOFA) score.
- ii) Total blood components used.
- iii) The predicted need for ongoing transfusion support.
- iv) Ability to control bleeding with either surgery or other procedure (e.g., interventional radiology, endoscopy).

Patients with a SOFA score >11, who have a continued need for large amounts of blood components, and where there is no foreseeable ability to control blood loss should be triaged to palliative care.

The ReSPECT document (Appendix 7) from the resuscitation council 10 can be used to document this, as all multidisciplinary teams use it and it can be placed into patient notes.

## Patient Categories: Red Cell Shortages

Category 1	Category 2	Category 3
<b>These patients will remain highest priority of transfusion</b>	<b>These patients will be transfused in the Amber but not Red phase</b>	<b>These patients will not be transfused in the Amber phase</b>
<b>Resuscitation</b> Resuscitation of life-threatening/on-going blood loss including trauma.		
<b>Surgical Support</b> Emergency surgery* including cardiac and vascular surgery**, and organ transplantation. Cancer surgery with the intention of cure.	<b>Surgery/Obstetrics</b> Cancer surgery (palliative). Symptomatic but not life-threatening post-operative or post-partum anaemia. Urgent*** surgery.	<b>Surgery</b> Elective surgery which is likely to require donor blood support (patients with > 20% chance of needing 2 or more units of blood during or after surgery).
<b>Non-surgical anaemia</b> Life-threatening anaemia including patients requiring in-utero support and high dependency care/SCBU. Stem cell transplantation or chemotherapy****. Severe bone marrow failure. Transfusion dependant anaemias including thalassaemia and myelodysplasia. Sickle cell disease (SCD) patients on regular transfusion programmes for prevention of complications of SCD. Organ transplant.	<b>Non-surgical anaemia</b> Symptomatic but not life-threatening anaemia	

\* Emergency – patient likely to die within 24 hours without surgery.

\*\*With the exception of poor risk aortic aneurysm patents who rarely survive but who may require large volumes of blood.

\*\*\*Urgent – patient likely to have major morbidity if surgery not carried out.

\*\*\*\*Planned stem cell transplant or chemotherapy should be deferred if possible.

1. The EBMG will define the time period for which these arrangements will be in effect or when they will be reviewed. This will be documented in the Blood Status Report.
2. Requests for transfusion outside the permitted categories will be referred to either the Consultant Haematologist or EBMG for further discussion with the responsible clinicians.

Transfusion laboratory staff are required to immediately notify the Consultant Haematologist if support is required for massive blood loss. Transfusion support will be provided initially without question, but transfusion resources should not be exhausted in ongoing transfusion support when the outlook is very poor. Appropriate transfusion alternatives should be considered at an early stage, particularly cell salvage, and staff mobilised to support this if needed. Close liaison between haematology medical staff and the responsible clinicians will be needed if bleeding continues despite definitive treatment.



## Preoperative Planning:

The theatre list must be reviewed daily. The availability of blood for transfusion will rely upon good coordination. Any shortage in a particular blood group will also need to be taken into consideration.

## Appropriate Transfusion:

All blood transfusions must comply with the Trust transfusion policy.  
Requests falling outside the agreed criteria or guidelines may be queried by the Consultant Haematologist or named deputy.  
All non-urgent requests for red cells must be reviewed and referred to EBMG

## Massive blood loss:

Consultant in charge of the patient must be informed. If major bleeding continues after transfusing 8 units of red cells, the Consultant Haematologist must be contacted to discuss patient management and additional blood component requirements. Please refer to the UHL protocol for massive Haemorrhage.

## Stand Down:

These actions must be continued until NHSBT indicates that stocks are recovering nationally and the Trust will be able to return to normal operations  
The NHSBT will notify the Blood Transfusion Laboratory Manager when stocks are restored so that the hospital may Stand Down.  
EBMG will be convened to undertake an immediate de-brief regarding the management of the shortage and any implications.

## 7.3 Platelet Shortage

The following chart provides general guidance for the use of platelet transfusions in the context of reduced availability. Category 1 patients are those with the greatest clinical need for platelet support and therefore should be given priority when considering allocation of platelets. Category 2 and 3 patients should be given lower priority.

The use of platelets should be considered as one element in the overall management of these patients. Use should be guided by the clinical condition of the patient and laboratory/near patient testing. Additional measures should be considered in patients with or at risk of massive bleeding including aprotinin, and recombinant VIIa.

