Leicestershire Partnership NHS Trust

Blood Transfusion Policy for Adult In-Patient within Community Hospitals CHS Division

To support the safe delivery of Blood Transfusion within Community Hospitals CHS Division

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Blood Transfusion Policy Contents

Policy for the Prescribing, Collection, Storage and Administration of Blood and Blood Components for Adult Patients in Community Hospitals

Version control and Summary of Changes

Version number	Date	Comments (description change and amendments)
2	July 2017	Use of Coagulation Factor Concentrates for the Reversal of Anticoagulation Over-dosage - removed
		Transfusion of Albumin Solutions and IV Immunoglobulin Preparations - removed
		Section 12 Traceability process changed
		Section 7 Training procedure brought in line with UHL
3	August 2019	Change of author
		Addition of new link for 8.1.2
		Removal of section relating to blood fridges
		Addition of reference to EPMA bundle
4	November 2020	Removal of blood fridges information
		Amendment / update of references
		Amendment to appendices

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Equality Statement

Leicestershire Partnership NHS Trust (LPT) aims to design and implement policy documents that meet the diverse needs of our service, population and workforce, ensuring that none are placed at a disadvantage over others. It takes into account the provisions of the Equality Act 2010 and advances equal opportunities for all. This document has been assessed to ensure that no one receives less favorable treatment on the protected characteristics of their age, disability, sex (gender), gender reassignment, sexual orientation, marriage and civil partnership, race, religion or belief, pregnancy and maternity.

In carrying out its functions, LPT must have due regard to the different needs of different protected equality groups in their area. This applies to all the activities for which LPT is responsible, including policy development and review.

1.0 DUE REGARD

Due regard must be paid to whether or not the patient is able to give informed consent and, hence refuse consent. A Mental Capacity assessment should be undertaken where there is any doubt. Should it be decided, as a result of this assessment, that the patient is not able to give informed consent, a multidisciplinary team meeting should be held to reach a best interests' decision as to whether or not the blood transfusion should be administered. Relevant carers / relatives should be involved as they may be able to give insight into what the patient's likely wishes would be.

2.0 JEHOVAH'S WITNESSES

All staff should be aware of the Jehovah's Witness' beliefs regarding blood and blood products. There are alternatives which may be acceptable and the Haematology Consultant at UHL must be contacted to discuss these options should a patient who is a Jehovah's Witness require a blood transfusion.

The LPT Multi-faith Resource Pack provides useful information concerning religious considerations. (Appendix 1)

Treatment options must be fully discussed with the patient and the discussion and outcome documented in the medical notes.

Should the patient decide to consent to a blood transfusion, this decision must be clearly documented in the medical notes. As with all patients, a Trust consent form must be signed by the patient as further confirmation of their informed consent.

This policy sets out Leicestershire Partnership NHS Trust's (LPT) blood transfusion policy for the Community Health Services Division. Every effort has been made to ensure all equality groups (protected characteristics) are given equal access to service provision especially in context of religion and belief. This is demonstrated through the provision of a comprehensive multi faith staff resources which includes advice and support in regard to blood transfusions for
many faith and cultural groups.

3.0 REFUSAL OF CONSENT

Where a patient refuses a blood transfusion, either on the grounds of religious belief or other, the reasons for refusal must be documented in the patient's case notes and the GP , Community Hospital Consultant Geriatrician or ANP should seek advice from the Haematology Consultant in order that other treatment options can be fully explored.

Definitions that apply to this Policy

Medicine and Healthcare products Regulatory Authority **(MHRA)** – is responsible for regulating all medicines and medical devices in the UK by guaranteeing they reach specific standards ensuring patient safety.

Serious Adverse Blood Reactions and Events **(SABRE)** is an electronic system for the mandatory notification of blood related events to the MHRA

Serious Hazards of Transfusion **(SHOT)** is the United Kingdom's independent, professional led haemovilgience scheme.

Blood Transfusion – The infusion of blood products via the intra-venous route.

4.0 PURPOSE OF THE POLICY

4.1 The purpose of this policy is to describe the process for administration of blood components, including authorisation and pre- transfusion blood sampling, maintenance of cold chain, management of transfusion reactions, and assessment. Traceability of final fate of units (BSQR)

4.2 The policy details best practice to reduce the potential risk of transfusion errors and to assist identified practitioners with all aspects related to blood and blood product transfusion.

4.3 This policy aims to provide a safe procedure from the transportation, and collection to the administration of blood components to patients. It covers guidelines for red cell transfusions. (Appendix 2)

5.0 SUMMARY AND KEY POINTS

This policy outlines the processes required to undertake safe blood transfusion within community hospitals.

6.0 INTRODUCTION

It is well recognised that most errors in blood transfusion practices are operational rather than technical. Thus, errors in obtaining and labeling blood samples, requesting, storage, collection and administration of blood or blood components can lead to significant risks to patients. Many 'wrong blood' episodes involve multiple errors at various stages of blood transfusion process. It is believed that such errors can be prevented if appropriate steps are taken to ensure that transfusion practices are performed to high standards of safety and effectiveness.

The procedures set out in this document, which must be considered in its entirety, constitute the Trust's policy for transfusion of blood and blood components. These have been based and are in line with UHL NHS Trust Policy (January 2019).

The contents of this policy are broadly based on the national guidelines, 'The administration of blood and blood components and the management of transfused patients' published in 2004, updated 2017.The guidelines reflect current professional opinion and have been produced by the British Committee for Standards in Haematology, in collaboration with the Royal College of Nursing and the Royal College of Surgeons of England.

It is the responsibility of the Trust to provide a representative on the Blood Transfusion Committee who will monitor compliance with the Blood Transfusion Policy for the Trust. This representative is via Consultant Geriatrician as part of the geriatrician interface between UHL and LPT Community Hospitals.

7.0 DUTIES WITHIN THE ORGANISATIOIN

7.1 The Trust Board has a legal responsibility for Trust policies and for ensuring that they are carried out effectively.

Trust Board Sub-committees have the responsibility for ratifying policies and protocols.

7.2 Statutory Requirements

Two EU Directives - 2002/98/EC and 2004/33/EC have been transposed into UK **criminal law** through the Blood Safety and Quality Regulations 2005 (Statutory Instrument 2005/50 and Statutory Instrument 2005/1098). These regulations set standards for quality and safety for the collection, testing, processing, storage and distribution of human blood and blood components.

This policy has been updated following publication of the above legal documents and current guidelines.

It is, therefore, essential that all health care professionals and other staff responsible for, or involved in, any stage of the handling and administration of blood or blood components, are able to:

(a) Identify and understand their role in the safe handling and administration of blood.

(b) Complete that role safely.

The National Patient Safety Agency (NPSA) stipulate that any individual involved in the transfusion

process should have their competency assessed every 2 years and receive annual up-dates on the transfusion process.

The fate of all blood products must be traceable from donor to recipient.

Data needed for full traceability from donor to recipient and recipient to donor shall be kept for at least 30 years (BSQR 2005). This requires patient medical records to be kept for a minimum of 30 years.

It should be noted that the risk of transmitting viruses with the transfusion cannot be entirely excluded.

Consent should always be obtained from patients prior to a transfusion following the organisation's Consent to Examination and Treatment Policy (Appendix 11).

Consideration should be given to those patients who may require access to interpreter services, in order to ensure they fully understand the issues involved when considering a blood transfusion, in which case please contact Ujala Resource Centre the Trust's interpreting service. It may be appropriate to involve carers / relatives in cases where the patient has cognitive impairment or a learning difficulty in order to identify the most appropriate way of ensuring that the patient has an understanding of the procedure and is able to give informed consent.

Divisional Directors and Heads of Service
Are responsible to ensure Policy is adhered to.

Matron for Inpatient Services

Are responsible for ensuring that staff receive mandatory training on Blood Transfusion every year.

For ensuring that essential equipment available, in place and fit for the purpose it is intended to be used for (good working order) i.e. blood component giving sets, transit Boxes etc

In ensuring a 2 yearly audit of blood transfusion practice and competency is carried out (Appendix 3).

Ensure that all transfusion reactions, errors and near misses are reported via The Ulysee's incident reporting system and documented within the medical notes, fully investigated and actioned to prevent reoccurrence. Reporting will take place onto SABRE by UHL Blood Transfusion Service.

