

The Newcastle upon Tyne Hospitals NHS Foundation Trust

Collection & Delivery of Blood Components and Products from the Blood Transfusion Laboratory to the Clinical Area

Version No.:	6.0
Effective From:	18 April 2018
Expiry Date:	18 April 2021 (Extended to 18 October 2021)
Date Ratified:	19 March 2018
Ratified By:	Hospital Transfusion Committee

1 Introduction

This policy defines guidance on the correct procedure to be followed when collecting blood components or products from the blood transfusion laboratory for delivery to the clinical area and will outline the responsibilities of those involved in the procedure.

It has been reported by SHOT (Serious Hazards of Transfusion) that handling and storage errors accounted for 6% of cases reviewed during 2016. Both the Blood Safety & Quality Regulations (2005 No.50 as amended) and BSH Guidelines on the Administration of Blood Components (2017) state that only trained, competent and locally designated staff may collect blood components. Furthermore, hospitals must ensure that the cold chain is observed at all times including during transportation. This cold chain starts from the receipt of the blood product in the blood centre to the time the unit is transfused or otherwise disposed of. Therefore, there must be a clear audit trail of the collection, delivery and receipt (and return) of all blood components (BSH 2017).

2 Scope

This policy is intended for all Trust staff who are involved in the collection and delivery of the following blood components within the Trust: Red Blood cells (RBC), Platelet components (PLT), granulocytes (WBC, GRAN), Fresh Frozen Plasma (FFP), Octoplas (OCT), and Cryoprecipitate (CRYO), and batch products; Beriplex (PCC), Albumin (HAS) Anti-D (Rhophylac) and Recombinant Factor VII (Novo 7).

This policy applies to all patients who require transfusion of blood components or products within the Newcastle upon Tyne Hospitals NHS Foundation Trust (NUTH).

3 Aims

The aim of the policy is to provide guidance on the requirements and responsibilities of all staff when collecting blood components from the laboratory for delivery to the clinical area.

4 Duties (Roles and Responsibilities)

4.1 Chief Executive & Trust Board

The Chief Executive and Trust Board have responsibility for the safety and welfare of all Trust patients, visitors and staff. This includes overall

responsibility for ensuring effective corporate governance within the organisation.

4.2 Hospital Transfusion Committee (HTC)

The Trust Hospital Transfusion Committee meets Quarterly and reports via the Chair of the Committee to the Trust Medical Director who reports to the Trust Board, this group is responsible for:

- Promoting safe and appropriate blood transfusion practice through local protocols based on national guidelines.
- Auditing the practice of blood transfusion against the Trust policy and national guidelines, focusing on critical points for patient safety and the appropriate use of blood.
- Leading multi-professional audits on the use of blood within the Trust, focusing on specialities where demand is high, including medical and surgical specialities, and the use of platelets, plasma, and other blood components as well as red cells.
- Providing feedback on transfusion practice audits and the use of blood to all Trust staff involved in blood transfusion.
- Regularly reviewing and taking appropriate action regarding data on blood stock management, wastage and blood utilisation provided by the Blood Stocks Management Scheme (BSMS) and other sources.
- Developing and implementing strategies for the education and training of all clinical, laboratory and support staff involved in blood transfusion.
- Promoting patient education and information on blood transfusion, including, the risks of transfusion, blood avoidance strategies and the need for positive patient identification at all stages in the transfusion process.
- Consulting with local patient representative groups where appropriate.
- Modifying and improving blood transfusion protocols and clinical practice based on new guidance and evidence.
- Being a focus for local contingency planning and management of blood shortages
- Contributing to the development of clinical governance.

4.3 Hospital Transfusion Team (HTT)

The Trust Hospital Transfusion Team meets monthly and reports to the Trust Hospital Transfusion Committee. This group is responsible for developing strategy for and monitoring compliance with policy including:

- Implementing the HTC's objectives.
- Promoting and providing advice and support to clinical teams on the safe and appropriate use of blood.
- Promoting patient information and education on blood transfusion safety and use of alternatives.
- Actively promoting the implementation of good transfusion practice and Patient Blood Management.

