

NHS National Waiting Times Centre

Local Report ~ June 2008

Blood Transfusion

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NHS Quality Improvement Scotland (NHS QIS) is committed to equality and diversity. We have assessed the performance assessment function for likely impact on the six equality groups defined by age, disability, gender, race, religion/belief and sexual orientation. For this equality and diversity impact assessment, please see our website (www.nhshealthquality.org). The full report in electronic or paper form is available on request from the NHS QIS Equality and Diversity Officer.

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1 Setting the scene

NHS Quality Improvement Scotland (NHS QIS) was set up by the Scottish Parliament in 2003 to take the lead in improving the quality of care and treatment delivered by NHSScotland. NHS QIS does this by setting standards and monitoring performance, and by providing NHSScotland with advice, guidance and support on effective clinical practice and service improvements.

The Scottish National Blood Transfusion Service (SNBTS) is responsible for collecting, processing, storing and supplying all blood and blood components in Scotland and NHS boards are responsible for ordering and managing their supplies in a safe and effective manner. The Scottish Executive introduced a programme of work to improve and support transfusion practice in Scotland and, as a consequence, NHS QIS appointed a project group to develop clinical standards for blood transfusion practices. The project group developed four standards, covering: core principles; clinical management – pre-transfusion; clinical management – hospital transfusion laboratory; and clinical management – blood and blood component collection, administration and monitoring. The Clinical Standards for Blood Transfusion were published in September 2006. These include details of the project group which set the standards and are available on request from NHS QIS or can be downloaded from the website (www.nhshealthquality.org).

About this report

This report presents the findings from the peer review of **NHS National Waiting Times Centre's** performance against the blood transfusion standards.

The review process has three key phases: preparation prior to the visit; the visit; and the report production and publication following the visit. (See flow chart in Appendix 2 for further detail.) During the visit, each multidisciplinary review team assesses performance using the categories 'met', 'not met' and 'not met (insufficient evidence)', as detailed below.

- **'Met'** applies where the evidence demonstrates the standard and/or criterion is being attained.
- **'Not met'** applies where the evidence demonstrates the standard and/or criterion is not being attained.
- **'Not met (insufficient evidence)'** applies where no evidence is available for the review team, or where the evidence available is insufficient to allow an assessment to be made.

A final category **'not applicable'** is used where a standard and/or criterion does not apply to the NHS board under review.

Each review team is led by an experienced reviewer, who is responsible for guiding the team in their work and ensuring that team members are in agreement about the assessment reached. Membership of the review team visiting the **Golden Jubilee National Hospital on 4 March 2008** can be found in Appendix 3.

2 Summary of findings

2.1 Overview of local service provision

The NHS National Waiting Times Centre is a special health board made up of two distinct parts – the Golden Jubilee National Hospital and the Beardmore Hotel and Conference Centre, both situated in Clydebank, just west of Glasgow.

The hospital is Scotland's first wholly elective NHS facility, providing services in key specialties to patients throughout Scotland, in order to assist in reducing waiting times and is run by the National Waiting Times (Scotland) Centre Board, which has responsibility for the efficient, effective and accountable performance of the hospital.

At the time of the review visit to the hospital, services were provided on a single site and the first phase of the establishment of the West of Scotland Regional Heart and Lung Centre at this site had just taken place.

Further information can be accessed via the website of the NHS National Waiting Times Centre (www.nhsgoldenjubilee.co.uk/home/).

The hospital blood bank is situated next to the hospital transfusion laboratory which is part of the Golden Jubilee National Hospital's department of clinical laboratories. Blood and blood components are supplied to the Golden Jubilee National Hospital by the West of Scotland SNBTS (Clinical Directorate) hospital transfusion laboratory (WOSBTS) based at Gartnavel General Hospital, Glasgow.

In the 12 months prior to the review visit, approximately 670 red cell units, 130 plasma units and 40 platelet units were used at the Golden Jubilee National Hospital.

At the time of the review visit, the Golden Jubilee National Hospital did not have a dedicated transfusion practitioner to support the NHSScotland Better Blood Transfusion Programme (BBTP). This support was provided by a practice development nurse (clinical educator) assisted on an informal basis by a transfusion practitioner based at the Western Infirmary, Glasgow. Staff reported that funding had been identified to recruit a dedicated transfusion practitioner.

2.2 Summary of findings against the standards

A summary of the findings from the review is presented in this section. A detailed description of performance against the standards/criteria is included in Section 3.

Core principles

The Golden Jubilee National Hospital multidisciplinary hospital transfusion committee (HTC) reports to the clinical governance steering group via the head biomedical scientist (BMS), haematology/blood transfusion, who sits on both groups.

The HTC has led limited audit activity mainly as a result of not having a dedicated transfusion practitioner. Full implementation of the BBTP has also been affected by the absence of a transfusion practitioner. However, a multi-professional audit action plan is under development and a transfusion practitioner is being recruited.

