Royal Derby Hospital -site specific

University Hospitals of Derby and Burton NHS Foundation Trust

TRUST POLICY FOR THE TRANSFUSION OF BLOOD AND BLOOD COMPONENTS.

Reference Number CL-RM/ 2012 010	**Version: 4.7**	**Status: Final**	**Author:** Angela McKernan Job Title Lead Transfusion Consultant Sandra Dodds Job Title Blood Bank Manager Heather Clarke Job Title Lead Transfusion Practitioner Katarina Kacinova Job Title Transfusion Practitioner

Version / Amendment History	Version	Date	Author	Reason
	1 - 3	2005 - Feb 2007	S.Dodds W.Wagg	Reviews
	4	Oct 2008	Pam Twine	Amendments following review
	4.1 4.2	Jan 2011	Pam Twine	Monitoring section updated Minor amendment
	4.3	July 2012	Judith Beale	Amended following review
	4.4	Oct 2013	Pam Twine	Addition of Appendices
	4.5	February 2016	Heather Clarke	Reviewed and updated following review
	4.6	May 2019	Katarina Kacinova	Amendments following review
	4.7	October 2022	Katarina Kacinova	Addition of process 19 - Patient Blood Management in Transgender Patients

Intended Recipients: All wards and Departments
Training and Dissemination: At Induction then 3-yearly. IV Study days. Update

training sessions as requested/required. E-learning on the hospital intranet.
To be read in conjunction with: Policy for Managing Requests of Exclusion from Treatment with Blood Components/Products, Transfusion Handbook, Patient Identification Policy and Massive Transfusion Action Card
In consultation with and Date: Hospital Transfusion Committee, Clinical Effectiveness Committee, Medical Advisory Committee, Quality Assurance Committee
EIRA stage One Completed Yes Stage Two Completed N/A

Procedural Documentation Review Group Assurance and Date	
Approving Body and Date Approved	Trust Delivery Group - 28 November 2022
Date of Issue	November 2022
Review Date and Frequency	April 2025 (then every 3 years)
Contact for Review	Transfusion Practitioner
Executive Lead Signature	Executive Medical Director
Approving Executive Signature	 Dr James Crampton Interim Executive Medical Director

CONTENTS

Introduction

1.1 Royal Derby Hospital as a part of the University Hospitals of Derby and Burton NHS Foundation Trust (UHDB) is committed to delivering safe and clinically effective transfusion practice. This policy sets out the standards for all stages of the transfusion process, for staff training and for the required monitoring and audit of practice.

1.2 The Trust Policy for the Transfusion of Blood and Blood Components is reviewed and updated every 3 years to ensure it continues to be consistent with the corporate strategy, reflects national guidance and best practice, and complies with current legislation.

1.3 Blood is a valuable but a limited resource. Currently the Trust receives more than 12,000 red cell units annually and 2000 units of platelets and fresh frozen plasma. Blood transfusion is not a risk-free process and in decision-making the benefits of blood transfusion must outweigh the risks. Compliance with this policy will minimise the risk to patients.

2 Purpose and Outcomes

2.1 This policy applies to all transfusion decisions and transfusion episodes within the Trust, both in the clinical areas and the Blood Transfusion Laboratory.

2.2 This policy applies to staff who are directly involved in the process of blood transfusion, and those who support clinical staff by providing resources, training, and management infrastructure.

2.3 This policy applies to the transfusion of blood components, these include: Red Blood Cells (RBC), Fresh Frozen Plasma (FFP) and Octaplas, Platelets (PLTs), Cryoprecipitate (Cryo) and Granulocyte components.

2.4 This policy also applies to the Community, as blood transfusion occasionally take place there.

2.5 This policy does not apply to other pharmaceutically prepared products such as Intravenous Immunoglobulin (IVIG), Albumin, and Coagulation Factor Concentrate.

2.6 This policy does not apply to the administration of anti-D, but does apply to the testing prior to administration and the reporting of anti-D related incidents.

2.6 The purpose of this policy is to define steps for a safe and clinically effective blood transfusion process, and the management of transfusion related incidents.