- Being a source for training all NHS Trust staff involved in the blood transfusion process.
- Producing an annual report including its achievements, action plan and resource requirements for consideration by senior management at board level through the HTC and the Trust's clinical governance and risk management arrangements.

4.4 Consultant Lead in Blood Transfusion

The Consultant Lead in Blood Transfusion has responsibility for the clinical blood transfusion policies and procedures and will provide clinical direction to the Trust ensuring:

- Promotion of best practice through local protocols.
- Promotion of education and training.
- Participating in the HTC, HTT and RTC (Regional Transfusion Committee).

4.5 Transfusion Manager

The Transfusion Manager has responsibility for the scientific policies and procedures and for the maintenance of the Blood Transfusion Section. They report to the Departmental Laboratory Management on the functioning and effectiveness of the Blood Transfusion Section and work with the Consultant Lead. They are responsible for:

- Ensuring transfusion complies with national standards and legislation.
- Promoting best practice through local protocols.
- Providing scientific lead and direction.
- Undertaking research and development in the field of Blood transfusion.
- Providing advice on the use of blood components/blood products.
- Providing advice on the interpretation of scientific tests.
- Participating in the HTC, HTT and RTC (Regional Transfusion Committee).

4.6 Transfusion Practitioners

The Transfusion Practitioners work within the Blood Transfusion Team and are responsible for:

- Providing advice on the use of blood components/blood products.
- The education, training and assessment of clinical and support staff.
- Implementing evidence based practice and local and national guidelines.
- Promoting Patient Blood Management.
- Investigating incidents and near misses.
- Reporting to SABRE.
- Conducting local and national audits.
- Acting as a conduit between the blood transfusion laboratory and clinical areas.

4.7 Transfusion Section Leaders

Section Leaders work within the Blood Transfusion Team and are responsible for ensuring that all the requirements of this policy are applied within their areas of responsibility. They must identify the need for processes described in this policy and ensure that they are performed as required. Under the guidance of the Transfusion Manager they lead and delegate within the Transfusion Laboratory Section. They are also responsible for training, audit, evaluation and the processes to investigate nonconformities with the introduction of corrective actions within reasonable timescales.

4.8 Quality Manager (QM)

The QM is responsible for ensuring that processes conform to and operate within the Quality Management System of Blood Sciences. The Quality Manager is responsible for the development and maintenance of the Quality Management System and is responsible for ensuring that the systems for audit, registration and for addressing adverse results and nonconformities are in operation.

4.9 All Staff

It is the responsibility of all members of staff to ensure that they are conversant with the content of this policy and are appropriately trained and competent to act on the requirements to select and issue appropriate components/products as part of their duties. All staff must comply with the conditions contained within this document and have a duty to indicate any non-conformity to this procedure to their line manager(s). Staff in training must be supervised by a competent member of staff.

5 Definitions

5.1 Policy A policy enables management and staff to make correct decisions deal effectively with and comply with relevant legislation, guidelines and organisational rules and practices.

5.2 Procedure/Protocols This is a set of detailed step by step instructions that describe the appropriate method for carrying out tasks or activities

5.3 Guidelines These are systemically developed statements that assist in making decisions

5.4 Blood Components Defined as the components derived from blood such as red cells, platelets, FFP, cryoprecipitate and granulocytes.

5.5 Blood Products Defined as batched products such as Human Albumin Solution, Prothrombin Complex Concentrate (Beriplex), Anti-D and Recombinant Factor VII (Novo 7).

5.6 Porters Slip A collection slip used by the Trust to record the patient demographics for collecting blood

- 5.7 SABRE** The online reporting system used to report incidents involving blood transfusion within the Trust to haemovigilance services with an overall aim of improving patient safety in blood transfusion.
- 5.8 Sign Out Form** The sign out form is generated in the laboratory on the issue of specific products/components to a patient. It details the type of products/components issued and includes: the unit number of each product/component, the donor group, expiry date of and space to document where the product is taken to, by whom and time taken. It also includes the patient's information - name, sex, date of birth, MRN, blood group, antibody status and Consultant. They are kept in alphabetical order in a box in the blood issue room.
- 5.9 Datix** The national incident reporting and risk management system used by the Trust. It is accessible on the Intranet.
- 5.10 Non Compliance Form** The document detailing the investigation and root cause analysis of a process or action that deviates from acceptable standards of practice/performance. Designed to improve patient safety.

