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Please ensure that any GHNHSFT telephone extension numbers referred to within this Policy and Action Cards are pre-fixed with 0300 422 followed by the extension number listed.

TRUST POLICY

BLOOD TRANSFUSION (TRPOL16)

This document may be made available to the public and persons outside of the Trust as part of the Trust's compliance with the Freedom of Information Act 2000.

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FAST FIND:

This policy controls a larger procedure manual which includes the following:

- [AC1](#) - Prescription (Authorisation) of Blood Components
- [AC2](#) - Requests for Blood Transfusions
- [AC3](#) - Pre-Transfusion Sampling
- [AC4](#) - Urgent Requests for Blood, Including Out of Hours
- [AC5](#) - Request for Blood Collection and Receipt on the Ward
- [AC6](#) - Collection of Blood and Blood Components from Blood Fridge
- [AC7](#) - Administration of Blood Components – Preparation
- [AC8](#) - Administration of Blood Components – Pre-Transfusion Checks
- [AC9](#) - Administration of Blood Components – Technical Aspects
- [AC10](#) - Administration of Other Blood Components and Blood Products
- [AC11](#) - Clinical Care and Monitoring of the Patient, and Documentation
- [AC12](#) - Management of Adverse Events
- [AC13](#) - Blood Components and Patient Transfer
- [AC14](#) - Major Haemorrhage - Code Red
- [AC15](#) - Major Haemorrhage - Code Red Paediatric < 40Kg
- [AC16](#) - Haemovigilance
- [AC17](#) - Storage and Transport of Blood Components
- [AC18](#) - Training Requirements (Including Temporary/Agency Staff)

IMPORTANT – VERSION AND COPY CONTROL:

This policy and accompanying procedures are maintained in a number of locations:

- Trust Policy Site
- Pathology website – Blood transfusion
- Leckhampton Hospice
- Winfield Hospital
- Cheltenham Nuffield Hospital
- Tetbury Hospital

Strict copy control must be applied at all times, and any amendment of any of these documents must be made at **all locations**. DO NOT PHOTOCOPY DOCUMENTS.

1. INTRODUCTION / RATIONALE

- Transfusion of blood components is an important but potentially hazardous procedure that should only be undertaken when the clinical benefits to the patient outweigh the potential risks. Stringent procedures must be followed to ensure that the correct blood component is given and that any adverse reactions are dealt with promptly and effectively.
- This policy is supported by a number of action cards which are listed in the index and on the front page of this document.
- The Trust requires that transfusions of blood components are conducted according to the procedures annexed to this policy.

2. DEFINITIONS

| Word/Term | Descriptor |
|-------------------|---|
| Blood transfusion | The transfer of blood or blood components from one person (the donor) to the bloodstream of another (the recipient) |
| Allogenic | The transfusion of donated blood to a patient |
| Autologous | Reinfusion of the patient's own blood |

3. POLICY STATEMENT

The fundamental principal of this policy is that the following requirements are adhered to:

- The system used must identify the patient uniquely.
- There must be a clear link between each stage in the procedure from the collection of the blood for grouping and cross matching and the delivery of the unit of blood to the patient.
- It must be possible to trace blood from donor to recipient.

- Standard procedures must be followed in both clinical and laboratory areas.

