



BLOOD WATCH  
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# Blood Watch

## Understanding and Influencing Prescribing Behaviour- Market Research

TORC Melbourne 08

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# Blood Watch

- A program of the Clinical Excellence Commission

Aim: To achieve excellence in  
transfusion medicine



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# Our Approach

## Fresh Products Advisory Committee- NSW Health 2004 Priority areas:

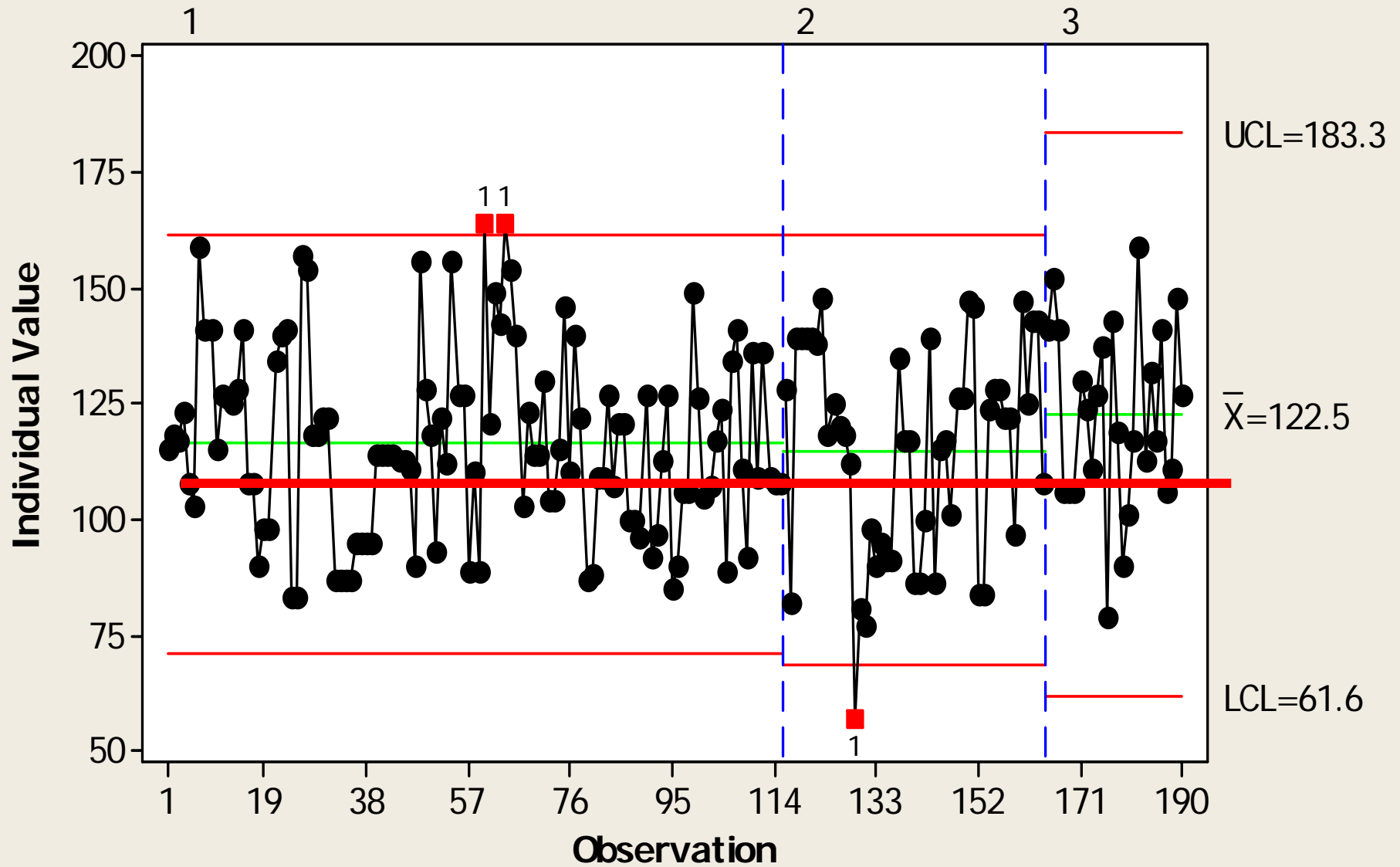
- Appropriateness
- Collection & analysis of data
- Clinical Governance
- Education
- Communication
- Cost



