

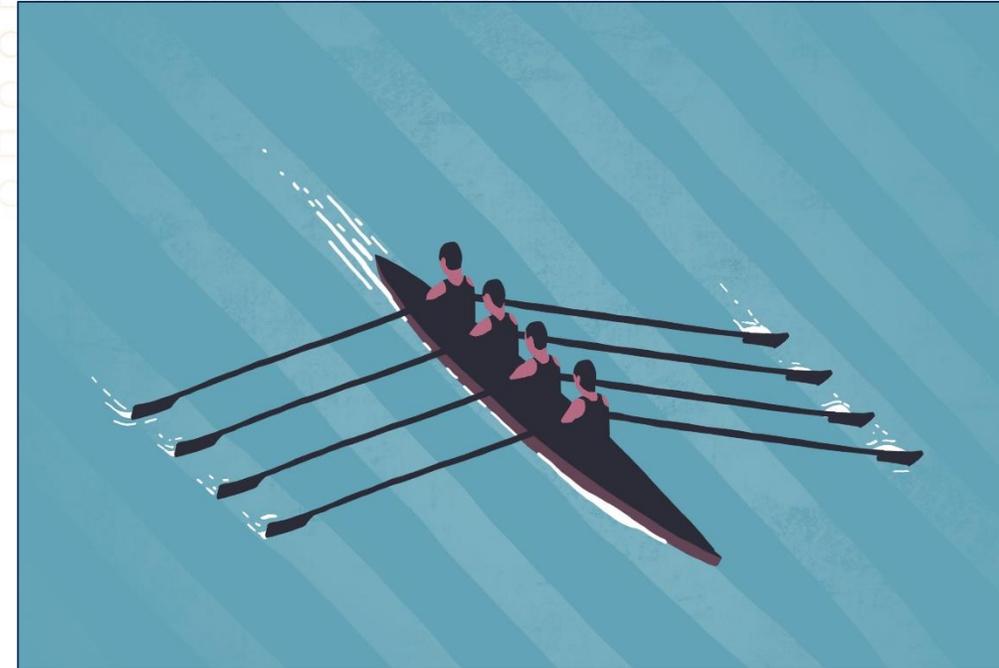
Leading Successful Teams Requires A High Level Of Collaboration



*Learn the essentials to enhance your personal effectiveness
11am -12.30pm*

*Associate Professor Bernie Harrison FACHSM
Director ACHS Improvement Academy*

*Ms Katie Robinson ACHSQIL
Clinical Educator ACHS Improvement Academy*



Acknowledgement of Country

I would like to acknowledge the traditional custodians of this land, the Turrbal and Yuggera people, the traditional owners of the lands at South Bank. I pay my respects to Elders past and present for they hold the memories, the traditions, the culture and hopes of Aboriginal and Torres Strait Islander Australians.



Objectives

- Understand principles of collaboration
- Gain insights into what happens when teams don't collaborate
- Recognise the importance of visionary leadership in collaboration
- Understand the power of successful teams who collaborate
- Recognise the skill set and leadership attributes of successful collaboration



Collaboration and team work is required when

- the task is usually complex
- creativity is needed
- the path forward is often unclear
- fast learning is necessary
- high commitment is desirable
- implementation requires the cooperation of others
- the task or process is often cross functional



**From The Team Handbook, Sholtes, Joiner, Streibel*



It is well documented globally health has the following problems

1. Variation in clinical practice
2. High rates of inappropriate care
3. Preventable injury and death
4. A striking inability to do “what we know works”
5. A large amount of waste and spiraling prices which limits access

Engineering a Learning Healthcare System: A Look at the Future: Workshop Summary (2011)

By National Academy of Engineering, Institute of Medicine Dr Brent James

Atlas of Variation- Australia

1. High rates of healthcare interventions that have a risk of harm and uncertain or no benefit, suggesting a need for decisive action
2. High rates of admission for potentially preventable conditions or complications of chronic illness that may be due to a lack of integrated care and variable implementation of evidence-based care
3. Low rates of investigation or treatment in groups with the highest burden of disease, indicating that barriers to appropriate access should be investigated and dealt with
4. Markedly higher rates of interventions, or repeat interventions, in some areas, without an obvious reason, raising concern about the degree of benefit gained, potential harms, and opportunity costs to the health system.

