Appendix 1 NBTC National Standards for the Clinical Transfusion Process

Overview

These standards define the requirements for knowledge and practical assessments for health care workers involved in the transfusion process.

Knowledge common to all tasks

All staff involved in the transfusion process must:

1. Have as a minimum a basic knowledge of the transfusion process and the principle of selection or matching of blood components for transfusion to avoid serious or fatal reactions.
2. Understand the critical steps in the process and that an error, deviation or omission during the process may lead to a serious or fatal reaction.
3. Understand the importance of unique patient identifiers and know the minimum information required and documentation needed at each stage of the transfusion process to safely proceed
4. Be able to explain the actions to take if inadequate information, discrepancies or mistakes are identified at any stage of the process.
5. Know that tasks **must not** be undertaken unless satisfactory assessment has been achieved in that task.

Practice

Blood component Standard 1: Blood transfusion- sampling

Action	Rationale
Collect/Complete the sample request form and take this to the patient's side	To be able to positively identify the correct person to be bled.
Ask the patient to state their last name, first name and their date of birth. Cross check this information with the sample request form. Where the patient is unable to identify themselves follow local policy on patient identification.	The use of open questions must be used unless the patient is unable to identify themselves as this reduces the risk of misidentification of the patient. This is known as positive patient identification
Check the patient details on the request form (last name, first name, date of birth and unique patient identification number) with the patient's identity (ID) band. Outpatients without an ID band may be asked to state the first line of their address as an additional check along with their last name, first name and date of birth. In emergency situations the patient's core identifiers may be unknown. At least one unique identifier, usually a temporary identification number (accident and	At least 4 identifiers are required to positively identify a patient – this should be last name, first name, date of birth and unique patient identification number In emergency situations, the unique patient identification number and gender must be used until full identification is obtained.

emergency or trauma number) and gender must be used as per local policy**.** Once full identification is obtained another sample/ ID band/request form/ other related documentation must be created for the patient	
Complete the sample tube label **after** the sample has been taken. This task must be done at the patient's **side**, from the patient's ID band/request form, by the sample taker (whenever possible). Details to be completed should include: A) Patient's last name, first name B) Patient's date of birth C) Patient's unique identification number D) Date and time of draw E) Signature/identity of sample taker	Pre labelling samples increases the risk of the tubes being used for another patient resulting in the wrong blood in the tube. Labelling away from the patient increases the risk of mislabelling the sample with the wrong patient's details. Printed labels are not permitted on the sample tube unless it has been generated 'on demand' by a handheld device at the patient's side. Errors may occur if printed labels from within the patient's notes are used as they may be incorrect (labels for the wrong patient)
Complete the request form with the date and time of sampling. The request form must clearly identify the staff member that has taken the sample	To provide a full audit trail of the process

Blood component Standard 2: Blood transfusion- pre collection checks and collection of blood components:

Action	Rationale
Pre-collection checks	
Check that the component has been authorised (or prescribed), that any special requirements have been noted, the reason for transfusion documented, and that the patient consents to the transfusion wherever possible.	To ensure that the appropriate specification of blood component is issued/collected from the storage area and that the component can be used. The consent process should include a discussion of the risks, benefits and possible alternatives to the transfusion and the patient should give verbal consent for the transfusion to be given
Check that the patient is available in the clinical area and there is patent venous access	To avoid any delays in commencing the transfusion
Check that the patient is wearing an identity band that is readable	To avoid delay or errors in positively identifying the patient