7.3 Responsibility of Staff

All staff involved in the transfusion process must be familiar with Trust Policy and associated policies, as well as with their own professional responsibilities. They should not take part in the transfusion process unless trained and competency assessed to NBTC standards

- Clinical staff must ensure that consent has been sought and obtained before any care, intervention or treatment described in this policy is delivered. Consent can be given verbally and/or in writing. Someone could also give non-verbal consent as long as they understand the treatment or care about to take place. Consent must be voluntary and informed and the person consenting must have the capacity to make the decision. Consent needs to documented in the patient notes whether the patient gives verbal or written consent.

- In the event that the patient's capacity to consent is in doubt, clinical staff must ensure that a mental capacity assessment is completed and recorded. Someone with an impairment of or a disturbance in the functioning of the mind or brain is thought to lack the mental capacity to give informed consent if they cannot do one of the following;
    - Understand information about the decision
    - Remember that information
    - Use the information to make the decision
    - Communicate the decision

Medical Staff/Advanced Nurse Practitioners

Medical staff / Advanced Nurse Practitioners are accountable for the appropriate use of blood and alternatives to transfusion.

All staff authorising blood transfusions are accountable for ensuring that:

- The patient understands the need for a blood component transfusion and, where blood is authorised, obtains written consent and is issued with a supporting information leaflet.
- The component, quantity, duration of transfusion and any special requirements, instructions if blood warmer required are clearly documented, TACO assessment completed
- The blood request form is correctly completed with the patient's details and details of component required and date and time required.
- The decision to transfuse and the clinical outcome are clearly documented in the patient's medical notes / electronic patient record.
- They are aware of how to investigate and manage blood component transfusions
- This is a regular clinical activity for staff and within their sphere of responsibility

Qualified Nursing Staff

Qualified Nurses are accountable in following Trust policy, NMC Guidelines and associated policies. They must be up to date in the following mandatory training:

- Blood Transfusion (and competency)
- Monitoring the patient during and after the transfusion and how to manage and identify suspected transfusion reactions
- Anaphylaxis
- Basic Life Support
- Infection Prevention and Control practices, including relevant policies
- I.V administration

They must report any adverse transfusion reactions to UHL Blood Transfusion Laboratory and submit an incident report through the Trust Incident Reporting System.

All staff authorised and trained to undertake venipuncture are accountable for:

- correctly identifying the patient verbally
- using the correct blood request form for Group and Screen
- checking that the patient's details on the wrist band correctly match those on the blood request form. Wristbands should be checked using the patient's NHS number or hospital number.
- taking the correct blood samples using correct bottles

This accountability is applicable whether using the Leicestershire sample tubes or different tubes used by other providers

8.0 AUTHORISATION OF BLOOD OR BLOOD COMPONENTS

Authorising blood and blood components is the sole responsibility of medical staff and no other members of staff are authorised to authorise blood for transfusion.

8.1 Medical staff are responsible for:

8.1.1. Authorising blood component on Blood Component Prescription Chart – Adult Blood Transfusion Integrated Care Pathway (Appendix 4) specifying:

- The type of blood component required.
- Volume or quantity to be transfused.
- Rate or duration of infusion.
- Date of transfusion
- Special requirements such as gamma irradiated, CMV-seronegative, HLA matched etc. These specifications must always be clearly stated both on the crossmatch request form and the blood prescription chart.
- Any medication required before or during transfusion.
- If a patient's clinical condition requires more frequent observations during transfusion than are routinely indicated on the prescription chart. (TACO review)

- Explaining the risks and benefits of proposed transfusion therapy to patients and obtaining their informed written consent, which must be filed in the patients' medical notes and scanned into the electronic patient record. Patients must be offered information leaflets on blood transfusion at the time of proposing this treatment. (A supply of leaflets can be obtained by accessing the link https://hospital.blood.co.uk/patient- services/ patient-blood-management/patient-information-leaflets/

8.1.2 Advanced Nurse Practitioners are responsible for:

Explaining risks and benefits of proposed transfusion therapy to patients and obtaining their informed, written consent, which must be filed in the patient's notes. Patients must be offered information leaflets on blood transfusion at the time of proposing this treatment. *(A supply of leaflets can be obtained by accessing the link)* https://hospital.blood.co.uk/patient-services/patient-blood-management/patient-information-leaflets/

The investigation and management of adverse transfusion reactions and reporting any severe adverse event to the UHL blood transfusion laboratory.

Authorising the blood component request form ('cross-match' form), which must contain the following information:

- Patient's surname
- Patient's forenames (initials not sufficient)
- Patient's date of birth (age not sufficient)
- Patient's NHS number
- Special requirements, if any, must be indicated on the request form. Please ensure 'neither' is ticked if no special requirements are indicated. (E.g. gamma irradiated, CMV antibody negative etc – details of indications for these requirements are given on the reverse of blood component (cross-match) request form
- Patient's Gender
- Patient's location
- G.P or Consultant in charge of the patient
- Time and date of request
- Time and date the blood component is required
- Quantity of blood component required
- Signature of the person collecting the sample
- Relevant clinical details and precise indication for transfusion (unqualified terms such as anaemia or ↓Hb are not acceptable).
- When requesting red cells, the pre-transfusion Hb including the date of test should be given on the crossmatch form
- The requests for platelets should indicate the patient's platelet count and the precise indication
- Name and signature of doctor/ ANP filling in the request form
- Previous blood group, transfusion history and atypical antibodies (if known)

8.1.3 Red cells will normally be reserved for the patient for only 48hrs after the date requested unless special arrangements have been made with the laboratory.

8.1.4 Blood transfusions should only be administered between 09.00 and 17.00 hours, Monday to Friday, to maintain patient safety.

8.1.5 If patients are receiving long-term transfusion therapy for the same indication, the indication and explanation offered to patients need not be documented for each transfusion episode, but these must be fully documented for the initial episode.

9.0 REQUIREMENTS FOR TAKING PRE TRANSFUSION BLOOD SAMPLES.

All patients identified as needing a blood transfusion require a pre transfusion compatibility blood test this is called cross matching. A blood sample for cross matching may be obtained by the following members of staff and must be taken using the safer sharps devices. Two samples are required see 9.1.5

- Medical staff / ANP
- Phlebotomists
- Clinical staff that have been trained for this purpose, for example nurses, and healthcare assistants

9.1 Identification of the patient.

9.1.1 All patients must be positively identified. Establish patient's full name and date of birth by asking open questions like "what is your full name?" and "What is your date of birth?" and NOT closed questions such as "Are you Mr…….?". This should be confirmed with the patient's wristband and notes/request form

9.1.2 If the patient is unable to confirm identification details, then two members of staff who have completed their e-learning modules one of which must be an ANP or medical doctor should confirm identity using patient's case notes and identification wristband.

9.1.3 All inpatients must have an identification wristband at the time of taking "group and screen" or "crossmatch" samples. The national guidelines encourage similar practice in outpatient settings. The details present on the wrist band should contain NHS number. (Appendix 6)

9.1.4 Only one patient must be bled at a time to minimize the risk of error.

9.1.5 Adults require 2 x 7ml Blood Transfusion samples for group and screen/ crossmatch. Samples must be taken at different times (at least 5 mins apart) and ideally though not necessarily be a different practitioner. Each sample must be accompanied with it's own form Date and time (sample taken) MUST be on each sample and request card

9.2 Labelling of Patient's Blood Sample.

9.2.1 The person taking the blood samples must label the sample tube at the patient's bedside.

9.2.2 The following minimum patient identification details must be clearly hand written on the sample tube:

- Surname
- Forenames (not initials)
- Date of birth
- NHS number or Hospital number
- Legible signature of the person taking the sample
- In case the patient is unidentified, a unique identity number, patient's gender and approx. age Refer to PAS alert NHS/PSA/RE/2018/008-5/12/18
- Date and time (24 hour clock must be used) sample was taken

9.2.3 Sample tubes must never be pre-labelled.

9.2.4 Sample details must always be handwritten. Do not use addressograph labels on samples. Addressograph labels used on samples **will not** be accepted by the Blood Transfusion Laboratory

9.2.5 The correct timing of sample collection in relation to previous transfusion of blood components (red cells and granulocytes) is as follows:

- In the confirmed absence of recent pregnancy or transfusion, samples may be taken up to 3 months prior to a planned transfusion.
- If the above cannot be confirmed or the patient has been pregnant or received a transfusion in the last 3 months, then samples for group and screen, and crossmatch are **only** valid for 72 hours.

9.2.6 Samples that are not fully and correctly labelled as specified in section 9.2.2 will **not** be processed,

and the requesting G.P or clinical team will be notified accordingly.