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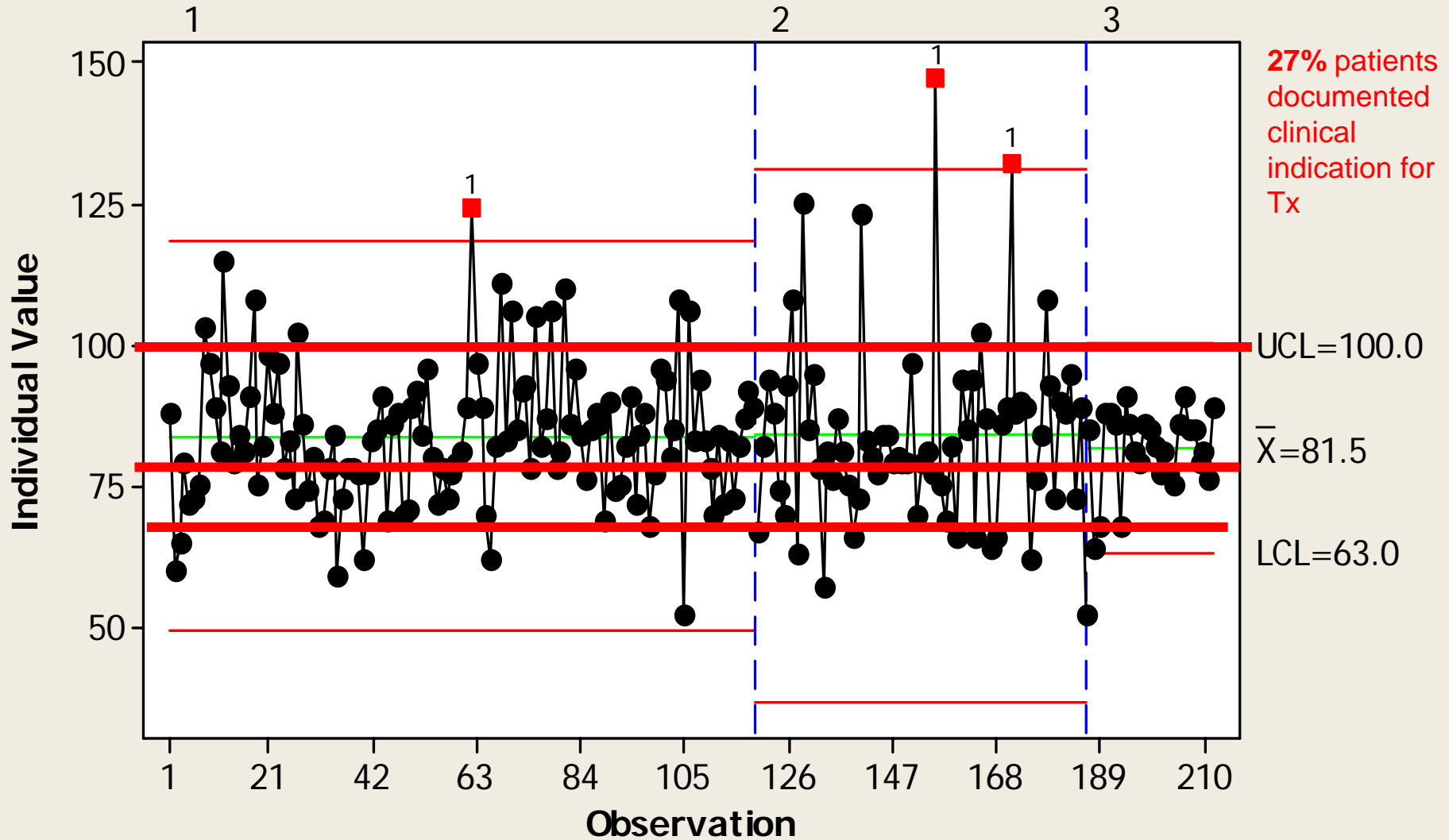
# Pre Admission Pre Op HB February, March, April

