

Competency Framework for the Administration of all Blood Products

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| Ref No. | |
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AIM

The findings of the Serious Hazards of Transfusion reporting scheme (SHOT) have demonstrated that in each successive year since its launch in 1996, human error has contributed to morbidity and mortality among a significant number of patients receiving blood transfusions. Failure of correct patient identification remains a major cause of these incidents. As a result, one of the recommendations from the recent report is that all practitioners should have their clinical competency assessed. In November 2006 the National Patient Safety Agency (NPSA) issued a Safer Practice Notice that requires competency assessment of all clinical staff involved in any stage of the transfusion process. This formal assessment must be performed every three years in order that the member of staff is allowed to continue to participate in the transfusion process.

In the opinion of Watson et al (2002) clinical competence is the mastery of requirements for effective functioning in the real world and involves a combination of knowledge, skills, judgmental ability, attitudes and values. The aim of undertaking competency assessment is to develop a competent practitioner by:

1. Reviewing and appraising your current practice
2. Identifying areas in your practice that need development
3. Identifying your training needs
4. Recording your professional development

The competencies defined in this document are a set of professional behaviours that describe the agreed standards expected of the practitioner undertaking administration of blood components and the management of the transfused patient, set out in the British Committee for Standards in Haematology (1999) guideline.

ELIGIBILITY

| Staff group | Complete sections:- |
|------------------------------------|---------------------|
| Doctors | 1, 2a, 2b, 3, 4 |
| Registered Nurses / Midwives | 1, 2a, 2b, 3, 4 |
| Operating Department Practitioners | 1, 2a, 2b, 3, 4 |
| Health Care Assistants | 2b, 4 |
| Porters | 2b |
| Midwifery support workers | 2b,4 |
| Assistant practitioners | 2b,4 |

LIMITATIONS

Professional registered personnel are bound by their professional code of conduct to act only within their competency, and are able to undertake all aspects of the scope.

Health care assistants and other ancillary staff will work under the assessor's supervision until their training needs have been met and they are assessed as being clinically competent to undertake this procedure, and are limited to only undertaking aspects of this scope necessary for them to perform their role.

CONSENT/PATIENT INFORMATION

The doctor responsible for the patient's care, must whenever possible obtain informed verbal consent for the transfusion of blood components. This may be waived in emergency situations when the patient is unable to consent, unless the patient has previously made provision to refuse the transfusion of blood products (i.e. Jehovah's witnesses).

This consent must be documented within the patient's health care records. Before commencement of the transfusion process, the first level registered nurse must check that the consent has been taken and that this consent is still valid. Patients must be given information (verbal and written), before consent is obtained regarding the risks and benefits of the procedure.

MAIN RISKS

Human error has contributed to morbidity and mortality among a significant number of patients receiving blood transfusions. Failure of correct patient identification remains a major cause of these incidents.

DRUGS

The Doctor or Non Medical Prescribers should prescribe the following drugs on the Integrated Care Pathway (ICP) before the transfusion is commenced: -
Furosemide
Chlorphenamine
Hydrocortisone

The Doctor or Non Medical Prescribers must either prescribe the following before the transfusion is commenced, or it can be administered under Patient Group Direction (PGD): -
Paracetamol

TRAINING REQUIRED

To achieve clinical competency you are required to undertake the theoretical and practical component. The assessment criteria for the practical component have been divided into 4 sections and broken down into all the elements covering pre-transfusion testing, preparing the patient, collecting and administering the blood product and monitoring the patient.

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|------------------------|---|
| Theoretical Component: | <ol style="list-style-type: none">1. Attend Level 1 Safe Transfusion Practice Education Session or complete E-learning package2. Read the Northern Lincolnshire & Goole Hospitals Blood Transfusion Policy |
| Practical Component: | <ol style="list-style-type: none">1. Preparing the Patient for Transfusion2. Collection of Blood Components3. Administration of Blood Components4. Monitoring the Transfused Patient |

ASSESSMENT REQUIRED

You are required to complete all the sections that are relevant to your role within the transfusion process. Using the evidence key provided, your

assessor will assess your level of competency by discussing and observing your practice. You should also assess your own level of competency using the evidence key and undertake, as MANY SUPERVISED PRACTICES as you, and your assessor deem necessary to achieve level 5 competency. Once signed off as competent, your manager should keep this document as a record of your achievement, and it will be recorded on the Central Training database. You may wish to keep a copy yourselves for your portfolio. Registered practitioners, who are familiar with the transfusion process and have attended a theoretical transfusion training session, may undertake an initial self-assessment. This requires completion of the competency level box within each section and signature. Only practitioners achieving Level 5 competency in all sections, may continue to perform blood product transfusions without further practical training. Self-assessment may be performed only once and must be followed by a formal assessment every three years.

ASSESSOR

Transfusion Practitioners

Clinical Assessors/Supervisors – Persons identified by their Managers, and who have undertaken all relevant Blood Transfusion Training. Including both the annual theoretical component and a formal practical competency assessment, (i.e. not a self assessment).