The HTC has developed a blood transfusion policy which is accessible through the board's intranet and is reviewed annually. Significant investment has been made in an electronic document control system (Q-Pulse) which will ensure effective dissemination of revised policies.

A 'bag and tag' system is in use by the board which ensures that every unit of blood component received into the Golden Jubilee National Hospital can be unmistakably traced to its recipient, or to its final fate, if not transfused. At the time of the review visit, traceability compliance was 100%.

The board's blood transfusion policy outlines its practice for establishing identification details for conscious patients and maintaining these details at every stage of the clinical transfusion process. While there is a system in place to support this practice, a retrospective audit of the completeness of patients' notes highlighted that gender was not always recorded. There is also no detailed space on the transfusion form to record gender. This was highlighted by the review team as a challenge for the board with a recommendation to revise labelling to include gender.

The Golden Jubilee National Hospital has a patient identification policy which requires inpatients to wear an identification wristband. There is an alert system in place to flag up patients with similar names. There is no formal procedure for the identification of unconscious patients and the board was encouraged to introduce a policy for this.

The Golden Jubilee National Hospital has a strategy for the management of blood shortages. An emergency blood management group (EBMG) has been established and emergency blood management arrangements (EBMA) are reviewed annually by the HTC.

Clinical management – pre-transfusion

The reason for transfusion of blood or blood components is discussed with the patient at the time of their pre-assessment. Written documentation of this discussion is not always present within the patient's notes. However, local methods for recording pre-transfusion discussions are being developed as part of an electronic care pathway. The phased opening of the West of Scotland Regional Heart and Lung Centre will bring an increased likelihood of admissions with decreased consciousness. Although the board has a policy for consent to blood transfusion, including refusal of blood transfusion, it has identified the need for a specific policy to include an alert system detected risks, eg refusal of consent, advance directive and special requirements. Leaflets explaining the risks and benefits of, and alternatives to, transfusion are readily available for patients who may require transfusion, or have been transfused.

Positive patient identification, at the time of blood sampling, is included in local protocols. However, the protocols do not include the need to record gender on the identification band.

Retrospective audit of blood transfusion documentation showed that not all prescriptions for blood and blood components are being routinely signed by a qualified practitioner. Prescriptions specify the blood component to be administered and the number of units to be transfused, but do not include the duration of the transfusion and any special instructions or requirements. The review team recommended that the board revises the prescription form to include these elements.

Clinical management – hospital transfusion laboratory

The hospital blood bank is accredited by Clinical Pathology Accreditation (UK) Ltd (CPA) and is compliant with the Medicines and Healthcare products Regulatory Agency (MHRA).

Competency-based training and assessment systems are in place and individual training records are maintained. All laboratory staff have completed the BBTP Level 1 training.

The review team encouraged integration of the massive blood loss policy with the emergency provision of blood and blood products procedure and the incorporation of these and the maximum surgical blood ordering schedule (MSBOS) into the blood transfusion policy.

A swipe card system is in place to control and monitor access to the laboratory blood bank fridge, which ensures access to trained personnel only. The review team recommended that the controlled access system be extended to all other blood fridges managed by the Golden Jubilee National Hospital.

Laboratory and clinical procedures are in place to optimise blood use and minimise wastage and the blood bank has optimal blood stock levels as agreed by the WOSBTS. There is ongoing review of the MSBOS. The laboratory utilises an electronic management system for stock movement which improves traceability.

Daily reconciliation audit of blood stocks takes place with data on stock held sent daily to the WOSBTS.

Clinical management – blood and blood component collection, administration and monitoring

There is no formal process for ensuring that only staff who have completed the BBTP continuing education programme appropriate to their role can participate in the blood transfusion process. However, the majority of staff involved in clinical transfusion process have completed the BBTP training.

Patients are monitored for any adverse events or reactions during and after the transfusion process as clinically indicated. However, retrospective audit showed that vital signs were not always recorded on the transfusion form. Start and completion times of transfusion are also not always recorded. Any serious adverse events and near miss incidents would be reported in the DATIX clinical incident reporting system.

A haemovigilance policy is in place through which serious adverse events or reactions and near miss incidents are reported to the appropriate national collating and regulatory bodies by relevant staff.

3 Detailed findings against the standards

Standard 1a: Core Principles

Standard Statement

There are systems in place supporting clinical governance to ensure safe, effective and appropriate blood transfusion.

NHS National Waiting Times Centre

Essential Criteria

1a.1: There is an established, active, multidisciplinary hospital transfusion committee (HTC) that has defined responsibilities and accountability to the chief executive/NHS board via the clinical governance structure.

STATUS: Met

The hospital transfusion committee (HTC) meets quarterly and presents an annual work plan and report to the National Waiting Times Centre board's clinical governance committee. The HTC and other specialist groups and committees also meet with the clinical governance committee annually. The HTC reports to the board's clinical governance steering group which also meets quarterly and reports to the board's clinical governance committee. The head biomedical scientist (BMS), haematology/blood transfusion, sits on the HTC and the clinical governance steering group.

