

THE NATIONAL BLOOD TRANSFUSION COMMITTEE

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National Blood Transfusion Committee (NBTC) in England

The NBTC in England was established in September 2001. It was created as a consequence of two major events in blood transfusion in the 1990s in the UK: the re-organisation of Blood Services in England, and the United Kingdom (UK) Chief Medical Officer's (CMO) '*Better Blood Transfusion*' initiative.

Establishment of the National Blood Authority and National Blood Service

The National Blood Authority (NBA) was established in April 1993, and took over responsibility in England for what was previously known as the National Blood Transfusion Service (NBTS) in April 1994. This development sought to change a regionally-based service into a national one. In September 1994, the NBA published its proposals for the future of the Regional Blood Transfusion Services, now to be called the National Blood Service (NBS). The proposals included the establishment

of three administrative Zones to replace the previous regional structure. When the Department of Health finally approved the NBA's revised plans in November 1995, an independent National Blood Service User Group (NBUG) was set up to monitor the services provided by the NBS, to bring to the attention of the NBA problems which could not be resolved at local level, and to report annually to the Secretary of State. Zonal Blood User Groups (ZBUGs) were established in each of the 3 Zones of the NBS to inform the work of the NBUG by seeking the views of those using the services provided by the NBS.

1998 Blood Transfusion Seminar and Health Service Circular

In July 1998, the four UK CMOs (England, Scotland, Wales and Northern Ireland) held a Seminar on '*Evidence-based Blood Transfusion*' which was followed by a Health Service Circular (HSC) '*Better Blood Transfusion*' (HSC 1998/224) issued in December 1998 [3], and was based on recommendations from the Seminar. It detailed actions required of NHS hospitals and clinicians to improve transfusion practice, including the:-

- Establishment of Hospital Transfusion Committees to oversee all aspects of transfusion at a local level
- Participation in the Serious Hazards of Transfusion (SHOT) scheme
- Development of agreed and disseminated local protocols for transfusion practice, based on national guidelines and supported by in-house training
- Consideration of the use of autologous transfusion, particularly peri-operative cell salvage

National management structure for the National Blood Service and the establishment of the National and Regional Transfusion Committees in England

In 1999, the NBS Zones were integrated into a new national management structure for the NBS, and the ZBUGs were disbanded. There continued to be a need for a formal mechanism for interaction of the NBS with blood users, and it was proposed that Regional Transfusion Committees should be established. It was also proposed that a National Transfusion Committee be established to replace the NBUG on the lines of recommendations by the World Health Organisation for National Committees on the Clinical Use of Blood.[1] The remit of these committees would be primarily focused on improving transfusion practice in hospitals, and supporting the

implementation of the actions recommended in the HSC '*Better Blood Transfusion*', although they retained the role of the ZBUGs and NBUG in monitoring the performance of the NBS.

An Interim National Transfusion Committee met on three occasions in 2000/01 with the remit of establishing the Regional and National Transfusion Committee structure by September 2001. Its membership included the ex-Chairmen and blood transfusion laboratory manager members of the NBUG and ZBUGs, providing a useful link with the previous User Group structure.

2001 Blood Transfusion Seminar and the 2nd Health Service Circular

A second UK CMOs' Seminar on blood transfusion '*Better Blood Transfusion*' was held in London on 29th October 2001. As a result of the seminar a further set of recommendations were agreed and subsequently published in a *Health Service Circular* *Better Blood Transfusion – Appropriate Use of Blood (HSC 2002/009) in July 2002*. [5]

The establishment of the CMO's National Blood Transfusion Committee (NBTC) in England and Regional Transfusion Committees (RTCs) was announced at the seminar. The other UK countries were invited to send representatives to the NBTC.

Initial meetings and work of the National Blood Transfusion Committee in England

The NBTC held its first meeting in December 2001. The NBTC membership included the Chairmen of the 10 Regional Transfusion Committees, and representatives of the Royal Colleges, SHOT, National Patient Safety Agency (NPSA), NBS, patients, and the Department of Health. Its remit was to support the *Better Blood Transfusion* initiative and to monitor the services provided by the NBS.

In 2005, NHS Blood and Transplant (NHSBT) was established by the amalgamation of NBS with UK Transplant. A further *Better Blood Transfusion* Seminar was organised by the NBTC and held in 2007, following an audit of the implementation of the recommendations of HSC 2002/009. [6] The recommendations of the 3rd *Better Blood Transfusion* Seminar were published in a *Health Service Circular* *Better Blood Transfusion – Safe and Appropriate Use of Blood*. [7]

Patient Blood Management

In 2012, the focus of the NBTC adopted the term *Patient Blood Management* (PBM) to describe a more particular focus on appropriate clinical transfusion and use

of alternatives to transfusion for individual patients. A *Future of Blood Transfusion* conference was held in June 2012. [8] The event was jointly hosted by the Department of Health, the NBTC and NHSBT, and supported by the NHS Medical Director.