Category 1 (Patients to be treated in Red Phase)	Category 2 (Patients to be treated in Red and Amber Phases)	Category 3
<p><b>Massive haemorrhage &amp; Critical care</b> Massive transfusion for any condition including obstetrics, emergency surgery and trauma, with on-going bleeding, maintain &gt; 50 x 109/l.</p> <p>Aim for &gt;100 x 109/l if multiple trauma or CNS trauma</p> <p>Bleeding in the presence of sepsis/acute DIC, maintain</p>	<p><b>Critical care</b> Patients resuscitated following massive transfusion with no on-going active bleeding, maintain &gt; 50 x 109/l</p> <p><b>Surgery</b> Urgent but not emergency surgery for a patient requiring platelet support</p> <p><b>Transfusion triggers for invasive procedures</b> Invasive monitoring or biopsy work, maintain platelet count &gt;</p>	<p><b>Surgery</b> Elective, non-urgent surgery likely to require platelet support for thrombocytopenia or congenital/ acquired platelet defects</p>

>50 x 10 <sup>9</sup> /l	50 x 10 <sup>9</sup> /l General surgery – maintain count > 50 x 10 <sup>9</sup> /l Operations in critical sites such as brain or eyes maintain > 100 x 10 <sup>9</sup> /l	
<b>Bone marrow failure</b> Active bleeding associated with severe thrombocytopenia or functional platelet defects  <b>Immune thrombocytopenia</b> if serious/life-threatening bleeding	<b>Bone marrow failure</b> Prophylactic transfusion for thrombocytopenia (platelet count < 10 x 10 <sup>9</sup> /l) in patients who are not infected and haemodynamically stable. Consider support if platelet count is < 20 x 10 <sup>9</sup> /l for patients at higher risk of bleeding.	
<b>Neonates</b> For neonatal allo-immune thrombocytopenia or severe thrombocytopenia in an otherwise well neonate, platelet transfusions are required when the platelet count falls to between 20 – 30 x 10 <sup>9</sup> /l. Higher target levels should be maintained if extremely low birth weight or unwell/bleeding or Intra-cranial haemorrhage suspected/confirmed.		

## 8 EQUALITY IMPACT ASSESSMENT

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- 8.1 The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
- 8.2 As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

## 9 SUPPORTING REFERENCES, EVIDENCE BASE AND RELATED POLICIES

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### **Further information / References**

National Blood Transfusion committee: A plan for the National Blood Service and Hospitals to address Red Cell shortages. <https://www.transfusionguidelines.org/uk-transfusion-committees/national-blood-transfusion-committee/responses-and-recommendations>

National Blood Transfusion Committee: A plan for the National Blood Service and Hospitals to address platelet shortages. <https://www.transfusionguidelines.org/uk-transfusion-committees/national-blood-transfusion-committee/responses-and-recommendations>

British Society for Haematology (2015). A practical guideline for the UHL Emergency Blood Shortage Policy

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haematological management of major haemorrhage. *British Journal of Haematology* **170** : 788-803

British Committee for Standards in Haematology (2006). Guidelines on the management of massive blood loss. *British Journal of Haematology* **135** : 634 – 641

Gateway 9058. HSC 2007/001: Better Blood Transfusion – Safe and appropriate use of blood. DoH 2007

Massive Haemorrhage UHL protocol: Trust Ref C263/2016

GUIDANCE AND TRIAGE TOOL FOR THE RATIONING OF BLOOD FOR MASSIVELY BLEEDING PATIENTS DURING A SEVERE NATIONAL BLOOD SHORTAGE.

<https://www.transfusionguidelines.org/uk-transfusion-committees/national-blood-transfusion-committee/responses-and-recommendations>

## **10 PROCESS FOR VERSION CONTROL, DOCUMENT ARCHIVING AND REVIEW**

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This document will be uploaded onto the Trust intranet system to ensure it is available to all staff.

This document has been ratified by the Hospital Transfusion Committee.

Documentation control including archiving will be maintained in accordance with the UHL Trust guidance on policies.

