

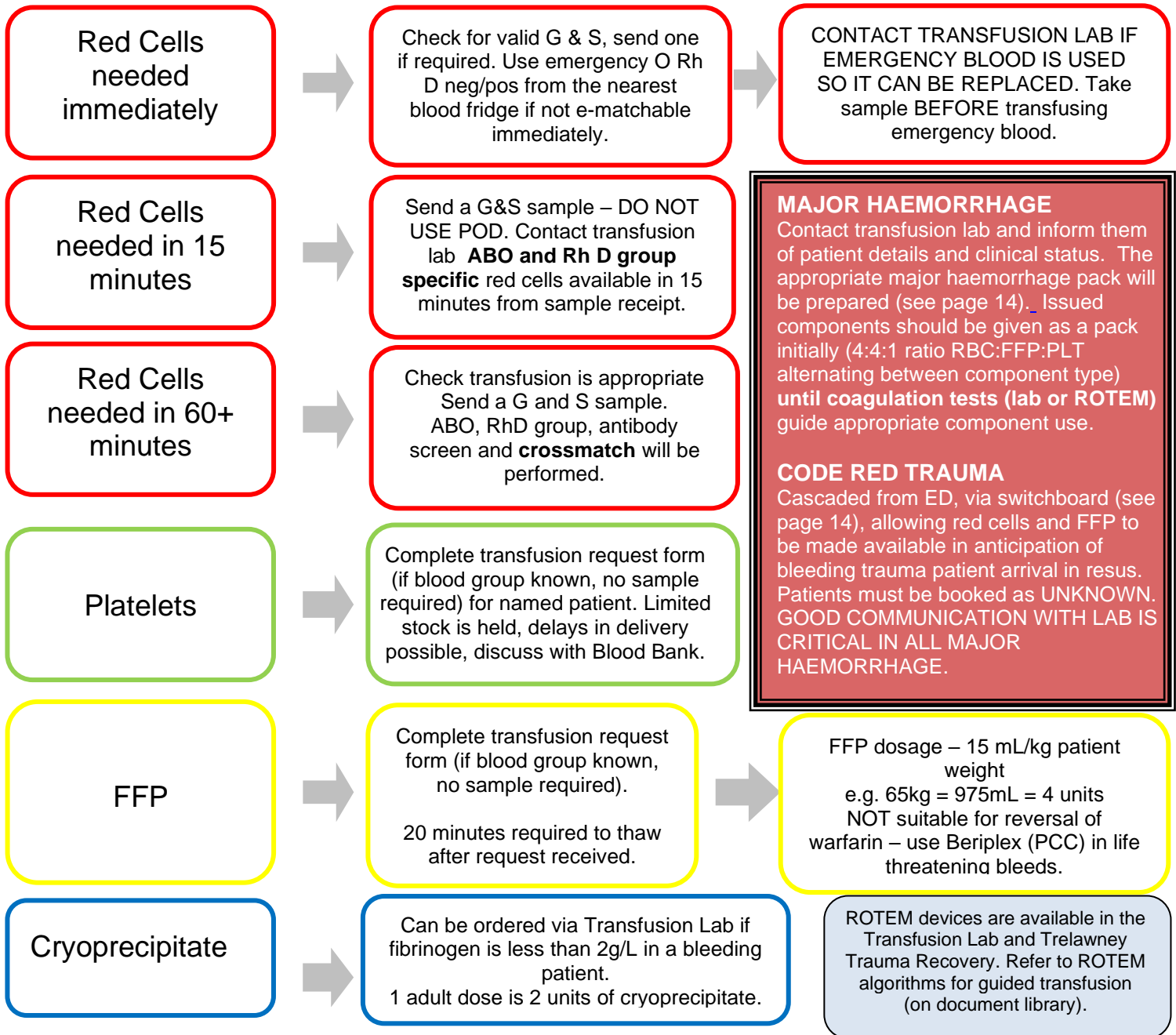
Blood Transfusion Policy

V8.0

June 2023

Summary

Contacting the lab: Ext 2500 Mon – Fri 09:00 – 17:30 Out of Hours bleep **3220**
 Transfusion Practitioners: Ext: 3093 Bleep: 3046 Mobile: 07990 644 572 (Office hours only)



SAMPLE TAKING – staff performing this aspect must have a valid transfusion competency assessment in place. Bedside electronic labelling must be used for all transfusion specimens if available. If samples are handwritten there need to be two blood group results on the lab IT system to allow issue of crossmatched blood. ANY alterations/obliterations/incorrect information will result in the sample being rejected. UNKNOWN patient samples must be booked in using the allocated hospital number by the Emergency Department and have gender and approximate age. If the patient is then identified, the unknown ID band must remain on the patient's wrist for at least 24 hours, or until after emergency surgery.

COLLECTION - staff performing this aspect must have a valid transfusion competency assessment in place. All blood components need to be scanned out from a blood fridge via BloodTrack and only stored in a designated blood fridge. 30 minutes is the maximum time blood can be out of the fridge for transit.

ADMINISTRATION - staff performing this aspect must have a valid transfusion competency assessment in place. RBC – usually prescribed over 90 minutes, this may be longer if patient has risk factors for circulatory overload (maximum of 4 hrs) FFP, PLTs, CRYO – Usually prescribed over 30 minutes per unit.

OBSERVATIONS - staff performing this aspect must have a valid transfusion competency assessment in place. To be performed at a minimum of baseline, 15 minutes into the transfusion and the end of unit for ALL COMPONENTS.

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Data Protection Act 2018 and General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team

Royal Cornwall Hospital Trust rch-tr.infogov@nhs.net

1. Introduction

- 1.1. Transfusions can be a routine part of patient treatment but carry a significant risk for patients and for the Trust if not performed following the national guidelines.
- 1.2. Blood transfusion and its respective documentation is regulated by UK law under the Blood Safety and Quality Regulations (BSQR) 2005.
- 1.3. This Policy is based on NICE Guideline 24: Blood Transfusion <http://www.nice.org.uk/guidance/ng24>.
- 1.4. For Paediatric and Neonatal transfusion see [Blood Transfusion for Children and Neonates Policy](#).
- 1.5. This version supersedes any previous versions of this document.

2. Purpose of this Policy

- 2.1. This policy has been produced to state standards, manage risk, and improve the quality of care to patients in relation to transfusion of blood and blood products.
- 2.2. The purpose of this policy is to ensure staff have access to the most up to date guidance regarding transfusion procedure, ensuring receiving blood and blood products is as safe as possible for patients.

3. Scope

- 3.1. This policy is ratified as the **ONLY** Adult Transfusion Policy used by all Royal Cornwall Hospital NHS Trust (RCHT). Cornwall Foundation NHS Trust (CFT) and other private healthcare facilities supplied by RCHT blood bank may have an additional, concurrent, local Blood Transfusion Policy.
- 3.2. All are required to abide by all aspects of this policy unless specifically excepted in their local versions ratified by the RCHT Hospital Transfusion Committee. All aspects must be followed by all staff taking part in the transfusion process.

4. Definitions / Glossary

ATD – Adult Therapeutic Dose.

BloodTrack – BloodTrack is the Trust electronic blood tracking system.

BloodTrack Courier – is the software that controls the blood component storage locations (eg. blood fridges).

BloodTrackTx – is the software that controls the handheld PDAs.

BMT – Bone marrow transplant.

BSQR – Blood Safety and Quality Regulations.

CRYO – Cryoprecipitate.

ESR – Electronic Staff Record.

FBC – Full blood count.

FFP – Fresh Frozen Plasma.

GMC – General Medical Council.

G and S – Group and Screen.

Hb – Haemoglobin.

HCPC – Health and Care Professions Council.

HTC – Hospital Transfusion Committee.

HTT – Hospital Transfusion Team.

LIMS – Laboratory Information Management System.

MHP – Major Haemorrhage Protocol.

MHRA – Medicines and Healthcare Products Regulatory Agency.

NHSBT – NHS Blood and Transplant.

NMC – Nursing and Midwifery Council.

PBSCT – Peripheral Blood Stem Cell Transplant.

PLT – Platelet.

RBC – Red Blood Cell.

SABRE – Serious Adverse Blood Reactions and Events.

SaBTO – Advisory Committee on Safety of Blood, Tissues and Organs.

SHOT – Serious Hazards of Transfusion.

TP – Transfusion Practitioner.

5. Ownership and Responsibilities

- 5.1. The policy has been produced and will be managed by the Hospital Transfusion Team (HTT), including the Consultant in charge of Transfusion, the Transfusion Laboratory Manager and the Transfusion Practitioners. Updates and amendments will be sanctioned through HTT in the first instance but also through the Hospital Transfusion Committee (HTC) including wider ratification.
- 5.2. Responsibility for Transfusion Practice lies with the Head of Transfusion, one of the Consultant Haematologists. He / she is answerable to the Medical Director(s) of the Trust. The Chief Executive has overall responsibility for ensuring that there is a safe system for transfusion practice within the organisation.

5.3. Role of the Hospital Transfusion Committee

The Hospital Transfusion Committee has delegated responsibility, on behalf of the Clinical Effectiveness Group, to oversee, develop and implement the Trust's policies and procedures related to blood transfusion.

[Click here for link to Terms of Reference](#)

5.4. Role of the Hospital Transfusion Team

The Hospital Transfusion Team is responsible for:

- 5.4.1. Modifying existing blood transfusion protocols and introducing appropriate changes to practice.
- 5.4.2. Reviewing and ratifying new and updated policies and guidelines relating to transfusion.
- 5.4.3. Regularly reviewing progress against elements of MHRA requirements.

5.5. Role of the Blood transfusion Laboratories

The Blood Transfusion Laboratory is responsible for:

- 5.5.1. Compatibility testing and issuing of blood components and blood products.
- 5.5.2. The ordering and management of blood product and component stocks including liaison with NHS Blood and Transplant.
- 5.5.3. Investigating adverse events and reporting them to the Trust Incident Reporting Procedure, the Serious Hazards of Transfusion (SHOT) UK Haemovigilance Scheme and the Medicines and Healthcare Products Regulatory Agency (MHRA).
- 5.5.4. Monitoring requests for products and usage.
- 5.5.5. Providing training and maintaining competencies of all staff involved in laboratory processes.
- 5.5.6. Regulatory compliance and the maintenance of a quality management system including the traceability.

