BETTER BLOOD TRANSFUSION INITIATIVES AN OVERVIEW

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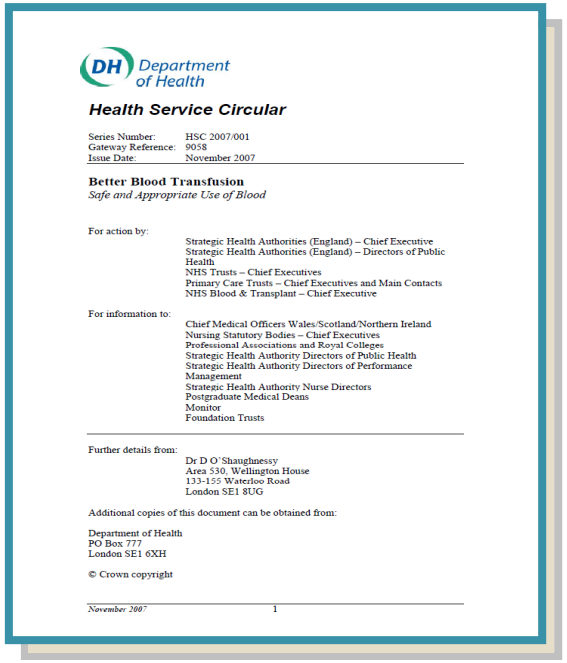
IN THE BEGINNING – what were the drivers for BBT?

- increased demand for blood
- decreased number of donors
- waiting list initiative
- increased cost (safety initiatives)
- SHOT findings/recommendations
- Possible new risks including vCJD
- clinical governance, culture change in NHS
- media attention, patient interest



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Better Blood Transfusion
Safe and Appropriate Use of Blood

For action by:
Strategic Health Authorities (England) – Chief Executive
Strategic Health Authorities (England) – Directors of Public Health
NHS Trusts – Chief Executives
Primary Care Trusts – Chief Executives and Main Contacts
NHS Blood & Transplant – Chief Executive

For information to:
Chief Medical Officers Wales/Scotland/Northern Ireland
Nursing Statutory Bodies – Chief Executives
Professional Associations and Royal Colleges
Strategic Health Authority Directors of Public Health
Strategic Health Authority Directors of Performance Management
Strategic Health Authority Nurse Directors
Postgraduate Medical Deans
Monitor
Foundation Trusts

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Additional copies of this document can be obtained from:

Department of Health
PO Box 777
London SE1 6XH

Health Service Circulars 1998, 2002, 2007

Better Blood Transfusion Seminars

BBT Toolkit

transfusionguidelines.org.uk

Transfusion Liaison Nurses / NHSBT BBT team

NHSBT Appropriate Use of Blood Group

BBT - What has been achieved?

- Team working at national, regional and local levels
- Blood transfusion induction and awareness training for all those involved in the blood transfusion process
- Engagement with Trust managers – governance, risk, nursing, finance and a higher profile within Trusts.
- Policies for the blood transfusion process, guidelines for appropriate use and audits to monitor compliance
- Incident reporting and investigation – learning lessons, quality improvements

National Transfusion Committee	**NHSBT Patients Clinical Team**
Regional Transfusion Committee	**Regional Transfusion Team**
Hospital Transfusion Committee	**Hospital Transfusion Team**