9.2.7 Samples are then sent to UHL Blood Transfusion Laboratory for processing.

9.2.8 Upon confirmation of the date and time of when a blood transfusion is required for a patient the Blood Transfusion Laboratory at Leicester Royal Infirmary must be contacted (Tel: 01162586605). The details of the patient, location of planned transfusion, date and time must be given to the laboratory staff. These details must also be faxed across to the lab as they use the fax as confirmation of request when the taxi arrives. A standard blood request slip can be used. The laboratory staff will then issue the components required and arrange for a taxi to transport the components to the transfusion location.

10.0 PROCEDURE FOR RECEIVING TRANSFERRED BLOOD FROM UHL NHS TRUST TO A COMMUNITY HOSPITAL

10.0 Community Hospitals

10.0.1 Community Hospitals should only order 1 (one) unit at a time from UHL Blood Transfusion Laboratory. The patient prescription (Adult Blood Transfusion Integrated Care Pathway) should have been completed prior to requesting delivery. The patient should have a cannula and baseline observations documented; so infusion of blood products can be commenced immediately, once the required checking processes have been completed.

10.0.2 When the transport box arrives it must NOT be opened until the following has been completed:

- On arrival the transit box should be checked for integrity and the storage conditions examined
- the time the box was packaged checked and confirmed that delivery is within this given time period,
- verify the units
- complete the accompanying transfer documentation
- send the documentation back to UHL Blood Transfusion Laboratory.

If there are concerns over the integrity of the blood products, or the box is received outside of the specified time period given on the box, UHL Blood Transfusion Laboratory must be informed immediately, their advice sought and arrangements to return the box and components made if required.

10.0.3 All blood movement documentation must be completed.

10.0.4 The unit will be safely stored at the correct temperature in the transport box until the expiry time stated on the box **only** if the box remains closed. Once the box has been opened the unit **must be** transfused within 4 hours. If after the box is opened and the decision is made not to transfuse the patient, the Blood Transfusion Laboratory staff must be contacted and they will advise on the action to be taken.

10.0.5 Staff involved in the Community transfusions can receive training by the Laboratory staff on how to receive, store, monitor and return un-used units using the boxes and cool packs. This can be arranged by contacting the laboratory.

11.0 COLLECTION OF BLOOD COMPONENTS (applicable to Clarendon and Beechwood Ward – Evington Centre ONLY)

11.1 The staff responsible for the administration of blood component must ensure that a suitable intravenous access, patient's consent and pre-transfusion observations have been secured and recorded **prior** to collection of blood and that the blood components have been correctly prescribed. Patient MUST have ID band in place

11.2 Collection is from the Blood Transfusion Laboratory at the Leicester General Hospital.

11.3 The collection must be authorised by a member of staff who is suitably qualified to administer prescribed blood components, i.e. a doctor, registered nurse.

11.4 Unqualified members of staff, who have received necessary training for this purpose, can be authorised to collect blood components.

11.5 The person collecting the blood component from the blood issue fridge must take completed Blood Component Prescription and Administration chart with them to confirm correct patient details.

11.6 If there is discrepancy between the supplied details and the label on the blood or component then advice must be sought from the Blood Transfusion Laboratory staff immediately.

11.7 The collector must deliver the blood component to the requested location without delay and hand the blood component to a qualified member of the nursing staff if applicable. The blood component must not be left on the ward without the knowledge of the qualified staff who is expecting its delivery.

11.8 The qualified member of staff who is responsible for the administration of blood components must check all patient identification details on the delivered blood component and the crossmatch report.

11.9 Only one unit of blood must be collected at a time.

11.10 Blood or blood components must only be collected immediately prior to administration and the administration must be commenced as soon as possible after its arrival on the ward, ideally within 30 minutes.

11.11 Blood may still be administered following a longer period of being left at room temperature, providing transfusion of that unit can be completed within 4 hours of removal from the dedicated temperature controlled blood fridge.

11.12 For adult patients under normal circumstances a unit of red cells can be safely given over a period of 2 to 3 hours.

11.13 If significant delays (greater than 4 hours) occur the Blood Transfusion Laboratory must be informed, and arrangements made for returning the component to the Blood Transfusion Laboratory. The time of return must be documented.

12.0 CARE OF PATIENTS REQUIRING THE ADMINISTRATION OF BLOOD OR BLOOD COMPONENTS

12.1 The following members of staff are authorised to administer the authorised blood or blood components only if they possess evidence of annual blood transfusion training:

- Doctor
- Registered Nurse

12.2 The ANP via the electronic prescribing system will add to the patients electronic prescription the BLOOD TRANSFUSION ANAPHYLAXIS MANAGEMENT CHS bundle. This bundle includes:

- Adrenaline 1:1000 – 500mcg IM
- Chlorphenamine 10mg IV
- Hydrocortisone 200mg IV.

12.3 Immediately before setting up the transfusion, two qualified members of staff must take the following to the patient;

- The unit of blood component to be transfused.
- The Blood Component Prescription and Administration Chart (Adult Blood Transfusion Integrated Care Pathway.
- Patient's electronic record
- The appropriate blood component giving set.
- UHL Compatibility Label Card (orange card-this is a tear-off section affixed to the unit of blood to be completed once the transfusion is started/finished and then sent back to the laboratory)

12.2 Student nurses, Registered Nurse Associates only act as a 3rd checker.

12.3 The patient's consent must be obtained in line with LPT Trust Consent Policy (Appendix 7) prior to the transfusion being set up and clearly documented in the nursing documentation and patient's notes.

12.4 The patient must be positively identified by asking his/her Surname, first name and date of birth, if they have capacity. These details MUST be checked and match exactly with ID band and Blood Component Prescription and Administration Chart (Adult Blood Transfusion Integrated Care Pathway) and the compatibility label on the unit CAS alert CEM/CMO/2017/005 from 9/11/17.

IMPORTANT: It is essential that any patient having a blood transfusion has an identification wristband, or equivalent e.g. photo ID card with unique patient identifiers NO ID BAND NO TRANSFUSION.

12.5 Make absolutely sure that (i) Surname, (ii) Forenames, (iii) Date of birth and (iv) Unique patient identification number (e.g. NHS or hospital number) is checked and found to be identical with the:

- Patient's identification wristband or equivalent (see above).
- Cross-match report.
- Compatibility label attached to the blood unit.
- Patient's case notes.
- Blood Component Prescription and Administration chart.

12.6 Occasionally the blood groups of red cells may not be identical to the patient's blood group. This will be stated on the crossmatch report. Units may be issued by the Blood Transfusion Laboratory with the following stickers when components with alternative blood group are issued but are safe to transfuse. If in doubt contact the Blood Transfusion Laboratory.

Blood group of component does not match patient. However it is safe to transfuse

12.7 If the blood group of red cells units and the blood group of the patient are not identical and the above sticker is not present, DO NOT START TRANSFUSION AND IMMEDIATELY CONTACT UHL BLOOD TRANSFUSION LABORATORY FOR ADVICE.

12.8 The compatibility label on the blood unit must also be checked and match with the details on the label from the Blood Transfusion Laboratory.and found identical with the crossmatch report. As 12.5:

12.9 After **ALL** patient checks have been satisfied, **BOTH** qualified staff members must sign the crossmatch report, against the blood unit being given. In the event of any discrepancy, transfusion must not proceed and further advice obtained from the Blood Transfusion Laboratory.

12.10 It is absolutely essential that each of the two members of staff carrying out the patient checks is vigilant and one does not rely upon the other to be rigorous. Double independent check.

12.11 The person attaching the unit of blood component to the patient must also sign the Blood Component Prescription and Administration chart (Adult Blood Transfusion Integrated Care Pathway and enter the start time and date.

12.12 The person attaching the unit of blood must always wear gloves when handling blood components. Administration of blood components is governed by the use of ANTT (Aseptic Non-Touch Technique).

12.13 Baseline observations including Temperature, Heart rate, respiratory rate, Blood Pressure, Oxygen Saturations and conscious Level must be recorded prior to the collection of blood.

12.14 Check the Blood Component Prescription and Administration chart to ascertain the prescribed blood component and its infusion time, whether any pre- medication or diuretic need to be given, or if there are any special requirements, such as CMV seronegative or irradiation

12.15 Once the transfusion is set up, the patient must not leave the ward or clinical area without a Registered Nurse escort; the transfusion must not simply be discontinued and resumed afterwards as this could increase the risk of a serious infective complication. .

12.16 The flow rate must be adjusted according to the prescription. The flow rate should be set using a drip rate formula

A standard giving set will administer: Clear: 20 drops/ml
Blood: 15 drops/ml
Pediatric: 60 drops/ml

$$\frac{\text{Volume to be infused (ml)} \times \text{Drops/ml}}{\text{Hours to run over} \times 60 \text{ (converts to minutes)}}$$

12.17 The same patient check procedure is required for each subsequent unit of blood. (The crossmatch report accompanies the first unit only, and during the transfusion it must be secured in case notes or the patient's observations folder at the end of the bed, together with the Blood Components Prescription and Administration chart.)