The review team considered the HTC terms of reference to be reasonable and appropriate, although encouraged the board to consider including review of errors and incidents related to blood transfusion. The team also encouraged the board to consider amending the HTC's annual term of chairmanship to ensure stability and continuity of the committee's work.

1a.2: The HTC has roles and responsibilities as outlined in MEL(1999)9 and HDL(2003)19. These include involvement in multi-professional audit, education and training, development and modification of guidelines and protocols, and involvement of stakeholders.

STATUS: Not met

An audit action plan is being developed by the clinical effectiveness facilitator on behalf of the HTC, although prior to the review visit, limited HTC-driven audit activity had taken place. The review team acknowledged that the lack of a dedicated transfusion practitioner had hindered conduct of multi-professional audit. It also recognised that the implementation of an audit plan was a challenge for the board at a time of considerable organisational change.

A practice development nurse member of the HTC was leading on the training and education in blood transfusion by encouraging attendance at face-to-face training sessions. This key clinical educator post had recently been vacated and staff reported that a dedicated transfusion practitioner would be recruited to continue with the education programme.

The HTC has developed a blood transfusion policy which is reviewed annually and accessible on the board intranet. Staff are alerted to the revision of a policy by email and by mention in the staff bulletin. The blood transfusion policy was presented in detail to staff at the face-to-face training sessions. Staff reported that considerable investment in an electronic document control system had been made which was expected to ensure more effective dissemination of revised policies in the future and would generate a read receipt.

1a.3: The HTC, in collaboration with the clinical governance committee, implements the NHSScotland Better Blood Transfusion Programme (BBTP).

STATUS: Not met

The HTC has made limited progress with the implementation of the NHSScotland Better Blood Transfusion Programme (BBTP) as there is no dedicated transfusion practitioner. BBTP training has been completed by the majority of consultants and nursing staff although it has been identified that junior medical staff are not being trained quickly enough while working at the Golden Jubilee National Hospital.

1a.4: The HTC reviews all reports of adverse events and near miss incidents relating to blood transfusion and, in response, implements changes in practice where necessary.

STATUS: Met

DATIX software (a computerised risk management reporting system) is utilised at the Golden Jubilee National Hospital to capture all data related to adverse events and near miss incidents. The software has been adapted to reflect the hospital directorates. Blood transfusion related incident reports are prepared by the head BMS, haematology/blood transfusion, for discussion at the HTC. Corrective and preventative action is agreed and implemented by the HTC. Root cause analysis and incident investigations are conducted with support from clinical governance staff and learning is shared via the directorate clinical governance groups.

A quarterly clinical governance monitoring report, including a review of all incidents, is prepared by the clinical governance and risk management development unit for consideration by the clinical governance steering group prior to its presentation to the board's clinical governance committee.

Standard 1b: Core Principles

Standard Statement

The NHS board has a system in place to ensure that every unit of blood component received into the hospital transfusion laboratory can be unmistakably traced to its recipient, or to its final fate if not transfused.

NHS National Waiting Times Centre

Essential Criterion

1b.1: There is a validated system to ensure that evidence of unmistakable traceability is generated, stored and accessible for 30 years.

STATUS: Met

Every unit of blood component received into the Golden Jubilee National Hospital blood transfusion laboratory is identified with a donation number. When a component is required for a patient, a paper issue tag is printed from the laboratory computerised system which includes patient identifying information and two self-adhesive traceability labels; each label contains the donation number. The issue tag is attached to the unit of blood component until it is transfused or returned to the laboratory if unused. If transfused, one label from the tag is signed, the date and time the unit was given is completed on the label and the label placed in the patient's notes. The other label is similarly completed and 'posted' in a label collection box. Laboratory personnel collect the labels from the boxes each day and update the computerised system to confirm that the patient received the component. The returned labels are attached onto the blood request form for that patient and stored for up to 30 years.

At the time of the review visit, traceability compliance was 100%. The review team noted that a challenge for the board was to maintain this level of compliance when the West of Scotland Regional Heart and Lung Centre became fully operational.

Standard 1c: Core Principles

Standard Statement

There is a robust system in place to establish patient identification details and maintain this at every stage of the clinical transfusion process.

NHS National Waiting Times Centre

Essential Criteria

1c.1: The minimum identification data set (surname, forename, sex, date of birth and unique identification number, eg Community Health Index [CHI]) is used at every stage of the clinical transfusion process to positively identify the patient.

STATUS: Not met

The board's blood transfusion policy states that the patient must be fully identified at each stage of the transfusion process by first name, surname, date of birth, community health index (CHI) and sex. A retrospective audit of the completeness of patients' notes identified that gender was not always being recorded and there is no dedicated space on the transfusion form to record gender. Laboratory audit of the completeness of the minimum identification data set demonstrated that blood request forms, blood collection slips and blood sample tubes were being correctly identified.