AUSTRALIAN COMMISSION
ON SAFETY AND QUALITY IN HEALTH CARE



The Fourth Australian Atlas of Healthcare Variation

2021



Teamwork - your personal experience

Think of the behavioural style of the leader in either of these scenarios

1. The very best team you have been a member of that achieved and/or exceeded its objectives

OR

2. The very worst team that you have been a member of which failed to deliver its objectives

Each table to provide feedback



Measuring climate and culture

The *Organizational Culture Inventory*[®] (OCI[®]) is the most widely-used and thoroughly-researched tool for measuring organizational culture in the world. outcomes including:

- employee engagement- discretionary effort
- safety and reliability
- successful merger integration
- creativity
- adaptability
- customer satisfaction



Research and Development by [Robert A. Cooke, Ph.D.](#) and [J. Clayton Lafferty, Ph.D.](#)

"Culture is everything."

Lou Gerstner of IBM (2002)

Impact of Leadership styles on driving climate

Coercive	Demands immediate compliance	- 0.26
Authoritative	Mobilises towards a vision	+ 0.54
Affiliative	Creates harmony	+ 0.46
Democratic	Consensus thru' participation	+ 0.43
Pacesetting	High standards of performance	- 0.25
Coaching	Develops people for future	+ 0.42





<https://www.youtube.com/watch?v=K3axU2b0dDk>

What is the problem here?

1. Production pressure
2. Cost as a key driver
3. No shared vision or purpose
4. Prepared to bully rather than collaborate
5. Disregard for welfare of team members and ultimately the organisation
6. Blame culture
7. Low moral
8. Low trust
9. Poor leadership
10. Poor governance oversight





What is going right here?

1. They are working to a shared goal
2. Everyone knows their role
3. High trust
4. Cohesive
5. Acknowledge each other's success
6. Well prepared
7. Super focussed
8. Continually improving with metrics
9. Strong leadership- empathic, collaborative
10. Strong governance oversight – solution focussed



Collaborative Leaders

- Willingness to take risks
- Eager listeners
- Passion for the cause
- Optimistic about the future
- Able to share knowledge, power and credit



What is resilience?

Dr Sam Harvey: Black Dog Institute

- Resilience is someone's ability to bounce back in the face of challenges or some sort of trauma.
- Resilient people have strong resources and skills to manage stress and conflict as well as a good support network to help them deal with the pressures of work.
- Resilience is more than coping, however. Resilient people are also flexible, adapt to new and different situations, learn from experience, are optimistic and ask for help when they need it.



Building this into practice

1. Problem/s that need solving?
2. How do you know it's a problem?
3. Can you create a compelling vision?
4. Who do you need to work on this with you?
5. How will you engage with them?
6. How do you manage the team dynamics
7. How do you stop the 'clay pigeon shooters'?
8. How do you stop arguments and disagreements?



Tuckman: Team Effectiveness

Forming High dependence on leader for guidance and direction. Little agreement on team aims other than received from leader. Individual roles and responsibilities are unclear. Leader must be prepared to answer lots of questions about the team's purpose, objectives and external relationships. Processes are often ignored. Members test tolerance of system and leader. Leader directs

Storming Decisions don't come easily within group. Team members vie for position as they attempt to establish themselves in relation to other team members and the leader, who might receive challenges from team members. Clarity of purpose increases but plenty of uncertainties persist. Cliques and factions form and there may be power struggles. The team needs to be focused on its goals

Norming Agreement and consensus is largely formed among team, who respond well to facilitation by leader. Roles and responsibilities are clear and accepted. Big decisions are made by group agreement. Smaller decisions may be delegated to individuals or small teams within group. Commitment and unity is strong. The team may engage in fun and social activities.

Tuckman forming storming norming performing model
<http://www.businessballs.com/tuckmanformingstormingnormingperforming.htm>
Bruce Tuckman's 1965 Forming Storming Norming Performing team-development model

Performing The team is more strategically aware; the team knows clearly why it is doing what it is doing. The team has a shared vision and is able to stand on its own feet with no interference or participation from the leader. There is a focus on over-achieving goals, and the team makes most of the decisions against criteria agreed with the leader. The team has a high degree of autonomy. Disagreements occur but now they are resolved within the team positively and necessary changes to processes and structure are made by the team. The team is able to work towards achieving the goal, and also to attend to relationship, style and process issues along the way. Team members look after each other. The team requires delegated tasks and projects from the leader. The team does not need to be instructed or assisted. Team members might ask for assistance from the leader with personal and interpersonal development. Leader delegates and oversees

Your new best friend in achieving consensus and building collaboration!