4. ROLES AND RESPONSIBILITIES

| Post/Group | Details |
|--|---|
| Consultant Haematologist, Blood Transfusion | <ul style="list-style-type: none"> • Ultimate responsibility for blood transfusion across the organisation • Ensuring review of this document |
| Blood Transfusion Laboratory Manager | <ul style="list-style-type: none"> • Review and maintenance of this document • Management of blood transfusion laboratory |
| Medical staff, trained and competent Specialist Nurses | <ul style="list-style-type: none"> • Appropriate prescribing (authorising) of blood components • Maintaining adequate documentation in the patient's health records, including the reason for transfusion |
| Medical staff and/or Registered Practitioners | <ul style="list-style-type: none"> • Requesting blood using appropriate forms and telephone procedures. • Providing sufficient information on request forms as defined by Trust procedures (Pathology Sample Labelling Web Page) • Checking the identity of the patient before blood sample collection. • Using safe techniques for obtaining blood samples. • Labelling blood sample tubes at the bedside in accordance with Trust procedures. • Reviewing compatibility information on the transfusion report prior to transfusion. • Explaining and documenting the risks and benefits of blood transfusion to the patient. • Obtaining verbal consent where possible for transfusion and documenting this. • Following the correct procedure for collecting blood from the blood bank refrigerator. • Checking the identity of the patient before transfusion. • Monitoring the patient during transfusion. • Documenting the transfusion in the patient's health record. • Involving medical staff in any management of the patient if reaction occurs. • Making sure units are fated as transfused on the blood tracking system Blood 360 (previously Blood Hound). |
| Phlebotomists | <ul style="list-style-type: none"> • Checking the identity of a patient before blood sample collection. • Checking information written on the request form is complete. • Using safe techniques for obtaining blood. |

| Post/Group | Details |
|--|---|
| | <ul style="list-style-type: none"> • Labelling blood sample tubes in accordance with Trust procedures. |
| Head of Portering Services | <ul style="list-style-type: none"> • Ensuring that porters follow Trust procedures when collecting and transporting blood. |
| Managers responsible for Health Care Assistants | <ul style="list-style-type: none"> • Ensuring that HCAs follow Trust procedures when collecting blood • Taking National Early Warning Score (NEWS 2) or equivalent named observations for transfusion |
| Blood Transfusion Department | <ul style="list-style-type: none"> • Ordering and storing blood components • Monitoring and auditing the use of blood components • Compatibility testing • Examining donations for any unusual features which may cause problems • Giving advice on the appropriate use of blood and blood products • Reporting incidents to Serious Hazards of Transfusion (SHOT) and/or Competent Authority • Provide blood transfusion training and/or training material for induction, annual mandatory updates, IV study day and Blood 360 (blood tracking system) |
| Health Records Departments | <ul style="list-style-type: none"> • Ensuring that patients' health records with stickers indicating transfusion received are retained for at least 30 years. This is applicable only to those records where transfusion stickers have been applied, i.e. before the implementation of the Blood 360 computer system |
| Ward and Department Managers | <ul style="list-style-type: none"> • Ensuring that there are appropriate request forms available. • Ensuring blood administration sets are available. • Ensuring staff are trained and competent to administer blood components. • Ensuring staff are trained to follow procedures which ensure that the correct blood component is collected from the blood bank fridge and correct unit is given. • Ensuring identity checks are always made when administering blood components to eliminate errors. • Monitoring patients and recognising adverse reactions • Reporting incidents. • Ensuring staff receive appropriate training and updates. |
| Gloucestershire Care Services and other external organisations | <ul style="list-style-type: none"> • Following Trust procedure for blood and blood product transport, storage, traceability and incident reporting covered by this policy and its related documents • Working in line with the Service Level Agreement set up by the Trust • Using the Bag and Tag traceability system as directed by the Trust, or Blood360 if in place (<i>GHC only</i>) |

| Post/Group | Details |
|------------|--|
| | <ul style="list-style-type: none"> Ensuring that registered practitioners sign and date the Bag and Tag label for each unit and return it to enable the unit to be fated as transfused on Blood 360 as assurance of vein to vein traceability |

5. PRESCRIPTION AND CONSENT FOR TRANSFUSION

- Authorisers of blood (prescribers) have a responsibility to assess the patient prior to transfusion for any risks of transfusion and follow the single unit transfusion policy (NICE NG24, PBM 2014)
- The patient's consent for transfusion must be documented in the patient's transfusion care record (NICE NG24, SaBTO)

[AC1](#) - Prescription (Authorisation) of Blood Components

6. REQUESTS FOR BLOOD TRANSFUSION AND COLLECTION OF BLOOD SAMPLES

- Misidentification of patient samples can result in potentially fatal ABO incompatible transfusions.
- To manage these risks, the following procedures are in place:

[AC2](#) - Requests for Blood Transfusions

[AC3](#) - Pre-Transfusion Sampling

[AC4](#) - Urgent Requests for Blood, Including Out of Hours

7. COLLECTION OF BLOOD COMPONENTS

- Collection of blood components from a blood components storage facility is a key step in the blood transfusion pathway, and remains a significant cause of error. Mistakes at this point set the scene for subsequent errors resulting in wrong blood incidents.
- To manage these risks, the following procedures are in place

[AC5](#) - Request for Blood Collection and Receipt on the Ward

[AC6](#) - Collection of Blood and Blood Components from Blood Fridge

[AC13](#) - Blood Components and Patient Transfer

- Platelets, fresh frozen plasma and cryoprecipitate are issued directly from the Transfusion Department on a named patient basis

8. ADMINISTRATION OF BLOOD COMPONENTS

- Errors at the time of administration of blood components are the most frequent documented site of error, culminating in the transfusion of the wrong blood

- To manage these risks, the following procedures are in place:

[AC7](#) - Administration of Blood Components – Preparation

[AC8](#) - Administration of Blood Components – Pre-Transfusion Checks

[AC9](#) - Administration of Blood Components – Technical Aspects

[AC10](#) - Administration of Other Blood Components and Blood Products

9. PATIENT MANAGEMENT WHILST RECEIVING TRANSFUSION

The most basic principle of patient care during blood transfusion is to ensure patient safety. Patients receiving transfusion should be monitored for signs of the potential complications of transfusion and any suspected problems need to be dealt with swiftly and efficiently

To ensure appropriate management of patients whilst they are receiving red cells units, the following procedure is in place:

[AC11](#) - Clinical Care and Monitoring of the Patient, and Documentation

10. MANAGEMENT OF ADVERSE EVENTS

All Registered Practitioners, HCAs and medical staff should be aware of types and signs of transfusion reactions and what to do if a reaction is suspected. Prompt appropriate action is essential. This process is detailed in [AC12](#) - Management of Adverse Events.

11. ADMINISTRATION OF OTHER BLOOD COMPONENTS

The administration of other blood components is detailed in Action card [AC10](#).

12. MAJOR HAEMORRHAGE

Clinical team leaders are responsible for declaring a Major Haemorrhage in the event of a bleeding patient where a patient will require a massive transfusion. See the following action cards for the detailed procedure:

[AC14](#) - Major Haemorrhage - Adults

[AC15](#) - Major Haemorrhage - Paediatric < 40Kg

Note: Maternity has procedures in the case of Antepartum Haemorrhage and Postpartum Haemorrhage. See relevant policy pages for action cards related to these documents.

13. TRAINING REQUIREMENTS IN TRANSFUSION

[AC18](#) - Training Requirements (Including Temporary/Agency Staff)

14. TRAINING

See Training Needs Analysis document.

15. MONITORING OF COMPLIANCE

| Do the systems or processes in this document have to be monitored in line with national, regional or Trust requirements? | | YES |
|---|--|--|
| Monitoring requirements and methodology | Frequency | Further actions |
| Risk assessment produced in conjunction with incident trends supplied by the Risk and Transfusion Department. Action plans where appropriate | Annual, but reviewed more frequently in the light of risks identified | Hospital Transfusion Committee (HTC) reviews incident trends at quarterly meetings as part of Clinical Governance process |
| All sample rejections recorded on the integrated pathology system and the requester is contacted where possible. Serious incidents reported to Risk Department and Serious Hazards of Transfusion (SHOT) and recorded on DATIX | Rejected samples monitored monthly Quarterly non-conformity trend analyses Quarterly review by TQM | HTC monitors trends and incidents at quarterly meetings, and reports reviewed at Transfusion Quality Meetings (TQM) Serious incidents reviewed along with investigation details, action plan and outcome. Data and findings from national audits are tabled at HTC where procedures may be reviewed |
| Transfusion incidents are recorded on DATIX. | Reviewed at HTT every 3 months Reviewed at HTC every 3 months Accountable to the MHRA 12 monthly | Incident findings and recommendations are tabled at HTC and Hospital Transfusion Team meetings (HTT) where procedures may be reviewed and action plans developed. Non-compliance, along with associated investigation, action and outcome is reported to Datix, SHOT and the MHRA. Incidents are monitored and reported at the HTC every 3-4 |

| Monitoring requirements and methodology | Frequency | Further actions |
|---|-----------|-------------------------------------|
| | | months and at 3 monthly HTT meeting |