2.7 It will ensure that staff involved in any stage of the process of transfusing blood components is fully conversant with their role and all aspects of the procedures.

2.8 It will also promote the appropriate use of blood transfusion, and the use of alternatives to allogeneic blood when possible.

2.9 The aim of the policy is to provide a framework for transfusion practice to ensure safe and appropriate use of blood components, working to best practice, national guidance, and legal and accreditation requirements.

2.10 Key objectives are to:

- Increase staff awareness of safe transfusion practice and adherence to the Blood Transfusion Policy and procedures. This includes the critical steps in the process of transfusing blood: sampling and requesting, storage, handling, and administration of blood components, monitoring of the patient and reporting transfusion reactions.
- Clearly define roles and responsibilities for all stages of the transfusion process.
- Improve standards of transfusion practice by the implementation of national guidance and best practice.
- Establish effective and clear communication between various teams involved in transfusion practice. These teams include clinical front line teams, laboratory staff, the Hospital Transfusion Team (HTT), the Hospital Transfusion Committee (HTC), and other governance and supporting teams.
- Create a culture of openness and willingness to report blood transfusion related incidents and near misses with the aim to learn, implement corrective and preventative actions and ultimately reduce such occurrences.
- Promote the practice of clinical audit and data analysis with regard to all aspects of transfusion practice, which will ultimately influence future clinical and management decisions.
- Define the training and competency assessment strategy for staff involved in transfusion practice in line with the Trust Induction and Mandatory Training Policies.

Ensure the ability of the Trust to meet national standards and comply with regulatory requirements.

3 Definitions Used

3.1 Allogeneic Blood Component – A blood component obtained from a donor and transfused to a recipient where the donor and the recipient are two different individuals.

3.2 Autologous Blood Component – A blood component obtained from and returned to the same individual.

3.3 Blood Transfusion – The process by which a blood component is infused intravenously to a recipient to achieve a therapeutic goal.

3.4 Blood Component – A therapeutic constituent of human blood, as defined by the Blood Safety and Quality Regulations (BSQR) (SI 2005

No.50 as amended), i.e., red blood cells, platelets, fresh frozen plasma (FFP), cryoprecipitate, and granulocytes.

3.5 Clinical Special Requirements – Any special requirement (e.g. irradiated or CMV seronegative) which is a patient-specific clinical requirement (defined by the patient's underlying clinical condition), as opposed to either a special requirement carried out automatically during component processing (e.g. irradiating granulocytes), or a special requirement for components issued for a particular age group (e.g. Kell negative red cells for woman of child bearing potential (<50 years of age).

3.6 Cold Chain - A cold chain is a temperature-controlled supply chain. An unbroken cold chain is an uninterrupted series of storage and distribution activities which maintain a given temperature range.

3.7 Cryoprecipitate (Cryo) – A blood component obtained by thawing and re-freezing FFP. It is a rich source of fibrinogen. They are obtained by pooling five whole blood donations.

3.8 Fresh Frozen Plasma (FFP) – Plasma obtained from donors and frozen to maintain the function of clotting factors.

3.9 Platelets (PLT) – A platelet concentrate suspended in additive solution for the purpose of transfusion to a recipient. They are either obtained from a single donor by apheresis, or by pooling platelets obtained from four whole blood donations.

3.10 Red Blood Cells (RBC) – A red blood cell concentrate suspended in additive solution for the purpose of transfusion to a recipient.

3.11 Traceability- the ability to trace each individual unit of blood or blood component from the donor to its final destination, whether this is a recipient, a manufacturer or medicinal products or disposal and vice versa.

4 Key Responsibilities/Duties

4.1 The **Chief Executive** will ensure that:

- The Trust is compliant with all legal requirements pertaining to blood transfusion
- The Trust has risk assessed and justified its response to new recommendations as they are released
- The Hospital Transfusion Team is supported and resourced to implement national directives and initiatives relating to blood transfusion
- The Hospital Transfusion Team is supported and resourced to conduct regular audits including National Comparative Audits to monitor transfusion practice

4.2 The **Hospital Transfusion Committee (HTC)** is responsible for ensuring that Trust staff upholds the principles and guidelines within this policy.