Post it notes!

Finding a solution acceptable enough that all members can support it; no member opposes it

It is not

1. a unanimous vote -- consensus may not represent everyone's first priorities
2. a majority vote -- in a majority vote, only the majority gets something they are happy with; people in the minority may get something they don't want at all, which is not consensus where everyone totally satisfied

Scholtes PR The team handbook. Madison WI:Joiner Assoc Inc. 1989:pg 2-40

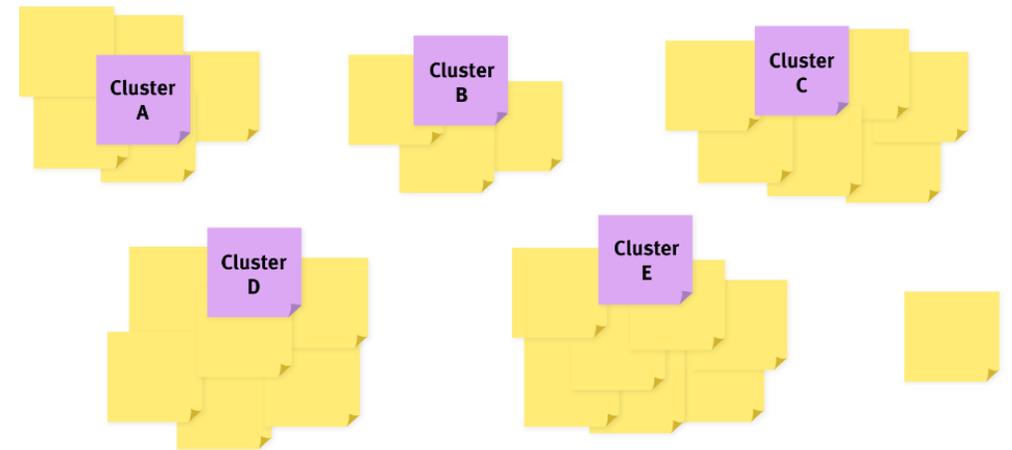


What gets in the way of collaboration in your organization?



1. Write one issue per post it note
2. Keep writing until you run out of issues
3. Stick them on the butcher's paper
4. Theme the post it notes – content analysis (Affinity Diagram)
5. What are the key themes?
6. What are the potential solutions?

Affinity Diagramming



Collaboration at the conceptual level involves:

1. Awareness – We become part of a working entity with a shared purpose
2. Motivation – We drive to gain consensus in problem-solving or development
3. Self-synchronization – We decide as individuals when things need to happen
4. Participation – We participate in collaboration and we expect others to participate
5. Mediation – We negotiate and we collaborate together and find a middle point
6. Reciprocity – We share and we expect sharing in return through reciprocity
7. Reflection – We think and we consider alternatives
8. Engagement – We proactively engage rather than wait and see

<https://www.aiim.org/what-is-collaboration>

What's in it for me? (WIFM)

1. Part of something bigger than self
2. Sense of purpose
3. Sense of achievement
4. Reward and recognition
5. New skills
6. New friends!
7. Success for the organisation
8. Success for customers
9. Success for patients



Collaborative Charter

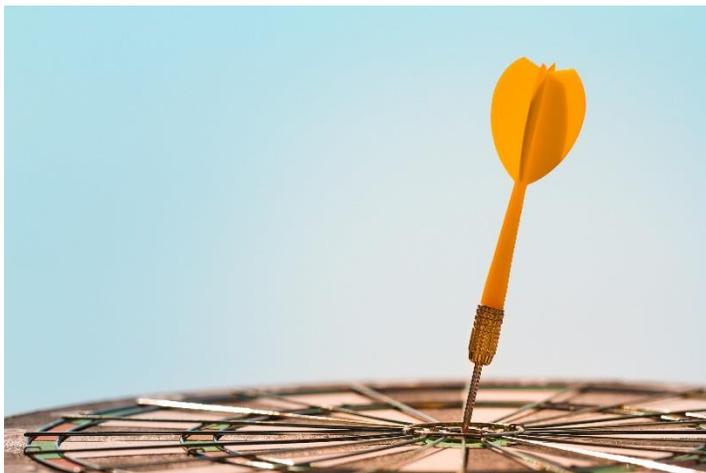


Establishes a common vision for the work

- Problem statement
- Gap between evidence and practice
- Mission statement
- Business case for improvement
- Specific goals
- Expectations