Blood transfusion is safer

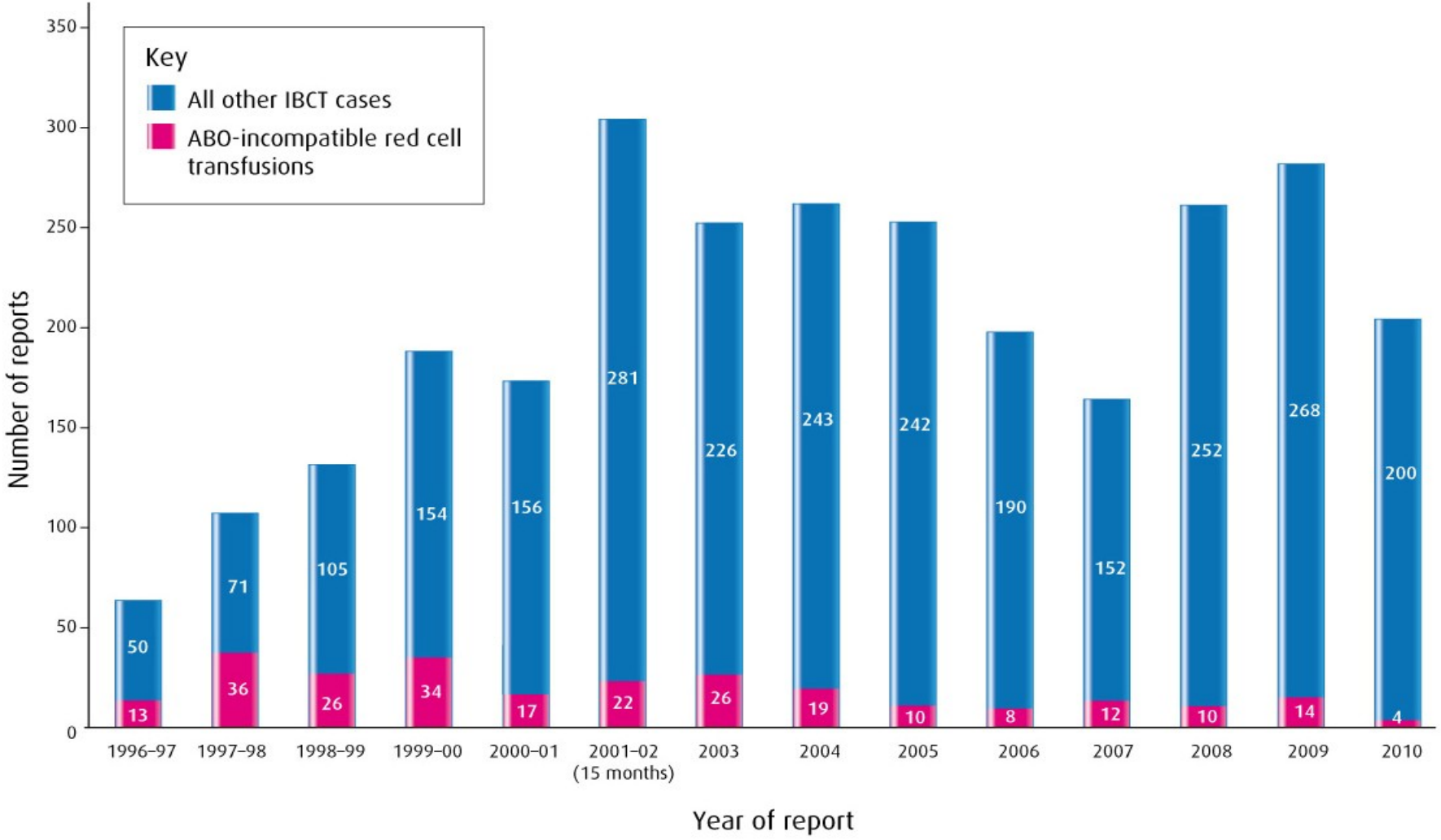
Not just BBT but initiatives from:

- National Patient Safety Agency
- Serious Hazards of Transfusion
- Audit of bedside practice, fridge collection, sampling and labelling