AUTHORISING OFFICER

Head of Nursing / Lead Nurse
 Departmental Ward / Unit Manager
 Modern Matron for the Area
 Transfusion Practitioner

EVIDENCE OF COMPETENCE

ASSESSMENT CRITERIA AND SUPERVISED PRACTICES

Evidence Key¹

| <i>RATING SCALE</i> | <i>INDICATIVE LEVEL OF COMPETENCE</i> |
|---------------------|--|
| 0 | Has no prior knowledge or experience of this area of practice |
| 1 | Has limited knowledge, has only observed this area of practice |
| 2 | Can participate and assist in this area of practice. Has commenced and is working on the associated learning package |
| 3 | Can link theory to practice and can perform this area of practice safely with supervision |
| 4 | Displays knowledge and understanding when performing this area of practice without supervision |
| 5 | Can demonstrate and explain this area of practice to junior colleagues (if applicable) |

1. Preparing the Patient for Transfusion

This section describes all the elements that should be undertaken when preparing the patient for transfusion.

| No 1 | Preparing the Patient for Transfusion |
|------|---|
| 1.1 | Identify the patient by full name and date of birth by asking open question and verify these details against the patient's wristband |
| 1.2 | Check patient identification number on the wristband against patient's case notes. Ensure extra vigilance is taken with identifying the unconscious / compromised patient |
| 1.3 | Identify the reason for transfusion |
| 1.4 | Ensure the doctor has documented that verbal consent has been obtained. |
| 1.5 | Explain the procedure to the patient and allow time for questions |
| 1.6 | Check patient's pre-transfusion history from casenotes and note any special transfusion requirements or previous transfusion reactions |
| 1.7 | Check blood component has been prescribed by clinician |
| 1.8 | Ensure patient is comfortable while guaranteeing they can be readily observed |
| 1.9 | Collect the correct equipment required for the transfusion |
| 1.10 | Ensure appropriate venous access has been established before component is collected |
| 1.11 | Check intravenous fluid is compatible with blood component(s) (if appropriate) |
| 1.12 | Undertake baseline observation of temperature, pulse, respirations and blood pressure |
| 1.13 | Record baseline observations on a separate TPR chart/Integrated Care Pathway |

| Date supervised practice | Competency level | Signature of practitioner | Competency level | Signature of assessor |
|--------------------------|------------------|---------------------------|------------------|-----------------------|
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¹Adapted from Steinaker and Bell (1979)

ASSESSMENT CRITERIA AND SUPERVISED PRACTICES
2. Collection of Blood Components

This section describes all the elements that should be undertaken when collecting blood components.

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|--------------|--|
| No 2a | Collection of Blood Components |
| 2.1 | Identify the patient by full name and date of birth by asking open question and verify these details against the patient's wristband |
| 2.2 | Check patient identification number on the wristband against patient's case notes before completing Blood Collection Form |
| 2.3 | Ensure extra vigilance is taken with identifying the unconscious / compromised patient |
| 2.4 | Ensure person sent to collect the blood component has received the appropriate training |
| No 2b | Collection of Blood Components |
| 2.5 | Collect blood component using completed blood collection form or patient identification documentation |
| 2.6 | Verify patient details on the collection of each blood component from the Hospital Blood Bank |
| 2.7 | Document removal of blood component in blood fridge register |
| 2.8 | Deliver the component to clinical area in a timely manner and give to appropriate staff member |
| 2.9 | Maintain the correct storage condition of the component until administration |

| Date supervised practice | Competency level | Signature of practitioner | Competency level | Signature of assessor |
|--------------------------|------------------|---------------------------|------------------|-----------------------|
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¹Adapted from Steinaker and Bell (1979)

ASSESSMENT CRITERIA AND SUPERVISED PRACTICES
3. Administration of Blood Components

This section describes all the elements that should be undertaken when administering blood components.

| No.3 | Administration of Blood Components |
|-------------|--|
| 3.1 | Undertake the final administration check as per NLAG Transfusion policy |
| 3.2 | Identify the patient by full name and date of birth by asking open question and verify these details against the patient's wristband as per NLAG Identification policy |
| 3.3 | Check patient identification number on the wristband against patient's case notes |
| 3.4 | Extra vigilance is taken with the unconscious / compromised patient |
| 3.5 | Check the component for signs of leaking, discoloration, clumping and the expiry date of the blood component |
| 3.6 | Check the compatibility form details against the details on the blood component and the patient's wristband |
| 3.7 | Check the blood group and the donation number on the compatibility form are identical to the blood group and donation number on the blood component |
| 3.8 | If interrupted during checking procedure start again |
| 3.9 | If any discrepancy is noted during the checking procedure do not proceed until the Hospital Transfusion Laboratory has been contacted |
| 3.10 | Commence the transfusion using an aseptic technique and set rate according to the prescription |

| Date supervised practice | Competency level | Signature of practitioner | Competency level | Signature of assessor |
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¹Adapted from Steinaker and Bell (1979)