1996 IHI published its first Breakthrough Series Guide, “Reducing Delays and Waiting Times Throughout the Healthcare System.”

IHI’s Breakthrough Series (BTS) is an improvement method that relies on spread and adaptation of existing knowledge to multiple settings to accomplish a common aim.

A microscopic view of red blood cells, appearing as reddish, biconcave discs against a dark background.

REPORT
The impact of the blood watch programme on the elective surgical blood usage in NSW – a population-based linkage project

Bernie Harrison
Jack Chen
Carolyn Der Vartanian
Paul Tridgell
Cliff Hughes

PUBLICATION
Harrison BT, Chen J, Der Vartanian C et al. Improving red cell transfusion in the elective surgical setting: an improvement collaborative with evaluation. *Vox Sanguinis, International Journal of Transfusion Medicine*, (2015) DOI: 10.1111/vox.122372014

The Campbell Centre for Health Services Research, UNSW
Australian Institute for Health Innovation



BLOOD WATCH
every drop counts

NSW Blood Watch Program

Eliminate risk and harm to patients

Preserve a scarce resource

Provide excellence in transfusion medicine

Bernie Harrison Director Clinical Excellence Commission 2007

Carolyn Der Vartanian Program Leader

Fresh Products Advisory Committee-NSW Health 2004

Priority Areas:

1. Appropriateness of red cell transfusion
2. Reporting of Adverse Events & Haemovigilance
3. Clinical Governance to support practice improvement
4. Education – Senior clinicians, JMO's Nurses, Lab staff around appropriateness, risks, Iron Deficiency Anaemia
5. Communication to and within the system

Harm Events

1. Two wrong blood to patient transfusions resulting in death
 2. Research 30% of red cell transfusions in stable adults with normal bone marrow do not meet evidence for administration.
 3. Harm of blood products outweighing benefit for large numbers of patients.
-

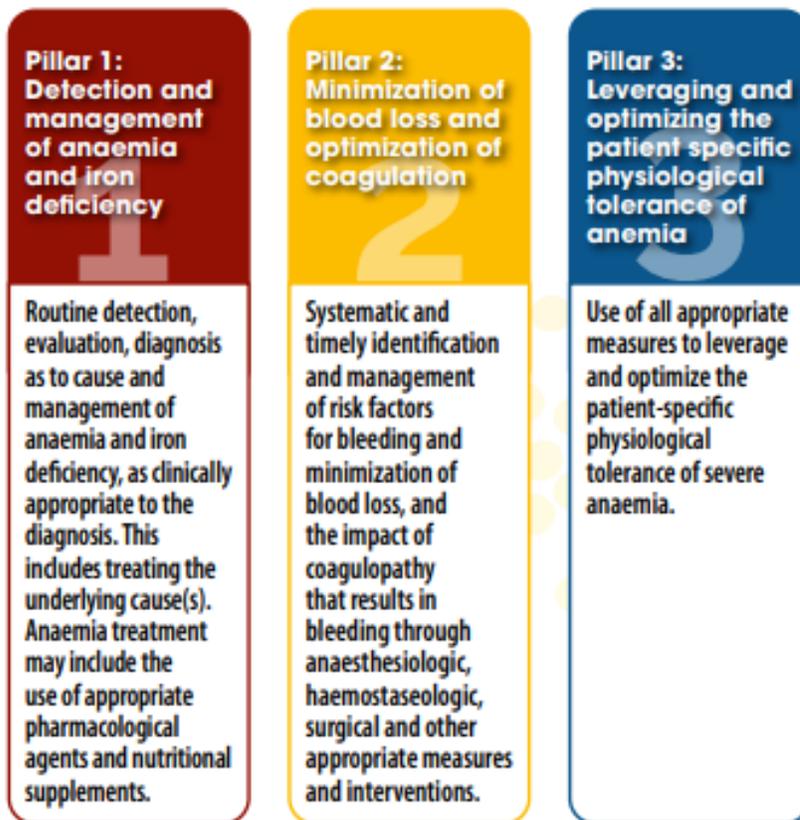
Normal Hb for haemodynamically stable adults with normal bone marrow