16. REFERENCES

[Joint UK Blood Transfusion and Tissue Transplantation Services Professional Advisory Committee \(JPAC\)](#)

[British Society for Haematology \(BSH\)](#)

[Medicines and Healthcare products Regulatory Agency \(MHRA\)](#)

Handbook of Transfusion Medicine (2013), 5th edition, Ed: Dr Derek Norfolk, United Kingdom Blood Services.

[Serious Hazards of Transfusion \(SHOT UK\)](#)

[NHS Blood and Transplant \(NHSBT\)](#)

[The Advisory Committee on the Safety of Blood, Tissues and Organs \(SaBTO\)](#)

[NICE \(NG24\) Blood transfusion](#)

Note: The Trust is not responsible for the content of external web sites.

| DOCUMENT PROFILE | |
|---|--|
| Reference Number | A0235 |
| Title | Blood Transfusion (TRPOL16) |
| Category | Clinical |
| Version | V11 |
| Issue Date | November 2024 |
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| Owning Specialty | Blood Transfusion |
| Associated Specialities | Enter Associated Specialities here |
| For Use By | GHNHST staff, Gloucestershire Managed Services, Gloucestershire Health & Care NHS Foundation Trust, Winfield Hospital, Cheltenham Nuffield Hospital, Tetbury Hospital and Leckhampton Court Hospice. |
| DDQN's | Joanne Harvey, Divisional Director for Quality & Nursing (D&S) |
| Author/Reviewer | Stuart Lord, Lead Transfusion Practitioner |
| Local Approval Group 1 | Hospital Transfusion Committee |
| Chair of Approval Group 1 | Dr Sophie Scutt, Consultant Anaesthetist |
| Additional Approval Group/s | N/A |
| Local Approval Details (Incl. Date of approval) | Hospital Transfusion Committee Date of approval: 10/09/2024 |
| TPAG Ratification | For Office Use Only |
| Consultees | Dr Rebecca Frewin, Consultant Haematologist Dr Sophie Scutt, Consultant Anaesthetist Tracy Clarke, Blood Transfusion Laboratory Manager Donna Davis, Blood Conservation Co-ordinator Alison Eades, Haematology Countywide Laboratory Manager Dr Alex Dimambro, Consultant Gastroenterologist Dr Thomas Kus, Consultant Paediatrician Dr Leanne McDermott, Consultant in Obstetrics & Gynaecology Albert Weager, Patient Representative Julia Hande, Patient Safety & Quality Manager Dr Richard Turck, Consultant in Emergency Medicine Mr Richard Wilson, Consultant Vascular Surgeon Joanne Harvey, Divisional Director for Quality & Nursing (D&S) Samantha Timmins, PBM Practitioner (NHSBT) Monika Kiss, Matron (Winfield Hospital, Ramsay Health Care UK) Inam Raziq, IV Therapy Team Nurse (GHC trust) |
| Dissemination Details | i.e., Upload to Policy Site; Policy Monthly Update; Information Campaigns, Training, Team Brief, Departmental / Divisional |