## **APPENDIX 1:**

Please refer to the UHL Optimal Surgical Ordering Schedule (OSBOS) policy on Insite  
- Trust reference B18/2010

**APPENDIX 2:**

**STATUS REPORT TEMPLATE FOR COMPONENT STOCK LEVELS**

For use by UHL Emergency Blood Management Group

**Sent by:** ..... **Received by** .....

**Date of Report:** ..... **Time:** .....

**Possible Duration of these Arrangements:** .....

**Component Type:** .....

<b>Blood Group</b>	<b>O Pos</b>	<b>O Neg</b>	<b>A Pos</b>	<b>A Neg</b>	<b>B Pos</b>
Indicate Status Green Amber Red					
<b>Number of units available</b>					
<b>% Stock reduction from normal</b>					
<b>Patient categories supported for transfusion</b>					

**Overall Status levels: (please circle appropriate phase)**

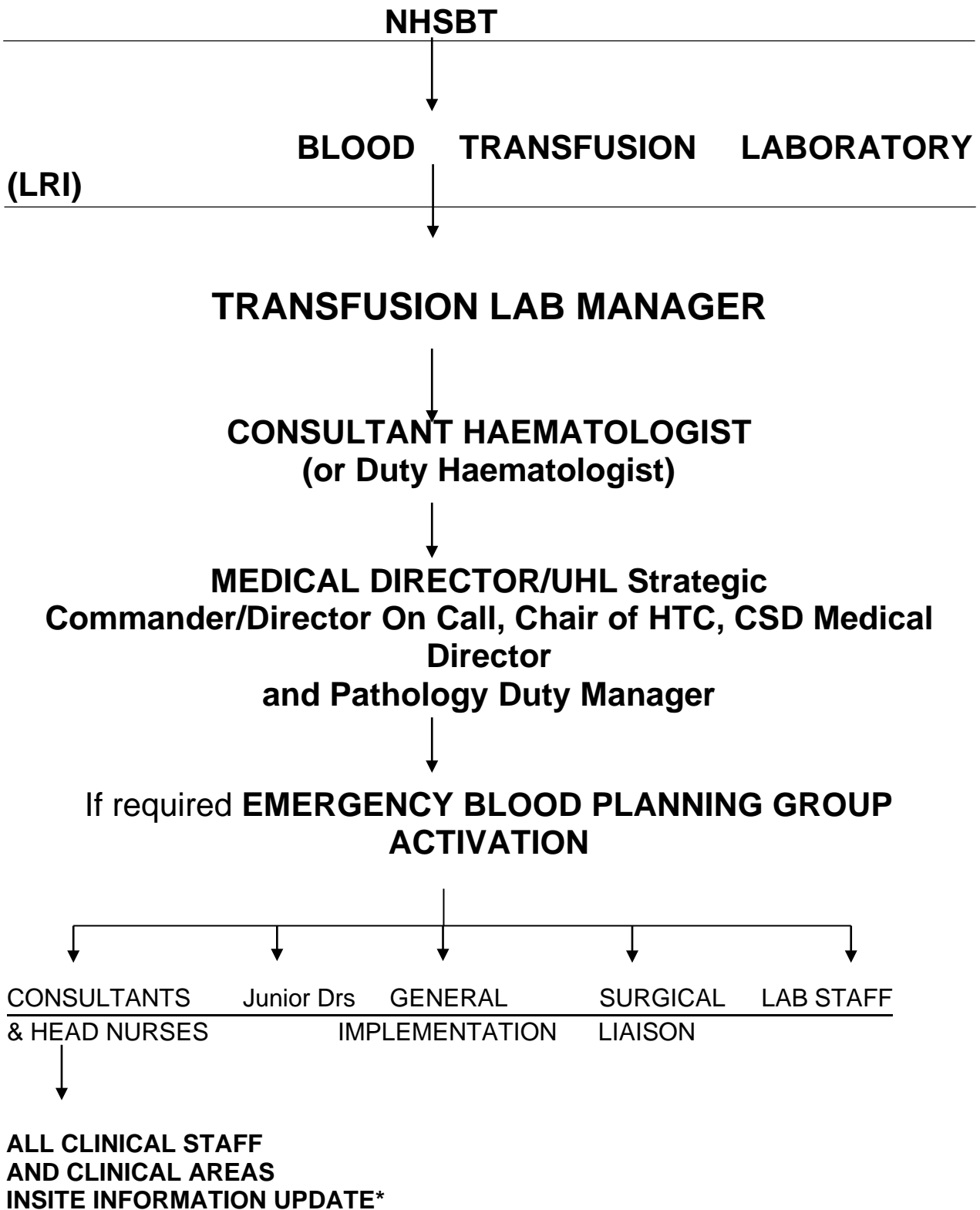
- Green phase: normal circumstances
- Amber phase: reduced availability of blood for short or prolonged period
- Red phase: severe, prolonged shortages