4.2.1 The **HTC** will:

- Oversee transfusion practice, agree/approve major changes in practice, ensure adherence to national recommendations and legislation, and monitor transfusion safety within the Trust.
- Ensure that any major changes are systematically debated, agreed, and implemented.
- Meet quarterly.

4.2.2 The **Chair of the HTC** will:

- Invite representatives from the Hospital Transfusion Team, Clinical Divisions, Patients, Risk and Education, the Medical Director and the Nurse Directors as well as other representatives from relevant groups within the Trust.
- Report to the Chief Executive via the Medical Director.

4.2.3 The **Lead Consultant for Transfusion** will:

- Take UHDB concerns to the National Blood Transfusion Committee via the Regional Transfusion Committee for discussion.
- Discuss issues raised at the National and Regional Transfusion Committees at the HTC.
- Provide an annual report to the Healthcare Governance Committee.

4.3 The **Hospital Transfusion Team (HTT)** includes the Blood Bank Manager and relevant staff, Lead Consultant for Transfusion and the Transfusion Practitioners.

4.3.1 The **HTT** will:

- Meet regularly to review transfusion initiatives and policies, blood usage and wastage, audits, untoward blood transfusion related incidents and training.
- Meet regularly with Divisions at local Division meetings.
- Promote safe transfusion practice throughout the Trust and be a specialist resource for staff and patients.
- Assist in the investigation of incidents relating to transfusion and if appropriate, assist in setting corrective and preventative actions.

4.3.2 The **Lead Consultant for Transfusion** will:

- Provide clear policies and guidelines for the management of blood transfusions (in collaboration with the HTT).
- Support managers to fulfil their responsibilities regarding the implementation of this policy (in conjunction with the HTT).
- Monitor the effectiveness of the implementation of this policy (in collaboration with the HTT).
- Draw up an action plan to address the national directives and initiatives identified.
- Ensure that audits on key aspects of transfusion practice are carried out.

4.3.3 The **Blood Bank Manager** will:

- Ensure that all serious adverse reactions and events are reported to the Medicines and Healthcare Devices Regulatory Authority (MHRA) and all serious transfusion related incidents are reported to Serious Hazards of Transfusion (SHOT).
- Ensure that the transfusion quality management system for Blood Bank is developed, implemented and maintained.

4.3.4 The **Transfusion Practitioners** will:

- Feed back any transfusion related issues to relevant Trust groups and external bodies as required.
- Support the development and delivery of an education strategy that is accessible to all staff involved in the transfusion process as agreed by the HTT, HTC and Trust.
- Provide Good Manufacturing Practice (GMP) training where appropriate.
- Devise and coordinate a programme of audits for the transfusion laboratory to monitor compliance with regulatory and accreditation requirements including MHRA, UKAS and ensure that follow up actions are taken.
- Support the transfusion laboratory in the investigation of incidents and service complaints and ensure that follow up actions are taken.
- Coordinate the response to external assessments of transfusion and verify completion of corrective action as required by reports of the assessors.
- Provide help and advice on quality management matters.

4.3.5 CONTACT DETAILS OF HTT MEMBERS

Transfusion Practitioners		
Katarina Kacinova	Ext. 88530	Katarina.Kacinova@nhs.net
Michelle Morley	Ext. 88296	Michelle.Archard1@nhs.net
Aimee Burtenshaw	Ext. 88296	Aimee.Burtenshaw@nhs.net

Blood Bank		
Heather Clarke	Ext. 89406	Heather.Clarke9@nhs.net
Nicola Kirkham	Ext. 88296	Nicola.Kirkham2@nhs.net

Lead Consultant	
Contact Dr Humayun AHMAD – interim transfusion lead	h.ahmad@nhs.net

4.4 **Clinical and Nurse Directors** will oversee the transfusion practice in their area of work.

Clinical and Nurse Directors will:

- Ensure that staff involved in the transfusion process receives appropriate training in transfusion at induction and regular updates thereafter.