At the commencement of each unit of blood component, the blood transfusion Adult Blood Transfusion Integrated Care Pathway must be fully completed and signed by the 2 Health Care Professionals administering the transfusion. Once the transfusion episode has been completed the signed and completed prescription page of the Adult Blood Transfusion Integrated Care Pathway (complete with Patient details):

- Must be scanned and emailed to the generic blood track email : bloodtracksupport@uhl-tr.nhs.uk,
- Photocopied and return to the Blood Transfusion Laboratory, Leicester Royal Infirmary
- A copy of the Adult Blood Transfusion Integrated Care Pathway must retained in the patients notes

This should be returned within 24 hours of the transfusion. It is a national legal requirement that all Trusts can demonstrate full traceability for all blood components issued and this information must be retained for 30 years (Blood safety and quality regulations 2018).

The fate of all blood products must be traceable from donor to recipient. **This is a legal requirement**. Therefore any unused products must be returned to the Blood Transfusion Laboratory Bank. **All wastages must be reported to the laboratory to complete audit trail.**

NB: Partial transfusions however small should be recorded as transfused and be documented accordingly.

12.18 After completion of the transfusion procedure, the Blood Component Prescription and Administration chart, the cross-match report and any additional observation chart used for monitoring transfusion, must be scanned and filed in patient's electronic record as a permanent record.

12.19 The blood giving set must be changed after two units of the same blood/blood component or after 8 hours or if the filter is found to be blocked, whichever occurs first. Blood / blood components must not be transfused in the same blood giving set following the infusion of other intravenous fluids.

12.20 Electronic infusion pumps **MUST NOT** be used for transfusion of blood as they may damage blood cells.

12.21 Always wear gloves and aprons when handling blood components.

13.0 GENERAL INSTRUCTIONS

13.1 Drugs must **not** be added to blood under any circumstances.

13.2 Blood component units must be inspected prior to transfusion, for any leaks at the ports and seams and for the presence of clots and must not be used if any such defect is noticed.

13.3 The transfusion of a unit of red cells should be completed within a 4 hour period.

14 MONITORING OF PATIENTS DURING TRANSFUSION

14.0 The health care professionals responsible for the care and monitoring of transfused patients are defined above under section 7.4. Registered Nurse Associates can perform observations before, during and after the transfusion. Any abnormal observations must be notified immediately to nursing or medical staff.

14.1 Baseline vital signs i.e. PULSE, BLOOD PRESSURE, RESPIRATION AND TEMPERATURE must be checked just before the collection/setting up the transfusion, and again 15 minutes and 60 minutes after the start of EACH UNIT of blood or blood component, plus observations must be taken upon completion of the transfusion. (This information must be documented on the Blood Component Prescription and Administration chart (Adult Blood Transfusion Integrated Care Pathway) (Appendix 1) or e-observations blood transfusion module.

14.2 The observations in 14.2 above are the minimum. More frequent observations may be necessary should the patient become unwell, or in other clinical situations e.g. unconscious or heavily sedated patients and patients with heart failure.

14.3 Most serious transfusion reactions tend to occur within the first 15 minutes of starting a new blood or blood component unit and the patient must therefore receive very close visual observation during this time.

14.5 Patient should be monitored for 24 hours post transfusion and therefore if discharged home before this time information must be given to the patient on who and how to contact should they feel ill at home during this period

15.0 MANAGEMENT AND INVESTIGATION OF TRANSFUSION REACTIONS

A reaction to the transfusion of blood products may be mild, moderate or severe or life threatening e.g. a haemolytic reaction due to ABO incompatibility, sepsis because of bacterially contaminated blood products. Adequate management depends on the likely nature of a transfusion reaction. It will be necessary to seek specialist advice from Senior Haematology medical staff or Transfusion Practitioners. All moderate and server reactions must be reported via DATIX and SABRE

All reactions, errors and near misses MUST be reported to the Blood Transfusion Laboratory and their advice and recommendations followed. Any untoward incidences must also be reported following the LPT organisation's own incident reporting system.

Classification of Transfusion Reactions:

15.1 **Haemolytic Transfusion Reaction**
"Haemolytic transfusion reaction is one in which signs of increased Red cell destruction are produced as a result of transfusion."
A distinction is made between an acute (immediate) reaction which occurs during the transfusion and one in which red cell destruction begins only after there has been a secondary immune response triggered by the transfusion which may take days or week.

15.2 Acute **(Immediate) Haemolytic Reaction**
"This may be caused by the transfusion of incompatible red cells, bacterially contaminated or thermally damaged blood."

Incompatible red cells react with the patient's own anti-A or anti-B, activating complement, causing intravascular haemolysis and disseminated intravascular coagulation (DIC).
Transfusion of ABO incompatible blood almost always arises from errors in labeling the sample or from inadequate pre transfusion bedside checks. If a unit is mistakenly transfused to a patient other than the one from whom the sample was received the chances of ABO incompatibility are about 30%.
The reaction is usually most severe when group A red cells are given to a group O patient. In a conscious patient only a few mls, may be needed to cause a severe reaction within minutes of commencing transfusion. In an unconscious patient some of the symptoms will not be evident.

15.2.1 Clinical features

Fever, chills or rigor. Tachycardia.
Hypotension and circulatory collapse. Severe pain at drip site.
Pain in back or chest. Dyspnoea.
Haemoglobinaemia.
Acute oliguria, renal failure and collapse. Disseminated intravascular coagulation (DIC).

15.2.2 Management

Stop the transfusion without delay. Dial (9)999
Resuscitate the patient.
Return all blood packs with any giving set still attached and the drip set to the blood transfusion laboratory.

15.3 **Delayed Haemolytic Transfusion Reaction**

The titre of an antibody in a recipient's plasma may be too low to be detected in the pre- transfusion tests. However, if incompatible red cells are transfused a secondary response may be provoked. A few days after transfusion there is a rapid increase in antibody with consequent destruction of transfused red cells.

15.3.1 Clinical features:

Fever (not always present). Fall in haemoglobin level.
Jaundice (often not before day 5 post-transfusion and can be as late as day 10). Haemoglobinuria (a mean of 8 days post-transfusion).

15.3.2 Management

Take samples for: FBC.
LFT.
Direct antiglobulin test (Coombs test). Antibody screening.
Inform blood transfusion laboratory staff and discuss with senior haematology medical staff.

15.4 **Febrile Non-Haemolytic Transfusion Reactions (FNHTR)**

Mild febrile reactions are often caused by cytokines in blood components or patient antibodies to donor leucocyte antigens. These often occur towards the end of the transfusion and there are no clinical signs other than a rise in temperature and non- specific accompaniments of any pyrexia. FNHTRs are now seen relatively less frequently because of universal leucodepletion of blood components.

FNHTRs are unpleasant but not life threatening. Paracetamol is often all that is required.

However, it is important to remember that a mild febrile reaction may be the early stages of an acute haemolytic transfusion reaction caused by incompatible or bacterially contaminated blood. If a patient becomes unwell or hypotensive, transfusion must not be restarted and blood transfusion laboratory must be informed. Responsibility of the return of the blood component pack and additional blood samples from the patient for necessary serological and microbiological investigations lies with the staff in the clinical area where the patient is located.

15.5 **Allergic reactions**

Caused by antibodies in the patient to infused plasma proteins or infusion of allergens, which react, with patient's IgE antibodies. More likely to occur with platelets and plasma than red cell concentrates.

15.5.1 Clinical features

(within minutes of the transfusion):

- urticaria
- itching

15.5.2 Management

Symptoms usually subside if the transfusion is slowed and antihistamine (e.g. chlorpheniramine 10mg i.v.) is given by slow injection. Hydrocortisone 100mg i.v. may also be used.

15.6 **Anaphylaxis**

This is a very rare but life-threatening complication. The onset is rapid and often dramatic. Immediate action is required. In some cases this is associated with antibodies against IgA in patients who have severe IgA deficiency. Antibodies to other plasma proteins may be implicated in other cases.

15.6.1 Clinical features

Dyspnoea Stridor
Facial/Throat swelling Drop in oxygen saturations
Tachycardia
Hypotension Urticaria
Feeling of impending doom

15.6.2 Management

Discontinue transfusion
Follow the organisation's Anaphylaxis Policy Dial 999
Inform the blood transfusion laboratory
Under no circumstances should transfusion be restarted Return all blood packs and the drip set to the blood transfusion laboratory

15.6.3 Future transfusions

Washed cellular blood components or selected blood components from IgA deficient donors may be needed for future transfusion.