6 Policy

6.1 Request Requirements for Collection of Blood Product

6.1.1 Request to Porters

The following patient identifiers must be given to the Porter, either on a 'Porters Slip' or verbally over the telephone. Identifiers given verbally to the Porter will be documented on a 'Porters Slip':

- Forename
- Surname
- Date of Birth
- Medical Record Number (MRN)
- Area/Ward that the component/product is to be delivered to
- Component/Product Required
- Number of Units

6.1.2 Collection by Ward Staff

Any ward staff collecting blood components/products must have written/printed documentation in the form of notes, addressograph label or handwritten details containing the minimum core identifiers:

- Forename
- Surname
- Date of Birth
- Medical Record Number (MRN)

6.1.3 Request for Unknown Patients

When patients are admitted to ED and are unidentified the following identifiers will be accepted:

- Surname (MRN)
- Forename (Male, Female or Unknown)
- MRN

6.1.4 Urgent Requests

If the request for components/products is urgent, the blood transfusion laboratory must be contacted by the requesting ward to express this. Ward staff should then communicate the urgency to Porter staff when making the request for collection of the blood components/products.

6.1.5 Major Haemorrhage Activation

- On activation of the Major Haemorrhage Protocol a Porter should be immediately sent for Major Haemorrhage Pack 1.
- It is the responsibility of the individual packing the units into the Major Haemorrhage Transport Box to sign each of the units contained in the box out individually
- The Porter/individual collecting the box must then sign underneath the units on the 'sign out sheet' including the following information:
 - Area box being taken to
 - Initials
 - Time
 - Date
- On Stand Down of the Major Haemorrhage Protocol any unused blood components must be returned to the lab immediately.

6.2 Collection Checks

6.2.1 Check the blood component/product required is available. Check the red box in the issue room for the 'sign out form'; if it is not in the red box go to laboratory to speak to a member of laboratory staff.

6.2.2 Platelets are always collected direct from laboratory. Laboratory staff will bring platelets to issue room with the sign out form.

6.2.3 All checks must be carried out in the issue room.

6.2.4 Check the following information on the 'sign out form' corresponds with the written patient identifiers:

- Surname
- Forename
- Date of Birth
- Medical Record Number (MRN)

6.2.5 If all identifiers correspond remove required product:

- Red Blood Cells – Fridge
- Fresh Frozen Plasma – Fridge
- Platelets – Laboratory
- Cryoprecipitate – Bench in issue room
- Octoplas – Fridge / Bench in issue room
- Albumin – Bench in issue room
- Granulocytes - Laboratory
- Anti-D, PCC and Recombinant Factor VII – Laboratory

6.2.6 Any component/products not in the fridge in issue room or on the bench in the issue room will need to be collected from the laboratory. Components and Products collected direct from laboratory must only be removed by laboratory staff.

6.2.7 Check the following information on the unit tag corresponds with written patient identifiers:

- Surname
- Forename
- Date of Birth
- Medical Record Number (MRN)

6.2.8 Check the donation number on the unit tag corresponds with donation number on 'sign out form'.

6.2.9 If all checks correct record, legibly, next to correct unit to ensure cold chain compliance:

- Area taken to
- Initials
- Time
- Date

6.2.10 Place the 'sign out form' back in alphabetical order in red box in issue room

6.2.11 All components/products must be signed out individually regardless of how many components/products are collected.

6.3 Transport to Clinical Areas

6.3.1 Red Blood Cells

- 1 to 2 units - Place 1 cool pack in bottom of transport box, red blood cells, then 1 cool pack on top of red blood cells
- 3 to 4 units - Place 1 cool pack on top of red blood cells
- Ensure that the lid is correctly zipped around the box.