5.6. Role of the Line Managers

Line managers are responsible for:

- 5.6.1. Ensuring that policies on patient identification are in place, implemented and monitored throughout the blood transfusion process from prescription, sampling, laboratory testing and issue of blood to collection and administration of blood transfusion.
- 5.6.2. Ensuring that staff who are involved in the transfusion process are competent to follow these procedures. At least 80% of ward staff should have a valid transfusion competency for safe practice.

- 5.6.3. Ensuring that written information is made available to patients about risks, benefits and potential alternatives to blood transfusion and that consent is documented.
- 5.6.4. Ensuring that staff have the training and equipment to provide barcoded wristbands for all patients according to Trust policies.
- 5.6.5. Ensuring that incidents are reported through the Trust Incident Reporting procedure, in line with the Trust Incident Management Policy, and ensuring there is resultant organisational learning through the divisional structure and more widely across the Trust.
- 5.6.6. Supplying details of transfusions which do not have an electronic record (via the use of BloodTrackTx) and the reasons for non-compliance in their clinical area.
- 5.6.7. Ensuring all staff are aware of this policy.

5.7. Role of Individual Staff

All staff involved in transfusion are responsible for maintaining and updating their training, knowledge, competence, and practice.

- 5.7.1. All **Medical Staff/Non-Medical Authoriser/Non-Medical Prescriber** are responsible for:
 - 5.7.1.1. Authorising blood components/prescribing blood products appropriate to the needs of the patient and, obtaining and documenting consent.
 - 5.7.1.2. Requesting blood, clearly indicating the reason for transfusion, and communicating the degree of urgency to the Blood Transfusion laboratory.
 - 5.7.1.3. Completing in full the transfusion request form.
 - 5.7.1.4. Explaining to patients the risks, benefits and possible alternatives to blood transfusion and providing written information where appropriate.
- 5.7.2. All **clinical staff** are responsible for:
 - 5.7.2.1. Ensuring they always adhere to the Transfusion Policy.
 - 5.7.2.2. Highlight to TP or laboratory staff any errors or omissions from the policy and report on Datix where appropriate.
 - 5.7.2.3. Ensuring they only practice if their mandatory training and relevant assessment are up to date.
 - 5.7.2.4. Documenting donation numbers of units transfused, and observations are recorded in patients' medical records.
 - 5.7.2.5. Keeping electronic equipment (such as Zebra PDAs and mobile printers) charged and in good working order, reporting faults immediately to CITS.

5.8. Transfusion Education and Competency

Clinical staff (nurses, HCA, ODP, midwives, etc)

- 5.8.1. All staff involved in the transfusion process (including Kernowflex and Agency) must complete Blood Transfusion mandatory/essential training every two years. Available for RCHT clinical staff on: www.clinicalskills.net.
- 5.8.2. The training will differ from registered staff, non-registered staff, and midwives. Staff must complete the relevant module(s) for their role.
- 5.8.3. All staff involved in the transfusion process (including Kernowflex and Agency) must pass a practical face to face assessment in the aspect of transfusion they take part in every two years. This may be repeated more often if deemed necessary (e.g., if involved in an incident and investigation suggest re-assessment is necessary earlier than two yearly).
- 5.8.4. Click here for [Competency Pack](#).
- 5.8.5. Practical assessments can be performed by Transfusion Practitioners or by a valid Transfusion Link Assessors/Transfusion Champions. Once completed, the Transfusion team must be informed to update the records.
- 5.8.6. Training compliance is monitored by the transfusion department. Regular reports are sent to the main clinical areas every month. Compliance reports for smaller areas/teams can be provided upon request to: rcht.transfusionadmin@nhs.net.
- 5.8.7. ESR does not reflect transfusion competency for clinical staff (only for medics).
- 5.8.8. Student nurses can take part on the process of blood transfusion, but the administration of blood components will remain a registered nurse legal responsibility.
- 5.8.9. Student Nurses/ODP/Midwives can participate in the transfusion process under the direct supervision of the correspondent assessor/supervisor designated for the day.
- 5.8.10. When the student is undertaking a clinical placement, the legal responsibility relies on the correspondent assessor/supervisor designated for the day. All documentation must be signed by the student and countersigned by the assessor/supervisor.
- 5.8.11. See [Blood Transfusion Clinical Training Policy](#) for further details.

5.9. Medical staff

- 5.9.1. All trainee doctors will receive training and a formal assessment on transfusion sampling once a year.
- 5.9.2. Medical staff must complete the three transfusion modules found on ESR under the code: 156 R Blood Transfusion MEDICAL staff. The e-learning's are:

- Essential Transfusion Practice.
- Consent.
- Safe Sampling for Transfusion.

6. Standards and Practice

6.1. Sample Taking

- 6.1.1. Transfusion request forms must be completed in full.
- 6.1.2. Transfusion request forms must be signed/countersigned by a competent and registered professional in a position to request Transfusion samples before taking the sample.
- 6.1.3. All staff requesting and/or taking G and S samples must have completed Sample Taking competency. This competence must be maintained.
- 6.1.4. All samples must be labelled at the bedside by the sample taker immediately after bleeding the patient.
- 6.1.5. Patients on monoclonal therapies (e.g. On Daratumumab) must have samples taken pre-treatment started and laboratory informed.
- 6.1.6. Any sample received that does not meet the acceptance criteria will be rejected. Please see the [Pathology Specimen Acceptance and Rejection Policy](#) for further details.
- 6.1.7. **Sample validity times**

Sample	Sample valid for:
Patient transfused or pregnant Within the preceding 3 months.	72h of planned completion of the transfusion.
Over 3 months since last pregnancy or, transfusion, or not previously transfused.	7 days. For any blood to be dispensed there must be a valid (less than 7 day old) G&S specimen available in the laboratory.

6.1.8. **Zebra devices (BloodTrackTx)**

- 6.1.8.1. BloodTrackTx is the Transfusion software available in the clinical areas. These Zebra PDAs should be used for the labelling of G&S samples.
- 6.1.8.2. It must be used at the patient's side using the 2D (square) barcode on the patient's ID band when the ID band is attached to the patient. This is a suitable alternative to taking two samples for patients with no historic blood group. All RCHT inpatient and several outpatient areas have BloodTrackTx available for use.

- 6.1.8.3. Any amendments or alterations to the printed label will lead to sample rejection. All patient information must be present on the label and the printed data on the label must be legible.
- 6.1.8.4. Issues with these devices are to be reported to CITS.
- 6.1.8.5. Staff member's ID badge are their digital signature. ID badges cannot be borrowed or used in someone else's behalf.

6.1.9. **Two Sample Rule for unknown/new patients**

- 6.1.9.1. Guidelines for pre-transfusion compatibility procedures in blood transfusion laboratories 2012 states that "Unless secure electronic patient identification systems are in place a second sample should be requested for confirmation of the ABO group of a first time patient prior to transfusion, where this does not impede the delivery of urgent red cells or other components".
- 6.1.9.2. If a patient does not have an existing (historic) blood group and the sample is handwritten, a second sample will be requested to confirm ABO group before blood can be issued.
- 6.1.9.3. The two samples must be taken by different members of staff or time separated (ideally no less than 30 minutes) if taken by the same member of staff. This ensures the patient has been identified on two occasions prior to blood issue.

6.1.10. **Key Points:**

- Always complete the request form before taking the sample.
- Never pre-label the sample tube.
- Ensure positive patient identification.
- Always label next to the patient with reference to their identity.
- Always complete one sample from one patient before bleeding the next patient.
- Use BloodTrackTx if available – handwrite tubes if not (note two sample rule).
- Avoid distractions when labelling samples.
- Requests must be made by a doctor unless agreed otherwise by the HTT, and authorised nurses must be working to an agreed algorithm.

6.2. **Collection of blood components**

- 6.2.1. RCHT has a total of seven blood fridges (HaemoBanks) located across the three hospital sites. All of them are monitored and controlled by the Transfusion Department.

- 6.2.2. Access to the blood fridges is restricted to staff who have a valid collection competency. This is not limited to clinical staff.
- 6.2.3. RCH Blood Bank supplies blood components to an extensive geographical area, conditioned blood boxes are used for transport outside RCH. Documentation at the time of collecting and opening these boxes is essential to maintain cold chain.
- 6.2.4. **Key Points:**
- All blood components **MUST** be scanned through BloodTrack (electronic blood tracking system).
 - Red cells and FFP must be returned to the blood fridge within 30 minutes from the time of removal to avoid wastage.
 - Blood components must never be stored in a ward, pharmacy or domestic fridge.
 - Platelets **MUST NOT** be stored in any fridge; they can only be stored in the platelet agitator located in Blood Bank.

6.3. Administration of Blood components

- 6.3.1. Administration of blood components must be performed by a RCHT trained NMC/HCPC/GMC registered professional.
- 6.3.2. All blood components must be transfused using a blood transfusion giving set (170-200 micron filter).
- 6.3.3. Patients with a clinically significant cold agglutinin, in the management of an ongoing major haemorrhage and adults undergoing elective or emergency surgery (where large volumes may need to be transfused rapidly), a blood warmer device should be used.
- 6.3.4. The requirement for a blood warmer should be noted on the transfusion prescription.
- 6.3.5. BloodTrackTx must be used if a barcoded wristband is printable.
- 6.3.6. In case of problems with the tag barcodes or patient identifiers not matching exactly the unit of blood and patient wristband. The blood component must be sent to the Blood Transfusion Laboratory who will correct the problem if possible, enabling the use of BloodTrackTx.
- 6.3.7. In non-bleeding patients an excessive volume of red cells transfusion to meet target Hb levels remains a significant factor in cases of TACO. This can be minimised by weight-adjusted red cell dosing, and medical management of anaemia where possible. Calculation taken from Norfolk 2013.

$$\mathbf{[Target\ Hb - Current\ Hb] \times weight\ (Kg) \times 0.4\ ml = desired\ volume}$$

6.3.8. Key Points:

- All patients receiving a transfusion should be in a clinical area with resuscitation facilities available.
- The patient must be wearing a patient identification wristband.
- Positive identification of the patient must take place and the unit details must be checked at the bedside with reference to the patient identity using a single checker process.
- Rationale for transfusion should be appropriate and documented in the patient's notes.
- All transfusions must be completed within four hours of unit leaving temperature control storage. The use of a transfusion take-down tag is advised to highlight this.
- It is a legal requirement to have full traceability of every unit, whether transfused or disposed. Failure to maintain traceability puts the Trust at risk of regulatory action.

