Collection and delivery of blood components

Blood Transfusion Procedure

Contents

1.0 Purpose of this procedure:

This procedure outlines who can be involved in the collection of blood components from transfusion laboratories or satellite blood fridges and how this is undertaken to ensure that the correct component is collected for the correct patient.

This procedure must be read in conjunction with the Blood Transfusion Procedure: Practical competency assessment for blood collectors.

2.0 Core procedure

Blood collection (either from the transfusion laboratory or from a satellite blood fridge) is the only part of the transfusion process for which it is mandatory for the member of staff involved to be competency assessed. This is a legal requirement as part of the Blood Safety & Quality Regulations 2005, which are monitored by the Medicines and Healthcare products Regulatory Agency (MHRA). Please see Transfusion Procedure: Practical competency assessment for blood collectors. Advice regarding this can be obtained from your charge nurse/midwife, clinical lead or local transfusion practitioner.

Individuals who are not employees of NHS Lothian are not permitted to collect blood. No students are permitted to collect blood unsupervised. A student must be supervised by a staff member who has been formally assessed as competent to collect blood.

Blood components must only be collected and received by trained, competent and authorised members of staff.

Before collecting a blood component, ensure that the patient's baseline observations have been completed and assessed as suitable for continuation with the transfusion.

Red cells should generally be collected only ONE UNIT AT A TIME for a patient (unless the patient is experiencing a major haemorrhage or rapid active bleed).

The collector should generally only collect blood component/s for ONE PATIENT AT A TIME. In exceptional circumstances where this arrangement might result in delay to transfusion and compromised patient care (e.g. where there are simultaneous emergency blood uplift requests and no additional staff available to collect) a risk assessed decision to allow the collector to uplift blood components for two patients, to be delivered consecutively, may be required.

Blood can only be issued against a blood collection slip (or agreed equivalent)* containing all the information outlined below. The individual who generates the collection slip is responsible for ensuring that the patient identification details used are correct for the patient to be transfused:

- The minimum patient identification dataset (required for every step of the transfusion process) i.e.:
  - Surname
  - Forename
  - Date of birth
  - CHI number (or, if the patient does not possess a CHI or is unidentified, UHPI or emergency number)
- Details of the component to be collected

Each of the patient identification details on the collection slip (or agreed equivalent) must be checked against the details on the laboratory-generated label attached to the blood component pack at the point of collection.

If the collector identifies any patient identification detail discrepancy (however small) between the collection slip detail and detail attached to the component pack, the component must not be removed. The collector must discuss without delay with the transfusion laboratory staff.

The collector must also check that they are collecting the correct component type for the patient and the expiry date written on the blood component.

> *On the RIE/RHCYP site, blood component collection from the transfusion laboratory is undertaken by portering staff. The member of clinical staff who telephones the transfusion laboratory to request the issue of a blood component/s is responsible for verbal provision of the correct patient's full name, date of birth and CHI/ED number. The laboratory staff prepare the blood component/s in a sealed transit box (red cells) or transit bag (FFP, platelets, cryoprecipitate) which is labelled with the patient's identification details and destined clinical area. The laboratory staff then contact the Facilities Helpdesk to arrange porter uplift of the blood component box/bag. The Helpdesk then relay this request to the appropriate porter, providing destined clinical area. The porter who comes to collect the blood component transit box/bag does not bring a collection slip but collects the blood box/bag labelled for the destined clinical area corresponding with their Helpdesk uplift request.

For each component, the date, time and identification of staff member collecting must be recorded in the following ways:

- If collecting red cells from any satellite blood fridge the collector must complete the blood fridge in/out register
- If collecting blood components from the RIE transfusion laboratory (porters only) the collector must complete the porter log sheet
- If collecting blood components from the SJH or WGH transfusion laboratories the collector must complete the corresponding blood issue sheet

The component should be delivered directly to the clinical area.

Upon receipt in the clinical area, **the receiving member of staff must check that the correct blood component has been delivered** and record the date and time it arrived. **If an incorrect blood component (for another patient or another clinical area, or an incorrect type of component) has been delivered DO NOT USE THE COMPONENT and PLEASE ALERT THE TRANSFUSION LABORATORY IMMEDIATELY.**

Please be aware of component storage and timing details which are available in Blood Transfusion Guideline: Blood components and storage and handling requirements.

In emergency situations it may be necessary to collect the emergency un-crossmatched group O negative blood from a satellite blood fridge (this is only relevant to RIE emergency department and RIE obstetric department). These red cell units are not specifically prepared for the patient concerned. **The transfusion laboratory must be informed immediately if this stock is used.** The issue of emergency stock must be controlled and documented, so that patient safety and audit trails are not compromised. To ensure traceability, ward staff must complete the recipient's full name, date of birth and CHI number (or, if the patient does not possess a CHI or is unidentified, UHPI or emergency number) on the associated blue tag, along with date and time transfused,

before returning to the transfusion laboratory. Please see Blood Transfusion Procedure: Obtaining blood components in an emergency.