Ages and Genders	Normal Haemoglobin Levels (gm/dL)
Adult Males	14 - 18
Adult Women	12 - 16
Men After Middle Age	12.4 - 14.9
Women After Middle Age	11 - 13.8

<https://www.medicinenet.com/hemoglobin/article.htm>

THE URGENT NEED TO IMPLEMENT PATIENT BLOOD MANAGEMENT

Three pillars of patient blood management



Three Pillars

1. Detection and management of anaemia and iron deficiency
2. Minimisation of blood loss and optimisation of coagulation
3. Leveraging and optimising the patient specific physiological tolerance of anaemia

Transfusion Triggers

Risks of a blood transfusion

- Transmitted infectious diseases
- Immunosuppression
- Virus
- Bacteria
- Non infectious diseases
- Haemolytic adverse reaction
- Human error



Checklist of transfusion triggers

For each RBC the transfusion trigger must be stated!

- (Exception: massive transfusion)

Hb < 7 g/dl

- Independent of ability to tolerate anaemia

Hb 7 - 8 g/dl

- Evidence of anaemic hypoxia

(Tachycardia, hypotension, ECG-ischæmia, lactic acidosis)

- Ability to tolerate anaemia impaired, existing risk factors

(CHD, cardiac insufficiency, cerebral-vascular disease)

- (Other indicators:)

Hb 8 - 10 g/dl

- Evidence of anaemic hypoxia (Tachycardia, hypotension, ECG-ischæmia, lactic acidosis)
Transfusion at Hb > 8 g/dl associated with an unclear risk-benefit-ratio (indication only in individual cases, low level of recommendation (2C)).