Induction training for nursing staff, operating department practitioners and porters includes face-to-face BBTP Level 1: Safe Transfusion Practice which covers positive patient identification. Only staff who have completed specific training about blood collection and distribution are authorised to enter the blood bank fridge room. This training includes a component on correct patient identification.

1c.2: All patients must be identifiable at all times. Inpatients and day patients must wear an identification wristband. If the wristband becomes inaccessible for any reason, an alternative, risk-assessed form of identification is adopted immediately.

STATUS: Not met

Golden Jubilee National Hospital has a patient identification policy which requires inpatients to wear an identification band. If the patient has no known allergies, the admitting practitioner will apply a white identification band once the patient positively confirms their name and date of birth. A red band is used for patients with allergies. The policy does not specify that gender should be included on the identification band.

When there is more than one patient within the Golden Jubilee National Hospital with the same or similar names, special warning stickers are applied to the patients'

medical notes, the ward notice boards and the nameplates outside the patient rooms. A yellow dot sticker is also applied to the identification band. The review team highlighted this as a good practice.

If the identification band became inaccessible, for example under surgical drapes, there is no risk-assessed alternative form of identification used.

When blood samples are taken, the patient details are completed on the sample at the bedside and if a name alert sticker is present on the patient notes, a yellow dot sticker is also attached to the blood sample before it is sent to the laboratory.

1c.3: There is a system (eg distinctive wristbands) to alert qualified practitioners to patients who have specific transfusion requirements, including the wish to not be transfused.

STATUS: Not met

Staff reported that during the consenting process, prior to an elective operation, at the pre-assessment clinic, specific transfusion requirements, including the wish to not be transfused would be discussed. A specific refusal of consent form for blood and blood product transfusion is used in addition to the procedure-specific consent form. Laboratory staff would be advised of this, although there is no formal way of alerting all staff involved in the patient's care that consent has been refused. The review team encouraged the board to adopt the red identification band or yellow dot sticker for such cases. The team also recommended that the term 'Jehovah's Witness' be removed from the heading on the refusal of consent form as the relevant policy allows for patients to refuse to consent to blood transfusion for reasons other than faith.

1c.4: For patients whose identity cannot be confirmed (eg unconscious patients or patients with communication difficulties), a minimum of gender and one unique identifier (eg accident and emergency number or CHI number) is essential for positive patient identification.

STATUS: Not met

At the time of the review visit, the Golden Jubilee National Hospital admitted patients for elective surgery and did not have an accident and emergency facility, therefore, it was very unlikely that an unconscious patient would be admitted. The review team encouraged the board to prepare a formal procedure for the identification of unconscious patients as the likelihood of receiving such patients would increase once the West of Scotland Regional Heart and Lung Centre was established.

Patients are asked in advance of their admission if they have communication difficulties and appropriate support is planned. For those patients who do not

disclose such difficulties, support can still be quickly identified and provided. There is an in-house translation and interpretation service available. All patients with communications difficulties have the minimum identification data set on their identification bands. The review team encouraged the board to formalise this procedure for cases where the full data set could not be confirmed.

Standard 1d: Core Principles

Standard Statement

The NHS board has a strategy for management of blood shortages.

NHS National Waiting Times Centre

Essential Criterion

1d.1: Emergency blood management arrangements (EBMA) are established as defined in HDL(2005)25.

STATUS: Met

An emergency blood management group (EBMG) has been established and a contingency plan for blood shortages has been drawn up. The emergency blood management arrangements (EBMA) are reviewed annually at the HTC. An EBMG email distribution group has been set up for initiation of the arrangements, however, the review team encouraged the board to detail more clearly the individual responsibilities of members of the group for cascading the information related to status of the EBMA.

Standard 2a: Clinical Management – Pre-Transfusion

Standard Statement

The decision to transfuse is made following consideration of the potential risks and benefits of, and the alternatives to, transfusion. Where possible this is discussed between the clinician and patient (or their legal guardian) in advance of transfusion.

NHS National Waiting Times Centre

Essential Criteria

2a.1: The patient's records contain evidence that the reason for transfusion of blood or blood components has been explained and discussed with the patient. This includes discussion of valid alternatives to transfusion and the option to refuse.

STATUS: Not met

Staff reported that it is standard practice for medical staff to discuss the reasons for, and alternatives to, blood transfusion as well as consent to transfusion at their pre-assessment. However, a retrospective audit found that written documentation of this discussion was not always present within the patient's notes. The review team noted that a good consent policy has been developed with support from the board's central legal office and clinical governance team. This policy includes a specific consent form for refusal of blood and blood products, and provides advice to clinical staff.

Local methods for recording pre-transfusion discussions are being developed as part of an electronic care pathway and this will be piloted by the orthopaedic department prior to introduction in other areas. A pre-operative assessment sheet is also under development.