15.7 **Septic shock**

Although this complication is extremely rare with a reported incidence of two cases per million blood components transfused, the mortality remains very high. This is caused by bacterial contamination of red cells or platelets.

15.7.1 Clinical Features

Usually acute with rapid onset Pyrexia
HypotensionTachycardia
Collapse

15.7.2 Management

Stop the transfusion Dial 999
Discontinuation of transfusion.
Return all blood packs and the drip set to the blood transfusion laboratory.
Inform the Blood Transfusion Laboratory.

15.8 **Transfusion Related Acute Lung Injury (TRALI)**

This rare but life-threatening complication manifests as features of non- cardiogenic pulmonary oedema, either during or soon after transfusion.

The cause is usually donor plasma that contains antibodies to the patient's leucocytes and is a serious condition with a high mortality rate.

15.8.1 Clinical Features

Chill Fever
Non-productive cough Breathlessness
Hypoxia
interstitial shadowing on chest x-ray

15.8.2 Management is that of acute respiratory distress syndrome

Stop transfusion
Immediately seek advice from senior haematology medical staff and ITU physician

15.9 Fluid overload - TACO

This can occur when correcting chronic anaemia in elderly patients or those with pre- existing cardiac disease.

15.9.1 Clinical Features

Dyspnoea
Tachycardia Hypotension

15.9.2 Management

Stop the transfusion
Give furosemide (frusemide) 40mg i.v. in the first instance Arrange chest X-ray and ECG

15.10 Late Complications of Transfusion

15.10.1 Iron overload

Transfusion dependent patients receiving red cells over a long period become overloaded with iron. Chelation therapy with desferrioxamine is used to minimize accumulation of iron.

15.10.2 Transfusion Associated Graft versus Host disease (TA-GvHD)

This is a rare but often fatal complication of transfusion caused by T- lymphocytes. Immunodeficient patients e.g. recipients of an allogeneic bone marrow transplant, foetal intrauterine transfusions, patients with Hodgkin's disease and patients undergoing specific chemotherapy such as fludarabine and cladribine, are at special risk for this disease. It has also occurred in immunologically normal patients after transfusion of a first or second degree relative's blood (from shared HLA haplotypes). It is prevented by gamma irradiation of cellular blood components given to patients at risk.

15.10.3 Post Transfusion Purpura (PTP)

PTP is a rare but potentially life threatening complication of red cell or platelet transfusion, most often seen in female patients. It is caused by platelet-specific alloantibodies. Typically 5-9 days after transfusion the patient develops an extremely low platelet count with bleeding. Refer to a Consultant Haematologist for treatment advice. High dose IVIG is the treatment of choice. Plasma exchange may be required. If platelet transfusion is absolutely essential, platelets compatible with the patient's antibody.

16.0 ROUTINE DISPOSAL OF USED BLOOD PACKS AND BLOOD GIVING SETS

16.1 On completion of uncomplicated transfusion procedure, all used blood component bags must be placed in an orange polythene bag used for disposal of clinical waste, sealed and labeled with patient details, date of transfusion, name of nurse taking down blood transfusion and kept in sluice for 24hrs. Sharps should be put into yellow sharps bin.

16.2 These bags must then be retained and kept in a designated area on each ward/theatre for at least 24 hours. This will make it possible to investigate any adverse event that may have been attributed to blood transfusion. After 24 hours, the bags should be disposed of as per the clinical waste policy.

16.3 After completion of the final unit of the transfusion, the giving set should remain in situ in the bag to avoid unnecessary risk of sharps injury/exposure to blood.

16.4 Partially transfused units that are no longer required must be sealed using an appropriate bung and discarded after 24 hours as per the clinical waste policy.

17.0 PROCEDURE FOR THE INTER-HOSPITAL TRANSFER OF PATIENTS WHILST RECEIVING BLOOD COMPONENTS

17.1 If a patient has to be transferred from one hospital to another while blood transfusion is in progress, a registered nurse or midwife, or a member of medical staff must remain with the patient until transfer is complete.

17.2 The registered nurse responsible for the patient must inform the technical staff in UHL Blood Transfusion Laboratory giving full details of the transfer.

17.3 The transferring hospital should ensure that any remaining unused blood transfusion components are transported in an appropriate transit box in controlled storage conditions in line with guidance given by UHL Blood Transfusion Laboratory.

18.0 TRAINING REQUIREMENTS

All staff involved in the blood transfusion must have read the transfusion policy and receive annual blood transfusion up-dates via e-learning updates on www.nhs.learnprouk or face-to-face training session relevant to their role within the organization.

The annual e-learning updates include:

- Haemovigilance in the UK
- Requesting procedure
- Sampling procedure
- Collection procedure
- Administration Procedure
- Management of the transfused patient

18.1 Doctors and Advanced Nurse Practitioners involved in the transfusion process must undertake the above e-learning modules available on www.nhs.learnprouk.com.

18.2 Advanced Nurse Practitioners require an initial face to face education session regarding cross matching requirements.

18.3 Registered Nurses involved in the transfusion process are required to undertake the above mandatory e-Learning via www.nhs.learnprouk.com annually.

18.4 Registered Nurse Associates involved in the transfusion process are required to undertake complete the mandatary e-learning via www.nhs.learnpro.com annually.

18.5 Health Care Assistants involved in the transfusion process are required to undertake and complete the mandatory e-learning via www.nhs.learnprouk.com annually

18.6 LCAT assessments (Appendix 5)

19.0 MONITORING OF COMPLIANCE

The primary responsibilities for ensuring staff who are involved in the transfusion process have been trained to the required standard lies with the Hospital Matrons. All transfusion training is logged on to U Learn which is the trust wide mandatory training database (Appendix 13)

The risks associated with the blood transfusion process are monitored via a number of routes:

- All patient safety incidents relating to the transfusion process will be monitored by the Divisional Patient Safety Group.

- Yearly audits of Bedside Transfusion Practice will be undertaken to monitor compliance with this policy which will be reported via the Clinical Effectiveness sub-group to the Clinical Governance Group of the Division

Minimum Requirements	Evidence for Self-assessment	Process for Monitoring	Responsible Individual / Group	Frequency of monitoring
Consent should always be obtained from patients prior to a transfusion	page 4 12.4 page 12 Consent to Examination and Treatment Policy	See Consent to Examination and Treatment Policy		
Qualified nursing staff must be up to date in blood transfusion (and competency)	page 7	ULearn records Annual audit of blood transfusion practice and competency		
All patients identified as needing a blood transfusion require a pre transfusion compatibility blood test sample. The listed minimum patient identification details must be clearly hand written on the sample tubes	9 page 9	Samples are then sent to UHL Blood Transfusion Laboratory for processing. Samples that are not fully and correctly labelled will not be processed.	UHL Blood Transfusion Laboratory	As and when required
On arrival the transit box should be checked for integrity, the storage conditions examined, the time the box was packaged checked and confirmed that delivery is within this given time period, verify the units.	10.0.1 & 10.0.2 page 10	Documentation returned to UHL Blood Transfusion Laboratory		On arrival the transit box should be checked for integrity, the storage conditions examined, the time the box was

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Appendices

Appendix 1	Multi-Faith Resource Pack https://www.leicspart.nhs.uk/about/key-documents/

Appendix 2	UHL Blood Transfusion Policy - includes Guidelines on Red Cell Transfusions https://www.leicestershospitals.nhs.uk/

Appendix 3	Audit of Blood transfusion practice and compliance - see below

Appendix 4	Blood Component Prescription, Administration and Transfusion Reaction Chart - see below 4.1 Adult Blood Transfusion Integrated Care Pathway 4.2 Blood Component prescription & Administration Chart 4.3 Haematology Report Sheet 4.4 Record of Transfusion Observations 4.5 Management of Transfusion Reactions 4.6 Informed Consent for Blood Transfusion

Appendix 5	Competency Assessment Forms - see below LCAT Assessors Recording Form for Blood Sampling LCAT Assessors Recording Form for Administration of Blood Components

Appendix 6	LPT Patient Identity https://www.leicspart.nhs.uk/about/key-documents/

Appendix 7	LPT Trust Consent Policy https://www.leicspart.nhs.uk/about/key-documents/

Appendix 8	Data Privacy Impact Assessment Screening

Appendix 3

Blood Transfusion (#1564)