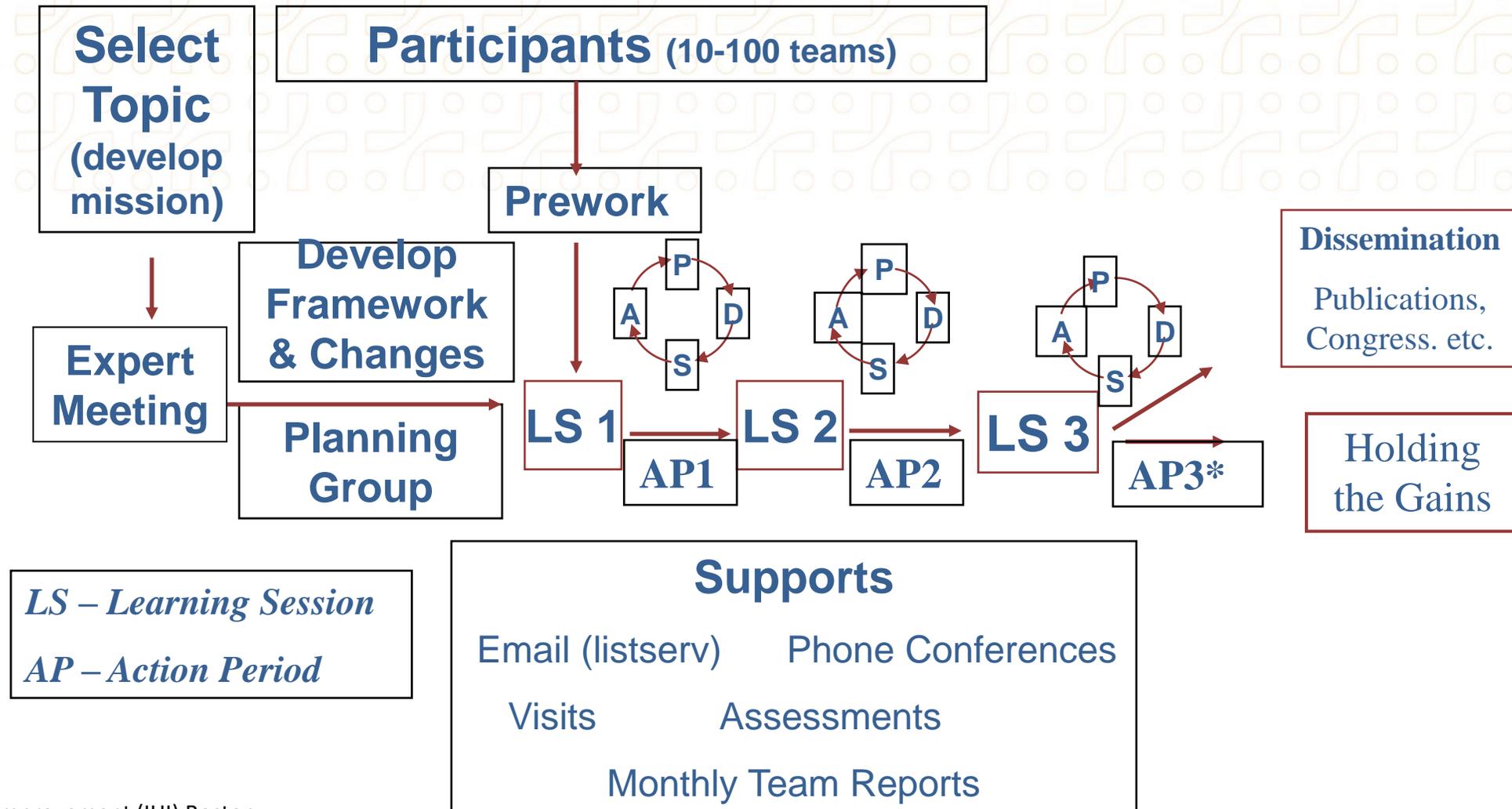
Stakeholders

- Patients
- Surgeons
- Physicians
- Colleges
- Medical Defence
- Nurses
- Government State and Federal
- Treasury
- Blood bankers
- Pathologists
- ARBS
- Donors of blood
- Coroner
- Lawyers
- JHWs

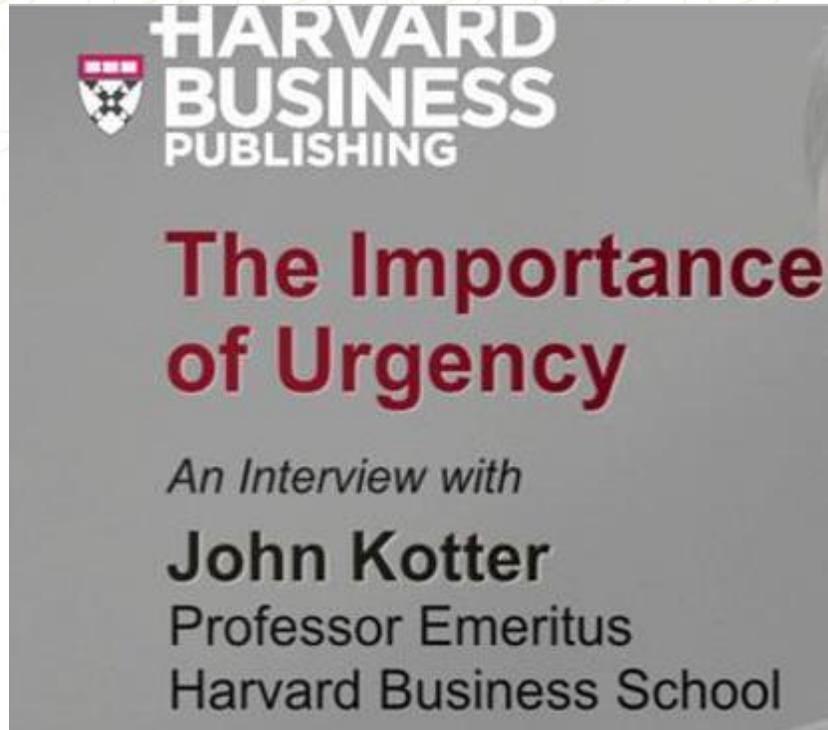


Breakthrough Collaborative

(6 to 18 months time frame)



Change Management Approach (Kotter 2011)



1. Establish a sense of urgency
2. Form a powerful coalition
3. Create a clear vision expressed simply
4. Communicate the vision
5. Empower others to act on the vision
6. Plan for and create short term wins
7. Consolidate improvements and produce more change
8. Institutionalise the new approaches

Blood Myths & the Evidence

A blood transfusion will get my patient home sooner...

