

## Appendix D – Organisational Questionnaire

### Section 1: General Information

1. What level of haematology care does your hospital provide? (according to BCSH criteria - see definitions in appendix 1)

Level 1

Level 2a

Level 2b

Level 3

2. At your hospital how many in-patient beds have been designated haematology beds (includes all types of haematology patient)?

3. Are patients who require in patient care primarily because of a haematological problem under the direct care of a consultant haematologist during working hours?

Yes

No

4. Are patients who require in patient care primarily because of a haematological problem under the direct care of a consultant haematologist out of hours?

Yes

No

5. Do you have local written guidelines for the use of blood component transfusion in haematology patients? *These may be the same as national guidelines and used for all other patients in the hospital.*

Yes

No

*If no, this is the end of the questionnaire. Please state how decisions regarding when to transfuse blood are made.*

*If yes, continue questions below.*

6. How are your guidelines made available to medical and nursing staff?

- Provided in written format at hospital induction to all new junior doctors
- Provided on hospital intranet
- Displayed on wall in haematology day unit
- Displayed on wall in haematology ward
- Specific teaching sessions provided at doctors' induction
- Provided in guideline/protocol folder on wards
- Other (please state)

7. When was your last local audit performed to assess compliance with transfusion guidelines? *(This could be of one or all blood component use and include additional specialties)*

- < 12 months
- 12-18 months
- 18-24 months
- 24-36 months
- 36-48 months
- 48-60 months
- No local audit performed

## Section 2: Local Guidelines

Red Blood Cells			
Q8. CLINICAL INDICATION for transfusion	NBTC Code	Q8a. Is indication local guideline (Yes/No)	Q8b. If yes, state threshold
<b>Acute blood loss in an emergency</b>	R1		
<b>Surgery / medical / critical care</b>			
Usual indication for red cell transfusion, age < 65 years	R2		
Usual indication for red cell transfusion, age ≥ 65 years	R2		
<b><i>With cardiovascular disease or symptoms</i></b>	R3		
History of ischaemic heart disease			
Chest pain; hypotension or tachycardia unresponsive to fluid resuscitation; or cardiac failure			
<b><i>With severe sepsis</i></b>	R4		
<b><i>With traumatic brain injury</i></b>	R4		
<b><i>With acute cerebral ischaemia</i></b>	R4		
<b><i>Surgery / medical / critical care</i></b> If different risk factors to those above please state and the threshold used			
<b>Radiotherapy</b>	R5		
<b>Chronic Anaemia</b>	R6		
Chronic anaemia age < 65 years			

Chronic anaemia age $\geq$ 65 years			
<b>Platelets</b>			

**The table below is based on the NBTC Indications and codes for transfusion. Please identify which indications your local guideline includes and where applicable the threshold used.**

<b>Q9. Does your guideline specify grades of bleeding to differentiate prophylactic from therapeutic transfusion?</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
<b>Q10. If yes are the bleeding grades as stated in appendix 2?</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
<b>Q11. CLINICAL INDICATION for transfusion</b>		<b>Q11a. Is indication local guideline (Yes/No)</b>	<b>Q11b. If yes, state threshold</b>
<b>Prophylactic use in the absence of risk factors for bleeding</b>	<b>P1</b>		
Reversible BMF e.g. disease/treatment excluding auto BMT			
Reversible BMF associated with auto BMT			
Chronic BMF receiving intensive therapy			
Chronic BMF, prophylaxis to prevent further recurrent bleeding (grade $\geq$ 2 using bleeding grade in appendix 2)			
Prophylactic – indication not described above. Please state indications with threshold platelet count used			
<b>Prophylactic use if risk factors for bleeding present (e.g. sepsis, antibiotic treatment, abnormalities of haemostasis)</b>	<b>P2</b>		
Reversible BMF			
Chronic BMF			
Prophylactic use if risk factors for bleeding and different threshold platelet count used to those identified above. Please state risks with threshold platelet count used			
<b>Pre-invasive procedure or surgery</b>	<b>P3</b>		
Central venous line insertion (tunnelled or untunnelled) except PICC			
Lumbar puncture			
Percutaneous liver biopsy			
Major surgery			
Epidural anaesthesia			

CNS surgery (including posterior segment of eye)			
Bone marrow aspirate and or trephine			
PICC line			
Other procedures not described above. Please state procedures with threshold platelet count used			
<b>Therapeutic Platelet transfusion</b>	<b>P4</b>		
Major haemorrhage			
Multiple trauma, or brain/eye injury, or spontaneous intracerebral haemorrhage			
Bleeding (grade $\geq 2$ as in appendix 2) but considered non severe			
Bleeding outside of categories above			
<b>Specific clinical situations. Please indicate threshold if different to those stated above</b>			
Platelet function defect – acquired. e.g. anti-platelet agents, uraemia	P5		n/a
Disseminated intravascular coagulation (DIC)	P6		
Thrombotic thrombocytopenic purpura (TTP)	P6		
Platelet function defect - congenital	P7		n/a
Primary immune thrombocytopenia (ITP)	P8		
Heparin induced thrombocytopenia (HIT)	P8		
Post-transfusion purpura (PTP)	P9		
Specific clinical situation not described above. Please state with threshold platelet count used			

### Definitions

#### ***Levels of Haematology Care***

**Level 1** care requires facilities for delivering treatment that would not normally be expected to result in significant neutropenia, although this might occur for a brief period (less than 7 days). Such treatment can be given on an out-patient basis, either orally or intravenously. Examples of this level of treatment include oral hydroxycarbamide and melphalan.

**Level 2a** care requires facilities for delivering treatment that more predictably results in short periods of bone marrow suppression, with neutropenia of usually less than 7 days duration. Examples include CHOP, ABVD, rituximab containing combinations (FCR, R-CVP, R-

CHOP etc.), bortezomib therapies and non-intensive treatment for acute myeloid leukaemia (AML).

**Level 2b** care requires facilities for delivering treatment that will predictably cause prolonged periods of neutropenia, would normally be given on an in-patient basis, and which may need to be given at weekends as well as during the week. These regimens are more complex to administer than at level 1 or 2a (for example, in terms of drug scheduling) and have a greater likelihood of resulting in medical complications in addition to predictable prolonged neutropenia. Consequently, the resources required to deliver these more complex regimens are greater than at level 1 or 2a. Such regimens include those used to treat AML with curative intent, and salvage chemotherapy regimens for relapsed aggressive histology lymphomas (for example DHAP, IVE).

**Level 3** care requires facilities for delivering complex treatment regimens and, as with level 2b, may have a high incidence of complications. In addition these treatments are designed for rare haematological malignancies where centralisation of care at regional centres is considered to be advantageous, for example in terms of the familiarity of the biology of the rare diseases and the treatment protocols used. An example of this is the modern in-patient management phase of acute lymphoblastic leukaemia (ALL).