Ward Name: _____

Part A - to be completed whilst the unit of blood you are auditing is in progress

1. Is the patient wearing an ID wristband? Yes No

If you answered **NO** to question **1**, please go straight to question 3

2. Does the patient's identification include their:
a. Last name Yes No
b. First name Yes No
c. Date of birth Yes No
d. NHS number Yes No

Accuracy of information on the patient's identification

3. Is the patient able to state their full name and date of birth? Yes No

If the answer to question **3** is **YES**, please use the information given to you by the patient when answering question **4**. (Answer N/A for questions 5 - 6)

If the answer to question **3** is **NO**, please use the information on the patient's identification to answer questions **5** to **6**. (Answer N/A for question 4)

To assess the accuracy of the information on the patient's identification, auditors should ask the patient to state (and spell, if necessary) their first name, last name, and their date of birth. To ensure that the information given by the patient exactly matches that on their identification, please make the following checks:

4. Does the following information, as stated by the patient, match what is shown on the identification?
a. Patient's first name Yes No NA
b. Patient's last name Yes No NA
c. Patient's date of birth Yes No NA

5. Does the following information on the patient's identification match what is shown on the tag attached to the unit of blood?
a. Patient's first name Yes No NA
b. Patient's last name Yes No NA
c. Patient's date of birth Yes No NA
d. Identification number Yes No NA

6. Does the following information on the patient's identification match what is shown on the prescription?

a. Patient's first name	Yes	No	NA
b. Patient's last name	Yes	No	NA
c. Patient's date of birth	Yes	No	NA
d. Identification number	Yes	No	NA

If any details did not match, please state the details of the discrepancy, i.e.: wrong spelling, missing letter(s), wrong number, etc.

4a
4b
4c
5a
5b
5c
5d
6a
6b
6c
6d

7. If the prescription indicates that the patient needs CMV-negative, or irradiated blood, does the unit you are auditing match those requirements? Yes No NA

About the unit of blood that you are auditing

8. Is the date of transfusion documented? Yes No

9. Is the transfusion start time documented? Yes No

10. Has the signature of the person who undertook the pre-transfusion bedside checks been documented? Yes No

Pre-transfusion observations

11. Were the following recorded within the 60 minutes before the transfusion start time?

a. Pulse?	Yes	No
b. Blood pressure?	Yes	No
c. Temperature?	Yes	No
d. Respiratory rate?	Yes	No

After the start of the current transfusion

At what time after the unit was started (in minutes), were these observations recorded?

12. The first pulse reading?	1-14	15	16-30	>30	Don’t know
13. The first blood pressure reading?	1-14	15	16-30	>30	Don’t know
14. The first temperature reading?	1-14	15	16-30	>30	Don’t know

Questions for the auditor to ask the healthcare professional caring for the patient at the time of audit

15. When did you last receive blood transfusion training?

In last year | In the last 3 years | Never | Don’t know

Part B - return to complete this section after the unit that you are auditing has finished transfusing

17. Has the unit stop time been recorded? Yes No

18. Were the following recorded no more than 60 minutes **after** the transfusion **stop** time?

a. Pulse?	Yes	No
b. Blood pressure?	Yes	No
c. Temperature?	Yes	No
d. Respiratory rate?	Yes	No

Appendix 4

University Hospitals of Leicester NHS
NHS Trust

DEPARTMENT OF TRANSFUSION MEDICINE

ADULT BLOOD TRANSFUSION INTEGRATED CARE PATHWAY

Hospital: Ward/Dept: Consultant:

THE FOLLOWING MUST BE CHECKED BY THE INDIVIDUAL ADMINISTERING THE TRANSFUSION:

Has informed consent been obtained and documented? Yes ☐ Date ☐

Is this patient unable to give consent? Yes ☐
The clinician feels that blood transfusion is in the patient's best interest. Name ☐

Information leaflet given? Yes ☐ No ☐

Ensure the following:

Pre-transfusion observations have been obtained

IV access is patent and available for transfusion

Is it the first unit to be transfused?
If not, check that the cross-match form is present

BLOOD RESULTS

Hb		Plats	
Pre	Post	Pre	Post

Hospital No.: AFFIX
Surname: PATIENT
Forenames: LABEL HERE
D.O.B.: Gender: M / F
Address:

The expiry date of each unit for transfusion must be checked before administration

Nursing Evaluation / Communication:
Use this space to record any important Transfusion-related information:

Patient's weight: kg

GIVING SETS MUST BE CHANGED AFTER 2 UNITS, OR 8 HOURS IF RAPIDLY TRANSFUSING MULTIPLE UNITS

BLOOD COMPONENTS **MUST NOT** BE MIXED WITH ANY OTHER SUBSTANCES, E.G. DRUGS, IV FLUIDS ETC

BLOOD COMPONENT PRESCRIPTION & ADMINISTRATION CHART

Note: Some patients will require CMV negative and/or irradiated blood components. PLEASE SEE OVERLEAF. Do not administer any blood components if the Yes/No options below are not circled by the prescribing doctor

INDICATIONS FOR THE USE OF IRRADIATED BLOOD PRODUCTS

1	BMT (Bone Marrow Transplant) / PBSCT (Peripheral Blood Stem Cell Transplant) Allograft Recipient	Yes / No
2	BMT / PBSC Autograft Recipient (No Total Body Irradiation - TBI) <3 months post transplant	Yes / No
3	Autograft Recipient (with TBI conditioning) <6 months post transplant	Yes / No
4	Hodgkin's Disease (all patients regardless of stage)	Yes / No
5	Due for Bone Marrow / PBSC Harvest within next 7 days	Yes / No
6	Currently on or previously received Fludarabine, Cladrabine, Deoxycoformycin (Pentostatin), ATG (Anti-Thymocyte Globulin) (ALG) or Campath (Alemtuzumab) treatment. Not essential following ATG treatment in recipients of solid organ transplant	Yes / No
7	Due to receive Granulocytes, HLA-matched platelets or donations from first or second degree relatives	Yes / No
8	Due to receive, or has received previous intrauterine transfusion	Yes / No
9	A neonate (<6 months) due to receive a red cell exchange transfusion	Yes / No
10	Suspected or confirmed congenital cellular immune deficiency state (e.g. Di George Syndrome)	Yes / No

Before administering a Blood Component to your patient: It is vital for the safety of your patient, to ensure that the answers to the questions above have been circled by the prescribing Doctor. Do not proceed without this confirmation.

INDICATIONS FOR THE USE OF CMV NEGATIVE CELLULAR BLOOD COMPONENTS

Where the answer to any of the following questions is 'yes', patients should receive CMV seronegative blood components, unless the clinical urgency is such that provision of CMV negative blood is likely to cause unacceptable delay.

1	CMV antibody negative patients with haematological or other disease who are likely to receive allogeneic bone marrow and/or peripheral blood stem cell transplants	Yes / No
2	CMV negative recipients of allogeneic bone marrow and/or peripheral blood stem cell transplants	Yes / No
3	Is it an Intrauterine Transfusion?	Yes / No
4	Neonate or infant up to 28 days old. For premature neonates 28 days old from expected date of delivery.	Yes / No
5	Is this an elective transfusion during pregnancy (not during or post delivery)?	Yes / No

HAVE YOU GIVEN YOUR PATIENT A BLOOD TRANSFUSION INFORMATION LEAFLET?

Hospital No.: AFFIX

Surname: PATIENT

Forenames: LABEL HERE

D.O.B.: Gender: M / F

Address:

PRESCRIPTION

	Date Prescribed	Blood Component Type (e.g. red cells, platelets etc)	Dose / Volume	Special Requirements CMV/Irradiated	Rate of Infusion	Diuretic required (Prescribe on Patient's drug chart)	Doctor (Sign & Print Name)
A							
B							
C							
D							
E							
F							
G							
H							
I							
J							

ADMINISTRATION

We confirm that the patient's details have been checked against the blood component and are correct

	Date blood component actually transfused	Donation number of unit (i.e. G092....)	Checked by: (Sign & Print Name)	Administered by: (Sign & Print Name)	Time started	Time finished
A						
B						
C						
D						
E						
F						
G						
H						
I						
J						

W1 HAEMATOLOGY REPORT SHEET

12
11
10
9
8
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6
5
4
3
2
1

HAEMATOLOGY

Apply forms from the bottom upwards
Please set reports accurately

RECORD OF TRANSFUSION OBSERVATIONS

Observations must be recorded for each unit transfused: Prior to starting the transfusion (before the blood is collected from blood bank); then at 20 mins; 1 hour; and on completion of each unit

Please record the TIME at which you carry out each set of observations

Date:

	A				B				C				D				E				F				G				H				I				J			
Time:	Pre	20 mins	1 hour	On comp.	Pre	20 mins	1 hour	On comp.	Pre	20 mins	1 hour	On comp.	Pre	20 mins	1 hour	On comp.	Pre	20 mins	1 hour	On comp.	Pre	20 mins	1 hour	On comp.	Pre	20 mins	1 hour	On comp.	Pre	20 mins	1 hour	On comp.	Pre	20 mins	1 hour	On comp.	Pre	20 mins	1 hour	On comp.
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TEMPERATURE

BLOOD PRESSURE

PULSE

RESPIRATION

Use this section to record any comments you may have, i.e. Adverse events, Part-used blood bags etc.