- Ensure that their divisions take part in transfusion audits and ensure that appropriate changes in clinical practice are made as a result of the recommendations of those audits.
- Ensure that untoward blood transfusion related incidents are discussed at Division level and that corrective action is taken to prevent such incidents from occurring again.
- Ensure that incidents involving transfusion are reported to the Transfusion Practitioners or Blood Bank Manager and where relevant, on the Trust Datix system.

4.5 **Health Care Practitioners** (this includes doctors, registered practitioners, ODP's, clinical assistants and all staff involved in the transfusion process) will:

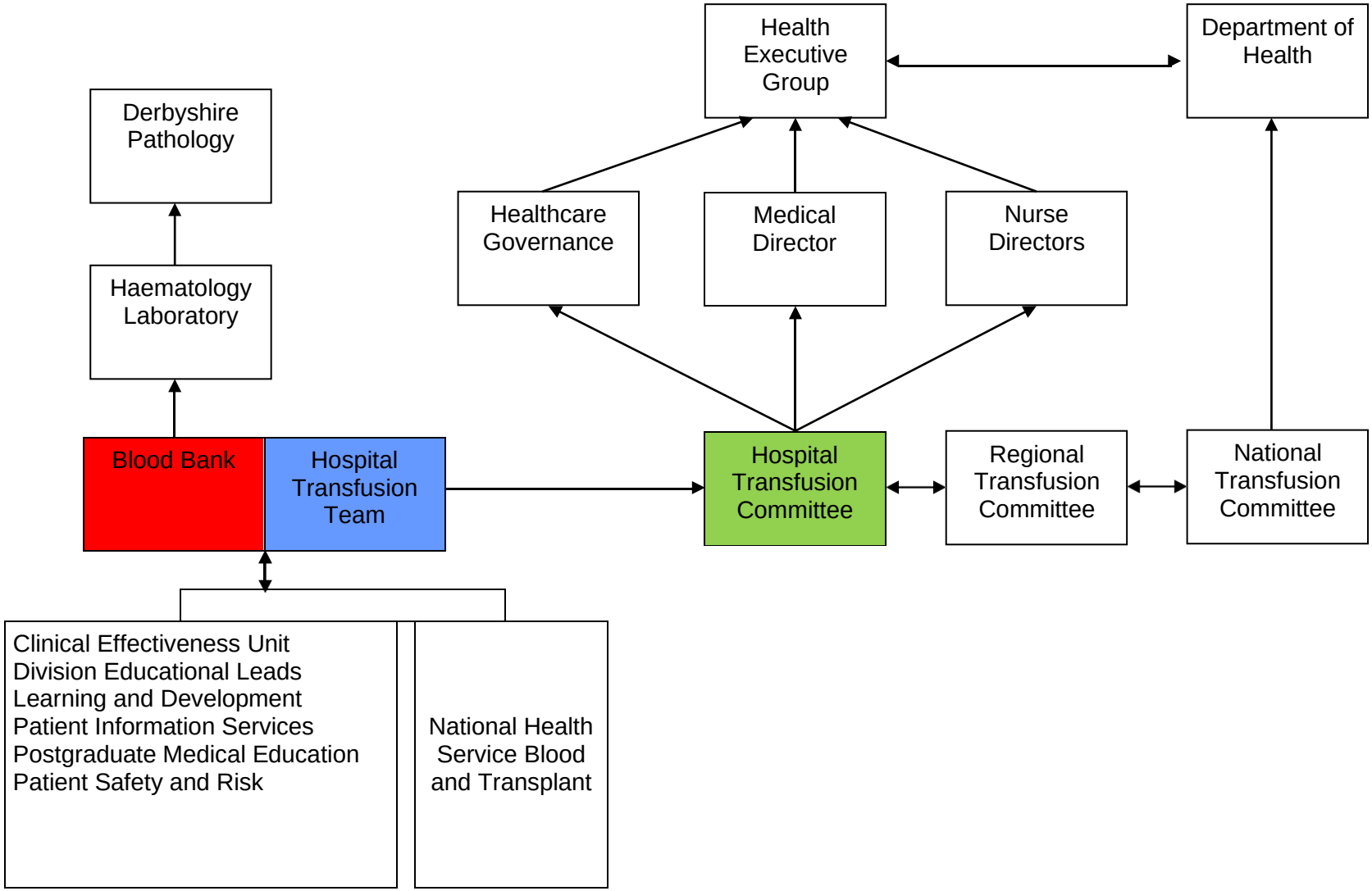
- Follow policy and procedures to ensure safe and appropriate care during the transfusion process.
- Only take part in the transfusion process if they are trained and competent in that role.
- Report and assist in the investigation of any transfusion related incident.

