

## SIXTH ANNUAL REPORT (2007/08)

The National Blood Transfusion Committee (NBTC) provides a central focus for progressing transfusion-related issues, enabling the transfusion community to act in a co-ordinated fashion, for example on the implementation of *Better Blood Transfusion*, blood conservation, contingency and emergency planning, new information technology developments and initiatives for training and clinical research. The NBTC continues to monitor the performance of the National Blood Service, which merged with UK Transplant to become NHS Blood & Transplant (NHSBT) in October 2005, and to receive reports on areas of activity in transfusion which have an impact on its work, such as the Serious Hazards of Transfusion (SHOT) scheme and the National Commissioning Group (NCG).

### Committee Meetings and Working Groups

The NBTC met twice during 2007/08. The Executive Working Group of the NBTC met twice, and the Regional Transfusion Committee (RTC) Chairs Group met three times. Current Working Groups are established for Blood Components, Clinical Research, the Implementation of the National Patient Safety Agency (NPSA) Safer Practice Notice (SPN) 'Right patient, right blood', Information Technology, Patient Involvement and Transfusion Laboratory Managers.

### Work of the NBTC in 2007/08

#### ***Better Blood Transfusion***

An NBTC survey in December 2006, with the participation of 156/170 (92%) of NHS Trusts where blood is transfused, indicated progress in the implementation of *Better Blood Transfusion* recommendations since 2004, for example an increase in the proportion of trusts with transfusion practitioners and in the induction training of nursing and medical staff. However, the results also indicated a need for further progress. Areas of concern included the lack of dedicated sessions for lead consultants, the lack of policies for key areas of transfusion practice such as surgery, limited increase in intra-operative cell salvage activity, and the provision of regular training particularly for medical staff. An additional survey of transfusion practitioners indicated that the role was under pressure in many trusts with an increased requirement for transfusion practitioners to undertake direct clinical and/or laboratory work.

Several members of the NBTC formed part of the Department of Health group that organised the third UK Chief Medical Officers *Better Blood Transfusion* Seminar on 16<sup>th</sup> March 2007 in London. The output of the meeting led to the publication of the third *Better Blood Transfusion* Health Service Circular (HSC 2007/001) *Better Blood Transfusion: Safe and Appropriate Use of Blood* in November 2007.

[http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Healthservicecirculars/DH\\_080613](http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Healthservicecirculars/DH_080613)

Its main aims are to:-

- Build on the success of previous *Better Blood Transfusion* initiatives to further improve the safety and effectiveness of transfusion.
- Ensure that *Better Blood Transfusion* is an integral part of NHS care.
- As part of clinical governance responsibilities, make blood transfusion safer.
- Avoid the unnecessary use of blood and blood components (fresh frozen plasma and platelets) in medical and surgical practice.
- Avoid unnecessary blood transfusion in obstetric practice and minimise the risk of haemolytic disease of the newborn (HDN).
- Increase patient and public involvement in blood transfusion.

Progress is expected in all areas by November 2008, when the first national audit of compliance will be undertaken. Annual audits will be conducted thereafter until 2012.

Specific activities, in addition to those outlined in the sections of this report below, promoting *Better Blood Transfusion* in 2007/08 included:-

- Revision of the *Better Blood Transfusion* toolkit on the [www.transfusionguidelines.org.uk](http://www.transfusionguidelines.org.uk) website to support the recommendations in the new HSC on *Better Blood Transfusion*.
- Provision of comparative data on blood use for each hospital by the Blood Stocks management Scheme (BSMS).
- A joint collaboration between the NBTC, SHOT, the Royal College of Pathologists and the Institute of Biomedical Science to improve practice in hospital blood transfusion laboratories.

### **Regional Transfusion Committees**

The RTCs are key to the promotion of *Better Blood Transfusion*. Additional financial support was provided in 2006/07 to enable:-

- The establishment of sections for the NBTC and RTCs on the [www.transfusionguidelines.org.uk](http://www.transfusionguidelines.org.uk) website to facilitate dissemination and sharing of information (the full link to the NBTC site is provided at the end of this report).
- Increased support for regional audit.
- Dedicated RTC administrative support.

The value of this additional support will be reviewed during 2008/09. However, it is evident that the combination of the website and the administrative support has facilitated much more effective communication from the NBTC to the RTCs and to Hospital Transfusion Teams (HTTs), and a bid will be made to continue the funding for it.