6.3.2 Fresh Frozen Plasma (FFP), Octoplas, Platelets, Cryoprecipitate (Cryo), Granulocytes

- Place in transport box **without** cool packs
- Ensure different components are transported separately
- Ensure component for different patients are transported separately.
- Ensure that the lid is correctly zipped around the box

6.3.3 Batch Products (Albumin, PCC, Anti-D, Novo 7)

- Do not need to be transported in transport box, carry by hand.

6.4 Delivery to Clinical Area

6.4.1 Delivery by Porter

- Transport components/products directly to clinical area.
- Hand box to member of ward staff.
- Member of ward staff to open box and check forename, surname, date of birth and MRN on unit tag correspond with 'porters slip' and correct product has been delivered.
- If correct, ward staff to place product back in red transport box with cool packs in place for red cells as 6.3.1, reseal, sign, date and time 'porters slip'. Product to be left in red transport box until ready for use (unless batch product).
- Porter to retain slip and place in collection box in porters lodge / other allocated area. Slips are collected by laboratory staff on a monthly basis.

6.4.2 Delivery by Clinical Staff

- Transport components/products directly to clinical area.
- Hand box to member of clinical staff requesting product. Product to be left in transport box until ready for use.

6.5 Return of Blood Components

If a blood component is to be returned from a clinical area it must be done so within 30minutes of leaving a temperature controlled blood fridge in the first instance.

On returning the unit(s) to the laboratory a Blood Return Slip must be completed.

The slips are held in the laboratory and require the following information

- Name of individual returning unit
- Date of return
- Time of return

6.6 Satellite Fridges

Any red blood cells collected and delivered to satellite fridges must be signed in and out on the satellite fridge register with the appropriate sections completed to ensure compliance with BSQR cold chain regulations (2005).

6.7 Error Reporting

Any performance errors should be reported to the Transfusion Practitioners/Blood Transfusion Team and investigated, reported and corrective action undertaken. This may include a Blood Sciences Non-Compliance Form, Datix and SABRE, the latter being dependent on severity.

All documentation included in the error reporting system should be maintained by the Blood Sciences document control system and retained for a minimum of 15 years.

6.8 Procedure for Receiving Blood Components Transferred into Trust with Patient

Any blood products or components transferred with a patient into the Trust must be sent to the Blood Transfusion Laboratory on arrival, along with the accompanying documentation from the transferring hospital.

Any products or components administered in transit must have full traceability, therefore the traceability portion of the compatibility label must be returned to the Blood Transfusion Laboratory on arrival as above.

7 Training

All staff must attend a yearly mandatory face to face Collection & Delivery training session delivered by the Transfusion Practitioners.

Staff must also undertake a 2 yearly competency assessment (NPSA, 2006).

A record of all training & competency assessment will be held by the Trust Education Department.

8 Equality and Diversity

The Trust is committed to ensuring that, as far as is reasonably practicable, the way we provide services to the public and the way we treat our staff reflects their individual needs and does not discriminate against individuals or groups on any grounds. This document has been appropriately assessed.

9 Monitoring Compliance

Standard process / issue	Monitoring and audit			
	Method	By	Committee	Frequency
Compliance against policy	Audit of policy as identified in section 7.	Transfusion Practitioners	Hospital Transfusion Committee	Annually
Non-Compliance / Clinical Incidents / Complaints	Blood Sciences Non-compliance forms	Blood Transfusion Team Blood Sciences Quality Manager	Hospital Transfusion Committee	Fortnightly meeting Included in Annual Management Review
Mandatory Training / Mandatory Training	As part of policy audit	Transfusion Practitioners	Hospital Transfusion Committee	Annually
	Training Reports for Directorate Monitoring	Education Centre Administrators	TEG	Monthly

10 Consultation and Review

The policy is based on BSH Guidelines and has been reviewed by the Hospital Transfusion Team and the Hospital Transfusion Committee. Changes in guidelines, practice and legislation are considered during review and implemented accordingly.