Check and document the patient's baseline observations, to include temperature, pulse, respiratory rate and blood pressure	To ensure the swift recognition of a transfusion reaction when deviations from baseline are observed
Collection of component	
Select the appropriate collection documentation containing the patient's last name, first name, date of birth and unique patient identification number. The documentation should also define which component should be collected. Check that the patient details on this documentation match the patient's ID band	To ensure the correct blood component is collected for the correct patient. Four identifiers are required for positive patient identification, and must be provided in written or electronic format by the clinical area.
Locate, remove and document the removal of the correct blood component for the patient from the storage area according to your local policy (electronic or manual methods)	Following agreed procedures will ensure that the correct component is collected for the correct patient, that the components are used in the correct order, and that a full audit trail is maintained.
Check that the patient details (last name, first name, date of birth and unique patient identification number) on the laboratory produced label attached to the component pack match the patient details on the collection paperwork. Check that the unique component pack donation number matches that on the laboratory produced label	To ensure the correct blood component is collected for the correct patient.
Transport the component to the clinical area as quickly as possible using the appropriate transportation method. Ensure that the component is handed to the appropriate member of the clinical team and receipted into the clinical area according to your local policy	To ensure the component is stored correctly whilst in transit, that the component is readily identifiable on arrival in the clinical area, that there is no delay and that there is a full audit trail.

Blood component Standard 3: Blood transfusion- administration of blood components
NB: ALL THE ACTIONS BELOW MUST BE PERFORMED AT THE PATIENT'S SIDE

Action	Rationale
Check that the reason for the transfusion is documented and the reason has been explained to the patient. This discussion should have already been done by the authoriser (or prescriber) who made the decision to transfuse	To ensure that the transfusion is appropriate and the patient has given their informed consent
Check that the appropriate component has been authorised (or prescribed), including any special requirements, the rate and volume of the infusion and whether any medications are required to be administered. Check that any special requirements documented on the prescription chart match those on the blood component	To ensure that the correct specification of component has been collected and the infusion instruction is clear
Check that the patient's baseline observations, to include temperature, pulse, respiratory rate and blood pressure have been recorded and are still valid (performed within one hour of starting the administration process)	To ensure a full set of baseline observations have been documented, to allow identification of a transfusion reaction
Conduct a visual inspection of the component for any leaks and discolouration and check its expiry date	To check that the component is in date, that there are no signs of infection or risk of bacterial ingress, and that the component is suitable to be administered. Administration of a bacterially contaminated component may be fatal.
Ask the patient to state their last name, first name and date of birth. Cross check this information as well as the unique patient identification number with the patient's identity band and the laboratory produced label attached to the component pack	The use of open questions reduces the risk of misidentification of the patient. A minimum of 4 identifiers is necessary to positively identify a patient.
Check that the special requirements recorded on the prescription chart match the special requirements noted on the component label	To ensure that the patient receives a blood component with the correct special requirements
Cross check and complete the documentation related to the administration of the component as per your local policy. This should include the identification of the staff undertaking the checking procedure	To ensure a full audit trail is in place
Set up the infusion and, if an infusion pump is to be used, the correct infusion rate has been	To ensure the administration rate matches the details on the prescription

selected	
The patient should be reminded about adverse effects and the importance of reporting immediately any potential symptoms of an adverse event	To ensure a swift detection of any possible transfusion reaction
Fifteen minutes into the administration a full set of observations (as baseline) must be repeated and documented. Discussion of the patient's wellbeing should also take place at this time	To identify any deviation from the baseline observations or clinical symptoms that may be due to an adverse reaction to the transfusion.
The patient should be regularly observed and monitored throughout the administration process, as per local policy	To detect any change in the patient's condition that may be due to a transfusion reaction during the administration process and to check that the transfusion is progressing at the correct rate
Once the component has been administered another full set of observations (as baseline) must be repeated. These observations should be clearly documented as completion observations. If a further component is to be commenced within an hour of the completion of the current component these observations can be used as baseline observations for the next component	To detect any change in the patient's observations that may indicate the development of a transfusion reaction
Positive evidence of the transfusion of each component unit must be documented in accordance with local policy	To ensure full traceability of blood components between donor and patient in the event of recalls or need to investigate adverse events
The empty component packs and their associated infusion sets must be disposed of according to local policy	To minimise the risk of contamination or of any needle stick injury.
Patients should be observed during the subsequent 24 hours for (or, if discharged, counselled about the possibility of) late adverse reactions. Organisations should ensure that systems are in place to ensure patients have 24-hour access to clinical advice	Transfusion reactions can occur many hours after the transfusion has completed

Ref: BCSH Guideline on Administration of Blood Components 2009