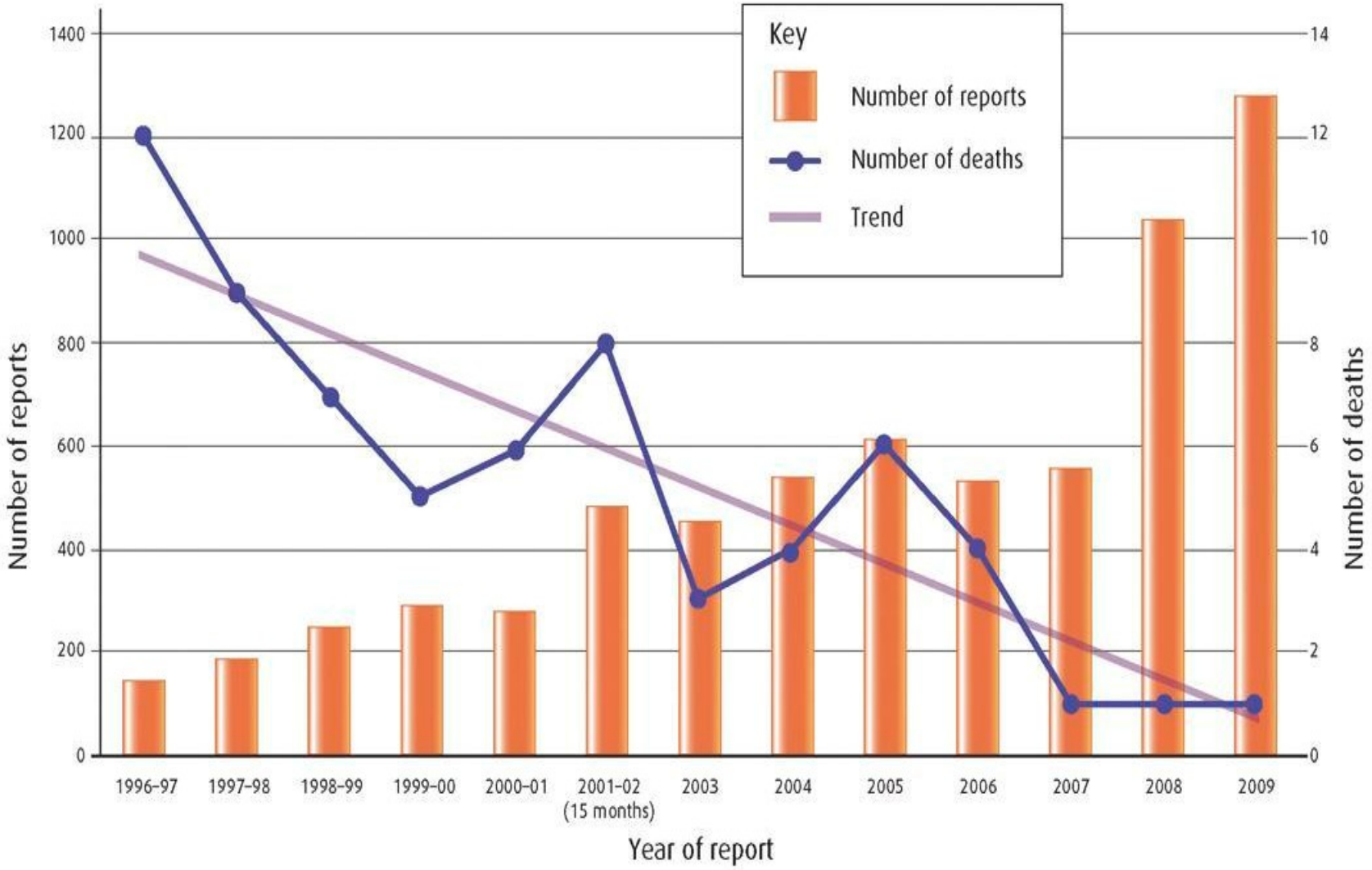
Regulation and inspection of clinical areas by:

- NHS Litigation Authority ,
- Care Quality Commission

Figure 4
IBCT cases 1996–2010 showing ABO-incompatible red cell transfusions



Total reports and total deaths definitely due to transfusion 1996 - 2009



Surveys of BBT implementation

% of Trusts with a	2001	2003	2004	2006	2008	2010
Hospital Transfusion Committee	**91**	**98**	**99**	**97**	**97**	**94**
Transfusion Practitioner	**14**	**50**	**68**	**96**	**96**	**99**
Transfusion Consultant	**-**	**-**	**-**	**48**	**56**	**69**

Is the team in place?