The boundaries of the 12 existing RTCs were realigned in 2006/07 to reflect the boundaries of the ten Strategic Health Authorities. This has caused some disruption, as many hospitals have transferred to a different RTC, and some regions are geographically large. Members also report it is difficult to obtain time off from their trusts to attend RTC meetings and educational events. Despite these initial problems, hospitals are now adapting well to the new RTC arrangements.

### ***Appropriate Use of Blood***

During 2007/08 (up to the end of December), there was a reduction of 2.5% in the number of red cell units issued to hospitals in England and North Wales; a decrease of 20% in the last 6 years. A number of audits suggest that this reduction is primarily in surgical usage, which reflects recent efforts in this area of transfusion practice. During the last year, the usage of

FFP transfusions have reduced by 4.8% and platelet transfusions increased by 0.5%, both having changed very little over the previous 5 years.

Detailed audits of blood usage indicate that there continues to be considerable inappropriate use of red cell, platelet and plasma transfusions in all clinical specialties, and new initiatives are required to minimise this both on grounds of both patient safety and cost.

### ***UK Blood Safety and Quality Regulations (BSQR) (2005)***

The Medicines and Healthcare products Regulatory Agency (MHRA) received compliance reports from 380 hospitals for 2006/07. Following initial assessment, 191 sites were referred for further assessment by a team of specialist blood inspectors. 65 sites were identified as needing inspection; in addition to 6 compliant sites to quality assure the inspection process.

Blood transfusion laboratories have been working hard to meet the demanding BSQR requirements in the face of increasing workload, and poor staffing and training documented in an initiative led by the Institute for Biomedical Science in collaboration with the NBTC, the Royal College of Pathologists, and SHOT. The recommendations of this initiative include that laboratories should be fully automated, should have minimum staffing levels based on numbers, skill mix, qualifications, experience and competence, and that increased efforts are needed to implement the use of IT throughout the transfusion process to enhance patient safety.

### ***Serious Hazards of Transfusion (SHOT) scheme***

SHOT continues to work closely with the MHRA to provide a co-ordinated haemovigilance system encompassing both its legislative and professional aspects. The NBTC endorsed support of SHOT's proposals for additional funding for staff and investment in IT facilities.

### ***National comparative audit of blood transfusion***

The focus of the current programme is to audit blood usage. Following audits of the use of platelet transfusions, and the use of blood in total hip replacement in 2006/07, an audit of the use of blood in upper gastrointestinal haemorrhage has been completed in 2007/08. A national audit of the use of FFP is being planned for 2008/09. The programme for 2007/08 also included an audit of overnight blood transfusion, and a 2-region audit of the appropriate use of red cells.

All audits of blood usage found variation in the use of blood and evidence of some usage outside published guidelines. Recommendations included that the process of completing transfusion guidelines should include the development of strategies for disseminating them amongst relevant clinicians who should be reminded of the risks of transfusion and the need to document the clinical indication for transfusion in all cases. The reasons underlying the apparent high levels of inappropriate transfusion need to be investigated, and an increased level of clinical research is required to develop a stronger evidence base for transfusion.

There have been challenges in obtaining participation in national audits because of limited availability of local audit staff and competition from other audit initiatives. Technology has been developed to allow on-line input of data which facilitates both data input in hospitals and its analysis by the audit team. Participation rates by trusts in national audits of blood transfusion will be provided to the Healthcare Commission.

### ***Education and training in transfusion***

In November 2006, the NPSA, NBTC and SHOT introduced the requirement for all clinical staff involved in the blood transfusion process to be competency assessed. National competencies are identified in the SPN which clearly states that 'formal' assessment should be undertaken. In 2007/08, the NBTC established a Working Group to assist hospitals

develop a competency assessment and training framework for all staff involved in blood transfusion.

The NPSA, NBTC and SHOT recently reviewed the patient safety principles behind the introduction of a competency assessment process and strongly recommend that assessment should be an observed process. In recognition of the additional resources that may initially be required for NHS organisations that are currently using a self assessment model to transfer to introducing the principles of observed assessment, the timescales identified in the SPN to implement competency assessment have been extended. 50 percent of all relevant staff should be formally assessed by May 2009. By November 2010 all initial competency assessments should have been undertaken.

A recent survey of the UK medical schools carried out by the NBTC found that transfusion training is delivered to all medical students. The model of delivery varies widely and some imaginative approaches have been identified. Competency assessment shows significant variation and there is some concern that transfusion does not appear to be a core competency at some medical schools, with no regular testing being undertaken. Efforts will be made to include blood transfusion as a core competency in the Foundation Years training.