**Next expected update:** .....

Comments:

**APPENDIX 3:**

**OVERVIEW OF PROCEDURE**



- \* INDICATION of RED OR AMBER PHASE
- \* WHICH BLOOD GROUPS ARE AFFECTED
- \* CLINICAL CATEGORY OF PATIENTS SUPPORTED FOR TRANSFUSION

## APPENDIX 4:

### KEY ACTION CARDS FOR EMERGENCY BLOOD SHORTAGE PLAN

#### Emergency Blood Stock Contingency Plan

If the plan is implemented there will be a number of key roles which will be highlighted on Key Cards with designated actions that must be followed.

#### **Lead BMS, Blood Transfusion or Acting Deputy Action Card**

On receiving AMBER or RED Alert from NHSBT undertake the following:-

Forward the Fax or e-mail received from the National Blood Transfusion Service (NHSBT) to:

1. Pathology Duty Manager
2. Consultant Haematologist on Transfusion Rota
3. Transfusion Laboratory Manager

#### **BLOOD TRANSFUSION LABORATORY ACTION CARD**

##### NOTIFICATION

When notified by NHSBT of blood shortage (phone or fax)

1. note the phase to move into (**RED** or **AMBER**)
2. note which blood groups are affected
3. **immediately** inform a senior member of the Blood Transfusion Laboratory staff
4. if blood bank senior unavailable, inform any senior member of staff, DSM
5. initiate incident decision log
  - a. SENIOR STAFF NOTIFIED
6. Inform Consultant Haematologist on call rota for Transfusion of plan initiation
7. Complete Appendix 2 form with stock information:
  - a. RBC's
  - b. PLT's
8. Following decisions taken at the meeting, fill in the patient category box on the form
9. Return to Blood Transfusion Laboratory and
  - a. Alter emergency stocks board (on stock fridge)
  - b. Ensure all laboratory staff aware
    - i) Ensure only requests in supported patient categories are processed. Refer initially to requesting medic if blood cannot be supplied or category not stated  
Refer all inappropriate or excessive requests to EBMG

**NOTE: ALL CASES OF MASSIVE HAEMORRHAGE MUST BE SUPPORTED INITIALLY (3 UNITS). REFER TO CONSULTANT HAEMATOLOGIST IMMEDIATELY**

#### **Pathology Duty Manager Action Card**

If appropriate, the Pathology Duty Manager to activate the next cascade and inform:

1. Clinical Support Team Lead
2. Senior Manager on Duty (UHL Tactical Commander )
3. Medical Director (UHL Strategic Commander/ Director On Call )

### **Transfusion Laboratory Manager Action Card**

On receiving the alert, undertake the following:

1. Notify the Clinical Lead/ Consultant Haematologist of the communication
2. Delegate a staff member to check the current stock level – this will need regular updating
3. Initiate all unused blood returned to stock 24 hours from request
4. Reservation may be reduced to cover duration of surgery only and/or reallocated
5. Help with adherence to OSBOS and produce regular updates to EBMG team
6. Liaise with the Consultant Haematologist and Pathology Duty Manager
7. Forward inappropriate requests to the EBMG
8. Notify EBMG team when NHSBT have confirmed stocks have been restored and the hospital may stand down

### **UHL Tactical Commander Action Card**

On receiving the alert undertake the following:

1. To attend the EBMG meetings
2. To be the liaison between the EBMG and the Medical Director/UHL Strategic Commander/ Director On Call
3. To escalate internal communication to users when required
4. To organise a loggist for the EBMG as per the Trusts incident response plan via CSI

### **Medical Director/UHL Strategic Commander/Director On Call Action Card**

On receiving the alert undertake the following:

1. Call an urgent meeting of EBMG
2. Agree actions to manage blood shortage
3. To receive regular updates from UHL Tactical Commander
4. Act as the final arbitrator for dispute resolution whilst prioritising allocation of blood components
5. To communicate with external users e.g. public, media, if and when required

### **Clinical Lead/ Consultant Haematologist for Transfusion**

On receiving the alert undertake the following:

1. Inform the Medical Director, UHL Tactical Commander and UHL Duty Manager
2. Co-ordinate the Team Members
3. Liaise with the Pathology Duty Manager to confirm all EBMG members are informed
4. Attend regular twice daily update meetings of the EBMG
5. Review all planned transfusions and requests
6. Ensure that the criteria for transfusion is being adhered to
7. Review planned Theatre Cases working with the surgical teams
8. Give input to the ED and Critical Care teams for massive blood loss cases



### **Lead Transfusion Practitioner Card**

1. Report to the Consultant Haematologist & assist in actions required
2. Ensure all areas are using full clinical indication for transfusion on requests
3. Arrange the daily EBMG Team meetings
4. Work with the Blood Transfusion Laboratory Manager in the management of Blood Stocks using the OSBOS

### **Clinical Support Team Action Card**

If appropriate Clinical Support Team to activate the cascade and inform EBMG to convene in the Samuel Jordan Room, level 3 Balmoral Building, Executive Offices):

**Clinical CMG lead for Surgery (CHUGGS and Musculoskeletal & Specialist Surgery)**  
**Clinical CMG lead for Medicine (Acute Medicine/ED Specialist Medicine)**  
**Clinical CMG lead for Anaesthetics (ITAPS)**  
**Clinical CMG lead for Obs & Gynae (Women's & Children)**  
**Clinical CMG lead for Emergency Care (Acute Medicine/ED Specialist Medicine)**  
**Clinical CBU lead for Critical Care (ITAPS)**  
**Head of Operations**  
**Specialist Practitioner for Transfusion**  
**Clinical Risk Manager (UHL)**  
**Clerical support from Hospital Transfusion Team (HTT) - Loggist**  
**Communications Officer**  
**Runners to relay information**  
Provide feedback to UHL Tactical Commander/UHL Strategic Commander or Chief Executive - update of Trust Position

### **Named Lead Consultants Roles Action Card**

1. Designated named persons on a daily basis prioritising cases
2. Need designated staff member to feedback on University Hospitals of Leicester planned cases one day in advance
3. Dependant on blood stocks - may have to look to cancel cases
4. If Red Alert may result in only emergency work being processed
5. Review the lists a day ahead
6. Use the OSBOS to assist calculation
7. Consider if Cell Salvage could be used for emergency/planned procedures
8. Ensure all surgical teams are following the indications for transfusion template when prescribing blood/blood components
9. Feedback on amount of blood likely to be required to Consultant Haematologist
10. Attend update meetings
11. Regularly update surgical/anaesthetic colleagues
12. Ensure all alternatives to transfusion are being implemented

### **ED Consultant or Acting Deputy Action Card**

1. Inform the Consultant Haematologist if Massive Blood Loss Emergency
2. Follow the Adult Massive Blood Loss Guidelines
3. Consider the use of Cell Salvage System if appropriate
4. Inform Blood Bank as soon as the Emergency O Negative Blood is used

UHL Emergency Blood Shortage Policy

### **General Haematology Consultant Action Card**

1. Priority review on a daily basis of Blood/Blood Component requirements in all departments
2. Use full indication details for transfusion on all requests
3. Liaise with the Blood Transfusion Laboratory
4. Consider the use of alternative strategies to transfusion

### **On Call Medical Consultants Action Card**

1. Designated named Medical Consultant allocated daily to review all transfusion requirements
2. Ensure that indications for transfusion are being followed
3. Liaise with the Blood Transfusion Laboratory on requirements
4. Attend daily meetings and feedback to colleagues
5. Use revised red cell and platelet guidelines

### **Consultant ITU\Critical Care Action Card**

1. Designate named Critical Care Consultants allocated on a daily basis for all 3 sites
2. Liaise with the Consultant Haematologist/Blood Transfusion Laboratory on requirements
3. Attend the daily meetings and feedback to unit staff
4. Follow the revised guidelines for red cell usage in critical care
5. Follow the guidelines for Massive Blood Loss