6.4. Observations and Reactions

Observations must be performed routinely throughout the transfusion and include as a minimum:

- Baseline, within 30 minutes of the start of transfusion.
- 15 minutes after the start.
- At the end of transfusion.

6.4.1. Where a reaction is suspected follow the Acute Transfusion Reaction Form flowchart for clinical guidance ([appendix 10](#)).

6.4.2. All suspected transfusion reactions should be reported to Blood Bank immediately. They will perform further testing and a Transfusion Practitioner will review the patient (retrospectively if occurred out of hours).

6.4.3. If clinical advice is needed, the Haematologist consultant on-call is to be contacted via switchboard.

6.5. Patient Blood Management

6.5.1. Patient Blood Management (PBM) is a multidisciplinary, evidence-based approach to optimising the care of patients who might need blood transfusion.

6.5.2. Patient Blood Management puts the patient at the heart of decisions made about blood transfusion to ensure they receive the best treatment and avoidable, inappropriate use of blood and blood components is reduced.

- 6.5.3. National, regional and local audits in England consistently show inappropriate use of all blood components; 15-20% of red cells and 20-30% of platelets/plasma. Evidence shows that the implementation of Patient Blood Management improves patient outcomes by focusing on measures for the avoidance of transfusion and reducing the inappropriate use of blood.
- 6.5.4. **Blood transfusion is potentially hazardous and should only be undertaken when the benefits to the patient outweigh the risks. Transfusion should only be given when there is no alternative.**
- Alternatives include:
- Iron supplements.
 - IV iron.
 - Erythropoietin (EPO).
 - Cell salvage.
 - Tranexamic acid.
- 6.5.5. RCHT has a PBM service that facilitates patient optimisation pre-operatively in order to avoid unnecessary transfusions. rcht.PBM@nhs.net.

6.6. Consent

- 6.6.1. Verbal and written information must be provided to patients who may have or have had a transfusion, explaining:
- The reason for transfusion.
 - Risks.
 - Benefits.
 - Alternatives and how they may reduce their need for a transfusion.
 - That they are no longer eligible to donate blood (this is a precautionary measure in the UK to reduce the risk of transmitting variant Creutzfeldt-Jakob Disease (vCJD), people who have received a blood transfusion since 1980 are not currently able to donate blood).
- 6.6.2. 'Receiving a Blood Transfusion' leaflets are available in all ward areas or from the Transfusion Laboratory and should be offered/available to patients. A [Following your Blood Transfusion](#) Leaflet is available to give to any patient leaving the Trust shortly after their transfusion. Leaflets are also available in different languages.
- 6.6.3. Consent must be documented by the Authoriser in the patient's notes (it can be traditional paper notes, or electronic records).

- 6.6.4. On Nervecentre, there is a 'Blood Transfusion Check' form to be completed by the clinician authorising the blood component. This is a useful checklist to document all relevant aspects.
- 6.6.5. If a patient declines a transfusion, refer to the [Blood and Blood Products Refusal Policy](#).
- 6.6.6. If a patient is likely to decline blood transfusions in the future (religious or personal reasons), Blood Bank should be contacted (by sending a transfusion request form, email or phone call). A 'warning flag' will be added to the LIMS to prevent inappropriate transfusions for that patient.

6.7. Code Red Trauma Calls

- 6.7.1. A 'Code Red' is a Trauma Call (2222 bleep activation) where due to the mechanism of injury or the ATMIST received in ED, a major loss of blood is expected. This protocol is activated before the patient arrives to the hospital.
- 6.7.2. A prepacked 'Code Red' box containing two units RBC is available to be collected immediately from Blood Bank. FFP may already be available too. If not, it will be thawed on activation of the 'Code Red' (thawing is a 20-minute process).
- 6.7.3. A member of the Trauma team must be designated to communicate with Blood Bank to ensure clear information is relayed during the 'Code Red' avoiding delays. This person could be a Transfusion Practitioner if present.
- 6.7.4. Resuscitation in trauma has an improved outcome when blood components are accessed promptly and used on a 1:1 basis for RBC and FFP.
- 6.7.5. For use in ED only. [Click here for code red protocol](#)

6.8. Major Haemorrhage

- 6.8.1. 'Major Haemorrhage' is another 2222 bleep activation that starts a MHP protocol in Blood Bank. This can be activated from any clinical area (not only ED) and the location must be stated when calling switchboard.
- 6.8.2. A Major Haemorrhage can be defined as any of the following:
 - The loss of more than 1 blood volume within 24 hours (around 70 mL/Kg, or more than 5 litres in a 70 Kg adult).
 - A loss of 50% of total blood volume in under 3 hours.
 - Bleeding in excess of 150 mL/minute in adults.
- 6.8.3. As a practical clinical definition, major haemorrhage can be defined as any active bleeding which leads to:

A systolic blood pressure of less than 90 mm/Hg **or** a heart rate of more than 110 beats per minute in adults.

- 6.8.4. A member of the clinical team must be designated to communicate with Blood Bank to ensure clear information is relayed during the 'Major Haemorrhage' avoiding delays. This person could be a Transfusion Practitioner if present.
- 6.8.5. Emergency blood is readily available from blood fridges. Transfusion laboratory will be expecting a G&S sample (if not already there) and they will urgently crossmatch blood for the patient.
- 6.8.6. It is recommended an initial dose of 1g Tranexamic Acid IV is given within three hours of bleed onset. Tranexamic Acid is not recommended for GI bleeds.
- 6.8.7. Consider a second dose of Tranexamic Acid following the initial bolus. This can be an infusion or another bolus depending on local policy.

For obstetrics – see [Obstetric Haemorrhage Clinical Guideline](#).

[Click here for major haemorrhage pathway](#).

6.9. Unknown Patients

(Or where patient ID is not available – including computer downtime):

- 6.9.1. The Emergency Department will register using:
 - For **names**, a distinctive method to randomly generate combinations of first name and surname from an edited phonetic alphabet eg Foxtrot Whisky.
 - For **Hospital Numbers** (CR number), a distinctive method is to prefix a randomly generated number (this should be non-sequential if there are multiple casualties).
 - For **DOB**, the best option is to combine 1 Jan with an estimated year of birth, eg 01-Jan-1950, 01-Jan-2015. While unlikely to be the patient's true age, this approach is safer than using a standard DoB.
- 6.9.2. The ID band with these details must be attached to the patient. BloodTrackTx should be used to label G&S taken from the unknown patient.
- 6.9.3. See [RCHT Positive Patient Identification Policy and Procedures](#) . The patient's approximate age must be added to the request form.
- 6.9.4. **Key Points:**
 - The sample must be signed if handwritten.
 - Samples must be taken BEFORE any emergency O blood is given.
 - Deliver samples to laboratory by hand – do not use the pod system during emergencies, this can cause delay.

- Wristband with unknown patient information must be left in place for at least 24 hours after patient is identified, or until initial emergency surgery/treatment is completed. This ensures continuity for results and blood component administration.

6.10. Emergency blood. Group O Red Cells

- 6.10.1. Emergency blood is immediately available from all blood fridges across RCHT and Duchy Hospital:
- Transfusion Laboratory Issue Fridge (Link Corridor).
 - Delivery Suite (PAMW) – both adult and neonatal blood packs.
 - Main Theatre (Tower Block).
 - Trauma Theatre (Trelawney Wing).
 - West Cornwall Hospital, Penzance – Blood fridge room on renal corridor.
 - St Michaels Hospital, Hayle – Theatres.
 - Duchy Hospital.
- 6.10.2. The Transfusion Laboratory Issue Fridge (Link Corridor) has emergency O RhD negative red cells for female patients, and emergency O RhD positive blood for male patients. When the sex is not known, the Laboratory Issue Fridge will dispense emergency O RhD negative blood.
- 6.10.3. The Transfusion Department Staff must be informed immediately when these units are used.
- 6.10.4. **Despite being an emergency setting, full traceability must be maintained, whether via approved electronic BloodTrack system or approved paper-based system.**
- 6.10.5. Before using emergency group O blood ensure that:
- A blood transfusion sample has been taken and delivered to the laboratory.
 - There is no valid sample in the laboratory.
 - There are no crossmatched units available for the patient.
 - There is no ABO specific blood available for the patient.

6.11. Group Specific Red Cells (unmatched)

These are available from the Transfusion Department within 15 minutes of receipt of correctly labelled specimen. This is preferable to the continued use of emergency group O blood, pending the availability of fully crossmatched blood.

6.12. Fully Compatible Crossmatching

- 6.12.1. In urgent cases, fully compatible manual crossmatch will take 45 minutes.
- 6.12.2. If a patient has no antibodies and no grouping anomalies, they should be suitable for electronic issue. If the transfusion laboratory has a valid sample that has completed testing, blood can be issued on request within five minutes.
- 6.12.3. If a patient has antibodies or anomalous grouping results, blood must be crossmatched manually. In complicated cases this may necessitate referral to the nearest NHSBT reference laboratory and can lead to delays in the issue of blood. This is to ensure the most appropriate component is available for the patient. The Blood Transfusion Department will liaise with the clinician and keep them updated.

6.13. When to Transfuse Red Cells: Initial Investigation and Management of Anaemia

[Click here for management of anaemia pathway.](#)

Key Points:

- Always consider alternative treatment – transfusion should only be given when there is no alternative.
- Treat the cause of anaemia.

6.14. When to Transfuse: Acute Upper GI Bleeds

See NICE guidelines on Acute Upper Gastrointestinal Bleeding
[https://www.nice.org.uk/guidance/CG141/chapter/1-Guidance.](https://www.nice.org.uk/guidance/CG141/chapter/1-Guidance)

6.15. When to Transfuse Red Cells: Transfusion of Medical Patients with Anaemia

Click here for [Blood Transfusion Policy Guideline Summary Investigation and Management Of Anaemia Pathway.](#)

Key Points:

- Always review the patient following each unit. An FBC can be taken a minimum of 30 minutes following a unit to establish a Hb increment.
- Consider the patient size, weight, and co-morbidities to avoid Transfusion Associated Circulatory Overload (TACO). Report any suspected cases of TACO to the Transfusion Laboratory.

