

# **Patient Blood Management - The Future of Blood Transfusion.**

**What can we learn from Australia and USA**

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The background of the slide is a close-up, high-magnification photograph of a microchip. The chip is a square silicon die with a complex pattern of gold wire bonds connecting it to a substrate. The image is tinted with a blue and purple color scheme, giving it a technological and futuristic feel. The text is overlaid on this background.

**PATIENT at the CENTRE of  
everything we do.**

Thank- you:  
Questions?

# PBM was launched on 18<sup>th</sup> June 2012.

- What can we learn from Australia and USA
- Treatment of anaemia
- Pre Operative Optimisation
- Cell Salvage
- Iron

[http://www.transfusionguidelines.org/docs/pdfs/nbtc\\_pbm\\_2013\\_08\\_macdougall.pdf](http://www.transfusionguidelines.org/docs/pdfs/nbtc_pbm_2013_08_macdougall.pdf)

- MSBOS
- AIM II
- Introduction of E.I. on-demand
- <http://www.transfusionguidelines.org/Index.aspx?Publication=NTC&Section=27&pageid=7729>

# PBM was followed up with a meeting a joint SEC & London RTC event in London in September 2012.

- Development of our own KPI from the lessons learned from Australia and USA
- **PATIENT** authorisation for Transfusions
- Pre Operative Optimisation
- Cell Salvage
- Iron
- AIM II
- Introduction of E.I. on-demand

# What is Patient Blood Management?

- Patient Blood Management (PBM) is a multidisciplinary, evidence-based approach to optimising the care of PATIENTS who might need blood transfusion.
- PBM puts the PATIENT at the heart of decisions made about blood transfusion to ensure they receive the best treatment and avoid, inappropriate use of blood and blood components.
- PBM represents an international initiative in best practice for transfusion medicine.

# Why PBM?

- WE have lost our focus: Where did the patient go?
- Transfusions are unsustainable in the future;
- A single unit transfusion of red cells is “antigenically” the same as giving the recipient a solid organ transplant!
- Use of platelets have increased year on year.
- 60% of transfusions are for medical patients, upto 30% are inappropriate!
- For a Large Blood user (BSMS) 10 K Red cells per annum 1,800 units of red cells are inappropriately used; equates to £ 224 K per annum
- BUT WHERE is the ACTUAL evidence?

# What can we learn from Australia and USA?

- Australia 3 pillars of PBM

Patient blood management aims to improve clinical outcomes by avoiding unnecessary exposure to blood components. It includes the three pillars of:

- optimisation of blood volume and red cell mass
- minimisation of blood loss
- optimisation of the patient's tolerance of anaemia.

These principles apply in the management of any haematological disorder. Patient blood management optimises the use of donor blood and reduces transfusion-associated risk.

# What can we learn from USA?

- Requirement for High Quality Evidence;
- To successfully implement any program to **influence physician behaviour**, high quality evidence is needed
- For blood management, there is high quality evidence that supports the use of a restrictive transfusion strategy in many clinical settings where blood is widely used
- However, additional clinical trials are needed

# What can we learn from Australia and USA?

- Guidelines and standards available and into practice
- Engagement of **clinical staff** (**outside of transfusion**) incl. GPs
- Cross-discipline teams and role of champions; Nurses, and Transfusion Advocates.
- Resources:
- Government funding and support critical
- Funding models
- Tension for Transfusion Practitioners/others between quality/safety roles and PBM activities
- Education and training
- **Patient participation**
- Data quality, accessibility
- Uptake of cell salvage
- Research incl. human factors, implementation
- Measure & improve effectiveness of education/ interventions
- Performance measures

# AIM II Trial

- Brief overview
- Reasons
- Clinical Diagnosis linked to transfusion needs
- EVIDENCE for future
- Benchmarking

# Integrated Transfusion Services


- What is ITS and how will it affect us?
- Hopefully a nearer service to our patients?

# Maximum (Surgical) Blood Ordering Schedule.

- A List of operations routinely performed by your Trust and the “agreed” number of units which the Transfusion laboratory will usually issue to cover a patients operation having the “said” procedure.
- For operations on-site and off-site, especially if there is a significant time delay due to transportation requirements.
- MSBOS agreed by Trust HTC and regularly reviewed by HTC.
- See our MSBOS; next slide pdf embedded.

# PBM how? HELP!

- Putting the Patient FIRST;
- Education and training of our clinical staff; nurses, Nursing Assistants;
- HTT driven or additional?
- (Blood Conservation Group; formerly our Cell salvage group)
- Physician led; Not necessarily the Consultant Haematologist; Someone who is passionate about transfusion is key
- **Transfusion Practitioners are KEY**
- **Transfusion Advocates are essential**
- PBM guidance; from formerly BBT team
- DoH guidance.
- NICE guidance



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