

# Blood and Blood Component Transfusion Policy and Procedures

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Relevant Regulations and Standards	CQC incorporating NHSLA & NPSA guidance
	Blood Quality and Safety
	Regulations 2005
	CPA Standards
	BCSH Guidelines

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Links to Organisational/Service Objectives, business plans or strategies	Quality and safety

#### **Executive Summary**

This policy describes the main practical aspects of blood and blood component transfusion (red cells, fresh frozen plasma, platelets and cryoprecipitate). The aim is to ensure that the right blood is given to the right patient at the right time, every time and for the right reason.

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#### **Version History Log**

This area should detail the version history for this document. It should detail the key elements of the changes to the versions.

Version	Date Approved	Version Author	Status & location	Details of significant changes
6		Tina Ivel		Updated due to changes in technology, inclusion of full traceability requirements.
7	June 2008	Tina Ivel		Updated due to changes required to monitoring section 10.1
8	2010	Tina Ivel	Horizon	Updated due to changes in template format for RMSAT standards Electronic traceability added Reviewed in line with latest BCSH guidelines on administration of blood components Dec 2009
9	June 2012	Tina Ivel	Horizon	Extension agreed to policy prior to acquisition of SNEY and to comply with RMSAT 2011/12
10	Jan 2015	Tina Ivel	Staff Room	Alignment of policy from both organisations. Amendments to CMV requirements for patients and consent issues following guidance from SaBTo (Safety Advisory Body for Blood, Tissue and Organs) Latest guidance on sampling requirements from BCSH & MHRA

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	Change of the term prescription to authorisation
	for the written instruction for
	blood component
	transfusion.

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#### **Transfusion Process Flowchart**

### Decision to transfuse and consent

#### See section 3.1

- · Assess clinical condition
- Use clinical guidelines/national indication codes
- Inform patient and obtain consent
- Record decision and rationale



### Essentials of monitoring transfused patient

#### See section 3.5

- · Monitor patient's vital signs
- Recognise, diagnose and respond to adverse event
- Record outcome of transfusion
- · Assess need for further transfusion



#### Essentials of administering blood components

#### See section 3.4

- Identify the patient correctly
- Ensure there is a written instruction to transfuse
- Record pre transfusion vital signs
- Repeat check of patient identification against component label/documentation at patient bedside
- Inspect component/check expiry date
- Set rate of transfusion according to instructions
- Complete all documentation

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### Pre transfusion sampling and ordering of components

#### See Section 3.2

- Contact Blood Bank to see how many samples are required for patient
- Complete the request form correctly for sample required
- Positively identify the patient using wristband/request form each time a sample is taken
- Take blood sample and correctly label the tube at the patient's side. This will need to be performed on separate occasions by different people if 2 samples are required by the Laboratory
- Take note of special transfusion requirements
- Send sample and request form to Blood bank
- Communicate with blood bank if blood required urgently



#### Essentials of pre transfusion testing

- Determine patients ABO and RhD type
- Detect clinically significant red cell antibodies
- · Select and cross match red cell units
- · Apply compatibility label



### Essentials of delivery to clinical area

#### See section 3.3

- Component labelling must match patient identifiers
- Record removal of unit from storage location
- Deliver to appropriate person in clinical area
- Maintain correct storage conditions until transfusion



#### 1 Introduction & Scope

This policy is referenced to the guidelines set down by the British Committee for Standards in Haematology (BCSH) guidelines, National Health Service Litigation Authority (NHSLA) standards, Care Quality Commission (CQC) standards and Medicines and Healthcare products Regulatory Agency (MHRA) Rules and Guidance.

There is a balance to achieve between the known and potential risks of receiving a transfusion and the clinical benefits. Transfusion avoidance is at the corner stone of this policy but if a transfusion is necessary the process must be made as safe as possible within resources. No policy will eliminate all adverse reactions. It is therefore important that adverse reactions are recognised, dealt with promptly and efficiently and reported.

Stringent procedures must be followed to ensure that the correct blood is transfused to the right patient. This policy is supported by procedures on requesting, ordering and authorisation, administration and the management of complications. Procedures for the documentation of transfusion in nursing and medical records are also provided along with the procedure for the reporting of any adverse transfusion incident. The **protocol** is the separate clinical document (transfusion record) on which the written instruction for blood components (or products) are authorised and describes precisely the steps which should be adhered to rigidly in regard to transfusion procedures.

The policy and supporting appendices cover the blood transfusion processes to be used at York Teaching Hospitals NHS Foundation Trust sites and where relevant those external sites supplied by the Transfusion Laboratories at York and Scarborough. It sets out the procedures, staff responsibilities and training in relation to the blood transfusion processes.

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#### 2 Definitions / Terms used in policy

**Authorisation** –Blood is not classified as a medicine according to the MHRA and as such does not require a prescription to be written by a doctor. A competent, assessed member of the team who has undertaken and completed the Trust Framework for authorisation can also complete the written instruction for the transfusion of a patient.

**BCSH-** British Committee for the Standards of Haematologyexpert panel producing national guidance for blood component transfusion.

**Blood administration set** -Infusion set incorporating a mesh filter (170-200µm) for infusion of blood components.

**Blood component** - red cells, white cells, platelets, plasma and cryoprecipitate.

**Blood product -** therapeutic substance prepared from human blood including Prothrombin complex concentrate, Anti D.

**Blood request form -** Standard form bearing the details of patient test/component/product required which may accompany the blood sample (if required) to the laboratory.

Blood Safety and Quality Regulations (BSQR 2005) - legislation which affects the quality control of blood components from donor to recipient throughout the UK. The competent authority who monitors the correct implementation of these regulations is the MHRA-Medicines and Healthcare Regulatory Agency.

**Compatible -** Not possessing an antigen or antibody that may induce a haemolytic reaction in the recipient (may not be blood group identical).

**Compatibility label/tag -** attached to the blood component unit bearing the patients details and unique number of component which is applied at issue.

**Cross match -** Selection and compatibility assessment of red cell units

**Cryoprecipitate -** Fibrinogen rich component formed by collecting the precipitate that forms in fresh frozen plasma on thawing at 4°C.

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**CMV -** Cytomegalovirus. A type of herpes virus which is transmissible via transfusion and can cause infection in immunosupressed patients.

**EPO** - Abbreviation for recombinant human erythropoietin **Fresh Frozen Plasma (FFP)** - Plasma removed from whole blood donation and frozen within 6-8 hours of donation

**Group and Screen/Save -** Tests to determine ABO and RhD group and screen for atypical red cell antibodies.

**Hospital Liaison Committee (HLC) -** Network of Jehovah's Witnesses willing to assist patients, their families and medical staff in relation to discussions about treatment or alternatives to transfusion.

Hospital Blood Transfusion Group (HBTG) (Previously known as Hospital Transfusion Committee (HTC)) performs a central role in improving transfusion practice through promoting best practice through the development of local protocols based on national guidelines, promoting the education and training of staff involved in the transfusion process, leading multi-professional audits, providing feedback on audits of transfusion practice and use of blood within the Trust and ensuring compliance and awareness with the Blood Safety and Quality regulations

**Hospital Transfusion Laboratory (HTL)** Unit within the hospital which stores and distributes, and may perform compatibility tests on, blood and blood components exclusively for use within hospital facilities, including hospital based transfusion activities.

Hospital Transfusion Team (HTT) is the action group for the Hospital Transfusion Committee and has the same remit. The group membership consists of the chair of the HTC, an HTL representative, consultant anaesthetist, head BMS haematology and the transfusion practitioner; with input from Quality and Safety team and Corporate Learning and Development team as required. Irradiated - Cellular blood component treated with 25 gray (GY) gamma or X-ray irradiation to inactivate lymphocytes that could cause graft- versus- host disease.

**Massive transfusion -** Variously defined as the replacement of one blood volume within 24 hours or of 50% blood loss within hours or a rate of loss of 150ml per minute in adults or a rate of loss of 2-3ml/kg in children.

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**MSBOS** - Maximum surgical blood order schedule. Schedule of the normal quantities ordered by type of surgical procedure, set at hospital level.

**Positive patient identification -** Asking patients to state their first and last name and their date of birth prior to a procedure and making sure it correlates with the documentation being used. **Red blood cells -** Any blood component whose principle constituent is red cells.

**SABRE -** Serious Adverse Blood Reactions and Events- Mandatory reporting agency for incidents occurring during the transfusion process on the trust site or any facilities supplied by the Trust. **SHOT -** Serious Hazards of Transfusion, UK –wide reporting system for adverse transfusion events and 'near –misses'. **Traceability -**The facility to trace each individual unit of blood and blood component derived thereof from the donor to its final destination, whether this is a recipient, a manufacturer of medicinal products or disposal and visa versa (commission Directives on haemovigilance/traceability).

**vCJD- new variant Creuzfelt- Jacob disease** A fatal disease which may be transmitted through prion transferred during transfusion of blood products from an infected donor.

#### 3 Policy Statement

The policy and supporting appendices cover the blood component transfusion practices to be used at York Teaching Hospitals NHS Foundation Trust. It sets out the procedures, staff responsibilities and training to support the blood transfusion process. The policy applies to all patients undergoing transfusion of blood or blood components and staff dealing with all aspects of the transfusion process within York Teaching Hospitals NHS Foundation Trust and external sites supplied by the Transfusion Laboratories at York and Scarborough as relevant.

Appendix 5 applies to the electronic tracking of blood available in certain parts of the organisation. These must be followed if the blood track system is in place.

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#### 3.1 Consent

The procedure should be explained and discussed with the patient (or responsible person if the patient cannot communicate). The patient's transfusion protocol must contain evidence that the reason for transfusion of blood or blood components has been explained and discussed with the patient. This includes discussion of valid alternatives to transfusion and the option to refuse. The member of staff completing the written instruction must complete the consent section on the protocol, if available, otherwise, must document it in the medical records

If a patient refuses blood or a specific component this needs to be documented in the medical records, along with an Advanced Decision Directive (ADD) if available Recording Advance Decisions Procedure — York NHS Staff Room.

For the clinical care of the patient refer to the <u>refusal of</u> <u>blood guidelines</u> which explains the alternatives to transfusion that may be employed when blood products are not available.

<u>Leaflets</u> explaining the risks and benefits of, and alternatives to, transfusion must be readily available for patients who may require or have been transfused. Patients who have not been transfused during this admission or for their current illness should be provided with the NHS information leaflet, 'Will I need a blood transfusion?' Verbal consent must be obtained.