### **Colour Code for Cards:**

**Laboratory Action Cards**

**Pathology Duty Manager & UHL Tactical and UHL Strategic Action cards**

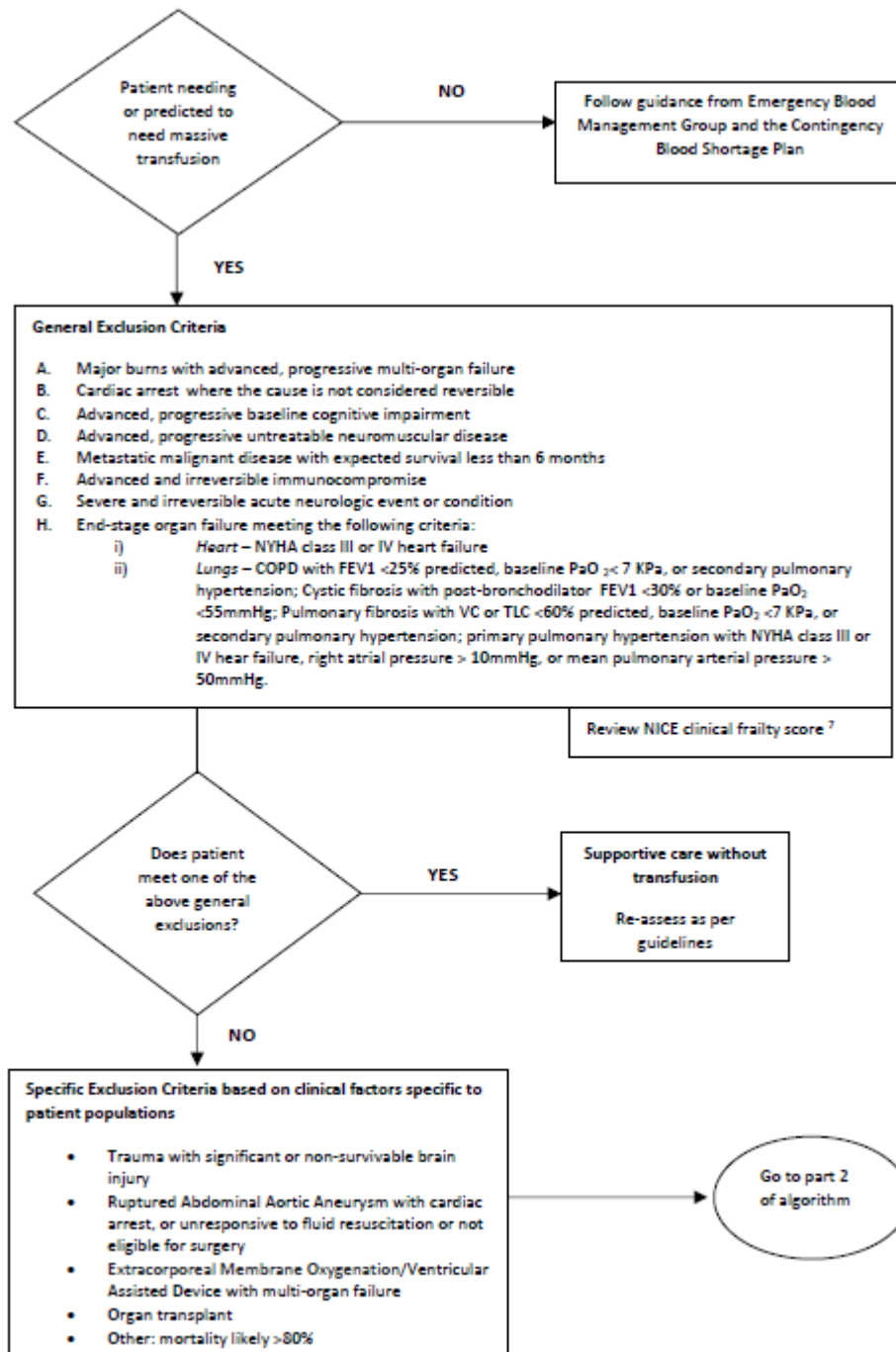
**Transfusion Practitioner action Cards**