Consent forms for refusal of consent to blood transfusion are used for Jehovah's Witnesses. The review team suggested that the board give consideration to removing the term 'Jehovah's Witness' from the form to allow for a more generic document to cover all refusals to consent to blood transfusion.

2a.2: Leaflets explaining the risks and benefits of, and alternatives to, transfusion are readily available for patients who may require to be, or have been transfused.

STATUS: Met

The national patient information leaflet *Receiving a Transfusion: Information for Patients and Relatives* is available in all clinical areas. The leaflets are hand-delivered to wards and the ward manager must sign for them. There is a high awareness of the leaflet among nursing staff who are all given a sample leaflet as part of their induction. The leaflet is sent to patients pre-operatively and offered on admission to hospital. The review team considered this an effective leaflet distribution system.

The board currently has several members of staff who can provide an in-house translation and interpretation service, allowing for readily adaptable literature and interpreter services. Where this is not possible, the service is outsourced to Strathclyde University.

2a.3: Where pre-transfusion discussion is not possible (eg in an emergency) there is a system, compatible with the patient's clinical needs, to investigate and act in accordance with the patient's treatment preferences. This includes compliance with an advance decision document.

STATUS: Not met

As the Golden Jubilee National Hospital is an elective hospital, there has been no perceived need to introduce a system to determine whether an advance decision document exists. Should a transfusion be needed without the opportunity for discussion with the patient, the board reported that clinical staff always act in the best interests of the patient. The current phased opening of the West of Scotland Regional Heart and Lung Centre on site will lead to a large increase in staff and case numbers as well as an increase in the complexity of cases. This will add to the increased likelihood of patients being admitted with decreased consciousness. Staff reported that the need for a specific policy had been identified.

At the time of the review visit, there had been no recorded or reported incidences of adverse events or patient complaints arising from non-compliance with advance directives.

The review team encouraged the board to incorporate an advance directive policy into the existing blood transfusion policy and to consider including detected risks such as refusal of consent, advance directive and special requirements into the alert system being used for allergies, ie the red identification band.

2a.4: When pre-transfusion discussion has not taken place, the reasons for transfusion (based on risks and benefits) are discussed with the patient and written information offered retrospectively.

STATUS: Not met

Staff noted that, when pre-transfusion discussion has not taken place, patients meet with the clinician to discuss, retrospectively, the reasons for transfusion. It was reported that this is documented in the patient's casenotes. However, the review team noted that this is not specified in the blood transfusion policy. Patient information leaflets are available within the clinical areas to be given to patients retrospectively.

The review team recommended that the board include a section on retrospective discussion in their blood transfusion policy.

Standard 2b: Clinical Management – Pre-Transfusion

Standard Statement

Positive patient identification at the time of sampling and the use of a minimum identification data set on samples and request forms is essential for pre-transfusion testing and blood component requests.

NHS National Waiting Times Centre

Essential Criterion

2b.1: Blood samples for transfusion purposes are obtained and labelled in accordance with local protocols, which are based on national guidelines.

STATUS: Not met

Local protocols are in place for pre-transfusion blood sampling. The protocols cover the minimum identification data set, positive patient identification and prohibition of pre-labelled sample tubes. However, the blood transfusion policy does not include the requirement for gender to be included on the identification band. Laboratory audit did, however, find that the blood request form, collection slip and sample tube were being correctly labelled with the minimum identification data set. The sample request forms are included in the patient's notes at the outset. Blood samples for transfusion purposes are taken only by staff that have been trained in canulation and venepuncture. The board confirmed that bank/agency staff have no involvement in pre-transfusion blood sampling.

Standard 2c: Clinical Management – Pre-Transfusion

Standard Statement

Blood and blood component prescribing is the responsibility of a qualified practitioner.

NHS National Waiting Times Centre

Essential Criteria

2c.1: All prescriptions for blood and blood components are signed by a qualified practitioner.

STATUS: Not met

The board's blood transfusion policy states that all blood and blood components are prescribed by a qualified medical practitioner. However, audit found that not all prescriptions were routinely being signed. The policy allows for an exception within theatre where blood products are prescribed in 'Recall', an electronic system.

Staff reported that the traceability label is applied to the back of the prescription form, once the transfusion has started. This was to avoid obscuring important information on the front of the form. The review team encouraged the board to make this a mandatory requirement throughout the hospital as the prescription form submitted to the review team to evidence this practice had labels placed on the front of the form.

The review team recommended that the board reviews the prescription form to prompt the inclusion of all identifiers and to audit prescriptions against this standard criterion.

2c.2: Blood and blood component prescriptions specify: blood component to be administered; number of units (millilitres in paediatric patients) to be transfused; duration of transfusion; any special requirements, and any special instructions.