Where pre-transfusion discussion is not possible (e.g. in an emergency) clinical staff must act in accordance with the patient's treatment preferences if known at the time of treatment (i.e. a Jehovah's Witness has an ADD which is signed and witnessed).

When pre-transfusion discussion has not taken place, the reasons for transfusion (based on risks and benefits) must be discussed with the patient and written information offered retrospectively.

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Patients who lack capacity should be dealt with as described in the Mental Capacity Act Guidance — York NHS Staff Room.

#### 3.2 Requests for Blood Transfusion

Requests for blood and blood components must be undertaken during the day unless there is an urgent clinical need for transfusion. The SHOT reports highlight some of the well documented problems associated with overnight transfusion.

Staffing levels are lower in both the clinical and laboratory department, and the ward environment at night is less conducive to full monitoring and checking of patients for observations, reactions and transfusion rate. Overnight transfusions should not take place unless clinically required.

The request for blood transfusion can be undertaken either by completing the transfusion request form electronically or by completing a paper based request form and sending it to the transfusion department.

#### The request form must contain:

- Full patient identification details: Last name, first name, date of birth, patient identification number – ideally NHS number (if no NHS number available an Emergency Hospital Number can be used.)
- Location of patient and where blood should be sent, if different, including hospital site.
- Number and type of blood or blood components including any special requirements (e.g. irradiated or CMV negative) and the time and date they are required. Avoid using 'as soon as possible', as more specific

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timing can help the hospital transfusion laboratory determine priorities.

- Past transfusion and obstetric history wherever possible.
- The patient's diagnosis or procedure to be undertaken and the reason for the request using the national indication code (available on the back of the paper based request form).

If the transfusion is required urgently (within 2 hours) or out of hours the laboratory should be notified by telephone.

## The need for very urgent, type specific blood or O negative blood must be stressed at this point

Telephone requests must be followed-up by a completed request form. See 3.3.1 for emergency blood availability.

Fork Site	
Extension	6334/5739

Out of hours bleep 842

17.00-08.30

Vaul. 0:44

#### **Scarborough Site**

Extension 2322
Out of hours 01723 368111.

17.30-09.00

Ask for the haematology

department

#### **Platelets**

Requests for platelets must be telephoned to the Hospital Transfusion laboratory and a request form completed as above.

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A recent blood sample is preferable but may not always be necessary if the laboratory already holds a record of the patient's blood group.

Platelets are obtained from the Leeds Blood Centre – therefore there may be a delay between ordering from the Transfusion Laboratory and receiving platelets in the clinical area. There is no platelet stock held at the Scarborough site, anticipate delivery time of at least 2 hours.

The requester should give an indication of clinical urgency to assist with the coordination of deliveries.

#### Fresh frozen plasma (FFP) and cryoprecipitate

Requests for FFP and cryoprecipitate should be telephoned to the Hospital Transfusion Laboratory and a request form completed as above.

A recent blood sample is preferable but may not always be necessary if the laboratory already holds a record of the patient's blood group.

FFP and cryoprecipitate require thawing and can take 30 to 40 minutes to prepare, allow for transportation time if at satellite unit.

#### 3.2.1 Requesting of Special Blood Requirements

See section 3.6 for further information

- Special requirements e.g. irradiated or CMV negative blood must be indicated by the clinician on the request form.
- Refer to the specific prescription forms for chemotherapy and /or the transfusion protocol and the need for irradiated products. The transfusion department must be contacted as indicated on the

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prescription chart (i.e. by pharmacy/specialist nurse and/or medical staff).

 If patients' have had chemotherapy treatment or transfusions at hospitals other than York /Scarborough the transfusion laboratory must be informed as soon as this information is available.

#### 3.2.2 Authorisation of blood and blood components

The procedure should be explained and discussed with the patient (or responsible person if the patient cannot communicate) - see section 3.1.

Details of the clinical indications and blood results regarding the transfusion must be recorded in the patient's transfusion protocol or the medical records.

The written instruction or authorisation of blood and blood components is the responsibility of the health care practitioner assessed as competent to undertake the role. Blood should be written up on the relevant section of the transfusion protocol and this should include:

- The patient identification details (Last name, First name, date of birth, NHS number or other unique identification number).
- The blood or component to be administered, including special requirements.
- The quantity.
- The duration of transfusion.
- Any special instructions e.g. medication prescribed before or during the transfusion.

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It is the responsibility of the health care professional who is authorising the blood component to ensure that the correct component is ordered (e.g. CMV negative, irradiated), that the component prescribed is appropriate treatment and that the haemoglobin trigger level is appropriate for the patients' condition. (Refer to Maximum Surgical Blood Order Schedule, Red Cell, FFP and platelet guidelines, Massive blood loss protocol, and Emergency Blood Management Arrangement).

## 3.2.3 Collection of Blood Samples for Pre Transfusion Compatibility Testing

Any person regularly involved in collecting the blood samples must ensure they are competent to perform the task.

- Staff authorised: medical, nursing, midwifery, phlebotomy staff and clinical support staff who have documented evidence of competency.
- Positive patient identification as per Trust ID Policy is essential.
- Patients should be asked to state their last name, first name and date of birth where capable of giving a reliable response.
- A check must be made to ensure the details on the identification wristband (if in-patient) match those on the request form and the answers to the questions above.
- Verbal consent must be obtained in line with the Trust Consent Policy.
- Blood samples must be taken and labelled from only one patient at a time.

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- The sample tube must be labelled immediately <u>after</u> the blood has been added by the person taking the sample.
   This should be done at the (bed)side of the patient.
   An addressograph or ICE/order comm label must not be used on the sample tube; if used the sample will not be processed by the transfusion department.
- The hand written details written directly onto the bottle must include last name, first name, date of birth and patient identification number (NHS number and/or Hospital number) and the label must be signed by the person taking the sample. Sample tubes must not be pre-labelled.
- The person labelling the sample has the responsibility for checking that the sample is from the correct patient and labelled with the correct details.

#### 3.2.4 Incorrectly labelled samples or request forms

The Hospital Transfusion Laboratory will reject either samples or request forms for the following reasons

- Those that do not show the minimum dataset, (last name and first name spelt correctly, date of birth, unique numeric identifier), and the signature of the individual who has drawn the sample.
- Samples that are completely unlabelled or show evidence of being previously labelled with details of another patient, even if those details have been almost completely obliterated.
- Samples labelled with addressograph or other pre printed labels.

If any of the above occurs you will be asked to send a repeat sample and request form, and is likely to cause delay in blood component release.

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#### 3.2.5 Unidentified patients

In the case of an unconscious, unknown patient, 'unknown male/female' should be used on the wrist ID band along with an unique identifier (not ED number). This number will be used as the identification number on all transfusions until the patient is formally identified.

Extreme care should be taken in this situation and attempts must be made to identify the patient at the earliest opportunity.

#### 3.2.6 Sample times

To ensure that the specimen used for compatibility testing is representative of a patient's current immune status, serological studies (and ergo electronic issue) should be performed using blood collected no more than 3 days in advance of the actual transfusion when a patient has been transfused or pregnant within the preceding 3 months, or when such information is uncertain or unavailable.

N.B. the 3 days includes the dereservation period, e.g. if the sample was 1 day old, the blood would have to be transfused within 2 days.

Where there has been no transfusion or pregnancy within the preceding 3 months, the sample is valid for up to 7 days.

Patient type	Sample to be taken
Patient transfused or pregnant in the last 3 months	Up to 3 days*
Patient NOT transfused And NOT pregnant in last 3 months	Up to 7 days

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\* This is the time between the sample being taken and the subsequent transfusion (assuming patient's whole blood sample is stored between 2 to 6° C.)

#### 3.2.7 Electronic issue of blood

Electronic issue is a different method of cross matching a sample in order to issue red cells.

It involves matching the data from the automated analyser (which identifies the blood group and antibody status of the patient), with the details on the blood unit from the national blood service and then issuing the blood unit.

To issue electronically the transfusion department needs 2 separate blood samples from the patient and the patient cannot have a history of antibodies.

#### 1st Sample

This will be kept on the database as a historical blood group. For surgical patients the initial sample should ideally be at the start of the 18 week pathway of care to determine if the patient has any antibodies present.

#### 2nd sample- group check

This can be taken up to 7 days prior to need of transfusion if the patient has not received a transfusion in the previous 90 days; if transfusion has occurred the sample will be valid for maximum of 72 hours.

Once this sample has been processed red cells can be issued faster than manual cross-matched blood on a recurrent basis.

 If there is no historical sample available for the patient -2 separate venepuncture episodes should be undertaken to

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ensure positive patient identification, if the situation is not life threatening/urgent.

 If a patient is to have an invasive procedure with the potential for acute blood loss ward staff need to ensure blood cover is available for patient prior to the procedure and the relevant pre operative paperwork completed – WHO checks/pre operative checklist – this can be performed by contacting the Transfusion Laboratory directly or see appendix 5 regarding use of ward enquiry.

If the need for blood is urgent a manual cross match can be performed on **one** sample but the transfusion laboratory must be informed- see <u>Massive Blood Loss In Adults Management</u>
Protocol — York NHS Staff Room.

The Transfusion Laboratory will inform clinical staff if any further samples are required.

For inpatients (ICU and Maternity particularly) who are at risk of bleeding and blood cover needs to be provided 24/7 it is suggested samples are taken on Tuesdays and Fridays to reduce risk for patients.

#### 3.3 Issue of blood and blood components

#### Issue of red blood cells for transfusion

All patient named and issued units from the Transfusion Laboratory will be stored in the blood fridge for a period of 24-48 hours. In exceptional circumstances units will be stored for longer/shorter periods at the discretion of the transfusion department in consultation with the clinical staff.

These units will have a compatibility label attached with the patient's ID details, blood group of donor and patient, component number recorded on it.

For on demand/remote issued units see appendix 5.