6.16. Maximum Surgical Blood Ordering Schedule (MSBOS)

Click here for [Maximum Surgical Blood Ordering Schedule \(MSBOS\).](#)

6.17. When to Transfuse Red Cells: [Guideline for Peri-Operative Blood Transfusion in Adults](#)

Key Points:

- Contact the Transfusion Practitioners on Ext 3093 / 07990 644572 for advice around appropriate transfusion.
- In a patient with iron deficiency, IV Iron can increase Hb 10g/l within 2-3 weeks of an acute bleed.
- Contact the Patient Blood Management Team on Ext 3496 for IV iron advice.

6.18. The Transfusion Pathway for Routine Transfusion of Red Cells [Click here for routine transfusion of red cells pathway.](#)

6.19. FFP and Octoplas [Click here for FFP pathway.](#)

Key Points

- Takes 20 minutes to defrost and issue.
- An approximate weight (in kg) of the patient is essential for accurate dosage (dosed at 15ml/kg, both adults and paediatrics).
- Should be transfused using a blood giving set.
- Usually transfused over 30 minutes per unit but can be given up to four hours from collection from blood fridge.

6.20. Platelets

6.20.1. Key Points:

- The cause of thrombocytopenia should be sought before giving platelet replacement.
- Consider the use in emergency surgery where timescale means anti-platelet drugs have not been stopped early enough. Seek advice from consultant haematologist, via switchboard.
- Platelets are supplied as a single adult therapeutic dose.
- They must be stored at 22°C (+/-2°C) and must never be put in a blood fridge.
- Platelets standard transfusion time is 30 minutes per unit, but can be up to four hours from collection, using a blood or platelet giving set.

6.20.2. Platelet transfusions are contraindicated in:

- Haemolytic uraemic syndrome (HUS).

- Thrombotic thrombocytopenic purpurae (TTP).
- Heparin induced thrombocytopenia (HIT).
- Seek advice from consultant haematologist.

6.21. Cryoprecipitate (cryo)

Key Points

- Administer if fibrinogen level drops below 2g/l in a bleeding patient.
- One therapeutic dose is two units.
- Transfuse over 30 minutes per unit using a blood giving set.

6.22. Granulocytes

- Only ordered by Consultant Haematologist.
- Transfuse using standard blood giving set over one to two hours.

6.23. Special Requirements (Irradiation)

- 6.23.1. To be requested on the Transfusion Request Form with appropriate clinical indication.
- 6.23.2. Irradiated blood and platelets are required when there is a significant risk of the recipient developing Transfusion-Associated Graft-Versus-Host Disease (TA-GVHD):
 - Hodgkin's Disease patients.
 - Patients ever treated with purine analogues: (Fludarabine, Cladribine, deoxycoformycin, Bendamustine, Clofarabine), monoclonal antibody therapies (Campath), Anti-Thymocyte Globulin or alemtuzumab (anti-CD52).
 - All allogeneic Bone Marrow Transplant (BMT) / Peripheral Blood Stem Cell Transplant (PBSCT) recipients from conditioning for 1 year, or longer if continuing on GVHD prophylaxis or treatment.
 - All autologous BMT / PBSCT recipients from conditioning for 6 months, if received Total Body Irradiation, or 3 months if received chemotherapy-only conditioning.
 - Any cellular transfusion during the 10 day period prior to a PBSCT collection.
 - Neonatal and some immunosuppressed paediatric patients: - please refer to guidelines for infants and neonates.
 - Patients requiring irradiated blood will receive an information leaflet with a card for the patient to carry, and an alert sticker to be placed in the notes.

6.24. Cytomegalovirus (CMV)

Current SaBTO guidance states that CMV negative blood components are now only required for intrauterine transfusions and the transfusion of neonates and pregnant women.

6.25. Anti-D

6.25.1. Follow the [Anti-D Clinical Guideline](#).

6.25.2. Third Year Student Midwives may administer anti-D under the direct supervision of a qualified midwife. The qualified midwife takes responsibility for this. Both need to countersign the documentation to ensure traceability.

6.26. Other non-NHSBT Blood Products

See the [Electronic Medicines Compendium](#).

6.27. Community Transfusion

6.27.1. Due to the risk of TACO there should be no more than two units per transfusion episode for both in-patients and out-patients.

6.27.2. Transport boxes should contain units for a single patient only.

7. Dissemination and Implementation

7.1. Dissemination will be through HTT, HTC and mandatory training for clinical staff. Policy will sit on the Document Library and in Q-Pulse. Guideline flowcharts will be on the Trust Clinical Guidelines website.

7.2. Transfusion training is mandatory as described in Section 5.8.

8. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	All parts of the process will be audited on a rotational basis.
Lead	Hospital Transfusion Team.
Tool	Aspects are audited as part of the National Comparative Audit in Transfusion.
Frequency	These are arranged nationally, and timescales set each year.
Reporting arrangements	Report to HTT, HTC and through the Trust Governance Structure as required.
Acting on recommendations and Lead(s)	HTT, HTC. Lead Transfusion Practitioner, Consultant lead in transfusion.
Change in practice and lessons to be shared	Changes in practice will be cascaded through mandatory training and Trust Governance structure.

9. Updating and Review

- 9.1. The Blood Transfusion Policy will be reviewed every two years.
- 9.2. Revisions will be made annually and recorded on Q-Pulse, the pathology quality management system. All change requests will be recorded on Q-Pulse as they arise.

10. Equality and Diversity

- 10.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the ['Equality, Inclusion and Human Rights Policy'](#) or the [Equality and Diversity website](#).
- 10.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Blood Transfusion Policy V8.0
This document replaces (exact title of previous version):	Blood Transfusion Policy V7.0
Date Issued/Approved:	May 2023
Date Valid From:	June 2023
Date Valid To:	June 2026
Directorate / Department responsible (author/owner):	Dr David Tucker, Consultant Haematologist Lead for Transfusion. Pedro Valle Vallines, Lead Transfusion Practitioner.
Contact details:	01872 253093.
Brief summary of contents:	The policy covers all aspects of Positive Patient Identification throughout sample taking for blood transfusion, collection of blood products and administration. Practical guidance on all aspects of blood product transfusion is included and links to other related policies/guidelines.
Suggested Keywords:	Transfusion, blood, bleed, haemorrhage, BloodTrack, G&S, group and screen, code red, crossmatch, haematology.
Target Audience:	RCHT: Yes CFT: Yes CIOS ICB: No
Executive Director responsible for Policy:	Chief Medical Officer.
Approval route for consultation and ratification:	Hospital Transfusion Team / Committee.
General Manager confirming approval processes:	Ian McGowan.
Name of Governance Lead confirming approval by specialty and care group management meetings:	Suzanne Atkinson.

Information Category	Detailed Information
Links to key external standards:	BBTS, BSQR, CQC, NICE guideline 24, National Directives and Health Service Circulars which underpin this policy: <ul style="list-style-type: none"> • Better Blood Transfusion 3 - Appropriate Use of Blood. • Health Service Circular 2007/001 Department of Health. • NHS Litigation Authority Inspection Standards. • British Committee for Standards in Haematology. • UK Blood Transfusion and Tissue Transplant Guidelines.
Related Documents:	Other blood transfusion related policies to be found on the Document Library: <ul style="list-style-type: none"> • Blood Transfusion Policy for Infants and Neonates. • Maximum Blood Ordering Schedule. • Intraoperative Cell Salvage and Administration of Autologous Blood. • Prophylactic and Postnatal anti-D including flowchart. • Guidelines for Transfusion of Blood Products in the Community. • Blood and Blood Product Refusal. • Intrapartum Care of Women Declining Blood Products. Associated guideline flowcharts.
Training Need Identified?	Yes – Mandatory requirement for all staff involved in the transfusion process. Two yearly (theory and practice). Ongoing current training.
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet.
Document Library Folder/Sub Folder:	Clinical / Haematology.

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
Apr 05	V 1.0	Re written.	Deb Thomas – Transfusion.
Jun 07	V 1.1	Update following audit outcome of overnight transfusion.	Deb Thomas – Transfusion Practitioner.
Jun 09	V 2.0	Full review.	Nicki Jannaway – Transfusion Practitioner.
Nov 09	V 3.0	Correcting some spelling mistakes, addition of use of pump in paediatric transfusions, formatting changes.	Nicki Jannaway – Transfusion Practitioner.
Nov 10	V 4.0	Addition of paragraph to clarify use of giving sets in Theatres. Update to include new computer system paperwork. Revise sample validity table. Training requirements for all staff added. Changes to Haemostatic pack – name change to Massive Haemorrhage Pack (and format of pack). rVii amendment.	Nicki Jannaway – Transfusion Practitioner. Stephen Bassey – Transfusion Manager.
Nov 10	V 4.0	NPSA competency assessment every 2 years in line with mandatory training. Add peel out strip from compatibility label to prescription.	Deb Thomas – Transfusion Practitioner.
Nov 10	V 4.0	Addition to clarify transfusion in transit between hospitals.	Nicki Jannaway – Transfusion Practitioner.
Nov 10	V 4.0	Dissemination and Implementation.	Dr Richard Noble – Transfusion Consultant.
Jun 11	V 4.1	Transfer into new policy format.	Deb Thomas – Lead Transfusion Practitioner.
Dec 11	V 4.2	Throughout policy changed PCT to PCH and NBS to NHSBT. Addition of No Wristband, No transfusion. TACO recommendations from SHOT.	Deb Thomas – Lead Transfusion Practitioner.