STATUS: Not met

The review team noted that the prescriptions for blood and blood components specified the blood component to be administered and the number of units to be transferred. The prescription does not, however, specify the duration of transfusion, and any special requirements and instructions. It was noted that anaesthetists in the intensive care unit use a separate form for intravenous fluids.

The review team recommended that the board includes duration of transfusion and any special requirements and instructions on a revised prescription form.

Standard 3a: Clinical Management – Hospital Transfusion Laboratory

Standard Statement

Laboratory operations comply with current regulatory requirements.

NHS National Waiting Times Centre

Essential Criteria

3a.1: All transfusion laboratories within the NHS board are accredited by Clinical Pathology Accreditation (UK) Ltd (CPA) or equivalent and are compliant with the Medicines and Healthcare products Regulatory Agency (MHRA) requirements.

STATUS: Met

The board's blood bank is accredited by Clinical Pathology Accreditation (UK) Ltd (CPA) and is accepted as in general compliance with the requirements of the Medicines and Healthcare products Regulatory Agency (MHRA). At the time of the review visit, staff reported that the board was addressing the MHRA requirement for staff to have training in good manufacturing practice.

3a.2: Competency-based training and assessment systems are in place and training records are maintained.

STATUS: Met

Haematology and blood transfusion competencies have been introduced in the blood bank and all staff working in the laboratory have assessment of these competencies documented in their training records. Laboratory staff have all completed the BBTP Level 1 training.

The review team encouraged the board to introduce further competencies for the more senior laboratory staff.

Standard 3b: Clinical Management – Hospital Transfusion Laboratory

Standard Statement

Procedures are in place to optimise blood use and minimise wastage.

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Essential Criteria

3b.1: Protocols endorsed by the HTC are in place, including but not limited to: the maximum surgical blood ordering schedule (MSBOS); massive blood loss; major incidents; and emergency blood management arrangements.

STATUS: Met

Procedures are in place to optimise blood use and minimise wastage and the blood bank has optimal blood stock levels as agreed by the WOSBTS. The review team recognised the reduction in blood wastage rate that had been achieved in recent years and acknowledged the difficulties associated with maintaining levels for an exclusively surgical hospital. It was also recognised that wastage rates should continue to decline as the number of surgical cases increased.

The surgical procedure is recorded on the blood request form and when the request is entered into the laboratory information management system, the amount of blood requested is automatically checked against the maximum surgical blood ordering schedule (MSBOS). Audit of this check has led to modification of the MSBOS by the HTC, a process which the review team noted as good practice. The wastage rates are monitored within the laboratory and are reported at each HTC meeting.

The review team encouraged the board to integrate the massive blood loss policy with the emergency provision of blood and blood products procedure and incorporate these and the MSBOS into the blood transfusion policy.

The Golden Jubilee National Hospital does not have an accident and emergency unit and would, therefore, not participate in planning for major incidents.

3b.2: There is a stock management system to eliminate excess inventory and reduce waste, supported by an information technology (IT) system.

STATUS: Met

Daily reconciliation of blood stocks takes place by physically checking units within the blood bank and the emergency O RhD negative units held in the satellite theatre fridge. Data on stock held are sent daily to the WOSBTS. The laboratory traceability process from receipt to confirmation of final fate is supported by an information technology (IT) system with a contingency paper-based system available in the event of computer downtime.

3b.3: In collaboration with clinical specialties, laboratory staff participate in audit of transfusion issues.

STATUS: Not met

Laboratory staff maintain an audit log of all audits they conduct. These have included blood component traceability compliance and blood collection form completeness. Similar audits are planned into an audit schedule for the coming year. There is limited formal collaboration with clinical specialties in audit of transfusion issues, however, and it was reported that a hospital transfusion team work plan was to be presented to the clinical governance committee for their approval later in the year. The impact of the increase in staffing levels with the initiation of the West of Scotland Regional Heart and Lung Centre on such audit activity was not predictable at the time of the review visit.

Standard 4a: Clinical Management – Blood and Blood Component Collection, Administration and Monitoring

Standard Statement

Positive patient identification is performed against the blood component and any accompanying documentation at every stage of the clinical transfusion process.

NHS National Waiting Times Centre

Essential Criteria

4a.1: Only staff who have completed the BBTP continuing education programme (or equivalent) appropriate to their role can participate in the clinical transfusion process.

STATUS: Not met

A large proportion of the nursing staff and healthcare support workers have received Level 1 BBTP theoretical training and the main core of consultants working in the Golden Jubilee National Hospital have received Level 1 and 2 BBTP theoretical training. When the training was first introduced, it was updated annually, although, at the time of the review visit, it was planned to update the training every 2 years. The rotational junior medical staff are a difficult group for whom to provide training, although they are contacted by email to request that they complete the Level 1 training using the Better Blood Transfusion Continuing Education Programme elearning materials accessed through the OrasGold™ online recording and assessment system. The relatively low uptake of training in this group has been recognised by the board and will be addressed when the imminent staffing increase takes place.