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#### 3.3.1 Emergency O negative products

Number of units	Location of O negative/flying squad units
2	Issue fridge, Theatre Reception, York
2	Blood storage facility, Raphael ward, Clifton
	Treatment Centre
2 x 2	Issue Fridge, Pathology Reception,
	Scarborough
3 x 2	Blood storage facility, Waters Ward (Lloyd
	Ward from March 2015), Bridlington Hospital

- These units must only be used if required for immediate use.
- The O RhD negative units may not be suitable for the rare patient who has red cell antibodies.
- Use of O RhD negative blood carries a risk of a potentially serious transfusion reaction. If in doubt discuss with the Transfusion Laboratory before transfusion.
- Inform the transfusion department if any O RhD negative units are taken to ensure the unit(s) are replaced immediately.

Ensure that a correctly labelled sample and request are sent directly to the Transfusion Laboratory to facilitate the issue of group specific/cross matched blood for the patient as soon as possible.

Complete and return the O RhD negative labels to the transfusion department as soon as possible following the transfusion to fulfil traceability requirements.

If a massive blood loss situation refer to the <u>Massive Blood</u>
<u>Loss In Adults Management Protocol — York NHS Staff</u>
<u>Room</u>. Flow charts are available in relevant clinical areas for the various scenarios.

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#### 3.3.2 Issue of platelets/FFP and Cryoprecipitate for transfusion

The above components will be available issued from the Transfusion department providing the correct procedure in section 3.2 has been followed.

The transfusion department will inform the clinical area by telephone that the components are ready for collection or will send with available portering staff.

#### 3.3.3 Collection of blood and blood components

All staff involved in collecting the blood from any blood fridge must complete the appropriate competency document at the earliest opportunity.

## Collection of named red cells for transfusion from a blood fridge to the clinical area.

 For sites with remote issue/on demand facilities please refer to appendix 5.

#### For other sites

- Clinical areas will be informed when blood is made available for individual patients – either by paperwork, computer system or telephone call depending on area and urgency of situation.
- The person authorised to remove the blood from the storage location must have ward based information available as patient identification – ideally the transfusion protocol (and a printed wristband when using the electronic system).
- The patient identification details on the compatibility label attached to the blood pack donation number must be checked against those on the ward based information when taking the unit.

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- The date and time of collection must be recorded manually on the form which lists units of blood issued for each patient being transfused. The person collecting the blood must sign to indicate which unit has been collected on the form. Alternatively those sites which have electronic tracking available must scan the units of red cells being removed – see additional information in appendix 5.
- One unit of blood should normally be collected at a time.
- Where rapid transfusion is required, two or more units may be taken at a time in a validated transport box ensuring they are packaged according to the instructions located on the lid of the boxes. Cool packs are available in each of the blood storage locations/issue fridges.
- Red cells placed in a validated cool box (Red box) with cool pack(s) will have a maximum of 4 hours to commence transfusion on the patient or return to the issue fridge if units not required.
- When delivered, hand the transit box over to a member of staff in the clinical area.
- Red cell or other blood products must not be stored in any fridge other than a designated blood issue fridge.
   Storage in ward refrigerators or drug fridges is not acceptable even for short periods.
- When returning cool packs they must not be placed back into the blood storage facility/issue fridges as they could be taken before they have reached optimal

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temperature. Please leave next to the issue fridge or place into red box for return to Transfusion Laboratory.

 For sites with remote issue/on demand facilities please refer to appendix 5.

#### 3.3.4 Urgent/emergency transfusion (A&E, Theatres, ITU)

 In cases of rapid transfusion, (theatres, ED, ITU), two or more units of blood will be available in a cool box with cool packs in situ.

#### 3.3.5 Return of unused units to Transfusion Laboratory.

Unused blood components must be returned at the earliest opportunity.

- If it has been less than 30 minutes since the red cell unit was removed from the blood issue fridge, the member of staff must complete the required process for returning the unit to the blood storage location. This will either be by the electronic tracking system or by completing the forms present at the blood storage facility.
- If it has been more than 30 minutes since the red cell unit was originally removed, do not return the unit to the blood fridge but inform staff in the transfusion laboratory immediately and follow their advice re discarding the unit. A Datix form will be completed for all wasted units.

### 3.3.6 Collection of platelets/FFP and Cryoprecipitate for transfusion

 Under no circumstances should a cool pack be placed with the platelets as these must be stored at room temperature.

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- When delivered, hand the components over to a member of staff in the clinical area.
- If the components are not used for any reason, inform the transfusion department at the earliest opportunity.

### Table to show movement of blood components at each site

Area	Where Issue fridge located	Who moves red cells to the issue fridge	Who moves FFP	Who moves platelets	Who collects red cell units for patient use- from where
Clinical areas -Scarborough Hospital	Next to Transfusion Laboratory	Laboratory staff	Competency assessed HCA's, nursing staff, ODP's from transfusion lab	Competency assessed HCA's, nursing staff, ODP's from transfusion lab	Competency assessed HCA's, nursing staff, ODP's from issue fridge
Clinical areas -York Hospital	Theatre reception	Porters	Porters straight to clinical area	Porters straight to clinical area	Competency assessed HCA's, nursing staff, ODP's from issue fridge
Renal Unit – York Hospital	Theatre reception	Porters	Porters straight to clinical area	Porters straight to clinical area	Competency assessed HCA's, nursing staff or PSA's from issue fridge
Satellite renal unit - Easingwold	N/A	N/A	N/A	N/A	Designated taxi firm from Transfusion Laboratory

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St Catherine's Hospice Scarborough	N/A	N/A	N/A	N/A	Competency assessed nursing staff from Transfusion Laboratory
St Leonard's Hospice York	N/A	N/A	N/A	N/A	Designated taxi firm from Transfusion Laboratory
St Monica's Hospital - Easingwold	N/A	N/A	N/A	N/A	Designated taxi firm from Transfusion Laboratory
Bridlington Hospital	Waters Ward soon to be Lloyd ward	Associate Practitioner/ Designated transport driver	Designated transport driver straight to clinical area	Designated transport driver straight to clinical area	Competency assessed HCA's, nursing staff, ODP's from on demand issue fridge
Whitby Hospital	Ward 3	Designated transport driver/	N/A	N/A	Competency assessed nursing staff from fridge on site
Malton Hospital	Fitzwilliam ward	Designated transport driver/ nursing staff	N/A	N/A	Competency assessed nursing staff from fridge on site
Selby War Memorial Hospital	N/A	N/A	N/A	N/A	Designated taxi firm from Transfusion Laboratory

## 3.3.7 Transfer of Blood from Trust blood fridges to another Hospital Blood Bank.

• In the event of patient transfer to another hospital, the

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Hospital Transfusion Laboratory **must** be contacted for advice on the appropriate blood transport box/cool pack requirement.

- The relevant site Transfusion Laboratory will liaise with the Blood Bank of the receiving hospital.
- A `Blood in Transit' document must be completed with the time red cell units & cool packs were put in to the box. This will be completed by Blood Bank staff.
- If blood has arrived from another Hospital inform the Transfusion Laboratory as soon as possible, ideally before use, as cold chain compliance will need to be confirmed and checked to ensure the units are safe to use.

#### 3.3.8 Arrival in clinical area

Once the blood component has arrived in the clinical area the unit should be recorded as being received by member of staff starting the transfusion. This can be performed either by paper documentation or electronically – see additional information in appendix 5.

#### 3.4 Administration of blood and blood components

Any person regularly involved in the receipt and administration of blood and blood products in the clinical area must complete the appropriate competency document at the earliest opportunity.

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In exceptional circumstances, in the absence of a competency assessed member of staff, the transfusion process may be undertaken but only where risk assessment indicates there would be greater danger to the patient from not receiving an urgent transfusion.

- Do not commence a transfusion after 9pm unless there is an urgent clinical need for transfusing out of hours.
   Administration errors increase when out of hours transfusions are performed.
- No patient should be allowed to leave the clinical area unattended. If the patient does need to be moved whilst a transfusion is in progress they must be escorted by a member of staff who has received transfusion training.
- The transfusion protocol must be completed in full and stored in the medical records when the transfusion process is completed.

#### 3.4.1 The bedside check

This is a crucial stage of the transfusion process and must be adhered to carefully, **IF IN ANY DOUBT DO NOT PROCEED, SEEK ADVICE**.

- The procedure must be carried out at the patient's bedside by two health care professionals (registered nurses, midwives, ODP's or medical practitioners.
- Student nurses in their second year of training,

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following their transfusion theory session, or competency assessed HCA, can be the initial checker at the bedside with the registered practitioner being the second checker (student nurses or HCA's are not eligible to check the work of a registered practitioner).

- The patient must be positively identified by asking for his/her name and date of birth (wherever possible).
   These details must match those on the identification wrist band. Any patient having a blood transfusion must have an identification wristband. <u>Identification of Patients (Positive)</u> — York NHS Staff Room.
- The patient's name, date of birth and NHS number and/or hospital number must be checked and found to be identical on:
  - 1) the patient's wrist band
  - 2) the compatibility label attached to the blood pack
  - 3) the transfusion protocol

This must be performed through the independent checking of 1-3 above by the members of staff and signed as completed on the transfusion protocol.

- Any laboratory comments will be included on the label attached to each unit, (e.g. Group A blood may be supplied for a Group AB patient and the comment will indicate that this is safe to transfuse). Any concerns contact the Transfusion Laboratory for further advice.
- The blood group and donation number on the blood pack must be checked and found to be identical to that on the label attached to the blood pack.
- The unit of blood or blood component must be checked for compliance with any special requirements on the

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protocol (e.g. irradiated or CMV negative).

- The unit of blood or blood component must be checked to ensure it has not passed its expiry date or time.
- The appearance of the blood or component and the pack must be inspected for leaks, unusual colour, haemolysis or clots etc.
- The date and time of the start and finish of the transfusion of each unit must be recorded on the transfusion protocol.

#### 3.4.2 Technical aspects of administration

- The transfusion of red cells must be commenced as soon as possible after removal from the fridge. If it is not required, contact the transfusion department as blood can be returned to the fridge within 30 minutes of removal from the fridge if taken by hand or 4 hours if kept in the cool box.
- Transfusion of red cells should be completed within 4 hours of removal from cold storage, (i.e. blood fridge or transport box containing cool packs).
- Transfusion of platelets, FFP and cryoprecipitate should be completed within 4 hours of arrival in clinical area.
- Infection control measures must be followed when undertaking the procedure.
- Platelets should not be transfused through giving sets which have been used for blood.

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- Drugs must not be added to blood and blood components.
- Red cells must not follow Dextrose solutions.
- A new blood giving set should be used after the transfusion has run for >12 hours/3 units, whichever is the sooner.
- If using an infusion device or approved blood warmer then the appropriate blood giving set for that device must be used.

