Overview of the ‘Better Blood Transfusion’ initiative

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"Better Blood Transfusion"

**Concerns:**
- Patient safety: errors, vCJD
- Demand for blood and shortages
- Evidence of variation in practice

**Outputs in form of HSCs:**
- HTC/HTTs, NBTC/RTCs
- Guidelines, audits
- Support from NHSBT
- Patient involvement
- Use of technology
- Clinical research
IBCT & ABO incompatible red cell transfusions (SHOT, 2010)
Change in red cell usage 2001-2007

Successive changes in annual red cell issues over 5 years:
- 0.9%, - 1.3%, - 5.9%, - 4.4%, - 3.2% = 15.7%
Where are we now?

- National, regional and local audits consistently show inappropriate use of 15-20% red cells and 20-30% platelets/plasma
- Low uptake of methods to avoid use of blood
- Safety of hospital transfusion still an issue
- Poor education and training
- Lack of patient involvement
- Evidence base getting stronger but more research needed
- Poor IT for blood safety and for providing data on blood usage

See NBTC Annual Reports
## Summary of the inappropriate use of blood from large regional and national audits of blood use

<table>
<thead>
<tr>
<th>Title</th>
<th>Year</th>
<th>Number of hospitals</th>
<th>N cases audited</th>
<th>Inappropriate use</th>
<th>Guideline standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red cell transfusion</td>
<td>2002</td>
<td>All 13 hospitals in Northern Ireland</td>
<td>360</td>
<td>19% patients inappropriately transfused &amp; 29% over-transfused</td>
<td>British Committee for Standards in Haematology (BCSH) (2001)</td>
</tr>
<tr>
<td>Red cells in hip replacement</td>
<td>2007</td>
<td>139/167 (83%)</td>
<td>7465</td>
<td>48% patients</td>
<td>British Orthopaedic Association (2005)</td>
</tr>
<tr>
<td>Upper gastrointestinal bleeding</td>
<td>2007</td>
<td>217/257 (84%)</td>
<td>6750</td>
<td>15% of red cell transfusions, 42% of platelets, and 27% of FFP</td>
<td>British Society of Gastroenterology (2002)</td>
</tr>
<tr>
<td>Red cell transfusion</td>
<td>2008</td>
<td>26/56 (46%) hospitals in two regions</td>
<td>1113</td>
<td>19.5% of transfusions</td>
<td>BCSH (2001)</td>
</tr>
<tr>
<td>FFP</td>
<td>2009</td>
<td>186/248 (75%)</td>
<td>5032</td>
<td>43% of transfusions to adults, 48% to children &amp; 62% to infants</td>
<td>BCSH (2004)</td>
</tr>
<tr>
<td>Platelets in haematology</td>
<td>2011</td>
<td>139/153 (91%)</td>
<td>3296</td>
<td>27% of transfusions</td>
<td>BCSH (2003)</td>
</tr>
<tr>
<td>Cryoprecipitate</td>
<td>2012</td>
<td>43/82 (52.4%) from 3 regions</td>
<td>449</td>
<td>25% of transfusions</td>
<td>BCSH (2004)</td>
</tr>
</tbody>
</table>
UK TRANSFUSION LABORATORY COLLABORATIVE
Recommended minimum standards for hospital transfusion laboratories
September 2010
Bill Chaffe, Joan Jones, Clare Milkins, Clare Taylor, Deborah Asher, Hedley Glencross, Mike Murphy and Hannah Cohen, on behalf of the UK Transfusion Laboratory Collaborative, c/o SHOT Office, Manchester, UK

The collaborative recommendations are intended to encourage effective and appropriate use of technology and staff in hospital transfusion laboratories within the framework of current legislative requirements.

MANY DRIVERS FOR IMPROVING HOSPITAL TRANSFUSION
• BUT IMPLEMENTATION IS POOR

• TODAY’S CHALLENGE IS TO PROVIDE THE LEADERSHIP TO IMPLEMENT ‘PATIENT BLOOD MANAGEMENT’