The problem worth solving

Maternity blood management – Improving identification and management of iron deficiency and anaemia
How to use these slides

• Customise with your health service data
• Present to executive and key stakeholders to gain endorsement to proceed with improvement initiatives
• Add more local information as desired
• Delete slides if not relevant for audience
The problem worth solving

Our obstetric transfusion rate is xxxx compared to NSW state-wide published data

1.4% NSW state-wide average obstetric transfusion rate
The problem worth solving

Our rate of anaemia at delivery is x.x%
Compared to Hospital ABC (3.6%) and Hospital XYZ (11.5%) post-improvement.
The problem worth solving

x.x% of anaemic women at delivery received a transfusion

x.x% of non-anaemic women at delivery received a transfusion

In 2018, anaemic maternity patients at delivery (≤110 g/L) had a x times higher chance of being transfused.
Risk factors for anaemia

- Pregnancy and breastfeeding are risk factors
- Iron deficiency is the most common cause

Reference: Looker AC et al. JAMA 1997;(12):973-976
Newborn
Low birth weight, higher risk of fetal death or abnormalities.

Children
Poor exercise tolerance and school performance.

Adult
Poor productivity, cognitive and behavioural problems.

Pregnancy
Higher risk of pre-term delivery, retarded IUG, <= 5x maternal mortality.

Spectrum of iron deficiency

Anaemia is one end of the spectrum of iron deficiency

Iron deficiency without anaemia is three times as common as iron deficiency anaemia

Reference: transfusion.com.au. This graphic was modified with permission from Sarah Cusick PhD, Centers for Disease Control and Protection, 2008.
Patient blood management guidelines

Patient blood management (PBM) obstetrics and maternity
Maximise red cell mass at the time of delivery and reducing reliance on transfusion as salvage therapy to treat blood loss.

Aim of the pilot

Consider including a SMART aim statement i.e. Specific, Measurable, Aspirational, Realistic, Time based.

Example aim statement

‘To optimise antenatal haemoglobin levels and iron stores in 80% of women who have their first visit at ≤ 20 weeks and to increase the use of iron therapy in 80% of women diagnosed with ID booked between 1 September and 31 December 2017’
Implementation tools

Toolkit for Maternity Blood Management

Hb Assessment and Optimisation Action Plan

Hb Assessment and Optimisation Flowcharts

Maternity Iron Handout
Definitions

Anaemia
- $\text{Hb} \leq 110 \text{ g/L (First trimester)}$
- $\text{Hb} \leq 105 \text{ g/L (Second trimester)}$
- $\text{Hb} \leq 110 \text{ g/L (Third trimester)}$

Iron deficiency (depleted iron stores)
- Ferritin $\leq 30 \text{ mcg/L}$

Iron deficiency anaemia
- Low ferritin and low Hb