**Clinical Action Cards**

## **APPENDIX 5:**

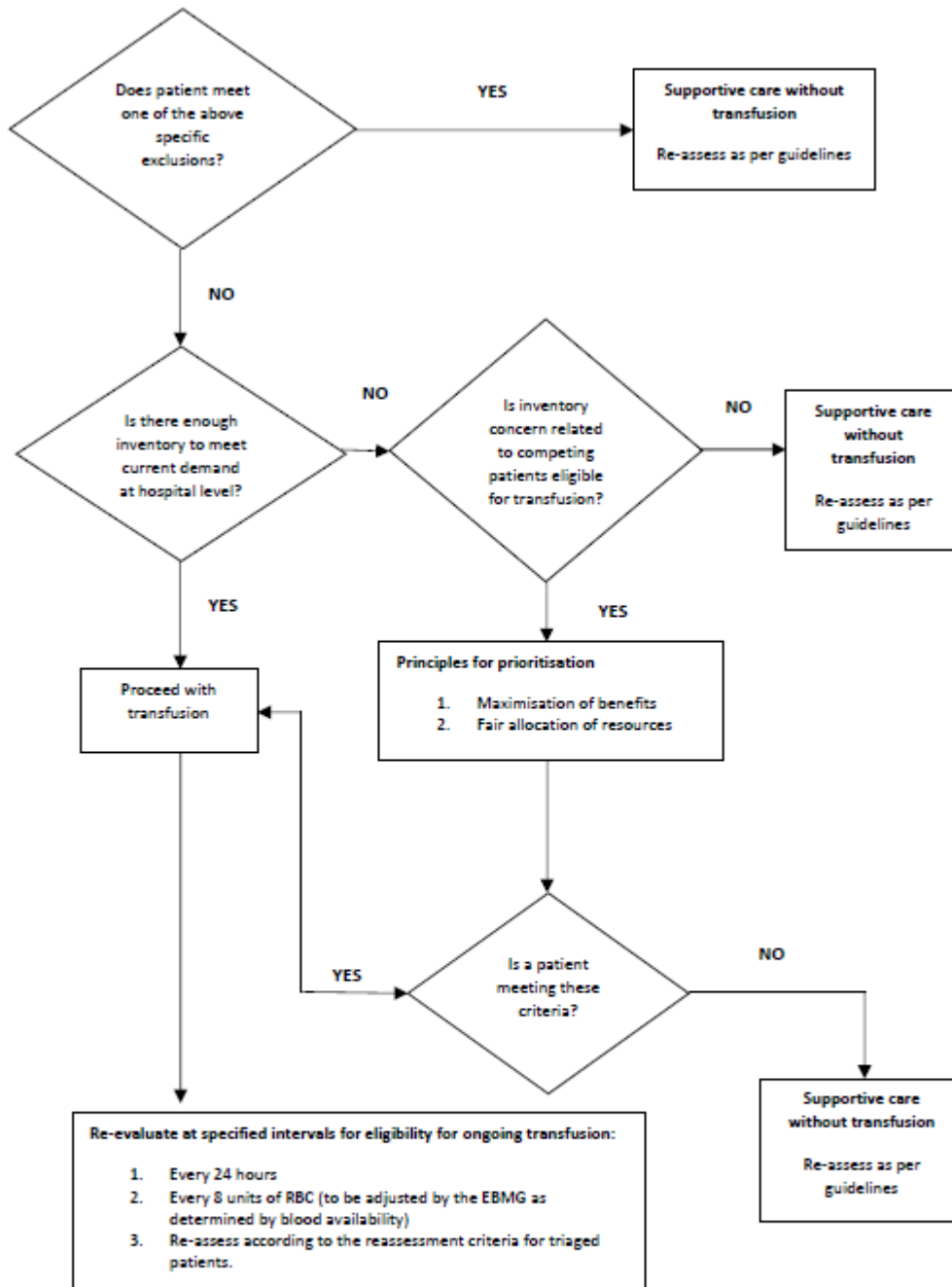
Please refer to Blood Transfusion departmental procedure PR3056: UHL Blood Transfusion Stock Management of Blood Components, for normal UHL stock levels of components.

## APPENDIX 6a: Emergency Framework for Blood Rationing in the context of severe national shortage- Algorithm for Triage Team (Part 1)



*This document is for guidance only, it is intended to aid Consultants on site to make decisions during severe national shortage of blood. The framework and algorithm provided do not indicate an exclusive course of action. They do not replace the need for application of clinical judgement, consideration of individual factors and local practices. The treatment decisions are the responsibility of the treating clinician.*

## APPENDIX 6b: Emergency Framework for Blood Rationing - Algorithm for Triage Team (Part 2)



Figures for Appendix A have been adapted from *Emergency framework for rationing of blood for massively bleeding patients during a red phase of a blood shortage*.<sup>1</sup>

*This document is for guidance only, it is intended to aid Consultants on site to make decisions during severe national shortage of blood. The framework and algorithm provided do not indicate an exclusive course of action. They do not replace the need for application of clinical judgement, consideration of individual factors and local practices. The treatment decisions are the responsibility of the treating clinician.*

# APPENDIX 7: Recommended Summary Plan for Emergency Care and Treatment

**ReSPECT** Recommended Summary Plan for Emergency Care and Treatment for:

**1. Personal details**

Full name

NHS/CHI/Health and care number

Date of birth

Address

Date completed

**2. Summary of relevant information for this plan (see also section 6)**

Including diagnosis, communication needs (e.g. interpreter, communication aids) and reasons for the preferences and recommendations recorded.