Date	Version Number	Summary of Changes	Changes Made by
		Retrospective consent in line with SaBTO recommendations. FFP volumes changed from 12-15ml to 10-15ml per Kg. Recording competency data on Maps rather than L+D for nursing staff.	
Sep 12	V 4.3	Into new policy format. TACO information (pg 9). Additional info re consent and overnight tx. Added Competency Pack as App. Added Blood Product Overview as App.	Deb Thomas – Lead Transfusion Practitioner.
Sept 14	V 4.4	Addition of further appendices for document library. Some wording updated for clarity throughout document. P6.8.6 change sample validity times according to guidance. Remove need for an audit form to be sent with each major haemorrhage pack.	Nicki Jannaway – Transfusion Practitioner.
Feb 16	V5	New format. Addition of pathway flowcharts as mobile guidelines. Addition of 'Code Red' trauma. PCH changed to CFT.	Nicki Jannaway – Transfusion Practitioner.
Feb 2018	V6	Minor amendments throughout. Removal of learnbloodtransfusion through ESR as a valid method of training in the Trust. Addition to clarify the administration of Anti-D by student midwives.	Nicki Jannaway – Lead Transfusion Practitioner.
May 2020	V7	General amendments, change requests noted. Modified the 6.5 Unknown Patient to reflect change on practice (NHS/PSA/RE/2018/008). Removed references to BloodHound and added BloodTrack. Added 5.7.7 to reflect about Student Nurses roles. Changed to Dr David Tucker, as Consultant Haematologist Lead for Transfusion.	Pedro Valle Vallines – Lead Transfusion Practitioner.
May 2023	V8.0	Policy restructured, change requests implemented as needed. Extended clarity on roles and responsibilities. Added	Pedro Valle Vallines – Lead Transfusion Practitioner.

Date	Version Number	Summary of Changes	Changes Made by
		clarification on how to deal with patient declining blood products on 6.6.6. Incorporated BloodTrackTx, as now live, and remove all remaining references to Llama as now obsolete. Updated flowcharts and general update.	

All or part of this document can be released under the Freedom of Information Act 2000

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.

This document is only valid on the day of printing.

Controlled Document

This document has been created following the Royal Cornwall Hospitals NHS Trust [The Policy on Policies \(Development and Management of Knowledge Procedural and Web Documents Policy\)](#). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity and Inclusion Team rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	Blood Transfusion Policy V8.0
Directorate and service area:	General Surgery and Cancer Services, Haematology.
Is this a new or existing Policy?	Existing.
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Pedro Valle Vallines – Lead Transfusion Practitioner.
Contact details:	01872 25 3093

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	To ensure adherence to national guidelines and best practice on all issues affecting safe appropriate blood transfusion.
2. Policy Objectives	To provide accurate advice on all relevant aspects of the transfusion of blood and blood products within both Acute and Community setting.
3. Policy Intended Outcomes	Positive Patient Identification – in all aspects of process from sample taking to administration. Staff Education program signposted. Haemovigilance.
4. How will you measure each outcome?	See more thorough section in policy relating to audit, competency assessment and incident reporting and trending.
5. Who is intended to benefit from the policy?	Any patient requiring treatment that may lead to transfusion of blood or blood products. Staff directly involved in the care of this patient group.

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	<ul style="list-style-type: none"> • Workforce: Yes • Patients/ visitors: No • Local groups/ system partners: Yes • External organisations: Yes • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	Please record specific names of individuals/ groups: Jehovah's Witness Liaison Committee – Namely Barry Gardiner for advice around blood refusal. Hospital Transfusion Committee.
6c. What was the outcome of the consultation?	Addition of 'Blood and Blood Products Refusal Policy' in place (section 6.6.5). Approved.
6d. Have you used any of the following to assist your assessment?	National or local statistics, audits, activity reports, process maps, complaints, staff or patient surveys: Yes – National statistics, process maps, subject matter expert.

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	Policy covers Adults – separate Policy for the Transfusion of Children and Neonates.
Sex (male or female)	No	Policy covers all.
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	Policy covers all.
Race	No	Policy covers all. For non-English speakers requiring transfusion information, the RCHT Interpreting and translation services policy should be followed. In addition, patient leaflets are available in multiple languages from NHSBT.

Protected Characteristic	(Yes or No)	Rationale
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	Policy covers all. Information leaflets are available in large font and braille on request from NHSBT.
Religion or belief	No	Blood and Blood Products Refusal Policy is in place following consultation.
Marriage and civil partnership	No	Policy covers all.
Pregnancy and maternity	No	Policy covers all.
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	Policy covers all.

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment:

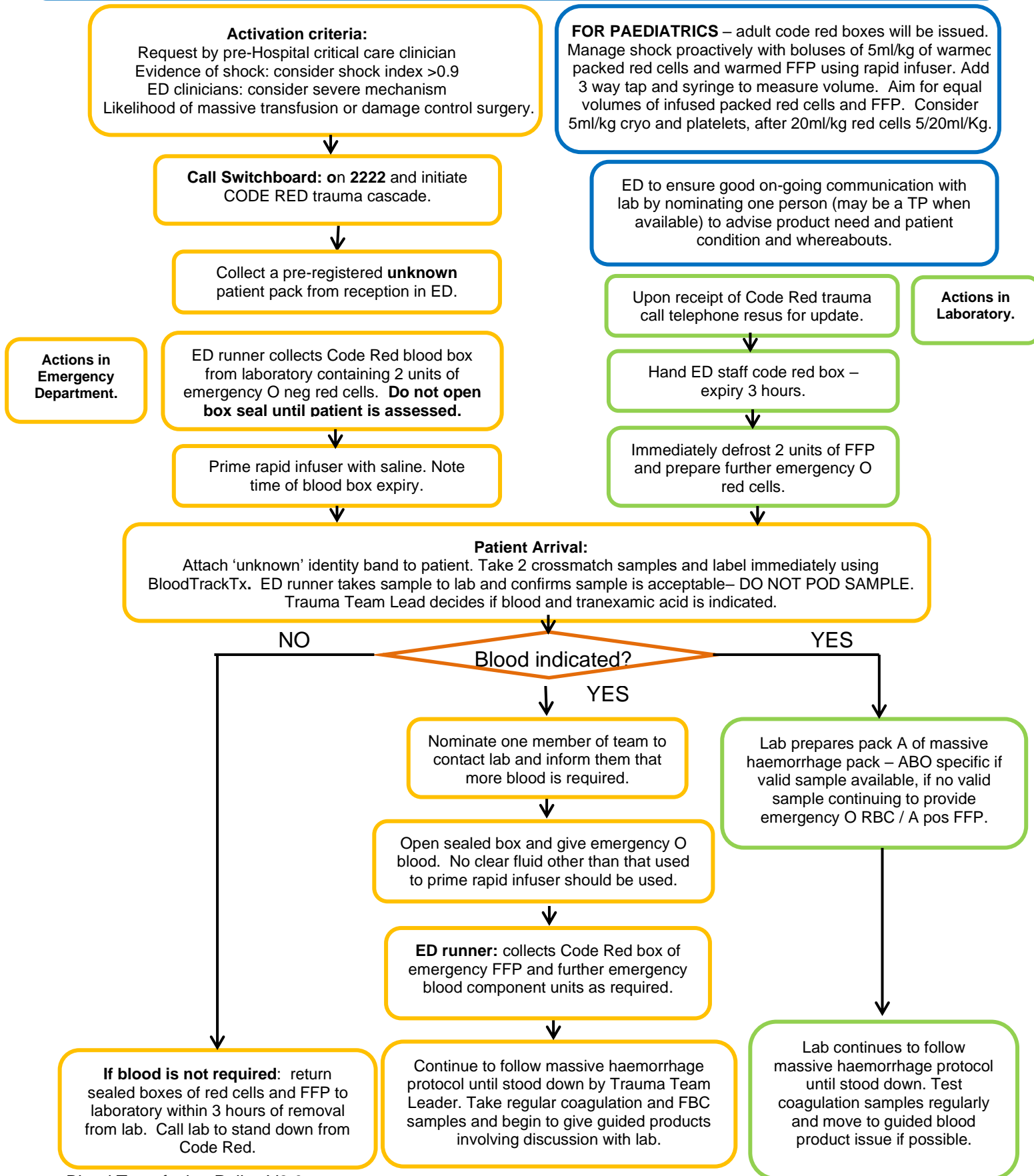
Pedro Valle Vallines – Lead Transfusion Practitioner.

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:

[Section 2. Full Equality Analysis](#)

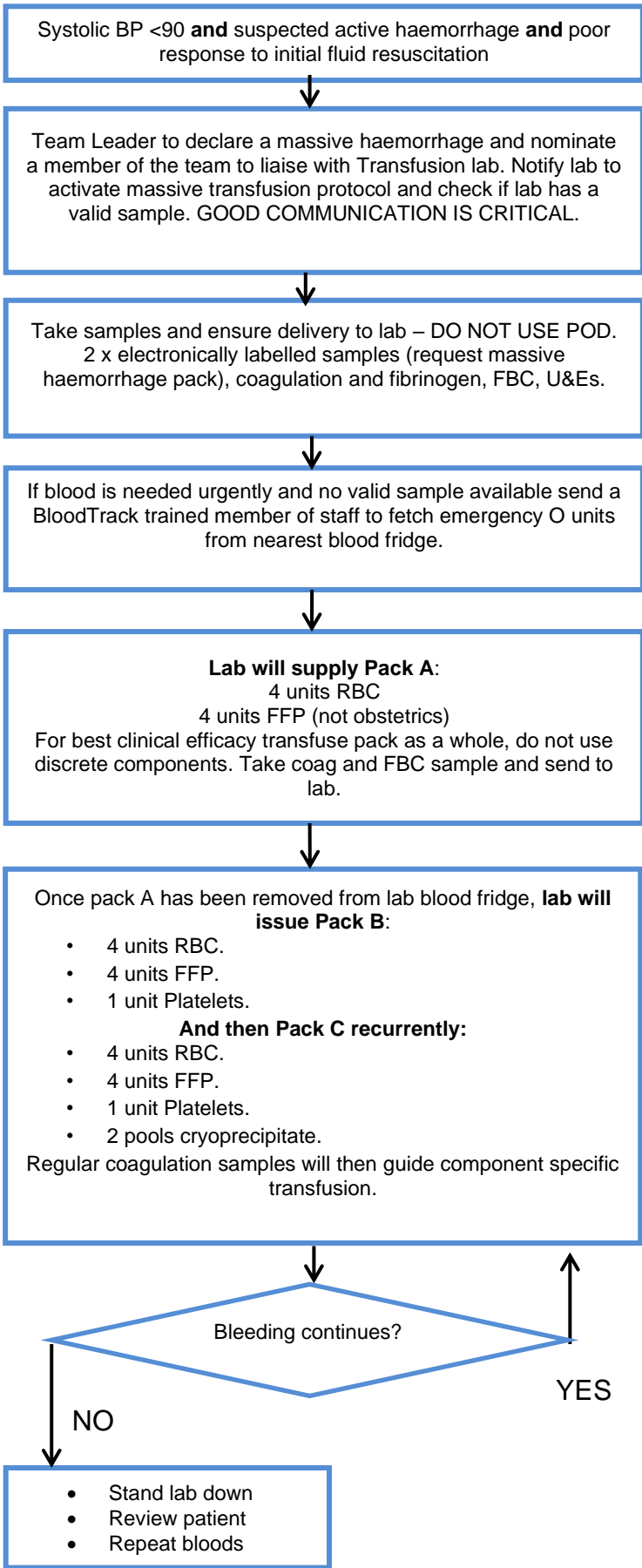
Appendix 3. Code Red Trauma Protocol [Click here for the full Blood Transfusion Policy](#)

FOR TRAUMA USE ONLY - For any other bleed call lab directly and initiate Major Haemorrhage Pack.
 Code Red cascade to switchboard – 2222 -automatically calls the following Consultants: Anaesthetic, Critical Care, Vascular Surgeon, General Surgeon, Orthopaedic Surgeon, plus Transfusion lab and Transfusion Practitioners.