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2. BMT / PBSC Autograft Recipient (No Total Body Irradiation - TBI) <3 months post transplant
3. Autograft Recipient (with TBI conditioning) <6 months post transplant
4. Hodgkin's Disease (all patients regardless of stage) and even if cured
5. Due for Bone Marrow / PBSC Harvest within next 7 days
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   Not esential following ATG treatment in recipients of solid organ transplant
7. Due to receive Granulocytes, HLA-matched platelets or donations from first or second degree relatives
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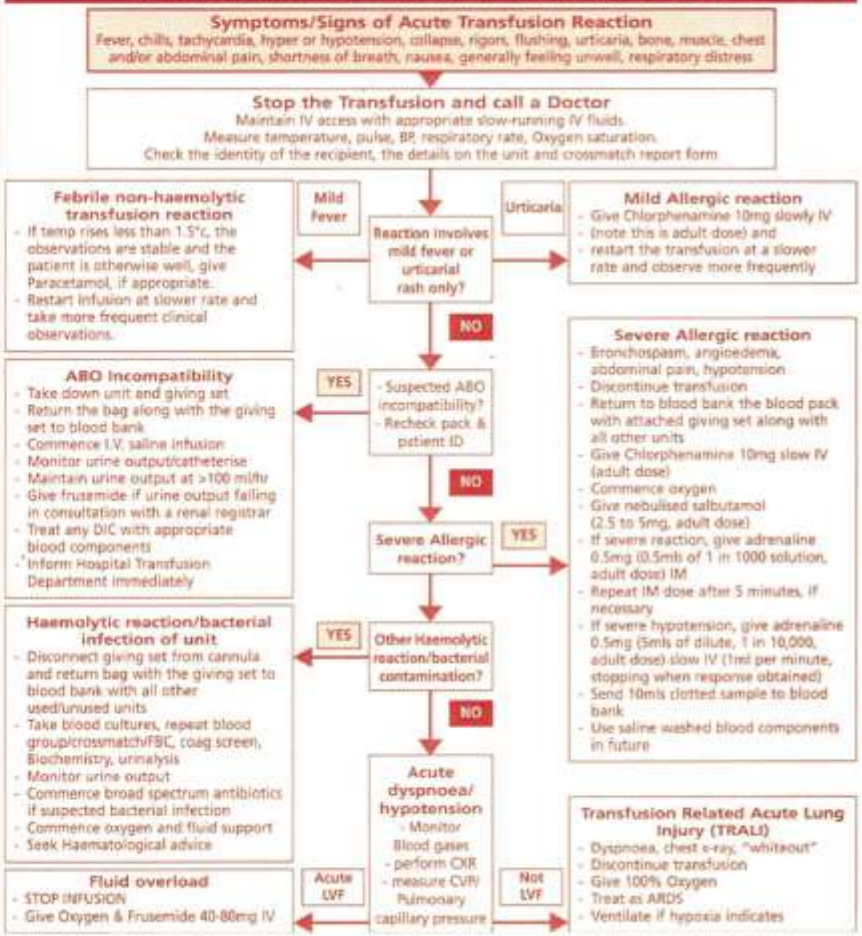
1. CMV antibody negative with haematological disease who are likely to receive allogeneic bone marrow and/or peripheral blood stem cell transplants
2. CMV negative recipients of allogeneic bone marrow and/or peripheral blood stem cell transplants
3. Intrauterine Transfusion?
4. Neonate or infant up to 28 days old. For premature neonates 28 days old from expected date of delivery
5. Is this an elective transfusion during pregnancy (not during or post delivery)?

TIMING OF PRE-TRANSFUSION SAMPLES IN RELATION TO PREVIOUS TRANSFUSIONS

- In the absence of a recent transfusion or pregnancy within the last 3 months, samples may be taken up to 3 months prior to planned transfusion. Samples are then valid for 3 days from the start of transfusion.
- If the event of a transfusion or pregnancy within the last 3 months, samples should be taken no more than 3 days in advance of the completion of the planned transfusion.
- For neonates under the age of 4 months, samples are required from the baby and the mother on the initial request only.

ALL ADVERSE TRANSFUSION-RELATED REACTIONS & EVENTS MUST BE REPORTED TO BLOOD BANK

MANAGEMENT OF TRANSFUSION REACTION



INFORMED CONSENT FOR BLOOD TRANSFUSION (RED CELLS, PLATELETS, FFP OR CRYO)

STEP BY STEP GUIDE ON HOW TO OBTAIN WRITTEN CONSENT FOR BLOOD TRANSFUSION:

1) If a patient needs, or is likely to need Blood Transfusion, informed written consent should be obtained where possible (see detailed guidance notes available on INsite.
2) Use the UHL standard consent form.
3) Explain the reasons, benefits and risks of proposed Blood Transfusion to the patient, and offer written information leaflet on Blood Transfusion. The following text may be used for this purpose:

"I / we feel that it is, or it may become, necessary for you / your child to receive a Blood Transfusion. Although Blood Transfusion is quite safe, there are some potential risks associated with this treatment. In the UK the risk of contracting a viral infection such as hepatitis or HIV from Blood Transfusion is extremely small. Very rarely patients receiving Blood Transfusion may experience an allergic reaction or develop other complications such as haemolysis (breakdown of red cells in your blood) or a bacterial infection. The actual risk of contracting vCJD through blood is unknown but is likely to be extremely small. There is also a very small risk of receiving "unsuitable" blood, however there are stringent procedures in place to minimise this risk."

In some cases, particularly for surgical patients, there may be suitable alternatives to offering donor blood. Please discuss this with your senior, colleagues or a member of the Blood Transfusion team.

4) Use the peel off stickers at the bottom of this page. Tick all boxes to indicate that the listed benefits and possible risks have been explained to the patient. Affix one sticker to each copy of consent form, file the top copy in patient's case notes and hand the bottom copy to the patient.
5) Consent for haematology and medical patients:
   - Patients requiring regular transfusion support will only need to be consented once, at the beginning of regular transfusion programme.
   - All other patients who are likely to require occasional transfusions should be consented once during each admission episode.
6) Consent for surgical procedures:
   - Patients undergoing **Planned Surgical Procedures** which require "Group and Save" or Cross Match (see Optimal Surgical Blood Ordering Schedule – available on INsite document ID 56978 should be consented for Blood Transfusion at the same time as the consent is taken for the surgical procedure.
   - Patients undergoing **Emergency Surgery:**
     Obtain written consent if time allows, otherwise obtain and document verbal consent if patient is able to give consent.
7) Emergency transfusion in an unconscious patient, or if the patient is otherwise unable to give informed consent – the clinician in charge will decide what is in the best interest of the patient and document in case notes – remember, the issue of informed consent for Blood Transfusion is no different to any other emergency treatment or intervention.