Blood Watch April Audits NSW AHS Data



# Pre Transfusion Post Op Hb February, March, April

Blood Watch Audits NSW AHS Data

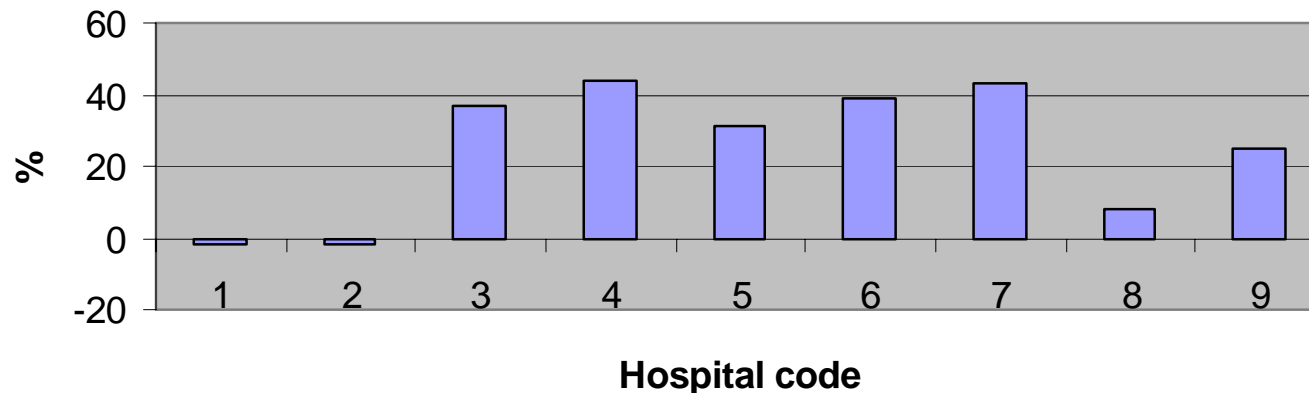




# Relative Use Database- Metropolitan Hospitals

**Proportion of red cell transfusions occurring in metropolitan teaching hospitals which are either above or below the state average (2005-2006)**

*(calculated as casemix adjusted relative use index: source data CEC red cell data linkage project NSW)*

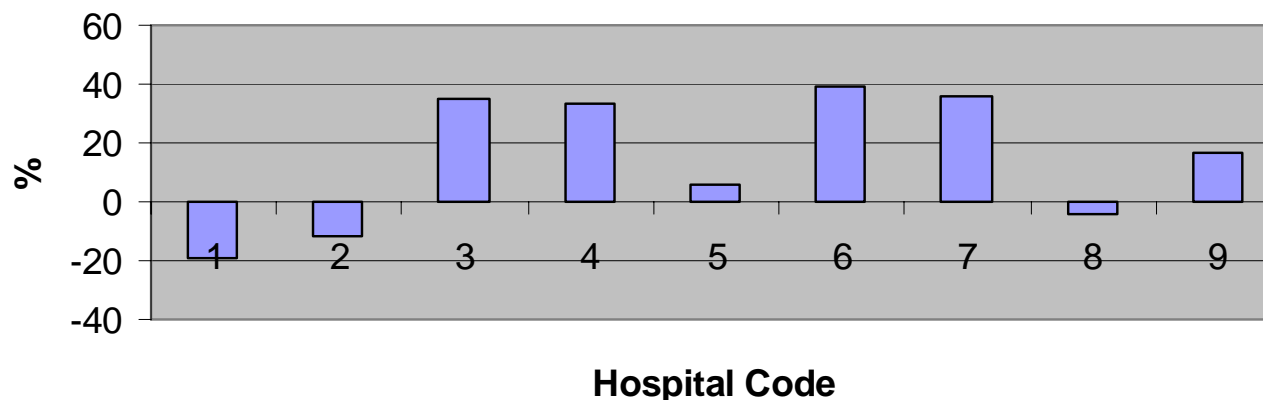


# Relative Use Database – Metropolitan Hospitals



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**Proportion of red cell units (dose) transfused in Metropolitan Teaching Hospitals which are either above or below the state average (2005 - 2006)**  
(calculated as casemix adjusted relative use index: source data CEC red cell data linkage project NSW)