#### 3.4.3 Completion of transfusion

- The administration set must be disposed of in a sharps bin and the empty bag must be put into a sealable plastic bag to be disposed of 24 hours post transfusion, in line with the <u>Waste Management Policy — York NHS</u> Staff Room
- On completion of transfusion of each unit of blood, the transfusion stop time and date must be written on the transfusion protocol and the sticky part of the label, which contains the component number added to the transfusion protocol.
- The detachable portion of the label must then be signed and returned to the Transfusion Department for fating as per MHRA requirements. Alternatively the units can be scanned electronically to send the information back to the transfusion department immediately, see appendix 5 for further information.

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#### 3.5 Observations during administration

Transfusion observations must be recorded as below.

This can either be via the appropriate section of the protocol or electronically.

- Up to 1 hour before the start of each unit Temp, Pulse, Blood Pressure, Respiratory rate
- 15 minutes (+/- 5 minutes) after the start of each unit –
   Temp, Pulse, Blood Pressure, Respiratory rate
- Repeated hourly (+/- 15 mins) during transfusion Temp, Pulse.
- The patient receiving blood and blood components should be under constant observation where possible.
   The patient should understand that symptoms such as shivering, rashes, flushing, shortness of breath and loin pain must be reported immediately. The patient must have access to a call bell at all times. Any delays in performing the observations must be kept to a minimum.

#### 3.5.1 The Management and Reporting of Adverse Events

- If a transfusion reaction is suspected the flow chart at the reverse of the protocol should be followed. Further information is available in <u>Adverse Transfusion</u> <u>Incidents Protocol — York NHS Staff Room</u>.
- Communicate with the relevant transfusion laboratory to determine the appropriate tests required.

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- Observations should continue including a fluid inputoutput chart. A urinary catheter may be appropriate for accurate monitoring.
- All adverse incidents must be recorded on the care pathway and a Datix report form must be completed for those graded moderate or above on the risk matix. Refer to the Trust Incident Reporting Policy for completing report forms.

#### 3.6 Special Requirements

It is important to state the diagnosis, and where possible, the clinical treatment of the patient on the request card.

- **3.6.1 Cytomegalovirus (CMV) negative Products** -the transfusion department will issue CMV negative blood products to these groups where possible;
  - Neonates and Children under the age of 12 months
  - Elective transfusions in pregnant women (not delivery or labour transfusions)

N.B Emergency O RhD negative blood stored in blood storage facilities supplied by York and Scarborough transfusion laboratories will no longer routinely be CMV negative.

The advisory committee for the safety of blood, tissues and organs (SABTO) have published a position statement for the

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provision of cytomegalovirus (CMV) seronegative blood products.

- The provision of leucodepleted products has led to a reduction in the risk of transmission of CMV via blood products.
- The UK specification for leucodepletion is generally accepted as the level which renders the products "CMV safe".

#### 3.6.2 Irradiated components

Transfused donor lymphocytes may recognise the recipient as foreign, can engraft and then initiate 'transfusion associated graft versus host disease' (TAGvHD).

Patients' typically develop a skin rash, diarrhoea and abnormal liver function, and will deteriorate with bone marrow failure and death from infection within 2-3 weeks.

TAGvHD can be prevented by the use of gamma irradiated blood components as this inactivates the donor leucocytes. See Table below for indications for irradiated components.

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Condition/Treatment	Commencement of irradiated products	Irradiated products no longer required
Hodgkin's disease	On diagnosis	Indefinitely required
Purine analogue drugs (fludarabine, cladribine, deoxycoformycin, clofarabine, bendamustine, nelarabine, pentastatin)	On prescription	Indefinitely required
Brentuximab chemotherapy	On prescription	Indefinitely required
Alemtuzumab (Campath 1H) and Anti- Lymphocyte Globulin (ALG)	On prescription	Indefinitely required
<b>Allogeneic</b> bone marrow or peripheral blood stem cell transplant recipients	From the time of commencement of conditioning therapy	Indefinitely required
Autologous bone marrow or peripheral blood stem cell transplant recipients	From the beginning of mobilization or for at least 7 days prior to harvest	Indefinitely required
Bone marrow harvest	From 7 days prior to harvest.	<ul><li>Donors-until after harvest complete</li><li>Patients- Indefinitely required</li></ul>
Stem cell mobilization	from commencement of stem cell mobilizing therapy	<ul><li>Donors-until after harvest complete</li><li>Patients- Indefinitely required</li></ul>
Patients receiving HLA-matched components or directed donations (from first or second degree relatives)	For HLA-matched/ directed donations only	
All granulocyte transfusions (rare)	For granulocyte transfusion only	
Neonata	I & Paediatric specific	
All intra-uterine transfusions	Irradiated red cells and platelets required	Up to age of 12 months
All exchange transfusions (where time permits)	Irradiated red cells and platelets required	Up to age of 12 months
Top up transfusions in premature or term infants when there has been a previous intra-uterine transfusion	Irradiated red cells and platelets required	Up to age of 12 months
Congenital immunodeficiency states	On diagnosis	Indefinitely required

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Always ensure the NHS patient information leaflet 'Information for patients needing irradiated blood' is given to patients requiring irradiated products so they can carry the attached card and a notification sticker is placed on the front of the medical records.

Please contact the relevant Transfusion Laboratory for further clarification on any of the above products.

#### 3.7 Training requirements of each Staff Group

Staff must undertake an initial competency assessment and then require 3 yearly knowledge assessment to be undertaken (National Blood Transfusion Committee 2014). The education strategy for blood transfusion can be found along with the Competency assessment documents on the Trust document library: Blood Transfusion Competency Assessment Documents — York NHS Staff Room.

Each clinical area involved in the transfusion process has an allocated transfusion link member of staff.

These members of staff are deemed competent by assessment undertaken by the Transfusion Team. They will then cascade assessment to the relevant staff in their area.

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The Transfusion Team will be informed of all staff

undertaking the assessment and will record their details

on the Trust Learning Hub.

See the training policy for details of specific staff groups

training requirements and competency details.

3.8 Staff Responsibilities

The Health Service Circulars 'Better Blood Transfusion'

(HSC 1998/224, 2002/009, 2007/001) have detailed the

action required of NHS Trusts and clinicians to improve

transfusion practice.

The Hospital Blood Transfusion Group will ensure the

actions detailed in 'Better Blood Transfusion' are

achieved within the required timescales.

The Board of Directors are responsible for:

Ensuring the health care professionals are informed of and

follow Trust policies on blood transfusion through its

arrangements for clinical governance.

**Hospital Blood Transfusion Group is responsible for:** 

 Discuss issues arising from national auidelines.

recommendations, regulatory bodies and develop

action points for the trust.

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 Discuss transfusion related incidents and events and highlight any major issues to the clinical risk management group.

 Discuss transfusion audit findings and review recommendations for the Trust.

 Feedback any transfusions issues from the clinical and laboratory areas into the committee forum and develop recommendations.

#### **Hospital Transfusion Team members**

 Act as action group for Hospital Transfusion Committee requirements.

 Develop action plan for completion of recommendations for the Trust, (Audit findings, education requirements, compliance with regulatory bodies requirements, adverse events findings).

 Identify issues to be highlighted to the Hospital Blood Transfusion Group.

# **Clinical Directorates are responsible for:**

Ensuring training in blood transfusion policies and procedures is included in induction programmes for new staff in the relevant areas.

 Ensuring all directorate staff involved in the blood transfusion process are aware of Trust transfusion

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policies and procedures, have undergone relevant training and are deemed competent to undertake the procedures in those areas of transfusion where they are authorised to practice.

 Ensuring adverse transfusion events including "near misses" are identified, documented, reported, investigated and appropriate action taken.

## **Transfusion Laboratory Staff are responsible for:**

- Ensuring the labelling of request forms and blood samples comply with local guidelines.
- Blood grouping and compatibility testing.
- Checking computer records for any special requirements when blood or blood components are requested.
- Cross checking against previous blood group and antibody status.
- Error reporting.
- Ensuring that blood and blood components are properly labelled, and the identification details of the patient and the blood transfused are the same on the compatibility label attached to the pack and the blood transfusion report form.
- The investigation and reporting of transfusion reactions or other incidents related to transfusion.

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Medical staff are responsible for:

Providing a written instruction for blood, blood

components and blood products.

Ensuring documentation of the transfusion event and

consent is recorded in the protocol or medical records.

Indication of whether or not the transfusion achieved

desired effect (either post transfusion increment rates or

improvements in patient symptoms).

Identifying and undertaking relevant training

requirements pertinent to their role.

Matrons are responsible for:

Ensuring all staff involved in the transfusion process

undertaken update training every 3 years.

Ensuring staff practice corresponds with Trust Policy.

Being aware of transfusion errors within their directorate

and ensure changes in practice have been

implemented to avoid reoccurrence.

Health care professionals may be responsible for:

Requesting blood, blood components and blood

products including any special requirements (CMV

negative or irradiated products).

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- Taking blood samples for compatibility testing in accordance with Trust policy.
- Explaining the risk and benefits of blood transfusion to patients.
- Collection of blood components or Albumin solutions from the issue fridge.
- Carrying out the procedure for the administration of blood and blood components.
- Monitoring patients during transfusion, and carrying out the appropriate actions in the event of adverse effects.
- Reporting of transfusion reactions or other incidents related to transfusion.
- Specific named practitioners able to authorise red cell/platelet transfusion.

# **Unregistered Nursing Staff:**

- Student nurses may be involved in the transfusion process under the close supervision of the Registered Nurse.
- Health Care Assistants (HCA) may take blood samples
   (venepuncuture) and collect blood components from the
   issue fridge for transfusion provided they are aware of
   Trust transfusion policies and procedures, have
   undergone relevant training and are deemed competent
   to do so.

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- They may act as the initial checker providing they have undertaken and successfully completed the competency package for being a bedside checker in line with line manager approval.
- HCA's may also undertake observations for transfusion without the need for separate competency assessment providing they have received training in the taking of routine observations.
- In all cases the Registered Nurse remains responsible for ensuring transfusion policies and procedures are adhered to at all times.

