

# Patient Blood Management An Overview

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## What is PBM?

- An evidence-based, multidisciplinary team approach to optimising the care of patients who might need transfusion
- Focuses on measures for blood avoidance as well as correct use of blood components when they are needed
- Improves patient care optimises use of donor blood and reduces transfusion-associated risk
- A joint initiative between NHS Blood and Transplant (NHSBT), National Blood Transfusion Committee (NBTC) and Department of Health



## The 'Patient' in PBM

Patient Blood Management (PBM) firmly places the patient at the centre of the decision making process - vital to inform and involve patients in their care – 'Informed Consent'

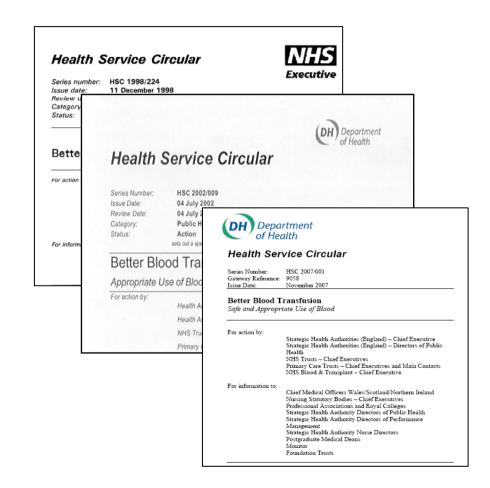
UK Patient Awareness Campaign 'Do you know who I am?'

 recommendation in Serious Hazard of Transfusion (SHOT) 2009 report



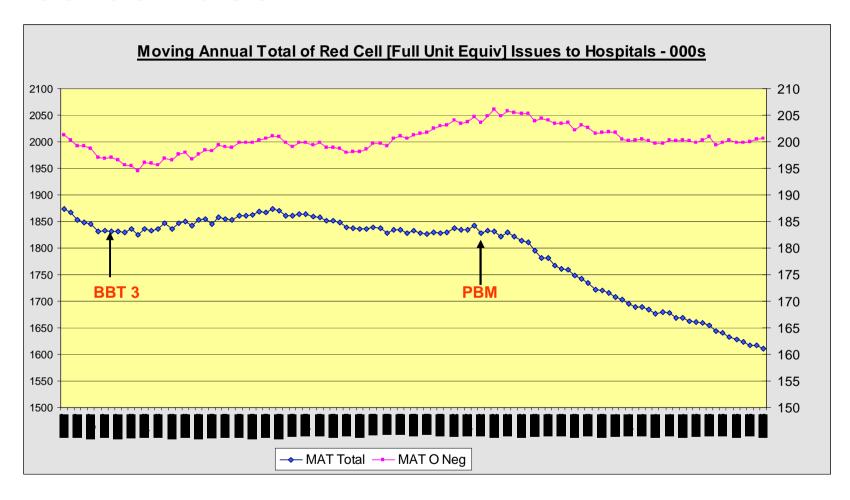
# **PBM** in England

- Better Blood Transfusion (BBT) initiatives since 1998 raising concerns around:
  - Patient safety
  - Increase in demand for blood components
  - Resource issues across the NHS
- Blood transfusion not high on the agenda for the majority of hospitals





## Red cell use



Year to date figures show a reduction of 3.8% at end Dec 2015

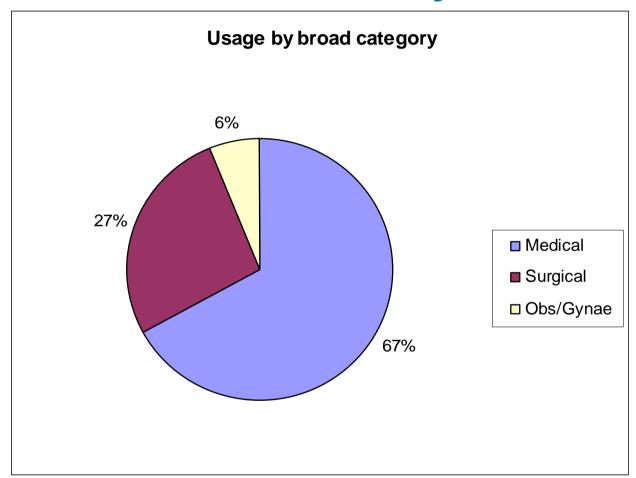


# Why the reduction?

- Audit recommendations implemented?
  - National Comparative Audit Medical Use of Blood, reported in 2013, showed inappropriate use in 13% of the transfused patients
    - 5% of patients with reversible anaemia
    - 8% of patients transfused above Hb threshold
- BBT / PBM initiatives?
  - Single unit policies?
  - Increase in use of cell salvage?
- Trauma centres?