3.0 Detailed site-specific collection procedures

3.1. St John's Hospital

The collector should generally only collect blood component/s for ONE PATIENT AT A TIME. In exceptional circumstances where this arrangement might result in delay to transfusion and compromised patient care (e.g. where there are simultaneous urgent blood uplift requests and no additional staff available to collect) a risk assessed decision by a biomedical scientist in the transfusion laboratory, to allow the collector to uplift blood components for two patients, to be delivered consecutively, may be required.

Compatible red cells are placed in the blood collection fridge in the laboratory. When required for a patient, the ward staff must complete a blood component collection slip with the patient's minimum identification dataset (surname, forename, DOB, sex and CHI number) **ensuring these details match the patient's identification band.** Ward staff contact the porters who will pick up the collection slip from the ward before going to collect the blood component from the laboratory (NB ward 15 clinical staff who have been competency assessed are also involved in the collection procedure). All details on the collection slip must be checked against the pack label prior to removing the selected unit from the fridge. **The details on the blood pack must be identical to the details on the collection slip. If the details do not match, blood must not be removed and the laboratory staff contacted.** The collector will remove the first pack for that patient from the transfusion laboratory fridge and document this on the associated laboratory blood issue form with date, time, location of patient and signature. Blood must then be delivered to the clinical area without delay.

The system for collection of FFP, platelets and cryoprecipitate is the same as above apart from these components are collected directly from transfusion laboratory staff.

Red cells are issued accompanied by a transit slip which must be completed with the date and time of removal from the blood fridge by the individual who is collecting and then dated, timed and signed by the person who receives the component in the clinical area. This completed transit slip must be returned to the transfusion laboratory along with the completed traceability tag following transfusion.

If the person who receives the component in the clinical area identifies that the component has been delivered to the incorrect clinical area or for a patient who is not the intended patient, the blood component **must not be used** and the **transfusion laboratory must be alerted immediately.**

Red cells that are not collected within 48 hours of the stated time will automatically be returned to stock. For blood to be held longer, please make arrangements with the transfusion laboratory.

A collection slip is not required in the event of a major haemorrhage as the patient's identification details will be communicated directly over the 'phone to the transfusion laboratory staff (see SJH Major Haemorrhage Protocol).

3.2. Royal Infirmary and Royal Hospital for Children and Young People: Clinical areas WITHOUT own satellite blood fridge

The default position is that the porter uplifts and delivers one blood box at a time.

Multiple components for the *same* patient (including blood box containing red cells plus bag/s containing non-red cell components) can be uplifted and delivered together.

The hospital transfusion laboratory (HTL) staff contact the Facilities Management Helpdesk when a blood component delivery is ready to be collected for a patient. The transfusion laboratory staff will inform the Helpdesk operator whether a delivery is 'routine' or 'emergency' in nature.

If deliveries for two or more patients are ready at the same time, 'emergency' deliveries will always be treated as a priority.

If the hospital transfusion laboratory staff contact the Helpdesk with more than one 'emergency' uplift request at the same time (or two 'emergency' uplift requests are made in quick succession, such that the second request arrives before the porter has uplifted the initial delivery), the Helpdesk operator will either:

- Clarify to the HTL staff member that they will request an additional porter to cover the additional uplift requirement (and will then arrange for an additional porter to report to the HTL laboratory) OR
- Inform the HTL staff member that they are not able to supply an additional porter to cover the additional uplift requirement (in the event that staffing level will not permit this)

If there is more than one 'emergency' delivery ready for uplift at the same time and the Helpdesk operator has stated that they cannot provide an additional porter, this will be treated as an "exceptional circumstance". In this event, the Helpdesk operator will communicate to the porter that there is an "exceptional circumstance" permitting the porter to uplift up to two blood boxes at the same time to deliver consecutively. This is considered necessary to balance the risk of blood box transposition with the risk of delay of an urgent transfusion.

Red cells held in the hospital transfusion laboratory are issued in validated transit boxes (platelets, FFP and cryoprecipitate are transported at ambient temperature) and can be obtained by telephone request following provision of the patient's surname, forename, date of birth and CHI / ED number. The red cells in the transit box are then collected by the porters and delivered to the clinical area. Component/s must be delivered to the clinical area without delay. **It is the responsibility of the receiving clinician to ensure that the correct component has been delivered to the correct clinical area for the correct patient.**

Blood component transit boxes/bags are issued accompanied by a delivery slip which must dated, timed and signed by the person who receives the component in the clinical area at the point of receipt. This completed delivery slip must be retained in the clinical area for one month following the transfusion.