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# Our aim



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- Need to communicate directly with senior clinicians about risks, emerging evidence and dose
- Advertising agency or Market Research?
- Eureka Strategic Research



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# Research objectives



- To develop an understanding of clinician perspectives and knowledge relating to transfusion practice
- To identify marketing and communication strategies to improve prescribing practice from both a national and a state perspective
- To identify how and where the target audience prefers to receive key clinical messages



# Research Objectives



- To help inform a marketing and communications strategy for the Blood Watch program
- To provide recommendations to assist in the development of a national program to enhance compliance with the NHMRC guidelines



# Methodology

## Interview structure



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	Metro	Regional/ Rural & Remote
Cardiac	3 x Cardiac Surgeons 2 x Cardiac Registrars	
Orthopaedic	2 x Orthopaedic Surgeons 2 x Orthopaedic Registrars	1 x Orthopaedic Surgeon 1 x Orthopaedic Registrar
Gastroenterology	2 x Gastroenterologists 1 x Gastroenterology Registrar	1 x Gastroenterologist 1 x Gastroenterology Registrar
Anaesthetists	2 x Anaesthetists 1 x Anaesthetic Registrar	1 x Anaesthetist 1 x Anaesthetic Registrar



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# Methodology

## Specifications



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Interviews conducted across metropolitan and regional locations, face-to-face, but some via telephone

Interviews 45 mins - 1hour duration

- Incentives for registrars \$250, for orthopaedic surgeons and anaesthetists \$300, and for cardiac surgeons and gastroenterologists \$350

Pilot interview conducted to assess suitability of discussion guide



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# Current practices

## Factors influencing prescribing decisions



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The main clinical indicator taken into account is Hb level, but most say they will always take other factors into account

We're not really supposed to think purely on numbers...you take it on a patient by patient basis on what sort of comorbidities they've got. (Anaesthetist)

Yeah, you get the result and then you think about the patient and you go, "Do I think they can tolerate that? What are they like at the time?" You wouldn't do it just on the basis of a number. (Ortho registrar)

Other factors/indicators include:

- Co-morbidities (esp anaemia & ischemic heart disease)
- Level of blood loss by volume
- Anticipation of potential blood loss
- General Health
- Age
- Rehabilitation



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# Current practices



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Most will prescribe 2 units of blood at once

- One unit seen as unlikely to make any difference

I don't think one is going to have enough of an effect. (Anaesthetist)

If you're transfusing one, then they probably don't need it. (Ortho registrar)

My theory, that I can't back up scientifically, is if they need it they get two. (Ortho Surgeon)

- Often the result of habit, rather than evidence
- For outpatients, often seen as impractical to prescribe single unit

Most feel confident about prescribing blood

You're either a good doctor or you're not and it's part of being a good doctor in the field. You're confident about your other practices, why wouldn't you be about that?

(Gastroenterologist)

# Current practices



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Most specialists report independent decision-making, although consultation on complicated cases not uncommon

I don't question if it comes from a consultant. (Ortho registrar)

Registrars often seek advice from consultants or make decisions based upon consultants' practice

I think it's helpful to hear another opinion, especially a hematologist. We often consult them. (Cardiac surgeon)

Some sought advice from anaesthetists or haematologists

In more complicated patients, you tend to call the haematology team or the blood bank haematologists. (Cardiac registrar)



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# Attitudes and knowledge

## Transfusion risks



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### Blood transfusions seen as very safe

- Blood supply regarded as very clean
- Likelihood of risks very low

Well, there are risks, but the risks are incredibly tiny.  
(Anaesthetist)

### All could name some risks associated with Tx

Most commonly named risks were infection, allergic reaction, and mismatched blood

### Very few named all risks unprompted

- Some risks highly unlikely to occur or disputed altogether, esp. extended length of hospital stay and likelihood of GVHD and TRALI in RBC tx

I don't know. Can you get [GVHD] from transfusion?  
That must be very rare.  
(Ortho surgeon)

There's something called 'TRALI Transfusion' when there's an acute lung injury, which I don't know much about.