ASSESSMENT CRITERIA AND SUPERVISED PRACTICES
4. Monitoring the Transfused Patient

This page describes all the elements that should be undertaken when monitoring the transfused patient.

| No 4 | Monitoring the Transfused Patient |
|-------------|--|
| 4.1 | Ensure patient is in a location where they can be adequately observed. |
| 4.2 | Ensure that patient (or carer/relative in the case dependant patient) is aware to notify staff immediately of any adverse reaction |
| 4.3 | Conduct and record temperature, pulse, respirations & blood pressure 15 minutes after the start of each unit |
| 4.4 | Continue to conduct and record any observations, which are necessary for the age/condition of the patient. |
| 4.5 | Conduct and record temperature, pulse, respirations & blood pressure on completion of each unit |
| 4.6 | Undertake additional observations according to patient need |
| 4.7 | Observe patient for any signs of a transfusion reaction |
| 4.8 | Know that the transfusion should be stopped immediately if any transfusion reaction is suspected |
| 4.9 | Know how to obtain medical advice and commence treatment if transfusion reaction is suspected |
| 4.9 | Know the correct procedure for notification and investigation of a blood transfusion reaction. |
| 4.10 | Know the correct procedure for dealing with the blood component following a suspected blood transfusion reaction. |
| 4.11 | Dispose of all equipment as per NLAG Infection Control, Transfusion and disposal of sharps policies |
| 4.12 | Document full transfusion history in patient's case notes, nursing notes or ICP |
| | File all transfusion documentation in patient's casenotes |

| Date supervised practice | Competency level | Signature of practitioner | Competency level | Signature of assessor |
|---------------------------------|-------------------------|----------------------------------|-------------------------|------------------------------|
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¹Adapted from Steinaker and Bell (1979)

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| <p>Name:</p> <p>Ward:</p> |
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Clinical Competency Assessment for the Administration of Blood Components and the Management of the Transfused Patient

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|------------------------|--|
| Theoretical Component: | Attend Level 1 Safe Transfusion Practice Education Session or complete E-learning package Read the Northern Lincolnshire & Goole Hospitals Blood Transfusion Policy |
| Practical Component: | <ol style="list-style-type: none"> 1. Preparing the Patient for Transfusion 2. Collection of Blood Components 3. Administration of Blood Components 4. Monitoring the Transfused Patient |

I confirm that.

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Has completed the required theoretical and practical component and achieved understanding and competence in the safe administration of blood components and the management of the transfused patient.

Signature of Assessor:

Date:

Signature of Practitioner:

Date:

Date Competency to be reviewed:

UPDATES

Annual Theory updates are mandatory and essential (HSC Health Service Circular – HSC 1998/224 & HSC 2002/009, Better Blood Transfusion)
Practical assessments should be carried out every 3 years (NPSA/2006/14 Guidance)

References:

British Committee for Standards in Haematology, Blood Transfusion Task Force (1999) Guidelines for the administration of blood and blood components and the management of transfused patients *Transfusion Medicine* 9 227-238
Nursing Midwifery Council (2002). *The Code of Professional Conduct* London: NMC
Serious Hazards of Transfusion (2003) *Annual Report 2001–2002* London: SHOT
Steinaker NW and Bell MR (1979) *A new approach to teaching and learning* Academic Press
Watson R, Stimpson A, Topping A and Porock D (2002) Clinical competence assessment in nursing: a systematic review of the literature *Journal of Advanced Nursing* 39,5 421-431

Others consulted during preparation of document:

Assistant Directors of Nursing – December 2006
Governance leads for all divisions – December 2006
NMAF Scope committee – January 2007
Transfusion committee – March 2007
Modern Matrons – February 2007
Education department – December 2007

Recommended Reading

Benner P (1984) *The Dreyfus model of skill acquisition applied to nursing from Novice to expert: excellence and power in clinical nursing practice* Addison-Wesley 13-38 285-302
Contreras M (ed.) (1998) *ABC of Blood Transfusion* (3rd edition). London: BMJ Publishing Group
Local Blood Transfusion Policy/ Procedure Manual
McClelland DBL (ed.) (2001) *The Handbook of Transfusion Medicine* (3rd edition) London: HMSO
Serious Hazards of Transfusion (2003) *Annual Report 2001–2002* London: SHOT

Resources

The following websites may be of interest:

British Committee for Standards in Haematology (BCSH) Guidelines

<http://www.bcshguidelines.com>

Handbook of Transfusion Medicine (McClelland, 3rd edition, 2001)

<http://www.transfusionguidelines@org.uk>

Nursing and Midwifery Council

<http://www.nmc-uk.org>

Serious Hazards of Transfusion (SHOT) Annual Report (2002)

<http://www.shotuk.org>

Effective Use of Blood Group – also has e-learning transfusion training modules available

<http://www.learnbloodtransfusion.org.uk>