| | |
|--|--|
| | Meeting, etc.Cascade Changes to HTC members for dissemination |
| Keywords | Blood, transfusion, sample, SHOT, red cells, fresh frozen plasma, platelets, transport, components |
| Equality Impact Assessment (EIA) | A0235 EIA |
| Related Trust Documents | AC1 - Prescription AC2 - Requesting AC3 - Pre-Transfusion Sampling AC4 - Urgent Requests AC5 - Request for Blood Collection and Receipt AC6 - Blood Collection AC7 - Administration - Preparation AC8 - Administration – Pre-Transfusion Checks AC9 - Administration – Technical Aspects AC10 - Administration of other Blood Products AC11 - Clinical Care and Monitoring of the Patient AC12 - Recognition and Management of Transfusion Reactions AC13 - Blood Components and Patient Transfer AC14 - Major haemorrhage – Code Red Adult AC15 - Major Haemorrhage – Paediatric AC16 - Haemovigilance AC17 - Transport of Blood Components AC18 - Training requirements (including temporary/agency staff) RD1 - Policy amendment history document |
| Other Relevant Documents | Pathology Sample Labelling Web Page Patients who refuse Blood and Blood Components policy Antepartum Haemorrhage guideline Postpartum Haemorrhage procedure A2301 – Peri-operative Tranexamic Acid guidelines |
| External Compliance Standards and/or Legislation | Blood Safety and Quality Regulations (BSQR) Medicines and Healthcare products Regulatory Agency (MHRA) |
| Relevant NICE Guidance | NICE (NG24) Blood transfusion |
| Relevant Regulations | Blood Safety & Quality Regulations (2005) |
| External Website | No |

Equality Impact Assessment (EIA)

| | |
|----------------|--|
| Date Completed | 16/07/2024 |
| Completed by | Stuart Lord, Lead Transfusion Practitioner |

| <u>Age</u> | | |
|--|---------|----------|
| | ✓ | |
| Adverse | Neutral | Positive |
| Consider people of different age groups. Think about the built environment, routines and practice. | | |

| <u>Disability</u> | | |
|--|---------|----------|
| | ✓ | |
| Adverse | Neutral | Positive |
| Consider both able and disabled people, and different types of disability. Think about accessibility of the built environment, routines, practice and communication. | | |

| Protected characteristic: <u>Gender Reassignment</u> | | |
|---|---------|----------|
| | ✓ | |
| Adverse | Neutral | Positive |
| Consider people who are transgender, or are transitioning. Think about routines, practice, communication and use of language. | | |

| Protected characteristic: <u>Marriage and Civil Partnership</u> | | |
|--|---------|----------|
| | ✓ | |
| Adverse | Neutral | Positive |
| Particularly relevant for issues concerning employment. Think about rules, practice, routines and use of language. | | |

| <u>Pregnancy and Maternity</u> | | |
|--|---------|----------|
| | ✓ | |
| Adverse | Neutral | Positive |
| Particularly relevant in the workplace is to consider people who are pregnant or on Maternity or Adoption Leave. Think about routines, practice and opportunities. | | |

| <u>Race</u> | | |
|--|---------|----------|
| | ✓ | |
| Adverse | Neutral | Positive |
| Race can mean colour, nationality, ethnic and national origins, as well as people belonging to ethnic and racial groups. A racial group can be made up of two or more distinct racial groups e.g., British Jews; Romany Gypsies; Irish Travellers. Think about routines, practice and communication. | | |

| <u>Religion or belief/no belief</u> | | |
|---|---------|----------|
| | ✓ | |
| Adverse | Neutral | Positive |
| Consider people who follow religious practices or traditions. This also applies to philosophical beliefs which are cogent, serious and apply to an important aspect of human life or behaviour. Think about routines, practice, dietary issues and use of language. | | |

| <u>Sex</u> | | |
|--|---------|----------|
| | ✓ | |
| Adverse | Neutral | Positive |
| Consider people who are men, women, boys and girls. Discrimination could be a one-off act or as a result of a document/rule. Think about procedures, rules, routines, language and behaviour, built environment. | | |

| <u>Sexual Orientation</u> | | |
|--|---------|----------|
| | ✓ | |
| Adverse | Neutral | Positive |
| Consider people who are lesbian, gay and bisexual. This also covers how people choose to express their sexual orientation, such as through their appearance or places they visit. Think about practice, the environment and use of language. | | |

| Other factors to be considered, not included as a 'Protected Characteristic' | | |
|--|---------|----------|
| | ✓ | |
| Adverse | Neutral | Positive |
| Consider people with other differences which make them susceptible to discrimination e.g., socio-economic factors; gender and non-binary; marital status (such as divorced, single). Think about routines, practice, protocol, language. | | |