Appendix 4. Transfusion in Massive Haemorrhage (Adult)

[Click here for the full Blood Transfusion Policy](#)



Contacts:

Transfusion Lab:
Monday-Friday 09:00 – 17:30: Ext 2500
Out of hours Bleep: 3220

Transfusion Practitioners (office hours): Ext 3093
Bleep: 3046

Additional Aims: Control Bleeding

- Normothermia (or >35°C).
- Ionised Ca⁺⁺ > 1mmol/l.
- pH > 7.2.
- Lactate < 1mmol/l.

If not previously given, consider:

- 1g IV tranexamic acid plus 1g over 8 hours (excluding GI bleeds).
- Beriplex (PCC) if patient on warfarin.
- For novel anticoagulants see the [Anti-coagulation related bleeding Guideline summary](#).

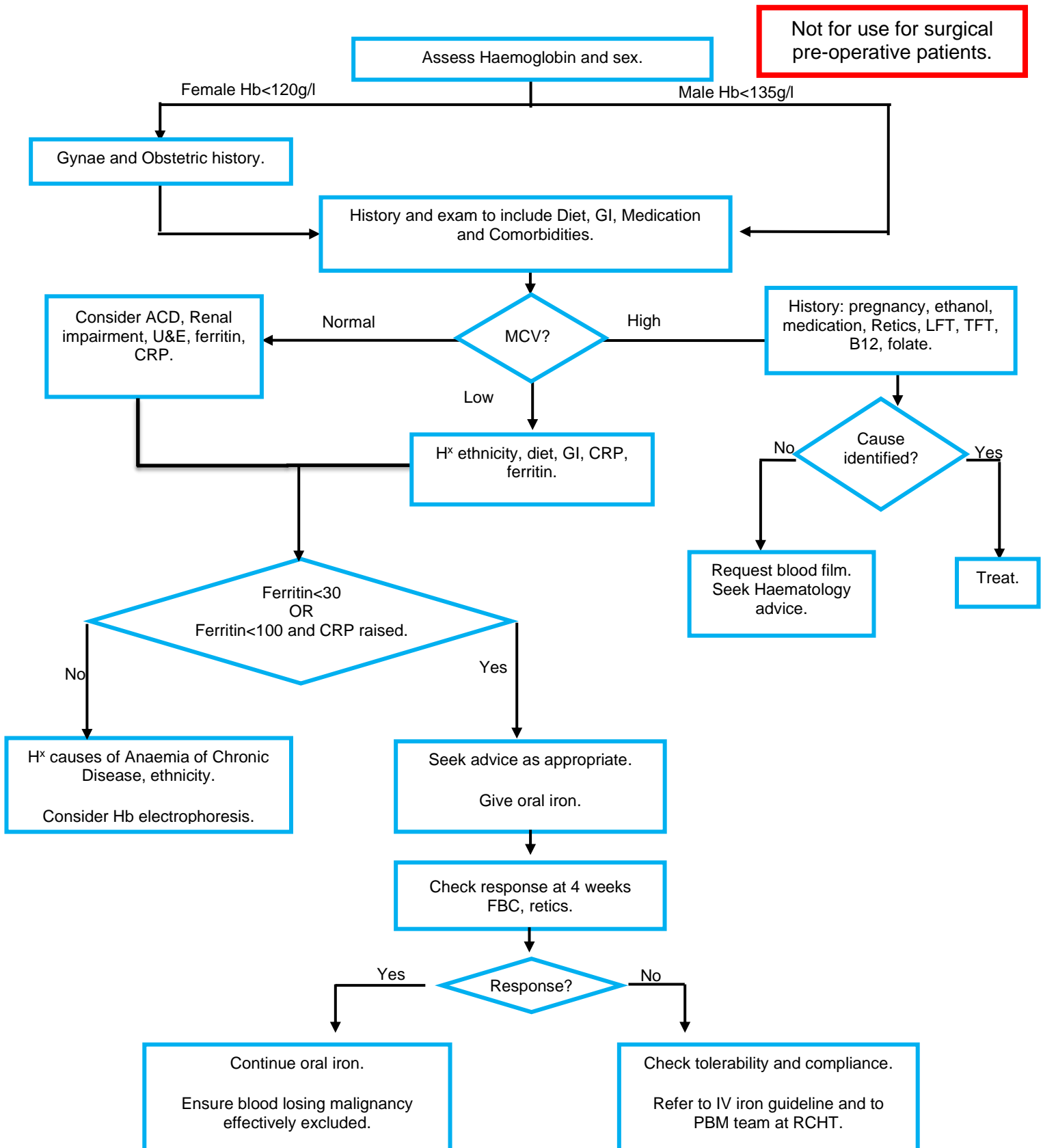
Once Lab results available continue transfusion to achieve:

- Platelet count >75x10⁹/l.
- Fibrinogen >1.5g/l.

TAKE COAGULATION, FBC and U&E SAMPLES AFTER EACH MHP TRANSFUSED USING TUBES AND REQUEST FORM PROVIDED.

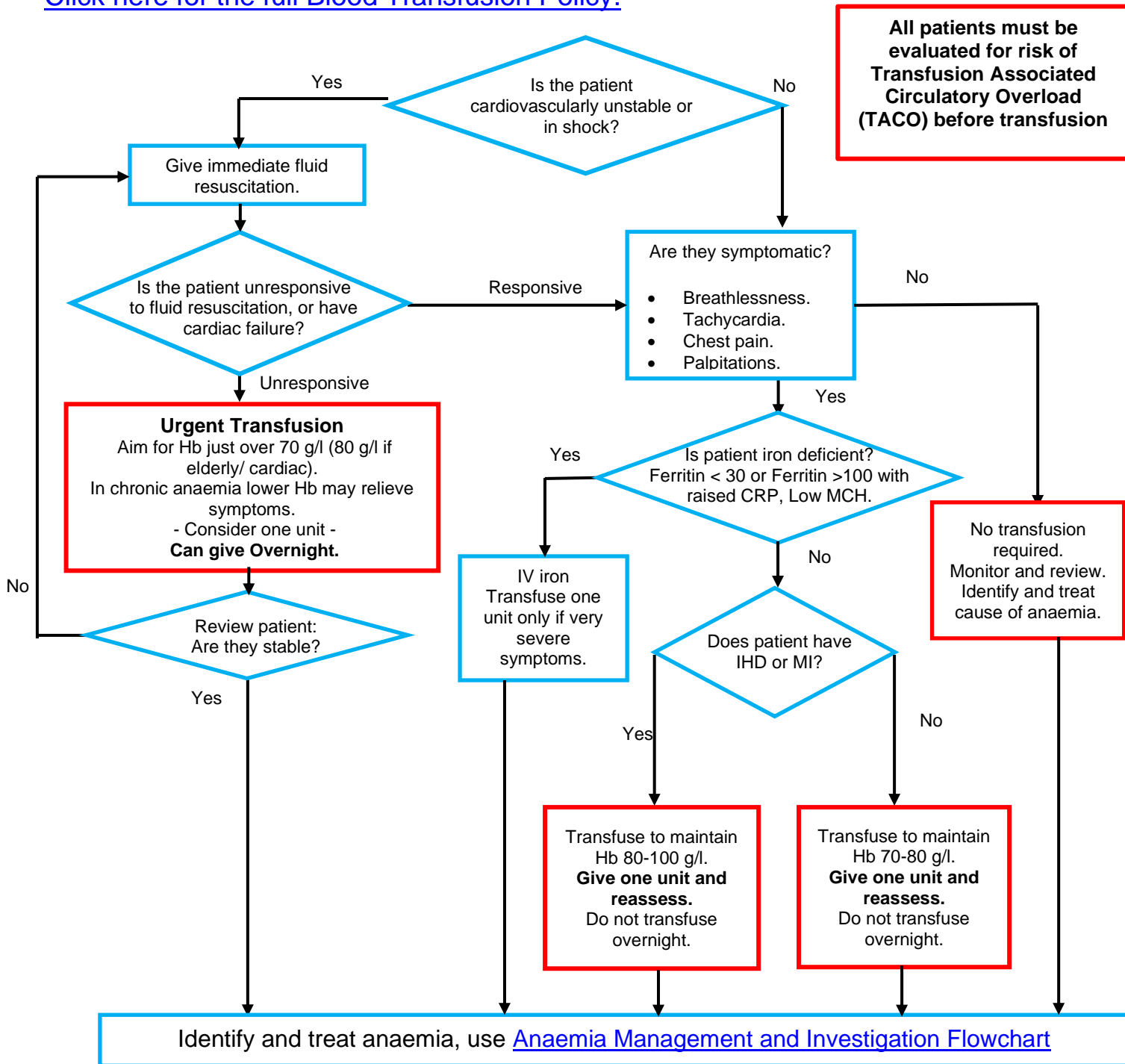
Appendix 5. Initial Investigation and Management of Anaemia

[Click here for the full Blood Transfusion Policy](#)



Appendix 6. Pathway for transfusion of medical patients with anaemia.