#### Phlebotomists may be responsible for:

- The collection of blood samples for compatibility testing provided they are aware of Trust transfusion policies and procedures, have undergone relevant training and are deemed competent to do so.
- Samples may only be collected where there is a correctly completed transfusion request form and the patient can be correctly identified.
- If these conditions are not satisfied the phlebotomist should report this to the nursing and medical staff responsible for the patient.

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Portering Staff may be responsible for:

The movement of blood components and blood

products, from the Transfusion Laboratory to the issue

fridge or straight to the clinical area, provided they are

aware of the Trust transfusion policies and procedures,

have undergone relevant training and are deemed

competent to do so. NB Porters have not been trained

to remove any type of blood from issue fridges to take

to clinical areas.

**Transfusion Practitioner Role:** 

Developing and delivering education programmes for

key members of staff involved in the transfusion

process.

Developing competencies for the transfusion process

and assisting the link staff in ensuring all relevant staff

complete competency assessments.

Developing and completing local audits, carrying out

national and regional audits relating to transfusion

issues, reporting the findings to the relevant committees

and carrying out the recommendations.

Developing and disseminating transfusion protocols and

policies incorporating national guidelines, regulatory

authority requirements and recommendations.

Investigating, advising and reporting to relevant internal

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and external organisations any adverse events related to transfusion incidents and reactions.

- Acting as a liaison between the clinical area and the transfusion department.
- Acting as a resource for the clinical staff and patients regarding transfusion issues.
- Chairing the Hospital Transfusion Team meetings.

#### Transfusion practitioner assistant (s)

The transfusion practitioner assistant is responsible for;

- Delivering education programmes for key members of staff involved in the transfusion process.
- Assisting the link staff in ensuring all relevant staff complete competency assessments.
- Assist with local, national and regional audits relating to transfusion issues.
- Disseminating transfusion protocols and policies incorporating national guidelines, regulatory authority requirements and recommendations.
- Carry out initial assessment when required on any transfusion adverse event and liaising with the Transfusion practitioner re actions required.
- Acting as a liaison between the clinical area and the transfusion department.
- Acting as a resource for the clinical staff and patients regarding transfusion issues where possible and

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referring issues to the Transfusion practitioner.

Member of the Hospital Transfusion Team.

#### **Transfusion Link Staff**

The Transfusion links are required to;

 Identify and complete assessment of competency of staff in the relevant areas. Inform the Transfusion

Practitioner Team of staff completing the assessment.

Undertake the study sessions provided by the

Transfusion Team.

Act as a resource for the Transfusion Practitioner Team

to disseminate any information to the staff in the clinical

area.

Identify and report any transfusion issues relevant to

the clinical area to the Transfusion Team.

4 **Equality Analysis** 

In the development of this policy the Trust has considered

evidence to ensure understanding of the actual / potential

effects of our decisions on people covered by the equality

duty. A copy of the analysis is attached at Appendix 1.

**Accountability** 

Operational implementation, delivery and monitoring of the

policy reside with:-

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- Hospital Blood Transfusion Group (HBTG) is responsible for authorising the policy and ensuring compliance through promoting of safe and effective prescribing of blood component transfusions, through local policy based on national guidelines. The HBTG will ensure compliance with this policy by review of adverse incident reports and provide an annual summary to the Patient Safety Committee/Group.
- The Hospital Transfusion Team is responsible for review of national guidelines and local adverse incidents making recommendations to the HBTG.
- However there are a number of key responsibilities placed on individuals within the organisation to ensure the effective implementation of this policy:-
- Transfusion Practitioner Team is responsible for review of any individual incidents of non compliance and report externally to SHOT and MHRA when required and feed into the HTT. The team also provides training on the application of this policy.
- Ward and departmental managers are responsible for the dissemination of this policy and ensuring compliance of all staff within their sphere of responsibility.
- All staff involved in the blood transfusion process are responsible for ensuring the standards outlined in this policy

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are complied with and escalating any concerns they may have.

- Individuals involved in incidents may undertake retraining and/or repeat assessments at the discretion of the HTT and/or line manager.
- Individuals involved in incidents must not continue to undertake transfusion related tasks until the investigation is completed and any necessary actions have been undertaken.

#### 6 Consultation, Assurance and Approval Process

#### 6.1 Consultation Process

The Trust will involve stakeholders and service users in the development of its policies.

Consultation has taken place with the following stakeholders:

- Lead Consultant for Transfusion
- Laboratory staff
- Members of the HBTG across the organisation
- External site co-ordinators
- HLC for Jehovah's witnesses

# **6.2** Quality Assurance Process

Following consultation with stakeholders and relevant consultative committees, this policy has been through quality assurance checks prior to being reviewed by the authorising committee to ensure it meets the NHSLA standards for the production of policy and equalities legislation and is compliant with the Development and Management of Policies policy.

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#### 6.3 Approval Process

The approval process for this policy complies with that detailed in section 6.3 of the Development and Management of Policies Policy. The approving body for this policy is Hospital Blood Transfusion Group and Patient Safety Group.

The Checklist for Review and Approval has been completed and is included as Appendix 2 and the completed Virtual Policy Review Group Checklist is included as Appendix 4.

#### 7 Review and Revision Arrangements

On reviewing this policy, all stakeholders identified in section 6.1 will be consulted. The persons responsible for review are:

- Lead Consultant for Transfusion.
- Laboratory staff
- Transfusion Practitioner

Subsequent changes to this policy will be detailed on the version control sheet at the front of the policy and a new version number will be applied.

Subsequent reviews of this policy will continue to require the approval of the HBTG and Patient Safety Group.

# 8 Dissemination and Implementation

#### 8.1 Dissemination

Once approved, this policy will be brought to the attention of all relevant staff working at and for York Teaching Hospital NHS Foundation Trust following the completed Plan for dissemination of the policy (See Appendix 3)

This policy is available in alternative formats, such as Braille or large font, on request to the author of the policy.

# 8.2 Implementation of Policies

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This policy will be implemented throughout the Trust by Transfusion Practitioner team in the transfusion training available, either face to face or e-learning and by day to day support by the Transfusion Practitioner, Transfusion Laboratory and Lead Consultant for Transfusion.

In addition to this the Policy Author will collate the following evidence to demonstrate compliance with this policy:

- The adverse incident reporting mechanism. If there are untoward occurrences these will be feedback into the hospital transfusion team and hospital blood transfusion group meetings. These incidents also may be required to be reported to SHOT/SABRE as part of the legal requirements of the Blood Safety and Quality Regulations 2005.
- See section 10.1

#### 9 Document Control including Archiving Arrangements

#### 9.1 Register/Library of Policies

This policy will be stored on Staffroom, in the policies and procedures section and will be stored both in an alphabetical list as well as being accessible through the portal's search facility and by group. The register of policies will be maintained by the Healthcare Governance Directorate.

If members of staff want to print off a copy of a policy they should always do this using the version obtainable from Staffroom but must be aware that these are only valid on the day of printing and they must refer to the intranet for the latest version. Hard copies must not be stored for local use as this undermines the effectiveness of an intranet based system.

# 9.2 Archiving Arrangements

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On review of this policy, archived copies of previous versions will be automatically held on the version history section of each policy document on Q-Pulse. The Healthcare Governance Directorate will retain archived copies of previous versions made available to them. Policy Authors are requested to ensure that the Policy Manager has copies of all previous versions of the document.

It is the responsibility of the Healthcare Governance Directorate to ensure that version history is maintained on Staffroom and Q-Pulse.

#### 9.3 Process for Retrieving Archived Policies

To retrieve a former version of this policy from Q-Pulse, the Healthcare Governance Directorate should be contacted.

# **10 Monitoring Compliance and Effectiveness**This policy will be monitored for compliance with the minimum requirements outlined below.

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# 10.1 Process for Monitoring Compliance and Effectiveness

The policy will be monitored as follows:-

Minimum requirement to be monitored	Process for monitoring	Responsible Individual/ committee/ group	Frequency of monitoring	Responsible individual/ committee/ group for review of results	Responsible individual/ committee/ group for developing an action plan	Responsible individual/ committee/ group for monitoring of action plan
a. Process for the request of blood samples for pre transfusion compatibility	Review transfusion sample labelling errors. See Appendix 6	Transfusion Practitioner/ Assistant Transfusion Practitioner/ Transfusion Manager	Ongoing	All relevant staff groups, HTT, HBTG	Hospital blood transfusion group	Patient safety group
b. Process for the administration of blood and blood products	Bedside check documented Patient ID on protocol Transfusion start/stop times documented on protocol See Appendix 6	Transfusion Practitioner/ Assistant Transfusion Practitioner	1 day per month	All relevant staff groups, HTT, HBTG	Hospital blood transfusion group	Patient safety committee/group

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Minimum requirement to be monitored	Process for monitoring	Responsible Individual/ committee/ group	Frequency of monitoring	Responsible individual/ committee/ group for review of results	Responsible individual/ committee/ group for developing an action plan	Responsible individual/ committee/ group for monitoring of action plan
c. Care of patients receiving transfusion	Observations recorded pre transfusion;15 mins(+/- 5 min) after starting; hrly (+/-15 min). Allow small delay as acceptable deviation See Appendix 6	Transfusion Practitioner Team	Ongoing	All relevant staff groups, HTT, HBTG,	HBTG	Patient safety group
d. Organisations expectations in relation to staff training, as identified in the training needs analysis	Learning Hub to obtain training figures for transfusion safety training. Expectation of 90% of staff involved in transfusion process trained	Transfusion Practitioner Team	Ongoing	All relevant staff groups, HTT, HBTG,	HBTG	Patient safety group
e. Requirements	Continue competency based	Transfusion Practitioner	Ongoing	All relevant staff groups, HTT,	HBTG	Patient safety group

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Minimum requirement to be monitored	Process for monitoring	Responsible Individual/ committee/ group	Frequency of monitoring	Responsible individual/ committee/ group for review of results	Responsible individual/ committee/ group for developing an action plan	Responsible individual/ committee/ group for monitoring of action plan
for the competency assessment of all staff involved in the blood transfusion process	training and assessment for all staff involved in the relevant sections of the transfusion process	Team		HBTG,	•	
Process for monitoring compliance with all the above	Adverse incidents related to blood component transfusion are reported via Datix and investigated	Transfusion Practitioner Team	As incidents occur	Transfusion Practitioner via HTT	HTT/HBTG	Patient safety group
	Report any serious adverse events or reactions to	Transfusion Practitioner Team	As incidents occur	Transfusion Practitioner via HTT	HTT/HBTG	Patient safety group