Details of other relevant planning documents and where to find them (e.g. Advance Decision to Refuse Treatment, Advance Care Plan). Also include known wishes about organ donation.

**3. Personal preferences to guide this plan (when the person has capacity)**

How would you balance the priorities for your care (you may mark along the scale, if you wish):

Prioritise sustaining life, even at the expense of some comfort

Prioritise comfort, even at the expense of sustaining life

Considering the above priorities, what is most important to you is (optional):

**4. Clinical recommendations for emergency care and treatment**

Focus on life-sustaining treatment as per guidance below

Focus on symptom control as per guidance below

Now provide clinical guidance on specific interventions that may or may not be wanted or clinically appropriate, including being taken or admitted to hospital +/- receiving life support:

CPR attempts recommended Adult or child

For modified CPR Child only, as detailed above

CPR attempts NOT recommended Adult or child

**5. Capacity and representation at time of completion**

Does the person have sufficient capacity to participate in making the recommendations on this plan?

Do they have a legal proxy (e.g. welfare attorney, person with parental responsibility) who can participate on their behalf in making the recommendations?  If so, document details in emergency contact section below

**6. Involvement in making this plan**

The clinician(s) signing this plan is/are confirming that (select A,B or C, OR complete section D below):

A This person has the mental capacity to participate in making these recommendations. They have been fully involved in making this plan.

B This person does not have the mental capacity to participate in making these recommendations. This plan has been made in accordance with capacity law, including, where applicable, in consultation with their legal proxy, or where no proxy, with relevant family members/friends.

C This person is less than 18 (UK except Scotland) / 16 (Scotland) years old and (please select 1 or 2, and also 3 as applicable or explain in section D below):

1 They have sufficient maturity and understanding to participate in making this plan

2 They do not have sufficient maturity and understanding to participate in this plan. Their views, when known, have been taken into account.

3 Those holding parental responsibility have been fully involved in discussing and making this plan.

**D** If no other option has been selected, valid reasons must be stated here. Document full explanation in the clinical record.

Record date, names and roles of those involved in decision making, and where records of discussions can be found:

**7. Clinicians' signatures**

Designation (grade/speciality)	Clinician name	GMC/NMC/HCPC Number	Signature	Date & time
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Signature"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Signature"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Signature"/>	<input type="text"/>

Senior responsible clinician

**8. Emergency contacts**

Role	Name	Telephone	Other details
Legal proxy/parent	<input type="text"/>	<input type="text"/>	<input type="text"/>
Family/friend/other	<input type="text"/>	<input type="text"/>	<input type="text"/>
GP	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lead Consultant	<input type="text"/>	<input type="text"/>	<input type="text"/>

**9. Confirmation of validity (e.g. for change of condition)**

Review date	Designation (grade/speciality)	Clinician name	GMC/NMC/HCPC number	Signature
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Signature"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Signature"/>

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(Taken from ReSPECT. COVID-19 Resources. <https://www.resus.org.uk/respect>)

## APPENDIX 8: Policy Monitoring Table

What key element(s) need(s) monitoring as per local approved policy or guidance?	Who will lead on this aspect of monitoring? Name the lead and what is the role of other professional groups	What tool will be used to monitor/check/observe/asses/inspect Authenticate that everything is working according to this key element from the approved policy?	How often is the need to monitor each element? How often is the need complete a report? How often is the need to share the report?	How will each report be interrogated to identify the required actions and how thoroughly should this be documented in e.g. meeting minutes.
Reduction of Blood Stocks	Blood Transfusion Laboratory Manager	Appendix 2 & 5 of this policy	Daily, every 24 hours	EBMG group meeting
Reduction of Blood Usage	Transfusion Consultant	Patient Case basis and using guidance from appendix 6a and 6b of this policy	Daily every 24 hours	EMBG group meeting