[Click here for the full Blood Transfusion Policy.](#)



DOCUMENT:

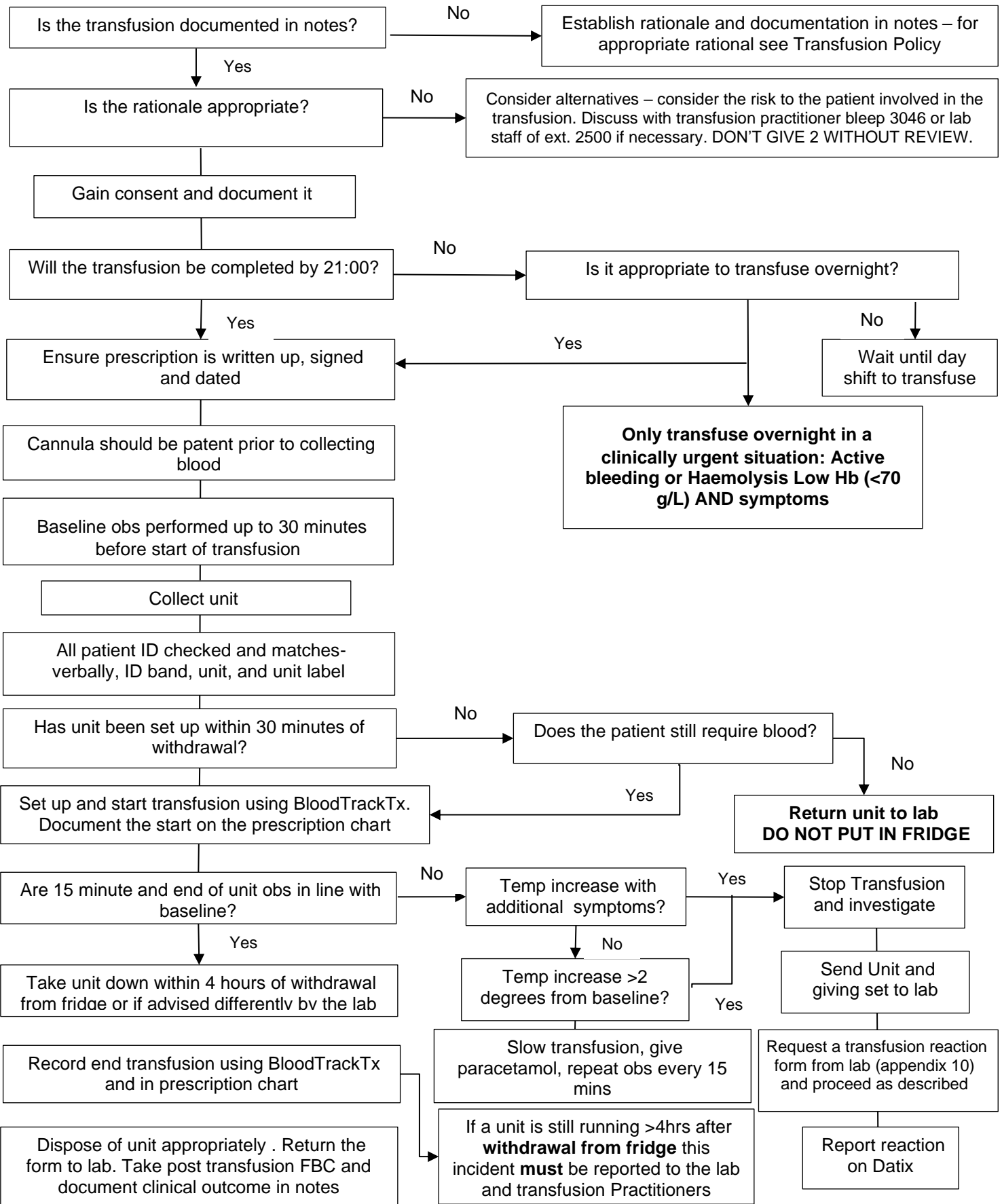
- Rationale.
- Gain informed consent and document.
- Leaflet given .
- Discuss risk/benefit.

Give a single unit and review, take a FBC between each unit of red cells.

Beware Transfusion Associated Circulatory Overload (TACO) particularly in elderly and cardiac patients. Consider patient weight and risk assess before transfusion.

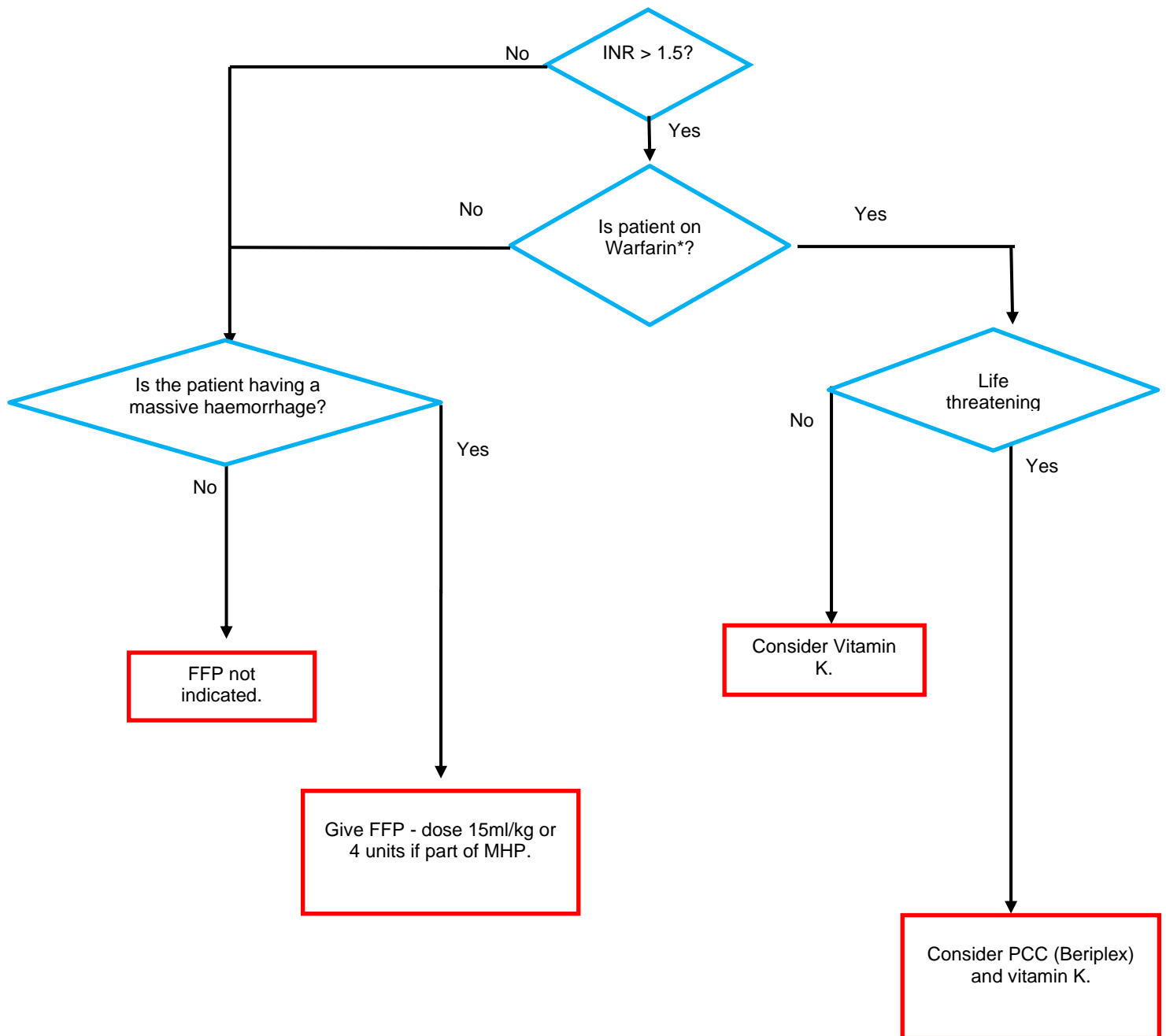
Appendix 7. Transfusion Care Pathway Summary

Staff undertaking this process MUST have an up-to-date competency assessment. [Blood Transfusion Policy \(cornwall.nhs.uk\)](http://BloodTransfusionPolicy(cornwall.nhs.uk))



Appendix 8. Use of Fresh Frozen Plasma (FFP).

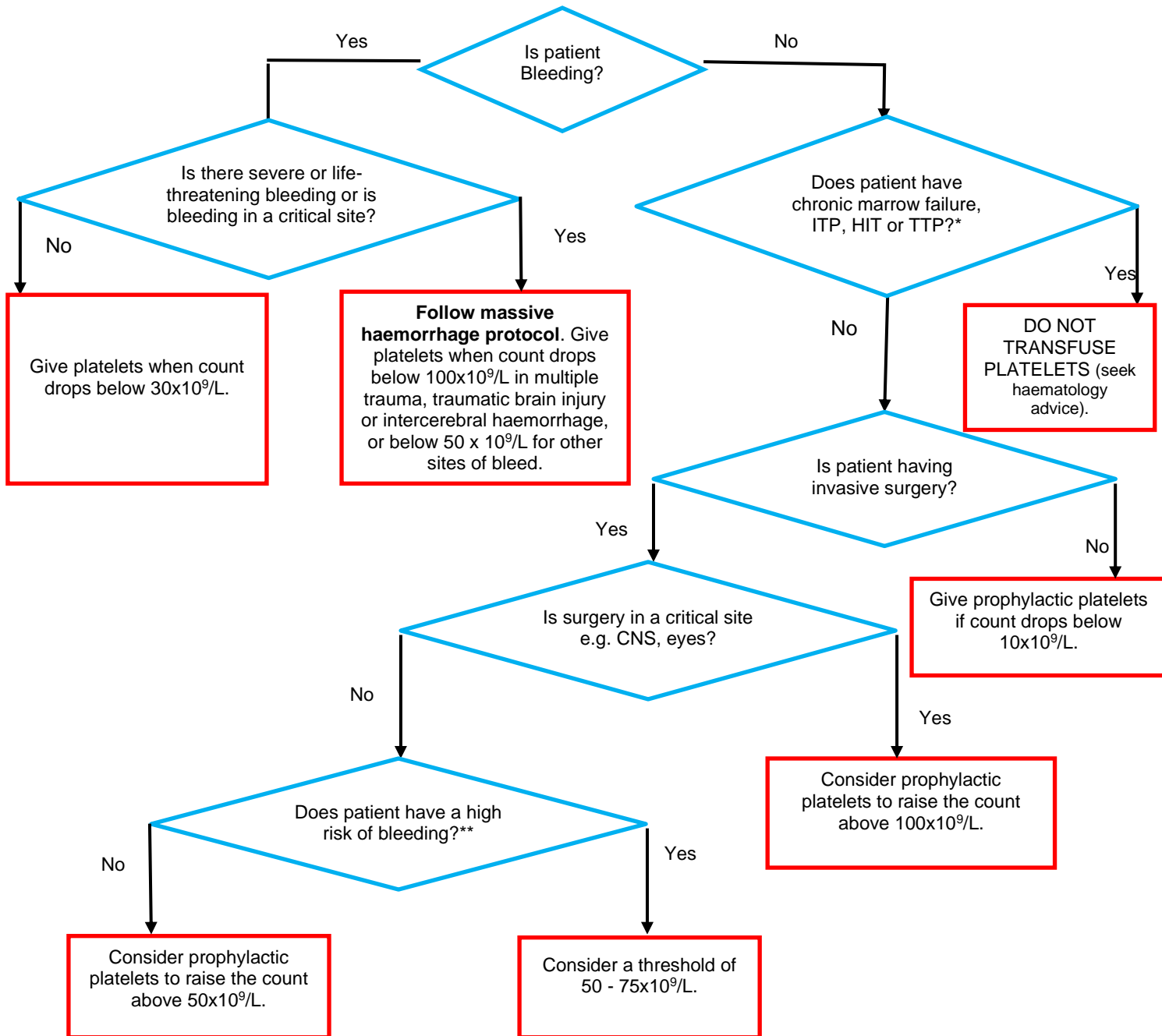
[Click here for the full Blood Transfusion Policy](#)