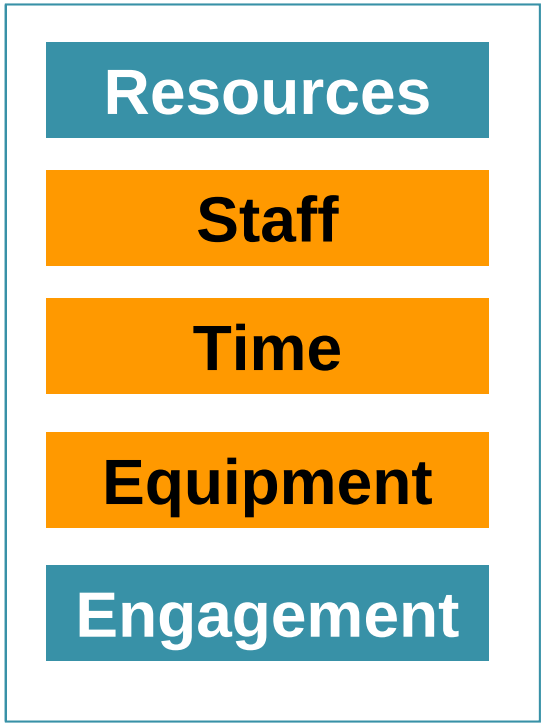
Is there enough time?

Do the meetings actually take place?

