Improving Fresh Blood Product Transfusion In NSW

ISQua 2009: 26th International Conference, Dublin

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BLOOD WATCH every drop counts

Blood Watch is a state-wide transfusion medicine improvement program

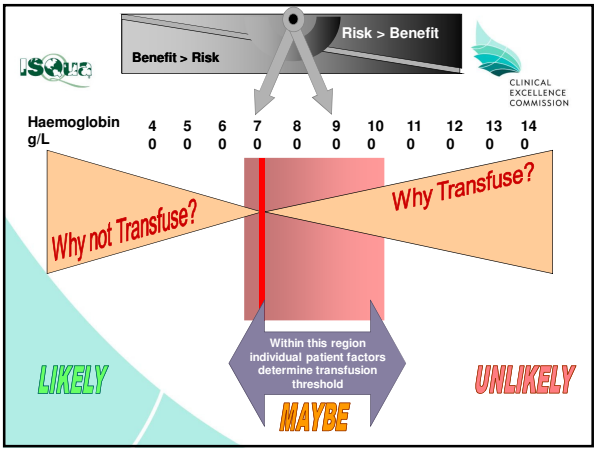
Vision: To achieve excellence in transfusion medicine

NSW Blood Budget 2008-2009

NSW's total projected Blood Budget for this year 08-09 is **$257,519,200**

This is made up as follows:

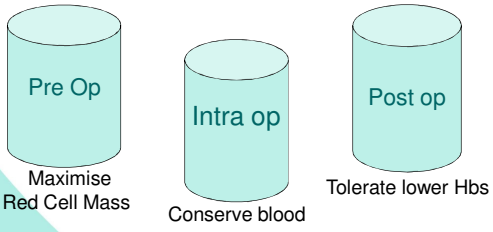
- State contribution (37%) $95,282,113
- Commonwealth contribution (63%) $162,237,087



The Issues allogeneic transfusions "a tissue transplant"

- Scarce and precious resource
- Responsibility to the donor
- Immunomodulation
- Adverse events eg TRALI, GAVHD, febrile reactions, bacterial contamination etc
- Mismatch transfusion = error
- Cost
- Viral risk
- CJD and Dengue Fever
- Lack of evidence of efficacy in stable patients

Patient Management Three Pillars



Diagnostics

Data

- Red Cell audit in March 2007
- Data linkage- Red Cell Utilisation Database

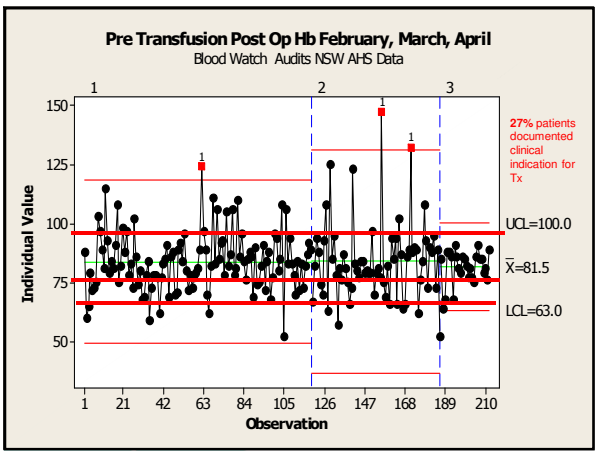
Qualitative Research

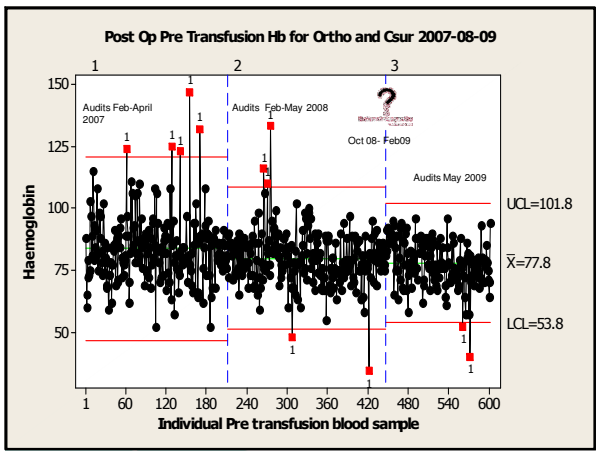
- Market research into prescribing behaviours of senior clinicians

Literature Review- emerging evidence

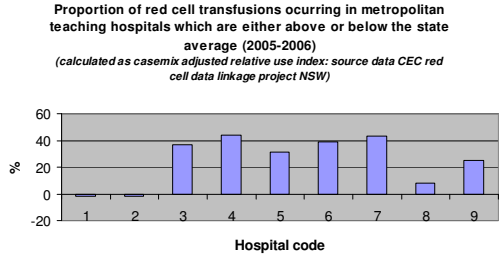
Red Cell Audit Results 2007

- 12.7% pts anaemic & had surgery with Hb's under 105g/L
- 4% received transfusion with Hb's over 100g/L
- 95% had post-op transfusion with Hb's over 70g/L
- Standard dose 2 units





Relative Use Database Metropolitan Hospitals



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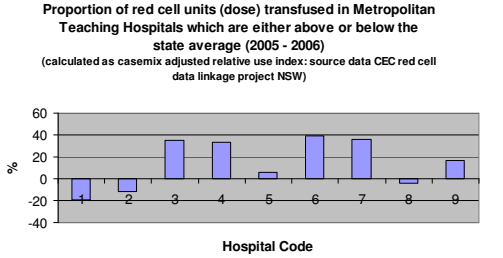
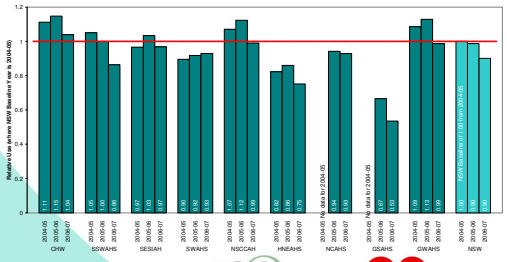