A retrospective audit of the training records of those staff who were involved in the selected transfusion cases found that these records were not always available.

Specific blood collection training sessions have been conducted for ward staff and porters, and there is a computerised tracking system which can identify who collects blood from the blood bank fridge. Access to the blood bank fridge is restricted to those who have completed the training and received a swipe card. The review team encouraged the board to consider introducing a swipe card system for access to the satellite theatre fridge. Laboratory staff plan to audit the training records of those staff who collect blood.

4a.2: The minimum identification data set is recorded on all transfusion documentation (see standard criterion 1c.1).

STATUS: Not met

The transfusion form does not include a prompt to record gender which should be part of the minimum identification data set. If an addressograph label is used on the transfusion form, this would include gender, however, retrospective documentation audit found that these labels are not always being used.

The patient identification policy has clear sections on appropriate action to be taken in the event of a patient identification band being incomplete, the electronic record generated at booking being incorrect or the CHI number requiring a change. The review team identified this as an area of good practice. There is also a clear policy on sample rejection if incomplete patient identification information is provided on the blood sample.

Standard 4b: Clinical Management – Blood and Blood Component Collection, Administration and Monitoring

Standard Statement

Patients are monitored for any adverse events or reactions during and after the transfusion process as clinically indicated.

NHS National Waiting Times Centre

Essential Criteria

4b.1: Patients are monitored according to hospital transfusion policy and any untoward events (including suspected adverse reactions) are immediately clinically managed and promptly reported to the HTL.

STATUS: Not met

The blood transfusion policy states that a baseline set of observations of blood pressure, pulse, respiratory rate and temperature should be taken and documented on the transfusion form prior to the start of the transfusion. Recording of these vital signs should be repeated 15 and 30 minutes after the start of each transfusion then recorded hourly thereafter and at completion of the transfusion. However, a retrospective documentation audit found that start and completion times of transfusion were not always being recorded on the transfusion form nor were the vital signs. Staff reported that a modified early warning system chart was also in use for patients staying overnight and the review team encouraged the board to revert to using this form for transfusion to encourage data recording.

If evidence of a transfusion reaction is observed or suspected, the transfusion would be stopped, medical advice sought immediately and the hospital transfusion laboratory advised.

4b.2: Serious adverse events and near miss incidents are reported on the clinical incident reporting system in accordance with local protocols.

STATUS: Met

Any blood transfusion reactions would be recorded in Datix which captures data on all serious adverse events and near miss incidents. The risk management facilitator has responsibility for maintaining Datix, although 'ownership' of the incident stays with the manager of the area in which it happened, until such time as it is fully investigated and any corrective and preventative action taken. The head BMS, haematology/blood transfusion, interrogates Datix on a weekly basis and is alerted by email when there is a blood transfusion related incident. The review team considered this to be a robust reporting system which provides opportunity for shared learning from incidents as the clinical educators also have access to Datix.

Staff reported that blood related incidents would be investigated by the transfusion practitioner, once recruited.

4b.3: Reports of serious adverse events or reactions and near miss incidents are submitted to Serious Adverse Blood Reactions and Events (SABRE) and the Serious Hazards of Transfusion (SHOT) initiative by the relevant staff.