*For patients on novel anticoagulants see [Anticoagulation Related Bleeding - Guideline Summary](#)

Appendix 9. Use of Platelets

[Click here for the full Blood Transfusion Policy](#)



*ITP – Autoimmune thrombocytopenia.
 HIT – Heparin induced thrombocytopenia.
 TTP – Thrombotic thrombocytopenic purpura.

** High risk of bleeding due to.

- The specific procedure they are having.
- The cause of their thrombocytopenia.
- A falling platelet count.
- Co-existing abnormal haemostasis.

Appendix 10. Acute Transfusion reaction form

NHS number:
Name:
Date of Birth:
CR number:

Affix patient label

Acute Transfusion Reactions (ATR)
Safe transfusion practice: Be careful; be vigilant
Only transfuse when appropriate

Unit Details:
Volume transfused:
Datix Number:
Patient diagnosis:

Date and time of reaction:
Component type:
Name, role and ward of staff member:
Reason for transfusion:

Management:
Stop transfusion immediately • ABC • Oxygen • Get medical help urgently • Recheck pack and patient identifiers.

All patients who have a blood component are at risk of an ATR

- **Check** 'Right patient, right blood,' **Confirm** patient identity with patient, **check** patient ID band, **check** unit compatibility label.

INSPECT: Examine unit for clumps, particles or discolouration. CHECK cannula site for infection.
MONITOR: Perform observations before, during and after transfusion.
INFORM: Ask patient to report any new signs or symptoms (especially respiratory distress) during and for 24 hours after transfusion. Transfusion Practitioners **MUST** be informed.

Record	What are the signs and symptoms? <i>Please tick</i>	Suspect	Treat
Wheeze <input type="checkbox"/> Swelling <input type="checkbox"/> Pain <input type="checkbox"/> Hypotension <input type="checkbox"/> Collapse <input type="checkbox"/>		Anaphylaxis <input type="checkbox"/> Severe allergy <input type="checkbox"/>	Anaphylaxis pathway Give IM adrenaline Consider: <ul style="list-style-type: none"> • Cetirizine. • Salbutamol.
Fever <input type="checkbox"/> Rigors <input type="checkbox"/> Tachycardia <input type="checkbox"/> Hypotension <input type="checkbox"/> Anxiety <input type="checkbox"/> Pain <input type="checkbox"/> Breathlessness <input type="checkbox"/>		ABO incompatible <input type="checkbox"/> Sepsis <input type="checkbox"/> Febrile non-haemolytic reaction <input type="checkbox"/>	IV saline Sepsis pathway (if sepsis) IV broad spectrum antibiotics (if sepsis).
Wheeze <input type="checkbox"/> Swelling <input type="checkbox"/> Pain <input type="checkbox"/> Hypotension <input type="checkbox"/> Collapse <input type="checkbox"/>		TACO <input type="checkbox"/> TRALI <input type="checkbox"/>	Furosemide (if TACO). • Take SST sample (yellow top biochemistry tube) for BNP. Request must be marked to the attention of Duty Biochemist.

Baseline Obs Time:	Temp:	BP:	HR:	RR:	SpO ₂ :
Reaction Obs Time:	Temp:	BP:	HR:	RR:	SpO ₂ :
Time of return to baseline Obs:					

- Initial Investigations**
- FBC, U&E, LFT, coagulation screen.
 - Repeat group and screen.
 - Urine dip sample (looking for haemoglobinuria).
 - IgA level (yellow top biochemistry tube).
 - Blood cultures (if sepsis suspected).
 - If breathless a CXR may be required.
 - Serial mast cell tryptase - immediate, 3hrs, 24hrs post reaction (if severe allergy/anaphylaxis suspected)

Please report all moderate or severe reactions to the laboratory

- Return blood component and giving set to laboratory
- Complete this form and return to laboratory
- DATIX reaction

Transfusion Lab: Ext 2500, bleep 3220
Transfusion Practitioners: Ext 3093, Bleep 3046

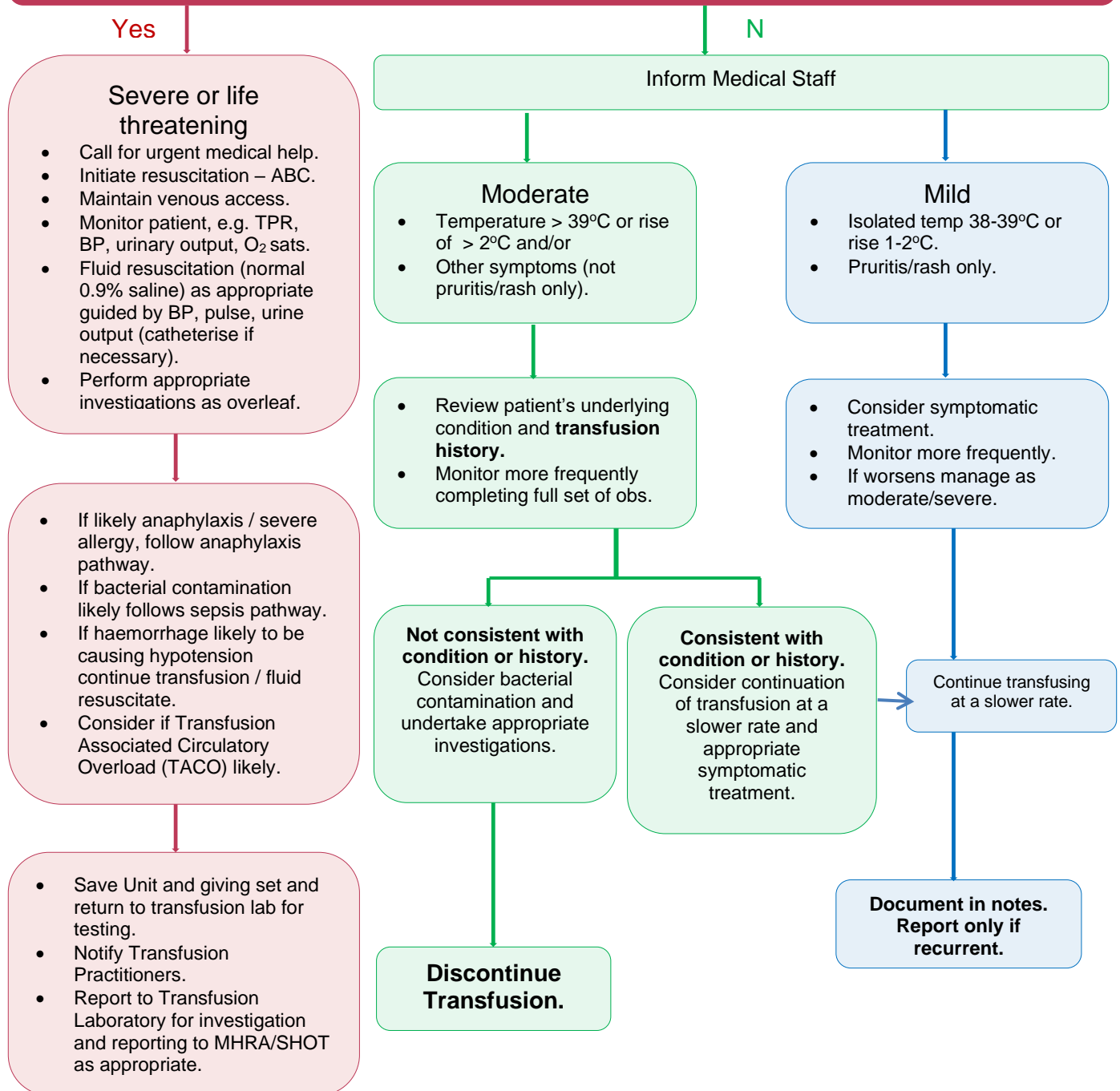
Bleep on-call Haematology Consultant through switchboard if life threatening or severe reaction.

Is my patient having a transfusion reaction? Features may include:

Fever, chills, rigors, tachycardia, hypo-/hyper-tension, collapse, flushing, urticarial, pain (bone, muscle, chest, loin, abdominal), respiratory distress, nausea, general malaise).

STOP THE TRANSFUSION – **Assess** (rapid clinical assessment); **Check** (patient ID /blood compatibility label); **Inspect** (look for turbidity, clots, discolouration).

Evidence of life threatening airway, breathing or circulatory problems? Evidence of wrong blood given and/or evidence of contaminated unit?



If transfusion is discontinued **DO NOT** discard unit but return to lab with giving set attached