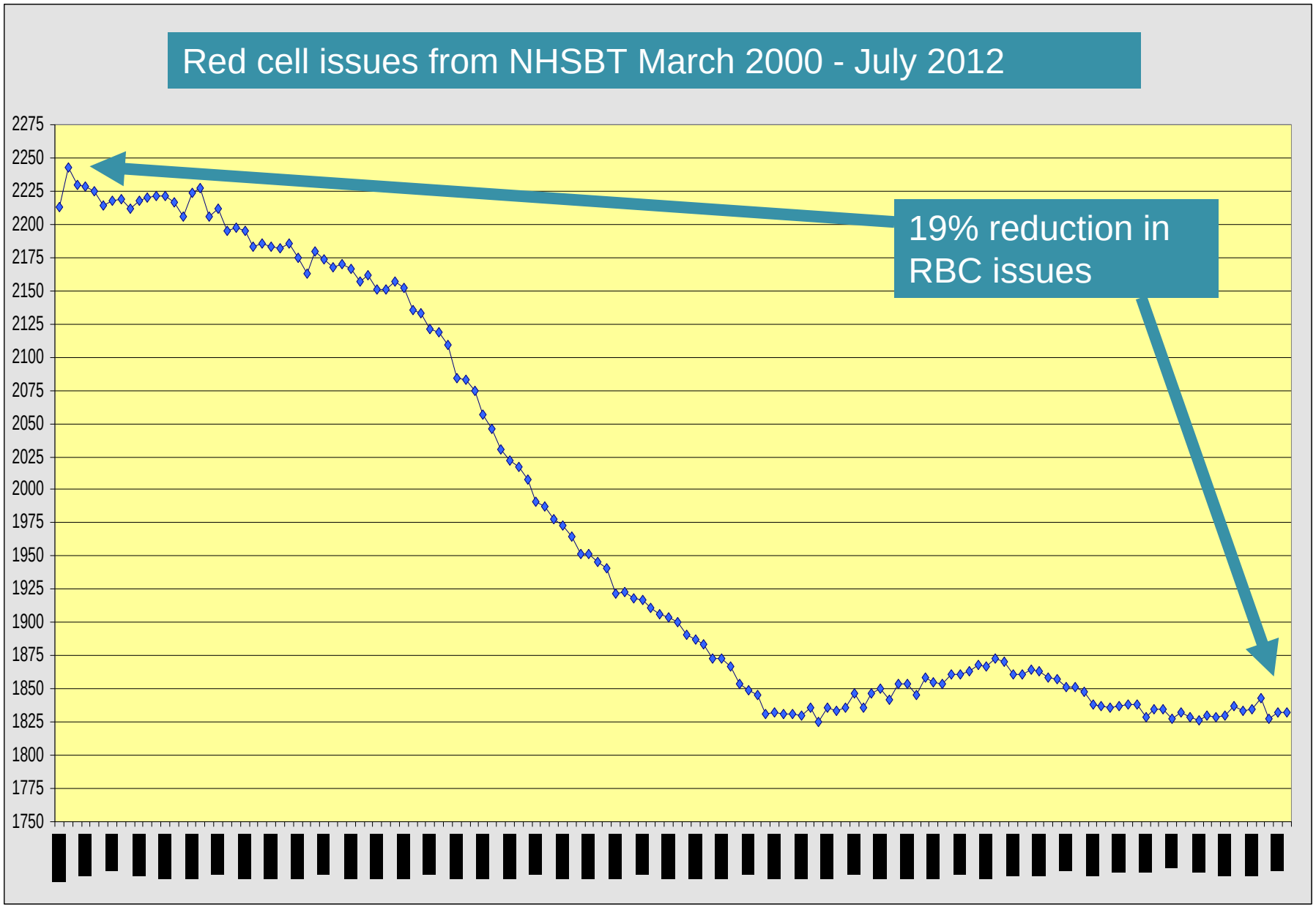
Surveys of BBT implementation

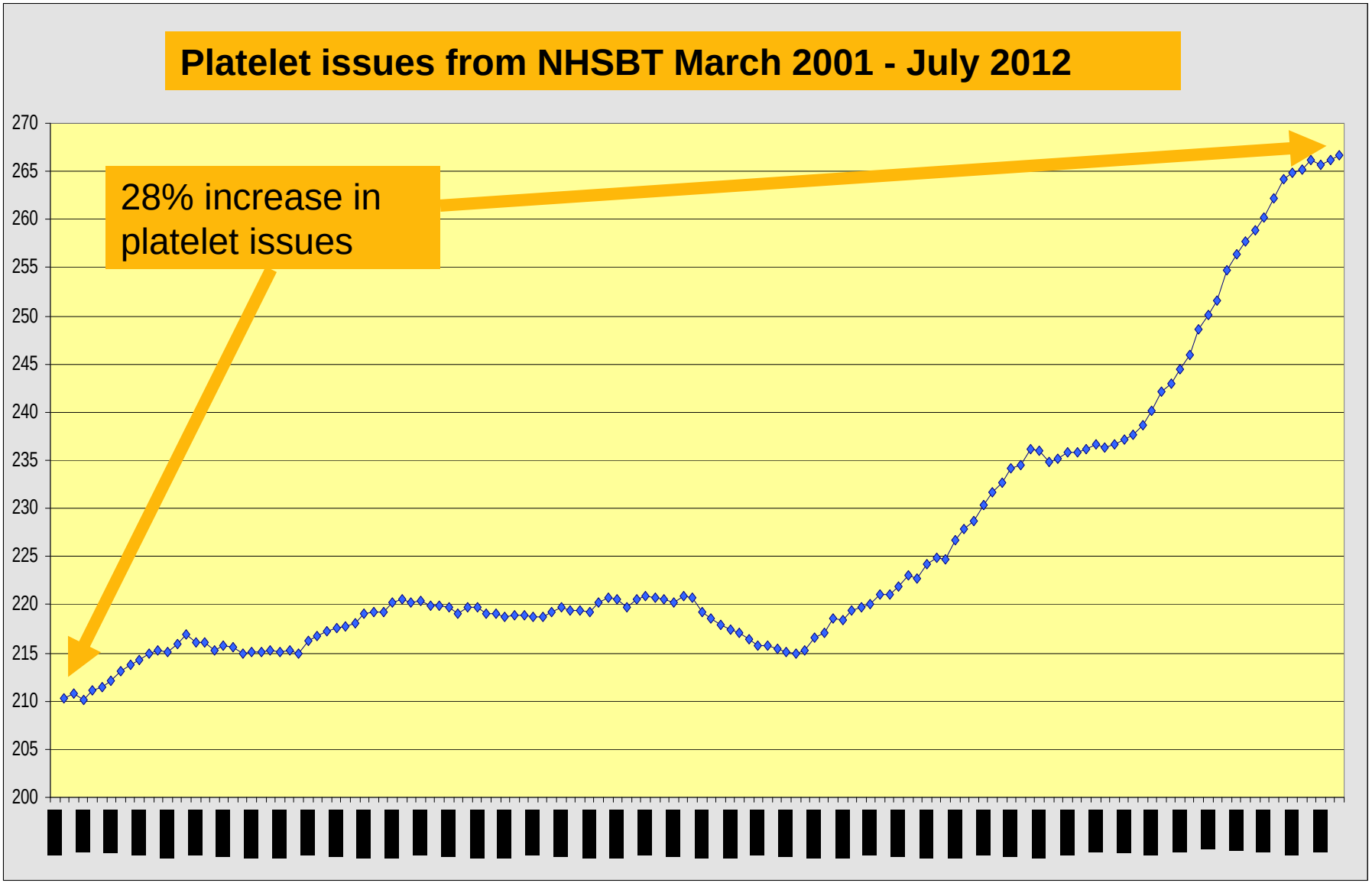
The challenges for hospitals are:

- Patient safety
  - Fewer, ideally zero, errors
- Effective use of blood
  - Less inappropriate use = ?% reduction in use
- Robust audit trail and documentation
  - 100% traceability
- Rapid availability
  - An under-recognised issue
- Good blood stock management and low wastage
  - still much more to do



Mike Murphy at ‘Strictly Blood Transfusion’ 2007


Red cell issues from NHSBT March 2000 - July 2012
19% reduction in RBC issues
2275
2250
2225
2200
2175
2150
2125
2100
2075
2050
2025
2000
1975
1950
1925
1900
1875
1850
1825
1800
1775
1750


Platelet issues from NHSBT March 2001 - July 2012
28% increase in platelet issues
270
265
260
255
250
245
240
235
230
225
220
215
210
205
200

Summary of inappropriate use from large regional and national audits of blood use

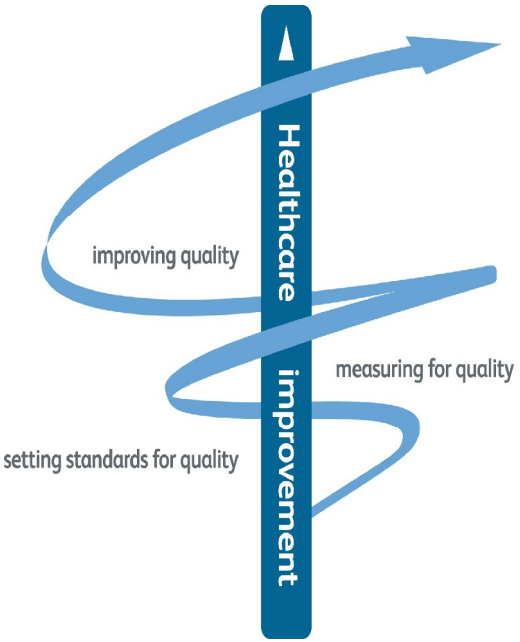
Audit	Year	Hospitals	Cases	Inappropriate use	Standards
Red cell transfusion	2002	13 (100%) NI hospitals	360	19% inappropriate transfusion 29% over transfused	BCSH 2001
Red cells in hip surgery	2007	139/167 (83%)	7465	48% of transfusions	BOA (2005)
Upper GI bleeding	2007	217/257 (84%)	6750	15% of red cell transfusions 42% of platelets and 27% of FFP	BSG (2002)
Red cell transfusion	2008	26/56 (46%) in two RTCs	1113	19.5% of transfusions	BCSH (2001)
Fresh Frozen Plasma	2009	186/248 (75%)	5023	43% of transfusions in adults, 48% to children and 62% to infants	BCSH (2004)
Platelets in haematology patients	2011	139/153 (91%)	3296	27% of transfusions	BCSH (2003)
Cryoprecipitate	2012	43/82 (52%) in three RTCs	449	25% of transfusions	BCSH (2004)

