

Six Minute Intensive Training (SMIT) – Patient Blood Management

What is Patient Blood Management?

Patient Blood Management (PBM) aims to optimise blood volume and red cell mass, minimise blood loss and optimise the patient's tolerance of anaemia.

PBM is not an alternative to blood transfusion but good clinical practice. A reduction in unnecessary blood transfusions minimise transfusion associated complications and supports appropriate use of blood products

PILLAR ONE	PILLAR TWO	PILLAR THREE
Pre-Op	Intra-Op	Post Op
Optimise Hb and Iron stores	Minimise Blood Loss	Manage anaemia / tolerance of anaemia

What is the Collaborative about?

The Collaborative embodies Pillar One: to increase the percentage of patients who have had their haemoglobin and iron stores optimised prior to elective surgery. The three pillars underpin PBM and highlight:

- Risks associated with blood transfusion – infection, length of stay
- Rising costs with provision and transfusion of blood
- Challenges of maintaining an adequate blood supply due to increased demand and ageing population
- Use of blood and blood products are not always in accordance with clinical guidelines.

Historically blood transfusion has been used indiscriminately without considering real clinical need. Blood is a vital resource that should be used when clinically indicated based on individual patient parameters.

Who started the National Patient Blood Management Collaborative?

The Australian Commission on Safety and Quality in Health Care established the National Patient Blood Management Collaborative to address the use of blood in **elective surgery**.

What surgeries are being focused on in the Collaborative?

- ✓ Gastrointestinal
- ✓ Gynaecological
- ✓ Orthopaedic

Who is participating in the Collaborative?

WE ARE!!

Along with 11 health services which are a mix of public, private and not-for-profit hospitals.

Change Principles

Between 2015 and 2017 health services will develop and trial strategies to enhance PBM and the effective use of the National Blood Authority (NBA) Guidelines. Three change principles will be used when developing strategies:

Change Principle 1: Implement a systematic and proactive approach to pre-operative optimisation of haemoglobin and iron stores for patients undergoing elective surgery.

Change Principle 2: Ensure patients receive integrated and coordinated PBM pre-operatively.

Change Principle 3: Enhance knowledge of evidence-based best practice in PBM.

How will the impact and success be measured?

By reviewing the patient's journey and looking at:

Step in clinical pathway	Indicator description
Assessment	<ul style="list-style-type: none"> • Assessed for anaemia • Assessed for iron deficiency
Diagnosis made	<ul style="list-style-type: none"> • Anaemia confirmed • Fe deficiency confirmed
Condition managed	<ul style="list-style-type: none"> • Anaemia managed • Fe deficiency managed
Outcome	<ul style="list-style-type: none"> • Anaemia improved • Fe deficiency improved
Transfusion	<ul style="list-style-type: none"> • Pre-operatively • Intra-operatively • Post-operatively

Outcomes of the Collaborative

By addressing low Hb and Fe deficiency prior to elective surgery the Collaborative hopes to reduce:

- ✓ **Avoidable blood transfusions**
- ✓ **Post-operative infections and adverse reactions to blood products**