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Minimum requirement to be monitored	Process for monitoring	Responsible Individual/ committee/ group	Frequency of monitoring	Responsible individual/ committee/ group for review of results	Responsible individual/ committee/ group for developing an action plan	Responsible individual/ committee/ group for monitoring of action plan
	SABRE/SHOT as required by the legislation					
MHRA; 2005 'Blood safety and quality regulations'	Complete MHRA compliance report	НТТ	Annual	Transfusion Practitioner via HTT	HTT/HBTG	Patient safety group
	Maintain cold chain compliance by monitoring Blood tracking system	HTT	Ongoing	HTT	HTT/HBTG	Patient safety group
	Monitor traceability compliance with ongoing audit	Transfusion Practitioner Team	Ongoing	All relevant staff groups, HTT, HBTG,	HBTG	Patient safety group
Serious Hazards of Transfusion; annual report	Follow guidance found in SHOT learning points action plan	HTT	Ongoing	НТТ	HTT/HBTG	Patient safety group

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# **10.2 Standards/Key Performance Indicators**

NPSA Safer Practice Notice 14- Right patient, Right Blood Blood Quality and Safety Regulations 2005 CPA Standards BCSH Guidelines

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#### 11 Training

Any training requirements identified within this policy that are of a 'Corporate Statutory or Mandatory nature will be outlined in the Statutory/Mandatory Training Brochure. This can be accessed via the link on Staff Room, the Q:\York Hospital Trust\Mandatory Training or the organisation's online learning platform.

These training requirements are used to develop the customised profiles that can be viewed by learners when they access their personal online learning account. It is then the learner's responsibility to undertake this learning with the support of their line manager and the line manager's responsibility to review this at annual KSF appraisal.

The Corporate Statutory and Mandatory Training Identification Policy and Procedure document describes the processes relating to the identification, review, delivery and monitoring of statutory and mandatory training including non-attendance.

#### 12 Trust Associated Documentation

Blood and blood component transfer between hospitals procedure

Blood and Blood Component Transfusion administered outside of York Trust NHS Hospital Policy –to be made obsolete after the ratification of this document

#### Cell salvage

Consent to examination and treatment policy - York only

Emergency blood and platelet management arrangement protocol

Fresh Frozen Plasma and Cryoprecipitate Guidelines

Guidelines for the management of patients taking anti-platelet medications undergoing surgical and endoscopic procedures -

Human Anti D immunoglobulin Policy

Massive blood loss in adults management protocol

Massive Blood Loss in Paediatric Patients

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<u>Maternity Unit Guidelines Management of Women who Decline</u> Blood Products

Maternity Unit Guidelines Major Obstetric Haemorrhage

Maximum surgical blood order schedule

Neonatal Blood and Platelet Transfusion Guidelines - York site

Oral Anticoagulants - treatment of bleeding patients

Platelets Guidance

Positive patient identification policy

<u>Post operative Autologous Transfusion 'Use of the Bellovac</u> Autologous Blood Transfusion (ABT) System' Protocol

Pre assessment management of patient with bleeding disorder protocol

Pre assessment anaemia management for primary joint surgery protocol

Renal Unit Procedure for the positive identification of patients

<u>Transfusion incident investigation Protocol</u>

Training Identification Policy

Warfarin - Emergency Reversal Management Protocol -to be made obsolete and replaced with oral anticoagulant management guidance

Warfarin - Elective reversal for surgery and invasive procedures

#### 13 External References

Blood Safety and Quality Regulations 2005 No 50.

Blood Safety and Quality Regulations (Amendment) (No2) Regulations 2005 No 2898

The Blood Safety and Quality Regulations 2005

British Committee for Standards in Haematology (BCSH) (2009) *Guidelines on the administration of blood components.* 

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http://www.bcshguidelines.com/documents/Admin\_blood\_components\_bcsh\_05012010.pdf

British Committee for Standards in Haematology (BCSH) (2012)

Guidelines for pre-transfusion compatibility procedures in blood transfusion laboratories

<u>Guidelines for pre-transfusion compatibility procedures in blood</u> <u>transfusion laboratories - 2012 - Transfusion Medicine - Wiley</u> <u>Online Library</u>

British Committee for Standards in Haematology (BCSH) (2004) Guidelines for the use of fresh frozen plasma, cryoprecipitate and cryosupernatant. Transfusion Medicine, 126: 11-28

http://www.bcshguidelines.com/documents/FFP\_Amendments\_\_0 9122005.pdf

http://www.bcshguidelines.com/documents/FFP\_28020604.pdf

British Committee for Standards in Haematology (BCSH) (2004) *Guidelines for neonates' and older children.* Transfusion Medicine, 124: 433-453

http://www.bcshguidelines.com/documents/transfusion\_neonates\_amendments\_bcsh\_\_091205.pdf

http://www.bcshguidelines.com/documents/trasnfusion\_Neonates\_bjh\_124\_4\_2004.pdf

British Committee for Standards in Haematology (BCSH) (2004) *Guidelines for the use of platelet transfusions.* Transfusion Medicine, 122: 10-23

http://www.bcshguidelines.com/documents/platelettrans bjh 0407 2003.pdf

British Committee for Standards in Haematology (BCSH) (1996) Guidelines on gamma irradiation of blood components for the prevention of transfusion- associated- graft- versus- host disease. Transfusion Medicine, 6: 261-271

http://www.bcshguidelines.com/documents/Irradiation\_BJH\_2011.pdf

Name of policy: Blood and Blood Component Transfusion Policy and Procedures

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British Committee for Standards in Haematology (BCSH) (2012) Addendum to guidelines on the use of irradiated blood components

http://www.bcshguidelines.com/documents/BCSH\_TTF\_addendum\_irradiation\_guidelines\_final\_6\_11\_12.pdf

British Committee for Standards in Haematology (BCSH) (2007) Guidelines on the specification and use of information technology systems in blood transfusion practice. Transfusion Medicine, 2007, 17, 1–21

http://www.bcshguidelines.com/documents/IT\_blood\_testing\_2205 2006.pdf

Department of Health (2002) Better blood transfusion: Appropriate use of blood. Health Services Circular HSC 2002/009.

Department of Health (2007) Better blood transfusion: Safe and Appropriate use of blood. Health Services Circular HSC 2007/001.

HSC 2007/001: Better blood transfusion - appropriate use of blood : Department of Health - Publications

Department of Health. Reference guide to consent for examination or treatment, second edition 2009

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\_103643

Department of Health -Advisory Committee on the Safety of Blood Tissues and Organs (SaBTO) Patient consent for blood transfusion: Department of Health - Publications

National Patient Safety Agency Safer practice notice (14) Right Patient, Right Blood. (November 2006)

Patient Safety - Right patient, right blood: advice for safer blood transfusions

Name of policy: Blood and Blood Component Transfusion Policy and Procedures

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Norfolk, D. (ed) (2012) The Handbook of Transfusion Medicine (5<sup>th</sup> Edition)

# Welcome

Nursing Midwifery Council (2004) The NMC code of professional conduct: Standards for conduct, performance and ethics. London: NMC

Serious Hazards of Transfusion scheme (SHOT) Annual reports 1998-2013 London. SHOT

Home: Serious Hazards of Transfusion

Name of policy: Blood and Blood Component Transfusion Policy and Procedures

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## **Appendices**

**Appendix 1: Equality Analysis** 

**Appendix 2: Checklist for Review and Approval** 

Appendix 3: Implementation Plan

Appendix 4: Virtual Policy Review Group Checklist
Appendix 5: Electronic tracking of Blood Information

Appendix 6: Audit documents

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# **Appendix 1** Equality Analysis

To be completed when submitted to the appropriate committee for consideration and approval.

Naı	me of Policy	Blood and Blood Component Transfusion Policy and Procedures				
1.	To ensure that receive optimu	intended outcomes of this work? all patients requiring blood component transfusion m safe care that reflects the guidelines from British the Standards in Haematology, NICE and Royal				
2	Who will be a	ffected? Patients, Staff, Relatives and Carers				
3	What evidence have you considered?  All releases from NICE, BCSH and Royal Colleges regarding any changes in regimens or testing requirements up to and including March 2014					
а	<b>Disability</b> The policy exists to ensure safe effective care of patients requiring blood component transfusion. In the event of a patient with a learning disability, visual or hearing problem, the information would be provided to them in a suitable format.					
b	<b>Sex</b> Patient's spolicy.	sex has no bearing on the implementation of this				
С	Race Patient's race has no bearing on the implementation of this policy					
d	Age Patient's age has no bearing on the implementation of this policy					
е	Gender Reassignment This has no bearing on the use of this policy					
f	Sexual Orient	ation This has no bearing on the use of this policy				

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g	Religion or Belief Jehovah's witnesses may not accept the blood components listed in this policy. Reasonable adjustments have been made to fit with their beliefs – a separate document 'Management of patients who Decline Blood Products' is available.					
h	Pregnancy and Maternity This has no bearing on the use of this policy					
i	Carers This has no bearing on the use	of this policy				
j	Other Identified Groups This has no be policy	earing on the use of this				
4.	Engagement and Involvement					
a.	. Was this work subject to consultation? Yes					
b.	How have you engaged stakeholders in constructing the policy	Yes				
C.	If so, how have you engaged stakeholders in constructing the policy content and service provision throughout organisation					
d.	For each engagement activity, please sthey were engaged and key outputs	state who was involved, how				
	Laura Munro – Lead Consultant for Tra	nsfusion				
	Jackie Davy- Blood Bank Manager Scarborough					
	Mandy Checketts- Operational Manager York Blood Bank –					
	Morris Jakubovic – Hospital Liaison Committee for Jehovah's Witnesses – development of separate document for management of patients who refuse blood components					
	Members of HBTG-					
5.	Consultation Outcome					
	Now consider and detail below how the proposals impact on elimination of discrimination, harassment and victimisation, advance the equality of opportunity and promote good relations between groups					

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а	Eliminate discrimination, harassment and victimisation
b	Advance Equality of Opportunity
С	Promote Good Relations Between Groups
d	What is the overall impact?
	Name of the Person who carried out this assessment: Tina Ivel
	Date Assessment Completed 22 <sup>nd</sup> October 2014
	Name of responsible Director Laura Munro

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Equality and Diversity Committee, together with any suggestions as to the action required to avoid/reduce this impact.

