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
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
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

Usage by broad category

- Medical: 67%
- Surgical: 27%
- Obs/Gynae: 6%

Full report at: http://hospital.blood.co.uk/audits/national-comparative-audit/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 18th 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
- ~ 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?

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<th>Better Blood Transfusion</th>
<th>Patient Blood Management</th>
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<tr>
<td>• Build on success of previous BBT initiatives</td>
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<td>• Safe transfusion</td>
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<td>• Appropriate use</td>
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<td>• Increase patient and public involvement</td>
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<td>• Benchmarking</td>
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<td>• Better clinical research</td>
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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 4th 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:

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• North East Regional Transfusion Committee

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