If the person who receives the blood component transit box/bag in the clinical area identifies that this has been delivered to the incorrect clinical area the blood component/s **must not be used** and the **transfusion laboratory must be alerted immediately.**

Blood transit boxes must not be used for continued storage of red cells. A sealed transit box will maintain red cells at the correct temperature for a validated period of time following issue from the laboratory (please contact the relevant transfusion laboratory if required). Patient identification details must be removed from the external surface of the transit box once the contents have been removed (to ensure patient confidentiality). Red cells must be transfused within four hours of opening the box or, if no longer required, must be returned to the transfusion laboratory within 30 minutes of box opening.

3.3. Royal Infirmary: Clinical areas WITH satellite blood fridges (for storage of red blood cells only)

Staff in areas with their own satellite blood fridge must be familiar with the NHS Lothian Satellite Blood Fridge policy.

The default position is that the porter uplifts and delivers one blood box at a time.

Multiple components for the same patient (including blood box containing red cells plus bag/s containing non-red cell components) can be uplifted and delivered together (only red blood cells can be stored in the satellite blood fridges).

The hospital transfusion laboratory (HTL) staff contact the Facilities Management Helpdesk when a blood component delivery is ready to be collected for a patient. The transfusion laboratory staff will state whether a delivery is ‘routine’ or ‘emergency’ in nature.

If deliveries for two or more patients are ready at the same time, ‘emergency’ deliveries will always be treated as a priority.

If the hospital transfusion laboratory staff contact the Helpdesk with more than one ‘emergency’ uplift request at the same time (or two ‘emergency’ uplift requests are made in quick succession, such that the second request arrives before the porter has uplifted the initial delivery), the Helpdesk operator will either:

- Clarify to the HTL staff member that they will request an additional porter to cover the additional uplift requirement (and will then arrange for an additional porter to report to the HTL laboratory) OR
- Inform the HTL staff member that they are not able to supply an additional porter to cover the additional uplift requirement (in the event that staffing level will not permit this)

If there is more than one ‘emergency’ delivery ready for uplift at the same time and the Helpdesk operator has stated that they cannot provide an additional porter, this will be treated as an “exceptional circumstance”. In this event, the Helpdesk operator will communicate to the porter that there is an “exceptional circumstance” permitting the porter to uplift up to two blood boxes at

the same time to deliver consecutively. This is considered necessary to balance the risk of blood box transposition with the risk of delay of an urgent transfusion.

Where the ward or department has a satellite blood fridge, red cells will normally be delivered to the ward by portering staff for storage in this fridge. Blood should be transported in boxes designated for this purpose and verified as satisfactory for transportation of blood components.

This will ensure that units arrive in the clinical area in optimum condition and can be re-issued by the hospital transfusion laboratory if unused.

Blood transit boxes must not be used for ongoing storage of blood components: red cells should be placed in the satellite blood fridge on receipt unless transfusion is required immediately in which case red cells must be transfused within four hours of opening the box. Patient identification details must be removed from the external surface of the transit box once the contents have been removed, to ensure patient confidentiality. If no longer required, red cells must be returned to the transfusion laboratory within 30 minutes of box opening to avoid wastage.

The clinical practitioner receiving the components is responsible for checking that they have been delivered to the correct location and for placing the units in the satellite blood fridge (red cells only) or keeping them at room temperature (non-red cell components) as appropriate.

If the person who receives the blood component transit box in the clinical area identifies that this has been delivered to the incorrect clinical area, the blood component/s **must not be used** and the **transfusion laboratory must be alerted immediately.**

Staff placing red cells in a local satellite fridge must log details of the unit/s into the fridge register, record the date and time, and print and sign their name. If a red cell pack is found in the blood fridge with no entry documented on the register, this will be removed by laboratory staff and discarded due to loss of safe storage audit trail.

Staff members who are requested to collect blood from a satellite blood fridge must ensure that they go with documentation containing the patient's minimum identification dataset (surname, forename, DOB, CHI number and sex). The patient identification details must be checked against the patient's identification band **prior** to collection of the component. These details should then be checked against the pack label prior to removing this from the fridge. **The details on the blood pack must be identical to the details on the collection document. If the details do not match, blood must not be removed and the laboratory staff contacted.**

Document the removal of the pack(s) by putting the time, date, printed name and signature of the person removing it into the fridge register. If no longer required, red cells must be returned to the satellite blood fridge within 30 minutes of removal, ensuring that the fridge register is completed with returned time, date and signature. If the blood pack has been out of the fridge for more than 30 minutes and is no longer required for transfusion, please contact the transfusion laboratory to arrange return.