(Anaesthetist)



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# Inappropriate transfusions

## Awareness



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- Most significantly underestimated proportion of inappropriate transfusions

I think it's not very many. 5%-10%, nothing more than that based on what I've seen. (Cardiac Registrar)

- Most commonly, doctors believed

inappropriate transfusions primarily done by junior doctors

- Also felt to be caused by lack of knowledge of guidelines

I don't think people are trying to actively go away from the guidelines, maybe they just aren't aware of them. (Gastro Registrar)

- Extreme reluctance to consider own practice as falling outside the guidelines ('it must be other doctors/ units/ hospitals')

I am not involved in inappropriate transfusions. (Ortho Registrar)

I haven't seen any inappropriate transfusions. (Cardiac Registrar)



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# Communications



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Assumption that guidelines exist, but little knowledge of details

I'm aware of guides in the blood bank, but I haven't seen one recently. (Anaesthetist)

Oh, I've come across in my time - but not recently I think - guidelines from the NSW blood bank. But the details, I couldn't give you. (Ortho Surgeon)

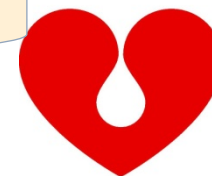
Most had not specifically seen the NHMRC Guidelines

Some were familiar with the Red Cross guidelines

We're all quite familiar with the guidelines that are issued by the Australian Red Cross service. (Ortho Registrar)

Others felt they had seen guidelines, but could not specify from who (few made reference to hospital- or unit-specific protocols)

Australian guidelines? I have heard during our teaching but I haven't seen any actual document with the criteria. (Gastro Registrar)



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# Communications



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Most unlikely to use RCBS lanyard

I'm not sure if most people would carry it because there are so many of these things  
(Cardio registrar)

Willingness to trust NH&MRC as an authority on blood transfusion, as well as Haematologists, specialist colleges (ARCBS also mentioned by some)

NSW Health not perceived as a reliable source of information about blood transfusion

They have no interest in health or patient outcomes. They're only interested in financial outcomes.  
(Gastroenterologist)

Some perceived CEC was part of NSW Health, and therefore were sceptical

I don't take medical advice from government bureaucracies just as I don't take tax advice from lawyers. (Ortho registrar)



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# Conclusions and recommendations



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High personal confidence in prescribing habits, general assumption that they represent best practice

- Often incorrect, yet reluctance to recognise this

Low level of interest in information about blood transfusion

- Comfortable with existing knowledge levels
- Prioritise information related to their specialisation or to more 'important' facets of surgery

Most surprised by high rate of inappropriate transfusions, and nearly always assume it is other doctors at fault



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# Next Steps



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- Communications plan and creative campaign
- Commission advertising agency to create 'sticky' messages and plan
- Key issues- triggers for tx, dosage
- Delivery of messages? Who, How, When?
- Roll out nationally



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# the Transfusion question



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Bruce D. Spiess, MD Said:

I have been asked what would I do on the ward if I did not have all the fancy "do-dads" to assess oxygen supply demand and delivery. Well, I believe you can look at heart rate, blood pressure, pulse oximetry and get an idea if the patient is stable. If the patient is stable then do nothing- he/she does not need a transfusion. Just because he/she hit your arbitrary trigger does not mean giving a transfusion will prevent some badness.



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# Next Steps



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- [www.thetransfusionquestion.com.au](http://www.thetransfusionquestion.com.au)
- A joint initiative of the NBA and the CEC



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# Our Progress so far

- We have repeated the data linkage
- We have repeated the local audits
- Our clinical leads are actively engaging with their colleagues in academic detailing activities
- We are improving consent processes and have designed a new patient info brochure
- We have commenced the transfusion question



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# Overall % of reduction in red cell usage in NSW Teaching Hospitals for in patients 2007-08

2006-2007 performance	Teaching Hospital	% improvement by hospital compared 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

# Our progress to date



Reduction in the issue of red cells, platelets and FFP reported by NSW ARCBS Jul 07- April 08

CEC Data linkage: Overall red cell usage has fallen by **9%** for all in-patients. Overall hospital activity has increased during period.



# Thankyou



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