STATUS: Met

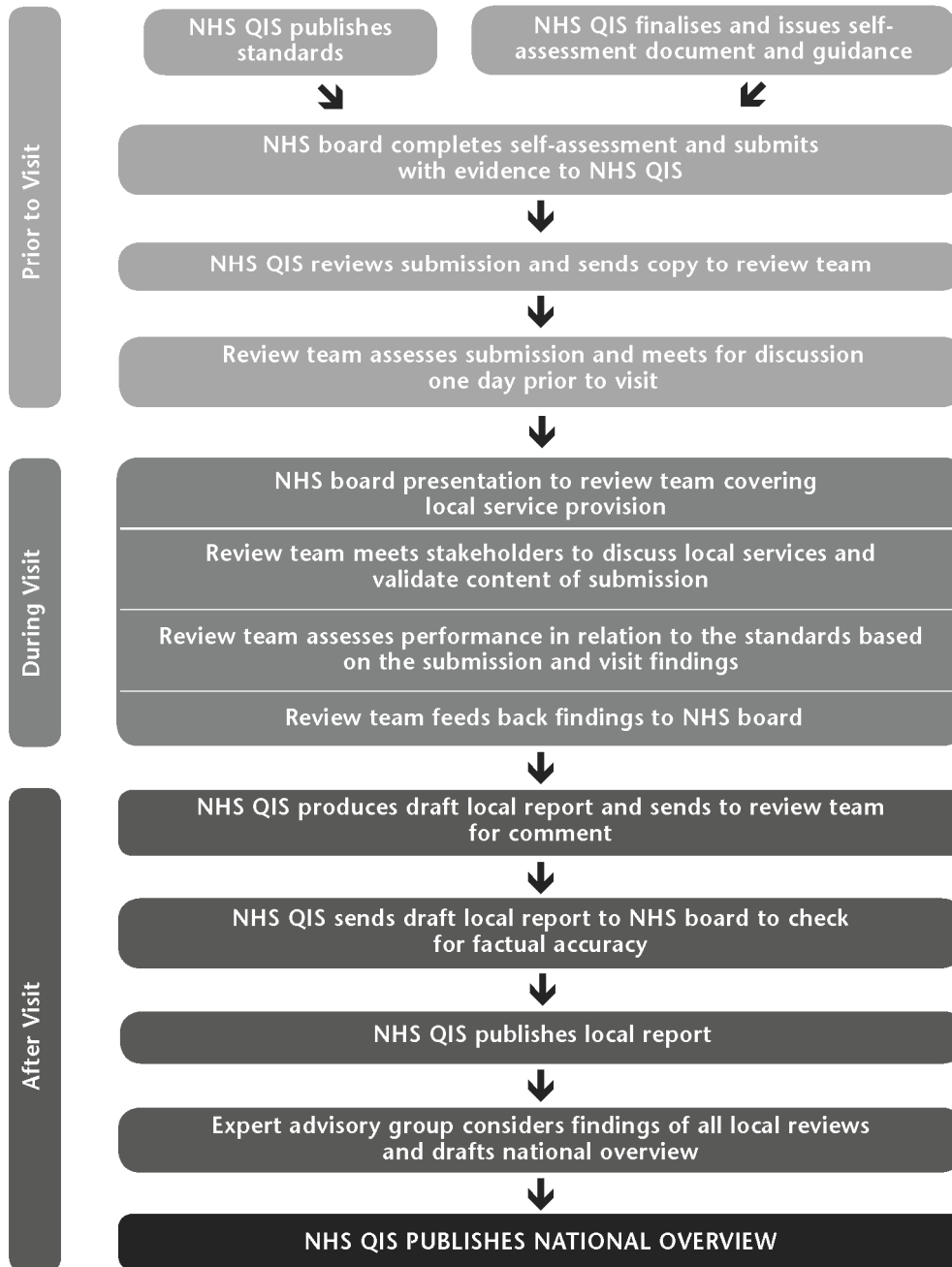
Any serious adverse reactions or events related to blood transfusion are reported through the MHRA software Serious Adverse Blood Reactions and Events (SABRE). At the time of the review visit, SABRE access was available to the head BMS, haematology/blood transfusion, consultant haematologist member of the HTC, the risk and quality assistant and any future transfusion practitioner. SABRE automatically reports to Serious Hazards of Transfusion (SHOT). Near miss incidents are reported by the head BMS, haematology/blood transfusion to SHOT. These procedures are clearly described in the haemovigilance policy.

Appendix 1 – Glossary of abbreviations

Abbreviation

BBTP	Better Blood Transfusion Programme
BCSH	British Committee for Standards in Haematology
BMS	biomedical scientist
CHI	Community Health Index
CPA	Clinical Pathology Accreditation (UK) Ltd
EBMA	emergency blood management arrangements
EBMG	emergency blood management group
HTC	hospital transfusion committee
IT	information technology
MHRA	Medicines and Healthcare products Regulatory Agency
MSBOS	maximum surgical blood ordering schedule
NHS QIS	NHS Quality Improvement Scotland
SABRE	Serious Adverse Blood Reactions and Events
SHOT	Serious Hazards of Transfusion
SNBTS	Scottish National Blood Transfusion Service
WOSBTS	West of Scotland Blood Transfusion Service

Appendix 2 – Review process



Appendix 3 – Details of review visit

The review visit to the Golden Jubilee National Hospital was conducted on 4 March 2008.

Review team members

Dr Henry Watson (Team Leader)

Consultant Haematologist, NHS Grampian

Mr Gerry McElhinney

Charge Nurse, NHS Lanarkshire

Mr William Davidson

Transfusion Laboratory Manager, NHS Lanarkshire

Ms Tina King

Blood Transfusion Practitioner, NHS Greater Glasgow and Clyde

Ms Anna-Karina Thomson

Public Partner, Forth Valley

NHS Quality Improvement Scotland Staff

Ms Nanisa Feilden

Senior Project Officer

Dr Avril MacLennan

Project Officer

During the visit, members of the review team met with consultant and nursing staff, transfusion laboratory staff, a transfusion practitioner and support staff from the Golden Jubilee National Hospital.

The composition of each team varies, and members have no connection with the NHS board they are reviewing. Both of these factors facilitate the sharing of good practice across NHSScotland, and ensure that each review team assesses performance against the standards rather than make comparisons between one NHS board and another. The team remit does not include reviewing the work of individual healthcare professionals, variations in practice (and potential quality) within a service will be encountered and subsequently reported.

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