CONSENT FOR BLOOD TRANSFUSION

Benefits

I To treat anaemia/improve delivery of oxygen to tissues	☐
II. To replace blood loss (bleeding/haemolysis)	☐
III. To help prevent further bleeding	☐

Potential Risks

1. Extremely small risk of viral illness such as hepatitis or HIV or other viruses	☐
2. Very small risk of bacterial infection	☐
3. Risk of transfusion reaction – allergic or haemolytic	☐
4. Unknown but probably extremely small risk of vCJD	☐
5. Very small risk of receiving unsuitable blood (though procedures in place to prevent this risk)	☐
6. Alternative options to blood transfusion	☐

CONSENT FOR BLOOD TRANSFUSION

Benefits

I To treat anaemia/improve delivery of oxygen to tissues	☐
II. To replace blood loss (bleeding/haemolysis)	☐
III. To help prevent further bleeding	☐

Potential Risks

1. Extremely small risk of viral illness such as hepatitis or HIV or other viruses	☐
2. Very small risk of bacterial infection	☐
3. Risk of transfusion reaction – allergic or haemolytic	☐
4. Unknown but probably extremely small risk of vCJD	☐
5. Very small risk of receiving unsuitable blood (though procedures in place to prevent this risk)	☐
6. Alternative options to blood transfusion	☐

Appendix 5

LCAT Assessors Recording Form

Trainee's name: Date:

Name of procedure: **Blood Sampling**		Brief clinical details (as appropriate)	
COMPETENCE CATEGORY	POSITIVE FEATURES	OPPORTUNITIES FOR IMPROVEMENT (OMISSIONS)	PERFORMANCE LEVEL or SCORE
Communication and working with the patient and/or family	Explains procedure to patient		
Safety	Identifies patient correctly a. Conscious b. unconscious Samples labelled at bedside No pre-labelled sample bottles 3 points of ID used on bottles ~~Emphasis on bleeding 1 patient at a time~~		
Infection prevention	Handwashing performed Universal precautions used ~~Safe disposal of sharps~~		
Procedural competence	Use of monovette system Aware of sampling requirements Request form fully completed Aware of special requirements Aware of difference between group & save and cross-match ~~Aware of timing of samples (if required)~~		
Team working	Aware of staff involved in transfusion process		

NOTES ON OVERALL PERFORMANCE (E.G. 2 OR 3 PARTICULAR STRENGTHS / WEAKNESSES)			OVERALL
SPECIFIC STRATEGIES FOR IMPROVEMENT	Refer to UHL Policy		

Assessor's name _____ Signature _____ Date _____

LCAT Assessors Recording Form

Trainee's name: Date:

Name of procedure: **Administration of Blood Components**		Brief clinical details (as appropriate)	
COMPETENCE CATEGORY	POSITIVE FEATURES	OPPORTUNITIES FOR IMPOVEMENT (OMISSIONS)	PERFORMANCE LEVEL or SCORE
Communication and working with the patient and/or family	Explains procedure to patient Informed verbal consent obtained (leaflet) Their role in transfusion process		
Safety	All correct equipment taken to bedside & checked at bedside 2 checkers used Are the component/pt safety checks complete Ensures checks are performed against component , wristband and prescription chart. Is component prescribed (correctly prescribed?)		
Infection prevention	Handwashing Universal precautions used Safe disposal		
Procedural competence	Use and priming of giving sets Observations carried out at correct intervals Aware nothing should be given with components Aware of protocol for managing transfusion reactions Completion of documentation inc. rtn of orange card		

Team working	Aware of staff involved in transfusion process		
NOTES ON OVERALL PERFORMANCE (E.G. 2 OR 3 PARTICULAR STRENGTHS / WEAKNESSES)			
SPECIFIC STRATEGIES FOR IMPROVEMENT	Refer to UHL Policy		OVERALL

Assessor's name _____ Signature _____ Date _

Appendix 8

Data Privacy impact assessment (DPIAs) are a tool which can help organisations identify the most effective way to comply with their data protection obligations and meet Individual's expectations of privacy.

The following screening questions will help the Trust determine if there are any privacy issues associated with the implementation of the Policy. Answering 'yes' to any of these questions is an indication that a DPIA may be a useful exercise. An explanation for the answers will assist with the determination as to whether a full DPIA is required which will require senior management support, at this stage the Head of Data Privacy must be involved.

Name of Document:	Blood Transfusion Policy for Adult In-Patient within Community Hospitals CHS Division	
Completed by:	Jonathan Dexter	
Job title	Consultant Nurse (Advanced Practice)	**Date** 03/09/2019

Screening Questions	**Yes / No**	**Explanatory Note**
1. Will the process described in the document involve the collection of new information about individuals? This is information in excess of what is required to carry out the process described within the document.	No	
2. Will the process described in the document compel individuals to provide information about them? This is information in excess of what is required to carry out the process described within the document.	No	
3. Will information about individuals be disclosed to organisations or people who have not previously had routine access to the information as part of the process described in this document?	No	
4. Are you using information about individuals for a purpose it is not currently used for, or in a way it is not currently used?	No	
5. Does the process outlined in this document involve the use of new technology which might be perceived as being privacy intrusive? For example, the use of biometrics.	No	
6. Will the process outlined in this document result in decisions being made or action taken against individuals in ways which can have a significant impact on them?	No	
7. As part of the process outlined in this document, is the information about individuals of a kind particularly likely to raise privacy concerns or expectations? For examples, health records, criminal records or other information that people would consider to be particularly private.	No	
8. Will the process require you to contact individuals in ways which they may find intrusive?	No	

If the answer to any of these questions is 'Yes' please contact the Data Privacy Team via Lpt-dataprivacy@leicspart.secure.nhs.uk
In this case, ratification of a procedural document will not take place until review by the Head of Data Privacy.

Data Privacy approval name:	
Date of approval	

Training Needs Analysis

Training topic:	
Type of training: (see study leave policy)	☐ Mandatory (must be on mandatory training register) ☐ ✓Role specific ☐ Personal development
Division(s) to which the training is applicable:	☐ Adult Mental Health & Learning Disability Services ☐ ✓ Community Health Services ☐ Enabling Services ☐ Families Young People Children ☐ Hosted Services
Staff groups who require the training:	
Regularity of Update requirement:	Annual
Who is responsible for delivery of this training?	e-learning
Have resources been identified?	e-learning
Has a training plan been agreed?	e-learning
Where will completion of this training be recorded?	☐ ✓ ULearn ☐ ✓ Other www.nhs.learnprouk
How is this training going to be monitored?	Via ward based managers

The NHS Constitution

The NHS will provide a universal service for all based on clinical need, not ability to pay. The NHS will provide a comprehensive range of services

Shape its services around the needs and preferences of individual patients, their families and their carers	☐x
Respond to different needs of different sectors of the population	☐x
Work continuously to improve quality services and to minimise errors	☐x
Support and value its staff	☐x
Work together with others to ensure a seamless service for patients	☐x
Help keep people healthy and work to reduce health inequalities	☐x
Respect the confidentiality of individual patients and provide open access to information about services, treatment and performance	☐x

Stakeholders and Consultation

Key individuals involved in developing the original document

Name	Designation
Kate Potter	UHL Deputy Service Manager Blood
Caroline Barclay	Consultant Nurse Advanced Practice

Key individuals involved in developing the updated document

Name	Designation
Jonathan Dexter	Consultant Nurse (Advanced Practice)
Sarah Latham	Lead Nurse

Circulated to the following individuals for comment

Name	Designation
Sarah Latham	Lead Nurse
Caroline Barclay	Consultant Nurse
Claire Gardiner	Advanced Nurse Practitioner
Ruth Tandy	Advanced Nurse Practitioner
Dr James Reid	Consultant Geriatrician and Blood Transfusion Lead
Dr Richard Wong	UHL Consultant Geriatrician
Dr Sudip Ghosh	Specialty Clinical Director
Jude Smith	CHS Head of Nursing/Deputy Clinical Director
Roshnee Gill	Ward Sister
Lesley Tooley	Clinical Education Lead
Amanda Hemsley	Infection Prevention and Control Lead
Amardeep Ghattaoraya	Deputy Service Manager – UHL

Due Regard Screening

Section 1	
Name of activity/proposal	Blood Transfusion
Date Screening commenced	August 2019
Directorate / Service carrying out the assessment	CHS
Name and role of person undertaking this Due Regard (Equality Analysis)	Jonathan Dexter - Consultant Nurse (Advanced Practice)
Give an overview of the aims, objectives and purpose of the proposal:	
AIMS: To ensure blood transfusion are available for patients as required	
OBJECTIVES: To provide equitable access to transfusion	

Section 2	
Protected Characteristic	**If the proposal/s have a positive or negative impact please give brief details**
Age	n/a
Disability	n/a
Gender reassignment	n/a
Marriage & Civil Partnership	n/a
Pregnancy & Maternity	n/a
Race	n/a
Religion and Belief	n/a
Sex	n/a
Sexual Orientation	n/a
Other equality groups?	n/a

Section 3			
Does this activity propose major changes in terms of scale or significance for LPT? For example, is there a clear indication that, although the proposal is minor it is likely to have a major affect for people from an equality group/s? Please tick appropriate box below.			
Yes		**No**	
High risk: Complete a full EIA starting click here to proceed to Part B		Low risk: Go to Section 4.	

Section 4			
If this proposal is low risk please give evidence or justification for how you reached this decision:			
Signed by reviewer/assessor	Jonathan Dexter	**Date**	21/08/19
Sign off that this proposal is low risk and does not require a full Equality Analysis			
Head of Service Signed	Jude smith	**Date**	