4.6 The **Blood Bank Manager** will:

- Manage the Blood Transfusion Laboratory to ensure a safe and effective transfusion service.
- Manage stocks of blood components to maintain service delivery and minimise wastage.
- Ensure appropriate storage of blood components and maintain the cold chain.
- Recall any blood component which may cause a hazard to patients.
- Ensure traceability of all blood components and retain documentation of all blood components for 30 years as required by the BSQR (2005)
- Report all serious adverse events and reactions to the MHRA and/or SHOT.
- Ensure Blood Bank complies with all accreditation requirements including UKAS and MHRA.
- Ensure effective communication with blood component suppliers (NHSBT, Octapharma etc.).

4.8 ORGANISATIONAL ARRANGEMENTS

UHDB (Royal Derby Hospital) Blood Transfusion Line of Reporting Organogram



5 Trust Policy for the Transfusion of Blood and Blood Components

5.1 Training Requirements

Blood Transfusion has been classed as essential to role which means that it is mandatory for some staff employed by the Trust, depending on their job role. There is more than one training option available for Blood Transfusion and staff should complete the most relevant option to suit the responsibilities and risks associated with their role.

5.2 Training and Competencies

All staff involved in blood transfusion must have up to date Blood Transfusion Theory training and have completed the relevant competency assessments. The Transfusion Practitioners and the Hospital Transfusion Team are responsible for setting local policies for blood transfusion and ensuring that staff involved in blood transfusion has access to adequate training.

All Medical staff, Nurses, HCA's, CSW's, Midwives, ODP's, Phlebotomists involved in transfusion sampling, collection, administration and transport of blood components to the clinical area receive Blood Transfusion Theory training at induction and thereafter at 3 yearly intervals.

Porters are trained and competency assessed for blood collection only and their training is recorded locally by the Transfusion Practitioners.

All staff involved in the blood transfusion process must also have an observed competency assessment performed on the tasks relevant to their role. These competencies are once only unless returning from long term sick or maternity leave, or if an individual is involved in a transfusion related incident. Then the relevant competency assessments must be re-done.

Proof of training and competency assessments are kept on the Trust Learning Hub and can be accessed on the individuals Training Passport.

5.6 The Blood Transfusion Policy is available on Koha via the Trust Intranet site (NETi). Directors and senior Managers are responsible for ensuring that their staff is aware of, and compliant with this policy.

5.7 The Trust's processes and guidance for blood transfusion are detailed in the following protocols. To access these protocols, click on the hyperlinks associated with each title:

6 Monitoring Compliance and Effectiveness

Monitoring Requirement:	• Care of patients (including the vital signs and observations) receiving a transfusion of blood / blood components. • The process of administration of blood / blood components including the bedside checking procedure. • Compliance with blood transfusion training. • Compliance with blood transfusion competency assessments. • Compliance with blood component traceability.
Monitoring Method:	• Incident analysis – data relating to blood component administration • Audit of administration and care process. • Blood transfusion training and competency records held on Trust Learning Hub. • Compliance with traceability requirements – (BBSOP72) record held on Transfusion Practitioner database.
Report Prepared By:	Transfusion Practitioners.
Monitoring Report presented to:	Hospital Transfusion Committee.
Frequency of Report:	Quarterly.

7 References

This policy is written with reference to the following:

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16. The Association of Anaesthetists of GB and Ireland Association of Anaesthetists: anaesthesia and peri-operative care for Jehovah's Witnesses and patients who refuse blood