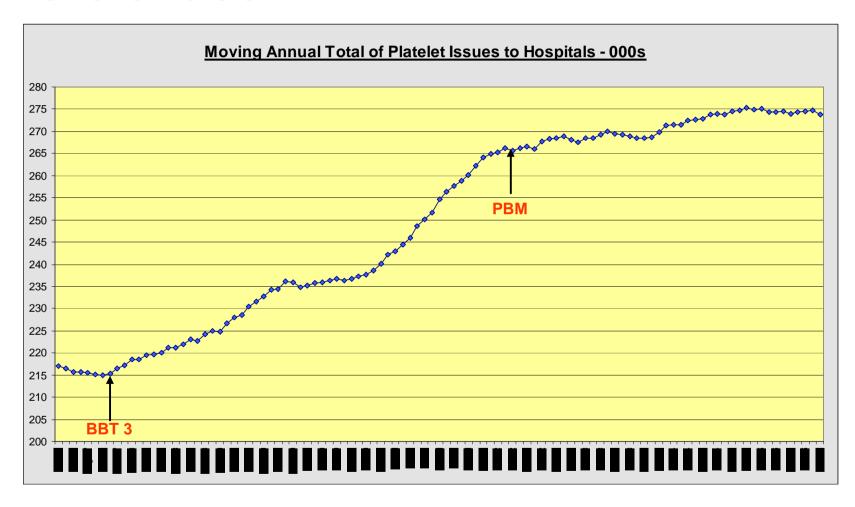
# **National Red Cell Survey 2014**



Full report at: http://hospital.blood.co.uk/audits/national-comparative-audit-reports/



### Platelet use



Year to date figures show a decrease of 0.6% at end Dec 2015



# Why the change?

- NCA (2010) found 28% of transfusions fell outside national guidelines
- Ageing population?
- New approaches to medical care?
- Advances in treatments that result in patients with a low platelet count?
- Double dosing?



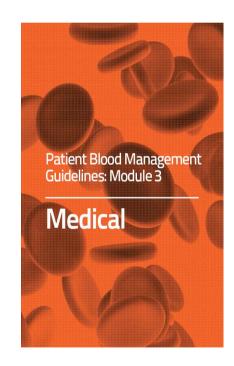
# Patient Blood Management – The Future of Blood Transfusion Royal College of Pathologists June 18<sup>th</sup> 2012

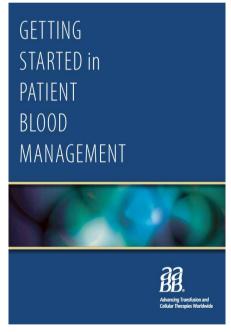




# Patient Blood Management

- An international initiative
- Minimising blood sample volume
- Appropriate transfusion triggers
- Managing pre-op anaemia
- Intra- and post-op management e.g.:
  - -cell salvage
  - assessing and managing abnormal haemostasis







# What has happened since July 2012?

- The NBTC established a PBM working group
- PBM Survey 2013 (repeated in Dec 2015)
- Recommendations were published in 2014
  - General
  - Specific
  - Implementation



# **PBM Survey England 2013**

146/149 (98%) of acute NHS hospitals responded:-

- 75% of TPs spend <30% time on PBM activities</li>
- ~ 50% of haematologists responsible for transfusion have no allocated sessions for transfusion
- 43% report blood usage to clinical teams
- 53% conduct local audits of blood use
- Variable documentation of consent and use of patient information leaflets
- Variable use of cell salvage, near patient testing, pre-op anaemia management
- 29% have a single unit transfusion policy



## Difference between BBT and PBM?

#### **Better Blood Transfusion**

- **BBT** initiatives
- Safe transfusion
- Appropriate use
- Increase patient and public involvement
- Benchmarking
- Better clinical research

#### **Patient Blood Management**

- Build on success of previous
   Build on success of previous **BBT** initiatives
  - Safe transfusion
  - Appropriate use
  - Increase patient and public involvement
  - Benchmarking
  - Better clinical research



## Difference between BBT and PBM?

#### **BBT** - Actions for:

- NHS Trust CE
- NHSBT
- NBTC
- Regional Transfusion Committee
- Hospital Transfusion Committee
- Hospital Transfusion Team

#### **PBM** - Actions for:

- Patient representatives
- Hospital Management
- Trust Board representative
- NHSBT
- NBTC
- Regional Transfusion Committee
- Hospital Transfusion Committee
- Transfusion Practitioner, Transfusion Laboratory Manager, Haematologist
- Surgery / Anaesthesia clinicians
- General Medical Physicians
- IT Specialists
- Clinical Governance



# PBM recommendations: General

- Establish a PBM programme and raise awareness amongst clinicians and patients
- Issues around patient testing:
  - Volume and frequency of samples
  - Promotes the use of near patient testing
- Appropriate dose and thresholds for transfusion



# PBM recommendations: Specific

### **Surgical**

- Pre-operative management of anaemia and haemostasis
- Intra-operative
- Post-operative

### **Medical**

- Management of abnormal haemostasis
- Management of anaemia



# PBM recommendations: Implementation

- Establish a PBM committee (possibly within HTC)
- Determine main targets for PBM
- Identify PBM champions
- Obtain a mandate from hospital management
- Educate clinicians about PBM
- Monitor and benchmark practice



# **NHSBT** support for PBM in hospitals

- Support for PBM in the NHSBT Blood 2020 Strategy
- PBM pilots in partnership with hospitals
- Consider supporting the development of the infrastructure for PBM in hospitals, for example:-
  - Modernising practices in transfusion laboratories and at the bedside
  - Collection of enhanced data on blood usage for demand planning and feedback to clinicians
  - Specific PBM practices e.g. intra-operative cell salvage
- Continue to support clinical research to identify optimal transfusion practice



## What next?

- NHSBT to launch a PBM strategy
- Review of NHSBT Patient Blood Management Practitioner Team structure
- National PBM Survey closed 4<sup>th</sup> January, 2016 report in coming months



## **Summary**

- PBM is an extension of BBT
- Centres around the patient
- International initiative
- Collection, analysis and feedback of data on blood usage to clinical teams is essential to drive PBM
- It provides the opportunity for blood services to further engage with hospitals



## Thanks to:

- Professor Adrian Newland, Consultant Haematologist, Barts Health NHS Trust
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