National Comparative Audit of Blood Transfusion

Clinical audit measures quality

- We need to know what we are doing so that we can work out how to improve
- We can use existing transfusion networks to measure transfusion practice in hospitals against standards taken from national guidelines
- Understanding reasons for variation and learning from best practice leads to improvement in quality of care to patients

"The Quality Spiral"



NCABT is a joint programme between NHSBT and Royal College of Physicians Clinical Effectiveness and Evaluation Unit (CEEU) and covers transfusion practice in the UK

NHS Blood and Transplant

CLINICAL STANDARDS
Royal College of Physicians
Setting higher medical standards

BBT – where are we now?

BETTER, but still room for improvement

- Audits show inappropriate use of red cells (15-20%), platelets and plasma (20-30%)
- Low uptake of methods to avoid the use of blood
- Safety of hospital transfusion still an issue
- Poor education and training in some groups
- Lack of patient involvement
- Evidence base getting stronger but still more research is needed
- Poor information technology for blood safety and for providing data on blood usage

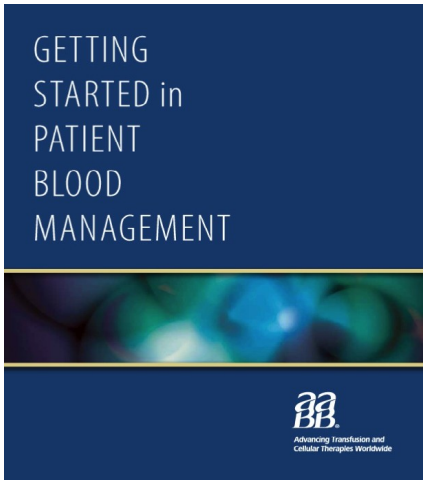
‘Patient Blood Management’

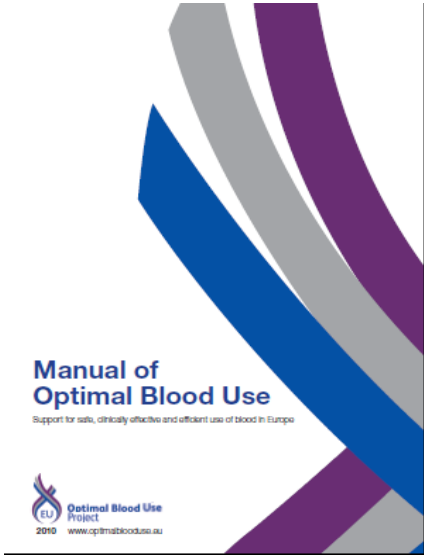
Meeting at RCPath 18th June 2012

Based on work done by US, Australian and European groups

“Patient blood management (PBM) is a new standard of care in medicine and surgery to manage and conserve a patient’s own blood, reducing reliance on the donor blood supply”

- Reduce blood loss through phlebotomy
- Optimise Hb prior to surgery
- Minimise perioperative blood loss (TEG etc)
- Use Intra Operative Cell Salvage (IOCS)
- Ensure evidence based decisions about blood transfusion





Better Blood Transfusion

- Has really made a difference to patients, transfusion teams and clinicians that prescribe and administer blood

- Time to move to new initiative that builds on BBT with the aim of developing a framework to support hospitals to deliver ‘patient blood management’