The aim of the multidisciplinary conference was to share views on how blood transfusion practice could be improved to:

- Build on the success of previous *Better Blood Transfusion* initiatives and to further promote appropriate use of blood components
- Improve the use of routinely collected data to influence transfusion practice
- Provide practical examples of high quality transfusion practice and measures for the avoidance of transfusion, wherever appropriate
- Consider the resources needed to deliver better transfusion practice including support from NHSBT
- Understand the patient perspective on transfusion practice.

Following the conference, the NBTC developed recommendations for the implementation of PBM. [9]

Objectives and working arrangements for the NBTC

The NBTC's overall objective is to promote good transfusion practice by providing a framework to:

1. Channel information and advice to hospitals on best practice and performance monitoring with the aims of:
 - Improving the safety of blood transfusion practice
 - Improving the appropriateness of clinical blood transfusion
 - Exploring and facilitating the implementation of methods to reduce the need for allogeneic blood transfusion
 - Listening to and informing patient concerns about blood transfusion
 - Promoting the highest quality and consistency in transfusion practice
2. Consult with national groups developing guidelines in transfusion medicine in order to determine best practice
3. Review the performance of the services provided by NHSBT
4. Identify service development needs, and provide assistance, as required, with the work of the National Commissioning Group for Blood (which sets blood

prices) and the Blood Stocks Management Scheme (which monitors blood wastage in NHSBT and hospitals)

5. Identify and respond to patients' perceptions about the provision of transfusion services
6. Provide advice on all aspects of transfusion practice to NHS England
7. Provide information on and support delivery of appropriate education and training of blood transfusion.

There are two meetings of the NTBC each year. Membership includes chairs of the regional transfusion committees, representatives of Royal colleges, relevant learned societies, the NHSBT and NHS England. The work of the committee between meetings is carried out by an Executive Working Group comprising the Chairman, 5 members of the committee, two NHSBT representatives, a patient representative and one from NHS England. Current working groups are established for Education and Training, Patient Involvement, Transfusion Laboratory Managers, and Patient Blood Management (PBM).

- The RTCs are key to local promotion of better transfusion practice acting as a focus for activity and a conduit between the Hospital Transfusion Committees (HTC) and the NBTC. There are 10 RTCs which were realigned in 2006/07 to reflect the boundaries of the ten Strategic Health Authorities, and these boundaries have continued despite further NHS reorganisations, and HTCs value the current structure.

The NBTC has an annual work plan setting out objectives and actions to support the NBTC strategy; the Working Groups also develop individual workplans which are available on the NBTC website www.transfusionguidelines.org.uk.

RTCs are provided with administrative support and the website is supported by the NHSBT.

Main outcomes of the work of the NBTC

The focus on *Better Blood Transfusion* and PBM over the 16 years of the NBTC has resulted in:-

- low mortality and morbidity related to transfusion in the UK (respectively 1.01 and 6.44/100,000 blood components issued in 2015) [10]
- 30% reduction in the use of red cell transfusions in England; current usage equates to red cell issues of 28.5 per 1000 population
- a stabilisation in the growing demand for platelets.

Other activities of the NBTC

- Support for the National Comparative Audit of Blood Transfusion programme. [13]
- The NBTC conducts surveys of transfusion practice.
- The NBTC has developed national standards and requirements for training and assessment for all staff involved in the transfusion process following the abolition of the National Patient Safety Agency (NPSA).
- The NBTC has developed a series of indication codes abstracted from national guidelines and regularly updated; these are used by many hospitals to guide appropriate decision making at the time of transfusion requesting. The NBTC is working towards the development of a national transfusion request specification that can be used in electronic order comms systems to support best practice.
- The NBTC works closely with NHSBT to ensure appropriate stakeholder engagement when NHSBT are making decisions about new components for development.
- The NBTC has worked with NHSBT to develop agreed action plans for hospitals and NHSBT in the event of shortages of red cells and/or platelets.
- The NBTC is working with the National Transfusion Laboratory Managers group, the UK Transfusion Collaborative and NHSBT to explore opportunities for closer integration between NHSBT and hospital transfusion laboratories to ensure that safe practice can continue to be delivered in the face of pathology reorganisations and loss of experienced laboratory staff.
- Sections have been established for the NBTC and RTCs on the www.transfusionguidelines.org.uk website to facilitate dissemination and sharing of information. The RTCs are responsible for delivering one or two educational symposia for their regions each year. These events reach many hundreds of multidisciplinary staff involved in blood transfusion.

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