11 Implementation (including raising awareness)

This policy will be communicated to all Trust staff who undertake this procedure. The policy will be available on the intranet and will be referred to in mandatory training sessions.

12 References

- BSH(2017) *The Administration of Blood Components: A British Society for Haematology Guideline* Available at: <http://www.b-s-h.org.uk/guidelines/guidelines/administration-of-blood-components/> (Accessed 02/01/2017)
- Bolton Maggs, P.H.B(Ed), Poles, D. et al on behalf of the Serious Hazards of Transfusion (SHOT) Steering Group *The 2016 Annual SHOT Report.*(2017)
- *The Blood Safety and Quality Regulations 2005 No.50 (as amended).* Available at: http://www.legislation.gov.uk/ukxi/2005/50/pdfs/ukxi_20050050_en.pdf (Accessed: 02/01/2017)

- National Patient Safety Agency (2006) Right Patient, Right Blood: Advice for Safer Blood Transfusions Available at:
<http://www.nrls.npsa.nhs.uk/resources/collections/right-patient-right-blood/>
(Accessed 02/01/2017)

13 Associated documentation

- [Mandatory Training Policy](#)

Equality Analysis Form A

This form must be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval.

PART 1

1. **Assessment Date:**
2. **Name of policy / strategy / service:**
3. **Name and designation of Author:**
4. **Names & designations of those involved in the impact analysis screening process:**
5. **Is this a:** Policy Strategy Service
Is this: New Revised
Who is affected Employees Service Users Wider Community
6. **What are the main aims, objectives of the policy, strategy, or service and the intended outcomes?** *(These can be cut and pasted from your policy)*
7. **Does this policy, strategy, or service have any equality implications?** Yes No
- If No, state reasons and the information used to make this decision, please refer to paragraph 2.3 of the Equality Analysis Guidance before providing reasons:**

8. Summary of evidence related to protected characteristics

Protected Characteristic	Evidence, i.e. What evidence do you have that the Trust is meeting the needs of people in various protected Groups	Does evidence/engagement highlight areas of direct or indirect discrimination? If yes describe steps to be taken to address (<i>by whom, completion date and review date</i>)	Does the evidence highlight any areas to advance opportunities or foster good relations. If yes what steps will be taken? (<i>by whom, completion date and review date</i>)
Race / Ethnic origin (including gypsies and travellers)	None relevant to this policy	Names of black and minority ethnic people have been known to be implicated in medication errors. This has been taken into account in the policy.	No
Sex (male/ female)	None relevant to this policy	No	No
Religion and Belief	None relevant to this policy	No	No
Sexual orientation including lesbian, gay and bisexual people	None relevant to this policy	No	No
Age	None relevant to this policy	No	No
Disability – learning difficulties, physical disability, sensory impairment and mental health. Consider the needs of carers in this section	None relevant to this policy	No	No
Gender Re-assignment	None relevant to this policy	No	No
Marriage and Civil Partnership	None relevant to this policy	No	No
Maternity / Pregnancy	None relevant to this policy	No	No

9. Are there any gaps in the evidence outlined above? If 'yes' how will these be rectified?

No

10. Engagement has taken place with people who have protected characteristics and will continue through the Equality Delivery System and the Equality Diversity and Human Rights Group. Please note you may require further engagement in respect of any

significant changes to policies, new developments and or changes to service delivery. In such circumstances please contact the Equality and Diversity Lead or the Involvement and Equalities Officer.

Do you require further engagement? Yes No

- 11. Could the policy, strategy or service have a negative impact on human rights? (E.g. the right to respect for private and family life, the right to a fair hearing and the right to education?)**

No it is designed to prevent blood administration errors and thus promote life

PART 2

Name:

Lindsay Cairns

Date of completion:

02/01/2018

(If any reader of this procedural document identifies a potential discriminatory impact that has not been identified, please refer to the Policy Author identified above, together with any suggestions for action required to avoid/reduce the impact.)