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## **Appendix 2** Checklist for Review and Approval

Authors need to be confident that their policy meets all of the criteria identified below before submitting this to the appropriate committee(s) for consideration and approval.

	Title of document being reviewed:	Yes/No	Comments
1.	Development and Management of Police	ies	
	Is the title clear and unambiguous and meets the requirements of page 3 of the Development and Management of Policies Policy?	Y	
	Is it clear whether the document is a policy, procedure or protocol?	Y	
	Does the style and format of the policy meet the requirements of section 3.2 of the Development and Management of Policies Policy?	Y	
	Does the policy contain a list of definitions of terms used?	Y	
2.	Rationale		
	Are reasons for development of the document stated?	Y	
3.	Development Process		
	Is the method described in brief?	Υ	
	Are individuals involved in the development identified?	Y	
	Do you feel a reasonable attempt has been made to ensure relevant expertise has been used?	Y	
	Is there evidence of consultation with all relevant stakeholders and users?	Υ	
4.	Content		
	Is the document linked to a strategy?	Υ	
	Is the objective of the document clear?	Y	
	Is the target population clear and unambiguous?	Υ	
	Are the intended outcomes described?	Y	
	Are the statements clear and unambiguous?	Y	
	Does it meet all of the requirements of NHSLA RMSAT or other relevant body, if	Y	

Name of policy: Blood and Blood Component Transfusion Policy and Procedures

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	Title of document being reviewed:	Yes/No	Comments			
	applicable?					
5.	Evidence Base					
	Is the type of evidence to support the document identified explicitly?	Y				
	Are supporting references cited in full?	Y				
	Are local/organisational supporting documents referenced?	Y				
	Are all associated documents listed and updated?	Y				
6.	Approval					
	Does the document identify which committee/group will approve it?	Υ				
	If appropriate, have the staff side committee (or equivalent) approved the document?	NA				
7.	Dissemination and Implementation					
	Does the dissemination plan identify how this will be done and is it clear?	Y				
	Does the plan include the necessary training/support to ensure compliance?	Y				
	Does the policy detail what evidence will be collated to demonstrate compliance with it?	Y				
8.	Document Control					
	Does the document identify where it will be held?	Υ				
	Have archiving arrangements for superseded documents been addressed?	Y				
9.	Process for Monitoring Compliance					
	Are there measurable standards or KPIs to support monitoring compliance of the document?	Y				
	Is there a plan to review or audit compliance with the document?	Y				
10.	Review Date					
	Is the review date identified?	Υ				
	Is the frequency of review identified? If so, is it acceptable?	Υ				

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11.	Overall Responsibility for the Document			
	Is it clear who will be responsible for coordinating the dissemination, implementation, evidencing, monitoring and review of the documentation?	Y		

#### **Policy Owner's Approval**

If you are happy to approve this document, please sign and date it and forward to the chair of the committee/group where it will receive final approval. (This can be completed electronically with an electronic signature)

Name	Tina Ivel on behalf of HTT	Date	January 2015
Signature	Tina Ivel		

#### **Committee Approval**

If the Chair or Vice Chair of the committee is happy to approve this document, please sign and date here and enter the name of the committee/group. The Policy Author will contact the secretary/administrator of the committee/group to obtain a signed copy of this checklist. The Policy Author will then submit this together with the approved policy (ensuring the "draft" watermark is removed) to the Policy Manager for logging and publication.

Name	Laura Munro	Date	January 2015			
Signature	Laura Munro					
Committee/ Group title	Hospital Blood Transfusion Group					
For Policy M	lanager's use only					
_	ned and completed Checklist for Revi companying the policy?	ew and	Yes			
Is the policy logged on Qpulse?						
Has the old version of the policy been archived? (if applicable)						
Has the policy been published on Staffroom?						
Author notified that policy has been published?  Yes						

Name of policy: Blood and Blood Component Transfusion Policy and Procedures

Version Number: 10

# Appendix 3 Plan for the dissemination of a policy

To be completed and attached to any document which guides practice when submitted to the appropriate committee for consideration and approval.

Title of document:	Blood and Blood Component		
	Transfusion Policy and		
	Procedures		
Date finalised:	January 2015		
Previous document in use?	Υ		
Dissemination lead	Tina Ivel		
Which Strategy does it relate to?	Quality and Patient Safety		
If yes, in what format and where?	NA		
Proposed action to retrieve out of date copies of the document:	Healthcare Governance Directorate will hold archive		

To be disseminated to:	1) Staff involved in transfusion process across organisation	2) Staff involved in transfusion process outside of organisation
Method of dissemination	E Mail	E Mail
who will do it?	Tina Ivel	Tina Ivel
and when?	On approval	On approval
Format (i.e. paper or electronic)	Electronic	Electronic

# **Dissemination Record**

Date put on register / library	11 February 2015
Review date	January 2017
Disseminated to	See above
Format (i.e. paper or electronic)	Electronic
Date Disseminated	
No. of Copies Sent	
<b>Contact Details / Comments</b>	

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#### **Appendix 4**

#### **Virtual Policy Review Group Checklist**

All policy/procedure authors are required to complete the table below, entering ticks or text in the relevant box and to be open and honest about any implications. Failure to identify implications may lead to the document approval process being delayed.

Policy Title:							
Policy Author				Policy Owner			
Date of submiss	sion to VPRG	•••••					
		Yes	No	Not Sure	N/A	Comr	nents

#### CLaD

Does the policy/procedural document require staff to be formally trained?

Would the training be classified as Statutory/Mandatory and is this already included in the Statutory/Mandatory Training Brochure?

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# Yes No Not N/A Comments Sure

Does training require the learner to access statutory or mandatory learning material/content on line?

#### **Procurement**

Will the introduction of the document incur additional costs associated with equipment, disposables, maintenance agreements etc?

What is the likely additional cost associated with the above?

#### **Information Technology**

Will the introduction of the document require an increase in computer hardware?

Are there any software, IT training or software license requirements associated with the document's introduction? If so, what are the estimated costs associated with this? **Information Governance** 

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# Yes No Not N/A Comments Sure

Are there any information governance issues associated with the introduction of the document?

#### HR

Will there be any impact on staffing levels or any other HR related issues? (If so give details)

#### **Estates and Facilities**

Will there be any significant impact on Estates and Facilities associated with the introduction of the document? (If so, give details)

#### **Communications**

Will the introduction of the document require significant communications team input?

#### **Risk and Legal**

Are there risks associated with the introduction of this document?

Are there any legal implications associated with the introduction of this document?
Will the introduction of the document require the production of significant

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# Yes No Not N/A Comments Sure

additional or new patient information?

#### **Occupational Health**

Will the introduction of the document have any potential implications on the OH department?

#### **Health and Safety/Security**

Will the introduction of the document have any significant health and safety or security implications for the Trust?

#### Corporate

Will the introduction of the document have any corporate governance implications for the Trust not covered above?

#### **Finance**

Are there any changes from the proposed document which have a financial impact?

If you answered yes to the above question, please provide detail.

Does the document require any

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# Yes No Not N/A Comments Sure

change in financial processes or arrangements? (e.g. Payroll, Invoicing, Payments etc)

If you answered yes to the above question, please provide detail.

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If you answered yes to the first question, has a business case been submitted? Enter details alongside relevant entry

# **Submitted and Approved**

(Include Business case No.)

**Being written** (Please provide planned timeframes for submission)

# **Saving being Declared**

**None of the above** (Please give a brief explanation of the reasons why a business case has not been submitted or savings declared)

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# Appendix 5 Electronic tracking of blood components and products using Blood Track systems for clinical staff

## Aspects covered in this section:

- A. Collection/delivery at issue fridge
- B. Blood enquiry
- C. Blood on demand issue

## A. Routine collection/delivery of blood units

#### 1) Scan User ID

All staff putting blood into/taking blood out of the issue fridge must have received training, been issued with an individual bar code or code to allow access to the fridge and undertaken a competency assessment.

These codes must not be loaned to other staff members for them to gain access.

If new bar code required (due to new ID badge, rubbed off, newly trained member of staff etc) contact either Link nurse for clinical area or member of transfusion team.



#### 2) Touch TAKING OUT

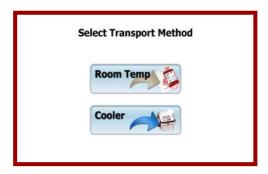


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## 3) Select Transport Method



This option depends on permissions granted by the Transfusion Laboratory.

4) Scan wristband using linear barcode of NHS Number or Enter Patient NHS Number/Hospital number via keypad.

## 5) Confirm Patient Details



## 6) Open Door and Remove Unit

Blood fridge is now unlocked and appropriate unit can be removed from blood fridge. Try to take the oldest unit first.

Scan the unit number bar code starting G0.......

#### 7) Scan Blood Unit Number



#### 8) Remove Another Unit?

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Usually only one unit at a time will be removed. Press No then log out of system.

# **Returning blood**

- 1) Scan User ID
- 2) Touch PUTTING IN



- 3) Scan Blood Unit Number
- 4) Open Door and Place Blood In
- 5) Touch Logout

## **Emergency Blood**

- 1) Scan User ID
- 2) Touch Emergency Blood Button

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## 3) Remove Blood From Fridge



## 4) Scan Blood Unit



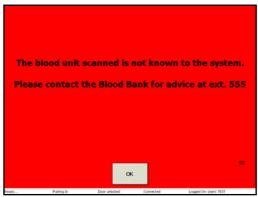


Blood units with **red boxes** should **never** be put back into the issue fridge without contacting the Transfusion Laboratory to resolve the problem.

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NB SGH contact details for Blood Bank is extn 2322.

If the computer systems are down, the person removing the blood will need to contact Transfusion to gain the keypad access code and all details should be recorded in the white register next to the blood fridge.

## **Key Points**

- Never remove or return a unit without scanning it. The Blood Bank is automatically alerted if a unit is not scanned and you will be contacted.
- Only remove one unit at a time
- If in doubt, place the blood unit back in the fridge and contact the Blood Bank at ext:
- When scanning, keep the blood unit low and flat
- If having trouble scanning, remove the barcode from under the scanner and try again

If there are any issues with the kiosk contact the Transfusion Laboratory or the Transfusion Practitioners as soon as possible in order to sort out the problem.