The Royal College of Pathologists carried out a survey of consultant haematologists and haematology trainees about their training in transfusion medicine. The findings included that transfusion training has reduced from a median of 6 months prior to 1995 to 3 months currently. Most training was provided in local blood centres. Current trainees were more likely to receive some of their training at a distant centre. Both consultants and trainees reported little or no hospital training. Of trainees with  $\geq 3$  years experience, nearly 20% had not dealt directly with clinical and laboratory transfusion problems. Trainees and consultants were concerned about the effect of the NHSBT reconfiguration on training. A transfusion training group has now been set up by the Royal College of Pathologists to address these issues.

### ***Clinical research in transfusion medicine***

Further links between the NBTC and the NHSBT clinical research programme have been developed to identify priorities for research and to promote clinical research in transfusion medicine.

### ***IT Working Group***

The IT Working Group continue to work with the NPSA and SHOT to support the information technology (IT) aspects of the *Right Patient – Right Blood* initiative described in the Safer Practice Notice issued by the NPSA ([http://www.npsa.nhs.uk/site/media/documents/2009\\_0316FEB06\\_V20\\_WEB.pdf](http://www.npsa.nhs.uk/site/media/documents/2009_0316FEB06_V20_WEB.pdf)).

Connecting for Health are piloting the IT specification for blood transfusion in a district general hospital

<http://www.connectingforhealth.nhs.uk/systemsandservices/bloodpilot/mayday>.

A survey of IT systems in hospitals was carried out to assess whether blood transfusion IT systems were able to provide specific clinical and transfusion characteristics for clinical, audit and epidemiological purposes. The response rate was 38% (84/222) for NHS hospitals and 18% (14/76) for private hospitals. There was considerable variation in the type and functionality of the systems used in hospital blood laboratories. Issues of concern related to the inability of systems to search transfusion records for the patient's diagnosis, procedure, adverse events, compliance with pre-determined triggers and whether the patient is still alive.

It was agreed that the IT Working Group should consider how best to pursue modernising hospital blood transfusion laboratory IT systems to provide the required functionality.

### ***Patient and Public Involvement***

A National Patient Transfusion Awareness Campaign was held in April 2007, supported by the NBTC and NPSA. The aim of the campaign was to inform patients and the public of the risks and benefits of transfusion, alternatives to donor blood and the importance of patient identification. A total of 200 NHS and private hospitals registered to take part in the campaign and 71 hospitals returned completed evaluation forms. Feedback received confirmed that the majority of hospitals intended to use the publicity material for ongoing/intermittent displays.

A Patient Involvement Working Group has now been established to promote ongoing patient and public involvement in blood transfusion. The Working Group will be involved in patient related activities during 2008, specifically the Royal College of Physicians Open Day on 5<sup>th</sup> July, and the Royal College of Pathologists National Pathology Week in November during which a Patient-focussed Seminar on Blood Transfusion will be held at the College on 7<sup>th</sup> November.

### ***Review of the performance of the NHSBT***

The NBTC continued to express concerns about the strategic changes announced by NHSBT in December 2006, particularly the effect of a reduction in NHSBT diagnostic laboratories on hospitals. The NHSBT acknowledged weaknesses in the evidence base for some aspects of the strategy and its ability to deliver the goals within the agreed timescale, and commissioned a review encompassing both the supply of blood and its diagnostic services.

A series of open meetings with hospitals and discussions with an expert panel nominated by relevant professional bodies including the NBTC were held at the end of 2007. The outcome of the review was that blood production will be consolidated in 6 processing centres, and diagnostics in 5 centres. The RTCs have raised further concerns about the relocation of some valued services, and the continuation of the vital role provided by NHSBT for improvements in clinical and laboratory transfusion practice.

Discussions continue regarding the appropriate route of regular high-level interaction between the NBTC and NHSBT along the lines of the expert panel meetings during the review.

***Establishment of the Advisory Committee on the Safety of Blood, Tissues and Organs (SaBTO)***

This new committee will provide independent expert scientific advice to the government on the most appropriate way to manage the safety of risks associated with the supply and use of blood, and tissues and organs for transplantation. The Chairman of the NBTC will provide a link to SaBTO.

Further information about the terms of reference, membership, and work of the NBTC can be obtained from the Secretary, Professor M.Murphy (NHS Blood and Transplant, John Radcliffe Hospital, Oxford), from the Chair of the appropriate RTC or from its website <http://www.transfusionguidelines.org.uk/index.asp?Publication=NTC&Section=27&pageid=814>

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