Unused red cell units (apart from emergency O negative units) will be removed from the satellite blood fridge by the medical laboratory assistants the morning after the date required. If the clinical team wish to have the blood left in the blood fridge for longer, this can be arranged by contacting the blood transfusion laboratory staff.

3.4. Western General: Clinical areas WITHOUT own satellite blood fridge

The collector should generally only collect blood component/s for ONE PATIENT AT A TIME. In exceptional circumstances where this arrangement might result in delay to transfusion and compromised patient care (e.g. where there are simultaneous urgent blood uplift requests and no additional staff available to collect) a risk assessed decision by a biomedical scientist in the transfusion laboratory, to allow the collector to uplift blood components for two patients, to be delivered consecutively, may be required.

Issues of matched red cells held in the hospital transfusion laboratory fridge can be obtained by either portering or clinical staff who must have a collection slip completed with the patient's minimum identification dataset (surname, forename, DOB, sex and CHI number). If a clinical staff member is going to collect and is taking a paper collection slip completed in the clinical area, the individual completing the slip must **ensure the details on the collection slip match the patient's identification band.** If a porter is asked to collect and this request is being made via TRAK, the individual who generates the collection request in TRAK is responsible for checking that this request is being made for the correct patient. TRAK-generated requests automatically print out in the laboratory blood fridge collection room.

The details on the collection slip (whether brought from the clinical area or generated via TRAK) must then be matched against the unit to be collected. **The details on the blood pack must be identical to the details on the collection slip. If the details do not match, blood must not be removed and the laboratory staff contacted.** Pack removal must be documented by completing the date and time, name and signature of the person removing it on the associated issue form (arranged in alphabetical order of patient surname in pigeonholes next to blood fridge). Blood must then be delivered immediately to the clinical area in a transport bag.

The system for collection of FFP, platelets and cryoprecipitate is the same as above except that these components are collected directly from transfusion laboratory staff.

Red cells are issued accompanied by a transit slip which must be completed with the date and time of removal from the blood fridge, by the individual who is collecting, and then dated, timed and signed by the person who receives the component in the clinical area. This completed transit slip must be returned to the transfusion laboratory along with the completed traceability tag following transfusion.

If the person who receives the component in the clinical area identifies that the component has been delivered to the incorrect clinical area or for a patient who is not the intended patient, the blood component **must not be used** and the **transfusion laboratory must be alerted immediately.**

A collection slip is not required in the event of a major haemorrhage as the patient's identification details will be communicated directly over the 'phone to the transfusion laboratory staff (see WGH Major Haemorrhage Protocol).

3.5. Western General: Clinical areas WITH satellite blood fridges (for storage of red blood cells only)

Staff in areas with their own satellite blood fridges must be familiar with the NHS Lothian Satellite Blood Fridge Policy.

Where the ward or department has a satellite blood fridge, red cells will be delivered to the ward by portering staff for storage in this fridge.

The clinical practitioner receiving the components is responsible for checking that they have been delivered to the correct location and for placing the units in the local blood fridge (red cells only) or keeping them at room temperature (non-red cell components) as appropriate.

If the person who receives the component in the clinical area identifies that the component has been delivered to the incorrect clinical area or for a patient who is not the intended patient, the blood component **must not be used** and the **transfusion laboratory must be alerted immediately.**

Red cells must be placed into the satellite blood fridge within 30 minutes of issue from the transfusion laboratory. Staff placing red cells in a satellite fridge must log details of the unit/s into the fridge register, record the time and date, name and signature. If a red cell pack is found in the fridge with no entry documented on the register, this will have to be removed and discarded due to loss of safe storage audit trail.

Staff members who are requested to collect blood from a satellite blood fridge must ensure that they have documentation containing the patient's minimum identification dataset (surname, forename, DOB, sex and CHI number). The patient identification details must be checked against the patient's identification band **prior** to collection of the component. These details should then be checked against the pack label prior to removing this from the refrigerator. **The details on the blood pack must be identical to the details on the documentation taken to the blood fridge. If the details do not match, blood must not be removed and the laboratory staff contacted.**

Document the removal of the pack(s) by completing the time, date, name and signature of the person removing it into the fridge register. If no longer required, red cells must be returned to the satellite blood fridge within 30 minutes of removal, ensuring that the fridge register is completed with returned time, date and signature. If the blood pack has been out of the fridge for more than 30 minutes and is no longer required for transfusion, please contact the transfusion laboratory to arrange return.

Ward/area staff are expected to check satellite blood fridges on a daily basis and arrange for the return of unused blood components to the hospital transfusion laboratory by either clinical staff or porters.

4.0 Associated materials/references:

NHS Lothian Satellite Blood Fridge Policy

NHS Lothian Blood Transfusion Procedure: Practical competency assessment for blood collectors

NHS Lothian Blood Transfusion Procedure: Obtaining blood components in an emergency