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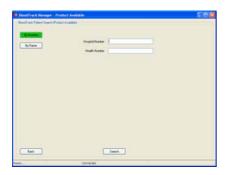
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## B. Blood Enquiry in the clinical area

1) Click on the desktop icon to run Blood Enquiry. This should be available on the majority of laptops available in the clinical areas.



2) There are 4 options available for clinical staff:-



i) Product Available - Shows where and how much of each product is available for a particular patient



**ii) Sample Available -** Enter the patient details, then press Search. This should bring up if the patient has a valid sample in the Transfusion Laboratory.



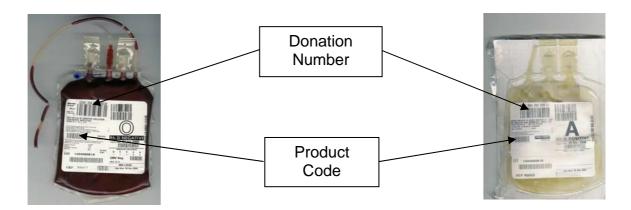
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## iii) Arrival of blood components or products

Scan the blood donation number (Top left beginning with G).
 If the green box does not appear immediately a prompt to scan the product code may appear at the top of the screen. If this occurs the product code needs to be scanned.



- 2. If you get a green box, take the blood unit to the patient and begin the bedside check with a second person as per the Trust Transfusion Policy & Protocol.
- 3. If you get a red box, contact the blood bank immediately, this signifies something is wrong & the unit is not safe to use.







## iv) End Transfusion

After the transfusion is completed (whether the whole unit or partial unit has been used) –**SEAL THE BAG WITH A BLUE STOPPER** and put into clear plastic bag (if appropriate). Scan the unit to mark as transfused.

1. Click the 'End Transfusion' button from the blood enquiry icon.

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- 2. Scan or enter your user ID barcode number.
- 3. Scan the donation number (Top left beginning with G). You may need to scan the Product Code (see page 1).
- 4. A Green box means that the transfusion has been recorded.
- 5. There is no need to sign, date and save the label for return to the transfusion laboratory if the unit has been scanned.

In the event of a system / power failure the paper based solution (luggage label system) will be implemented as a temporary measure.

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## C. Blood on demand – Haemosafe Fridge

The Haemosafe® is software controlled, automated dispensing refrigerator that secure, track, monitor and remotely allocate uncross matched, unassigned and emergency blood on demand and at point of care.



#### How Blood Track on demand works

- 1. Unallocated ABO blood is stored in special automated dispensing refrigerator at the point of care instead of cross matching blood for specific patients ahead of time.
- 2. When a patient needs blood, trained clinical staff identify themselves at the computer controlled refrigerator and then identify the patient by scanning a barcoded request form.
- 3. The patient's electronic cross match eligibility and ABO/Rh is determined through communication with the laboratory information system and identifies the most appropriate unit for the patient.
- 4. An appropriate blood unit is automatically selected by the system based on:
  - o Blood Group
  - Type of product required
  - Special requirements
  - Blood unit expiation date
  - o Or manual selection by hospital blood bank
- 5. In real time the cross match is performed electronically, the refrigerator unlocks only the most appropriate unit for the patient.
- 6. The care giver then removes the unit, scans it, applies the printed compatibility label, and is asked to verify that the process has been completed successfully by scanning both the blood unit and the compatibility label bar codes in quick succession.

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7. The blood unit is ready to be transfused – all in less than 60 seconds. This has significant advantages;

**Reduced Blood Bank Workload** – experienced hospital blood bank staff are in short supply. By reducing unnecessary labour associated with cross matching, transporting, and returning of unused blood, the blood bank and clinical staff workload is reduced.

**Reduced Delivery Time** – unallocated blood can be stored then cross matched and dispensed on demand in shorter time line than obtaining straight from Laboratory.

**Reduced Blood Waste** – reduces the number of times blood is cross matched and transported back and forth to issue fridge, reducing the risk to each unit. **Reduced Blood Inventory** –a smaller stock of unallocated blood can be made available to a large number of patients with the same blood type.

Only when a valid group and screen is not available, or the results show antibodies a traditional cross match required.

In emergencies, each dispensing refrigerator also doubles as a source of group O negative blood for computer controlled release.

#### To remove cross matched blood

#### 1. Scan User ID



#### 2. Touch TAKING OUT

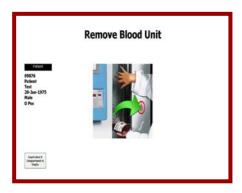


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- 3. Scan wristband using linear barcode of NHS Number or Enter Patient Details manually.
- 4. Confirm Patient Details
- 5. Open Door and Remove Unit



6. Scan Blood Unit Number



7. Remove Another Unit?



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# Removing unallocated blood

- 1. Scan User ID
- 2. Touch TAKING OUT
- 3. Scan or wristband using linear barcode of NHS Number Enter Patient Details manually.
- 4. Confirm Patient Details
- 5. Open Door and Remove Unit
- 6. Scan Blood Unit Number
- 7. Confirm Label Printed



- 8. Attach label to unit
- 9. Scan Blood Unit Number
- 10. Scan Compatibility Label
- 11. Remove Another Unit?

## **Returning units**

- 1. Scan User ID
- 2. Touch PUTTING IN
- 3. Scan Blood Unit Number
- 4. Open Door and Place Blood In
- 5. Touch Logout

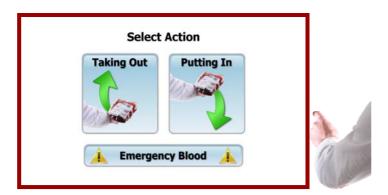
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## **Emergency Units**

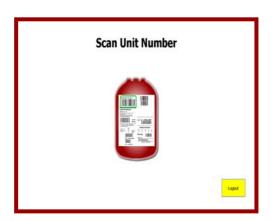
- 1. Scan User ID
- 2. Touch Emergency Blood Button



## 3. Remove Blood From Fridge



## 4. Scan Blood Unit



# 5. Remove Another Unit of Emergency Blood?

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#### **Alerts**



NB SGH contact details for Blood Bank is extn 2322.

- Never remove or return a unit without scanning it. The Blood Bank is automatically alerted if a unit is not scanned and you will be contacted.
- Check the compartment before opening the door. If your unit is not there
  on Taking Out, or if the compartment is full on Putting In, use the
  'Compartment Not Empty/Empty' button on the screen
- If in doubt, place the blood unit back in the fridge and contact the Blood Bank
- When scanning, keep the blood unit low and flat
- If having trouble scanning, remove the barcode from under the scanner and try again.

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# **Appendix 6 Audit Documents**

## Patient identification

#	Patient	Criterion 1 – Wristband present and legible?	Criterion 2 - First name ?	Criterion 3 - Last Name?	Criterion 4 - DOB?	Criterion 5 - NHS or ID number?	Criterion 6 - Patient able to confirm identity	Are there any discrepancies?
1								
2								
3								
4								
5								
6								
7								
8								
9								

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## PART A – Pre-Transfusion documentation

Date audited:

Name of Clinical area:

#	Patient	Location	Clinical indication recorded?	Pre Tx indices?	Date Tx decision was made?	Components to be transfused with volumes/doses?	Information given & consent obtained and documented?	Specific requirements needed?
1								
2								
3								
4								
5								
6								
7								
8								
9								

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#### Part B - Audit of transfusion observations

Date audited:

Name of Clinical area:

#	Patient	Location	Criterion 1 - Pre-Obs?	Criterion 2- At 15 mins?	If not at 15 minutes, when?	Criterion 3 – Post- Obs?	Criterion 4 -Start time of transfusion recorded	Criterion 5 -Stop time of transfusion recorded
1								
2								
3								
4								
5								
6								
7								
8								
9								

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## **Audit of transfusion documentation**

#### Date audited:

## Name of Clinical area:

#### PART C – Post-transfusion documentation

#	Patient	Location	Criterion 1-Blood authorised and signed?	Criterion 2- Was the protocol signed by the checking personnel	Criterion 3 – Was the component number recorded on the protocol?	Criterion 4- Did the transfusion achieve the desired effect?	Criterion 5- Was there an adverse transfusion event and documented in the patient records?	Criterion 6 -If Yes to 5 was this reported to the Transfusion Lab?
1								
2								
3								
4								
5								
6								
7								
8								
9								

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# Sampling audit

Date this sheet was started	Sample Number											Totals
						<u> </u>						Ţ
\A/I ( )		1	2	3	4	5	6	7	8	9	10	
Who took	Dr				-							
the sample?	Nurse				-							
	Midwife		-									
	Community Midwife				-							
	HCA											
	Phlebotomist											
	ODA/OPD											
	Unknown											
Where was	A&E/ED											
the blood	AMU											
sample	ICU/HDU											
taken?	Theatres/PACU											
	OPD/Pre op clinic											
	SCBU											
	Paeds (17/CAU)											
	Inpt ward											
	Day Unit											
	Delivery suite											
	Community											
	Unknown											
When was	Core hours											
the sample	Out of hours											
taken?												
What was	Core patient identifier(s)											
the reason	missing from tube											
for the	Core patient identifier(s)											
rejecting the	missing from form											
sample?	Core patient identifier(s)											
	don't match on tube and											
	form											
	Other required details											
	missing from tube											
	Other required details											
	missing from form											
	Other required details											
	don't match on tube and											
	form		-	-	-					-		
	Illegible details on tube											
	or form											
	Unlabelled tube or form				1							
	Pre printed label on tube				1							
	Details over written			1				1				

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If able meet the person who took the sample, pointing out the reason for the sample rejection. Then say:-Please talk me through what you did when you took this sample.

	Transcription error – copied information wrongly								
	Copied details from something other than patient's wristband								
	Was told that the missing information was not needed/not important								
	Did not know that the information was needed								
	Knew I should sign tube or form but forgot								
	Put wrong sticky label on request form								
	Patient was not wearing a form of ID								
	Did not label at the patient's side								
	Was interrupted or distracted								
	Was unaware of some/all of the procedure								
	Information needed to complete the labelling was not available								
	Unable to label the sample at the patient's side								
	Did not check Patient ID								
	Asked someone else to label the sample/Labelled the sample for someone else								
	Other, please state								
Has th	ne individual been competency assessed for venepuncture/transfusion sampling?								
	Yes No Don't know								
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