Overall % of Reduction in Red Cell usage in NSW Teaching Hospitals for in Patients 2007-2008

2006-2007 performance	Teaching Hospital	% improvement by hospital to previous year*
Highest Relative use	A	-19%
	B	-24%
Intermediate	C	-5%
	D	2%
	E	2%
Lowest	F	-14%
	G	-8%

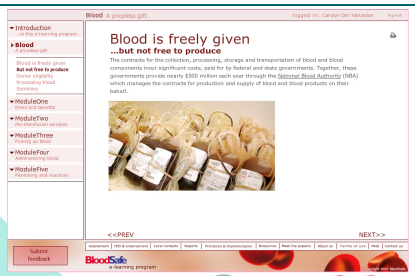
*Overall hospital activity increased during 2007 -2008

Red Cell Utilisation Rate: Relative rate of red cell transfusion occurring in NSW public hospitals: calculated as case mix adjusted relative use index, for overnight separations where the benchmark is NSW 2005/06 baseline

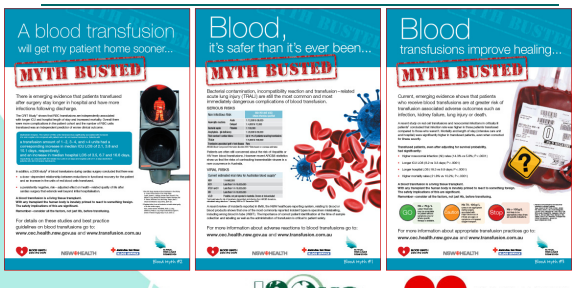


- The relative use graph shows an overall 10% reduction in-patient red cell usage between 2005- 2007.
- This figure is an underestimate due to only hospital overnight admissions being included,
- 9168 units were saved.
- Equates to a direct product cost of approximately **$2,383,855** savings across the State (based on AUD$260 per unit). This figure is inclusive of Commonwealth Government's 63% contribution to the States blood budget.

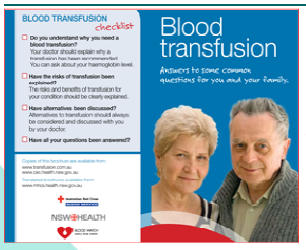
www.bloodsafelearning.org.au



Blood Myths & the Evidence



Patient Information Brochure



- Available to download in 10 languages at

www.mhcs.health.nsw.gov.au

Diagnostic

- Market Research into prescribing practice of surgeons
- Co-sponsored by National Blood Authority
- In-depth interviews with 21 senior surgeons and physicians, rural & metro
- "Senior doctors had a high personal confidence in prescribing habits, with a general assumption that they represent best practice. This is often incorrect, yet there is a reluctance to recognise this even when presented with the guidelines"

www.thetransfusionquestion.com.au

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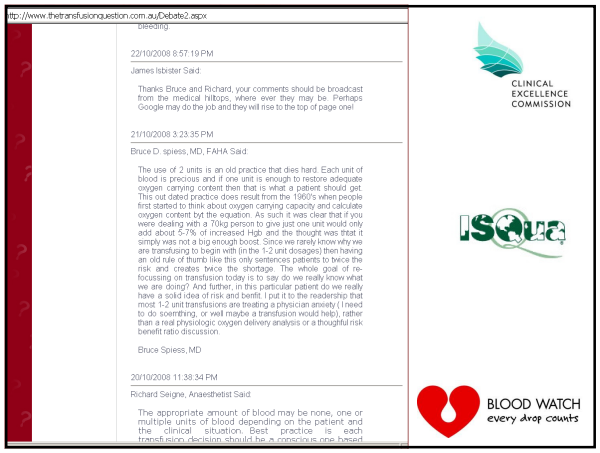
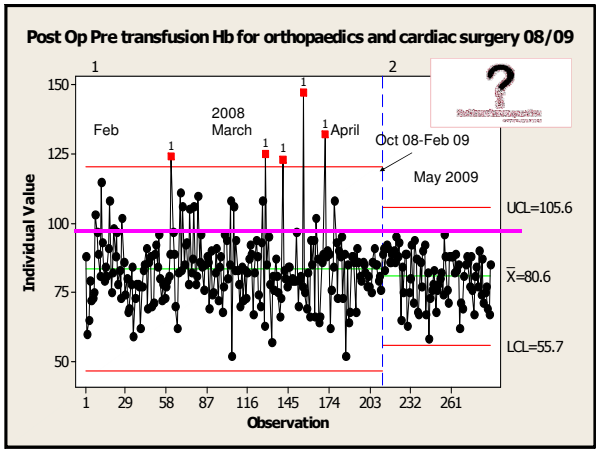


Results of the Campaign

- 2900 unique visitors between Oct 08- June 09
- Dwell time- approx 4mins
- Visitors from over 45 countries
- Over 60 debate posts
- Did it have any impact on clinical practice?



Next Steps 2009-2011

- Continue auditing performance
- Continue to spread system changes /strategies around all fresh blood products
- Extend communications initiative to all surgical groups –www.thetransfusionquestion.com.au
- Improve haemovigilance and reporting
- Focus on education around Iron Deficiency Anaemia
- Ongoing research/ evaluation of current program