MYTH BUSTED

There is emerging evidence that patients transfused after surgery stay longer in hospital and have more infections following discharge.

The CRIT Study¹ shows that RBC transfusions are independently associated with longer ICU and hospital length of stay and increased mortality. Overall there were more complications in the patient cohort and the number of RBC units transfused was an independent predictor of worse clinical outcome.

Meta-Analysis: The number of RBC units transfused was significantly associated with increased ICU and hospital LOS compared with patients who did not receive transfusions. Patients with a transfusion amount of 1-2, 3-4, and >4 units had a corresponding increase in median ICU LOS of 2.1, 3.6 and 10.1 days, respectively; and an increase in median hospital LOS of 3.5, 6.7 and 16.6 respectively, as compared with the median ICU LOS of 4.6 days and hospital LOS of 11.6 days-observed in patients who did not receive transfusions.

- In addition, a 2006 study² of blood transfusions during cardiac surgery concluded that
- a dose-dependent relationship between reductions in functional recovery for and an increase in the units of red blood cells transfused.
 - a persistently negative, risk-adjusted effect on health-related quality of life in cardiac surgery that extends well beyond initial hospitalisation.

A blood transfusion is a living tissue transplant. With any transplant the human body is innately primed to react to something. The safety implications of this are significant.

Remember-consider all the factors, not just Hb, before transfusing.

For details on these studies and best practice guidelines on blood transfusions go to: www.cec.health.nsw.gov.au and www.transfusion.com.au



Blood, it's safer than it's ever been.

MYTH BUSTED

Bacterial contamination, incompatibility reaction and transfusion-related acute lung injury (TRALI) are still the most common and most immediately dangerous complications of blood transfusion.

Non Infectious Risk		RISK PER UNIT USED (Units delivered per Unit)
Haemolytic reactions	Acute	1:12,000 to 38,000
	Delayed	1:4,000 to 12,000
Bacterial sepsis	Platelets	1:100,000
Anaphylaxis - IgA deficiency		1:20,000 to 50,000
Risk transfused/ cardiac failure		1 in 10% of patients receiving transfusions
TRALI		1:5,000 to 100,000
Transfusion-associated graft v host disease	Rare	

ARCBS Blood Component Information Booklet 2006 *Table based on overseas estimates

Patients are often still concerned about the risk of Hepatitis or HIV from blood transfusions. However recent ARCBS statistics show us that the risks of contracting transmissible viruses is a rare occurrence in Australia.

VIRAL RISKS	
Current estimated viral risks for Australian blood supply*	
HIV	1 in 100,000,000
HBV	Less than 1 in 10,000,000
HCV	Less than 1 in 10,000,000
HTLV I and II	Less than 1 in 10,000,000
HTLV	Less than 1 in 10,000,000

*Data references to risk of transfusion transmitted infection from ARCBS database, calculated using data from 1 January 2005 to 31 December 2006.

A recent review of incidents reported in IMIS, the NSW healthcare reporting system, relating to blood or blood products shows that one of the most commonly reported incident types is specimen mislabelling, including wrong blood in tube (WBIT). The importance of correct patient identification at the time of sample collection and labelling as well as the administration of transfusion is critical to patient safety.

For more information about adverse reactions to blood transfusions go to: www.cec.health.nsw.gov.au and www.transfusion.com.au



Blood transfusions improve healing...

MYTH BUSTED

Current, emerging evidence shows that patients who receive blood transfusions are at greater risk of transfusion associated adverse outcomes such as infection, kidney failure, lung injury or death.

A recent study on red cell transfusions and nosocomial infections in critically ill patients³ concluded that infection rate was higher in those patients transfused compared to those who weren't. Mortality and length of stay (intensive care unit and hospital) were significantly higher in transfused patients, even when corrected for illness severity.

Transfused patients, even after adjusting for survival probability, had significantly:

- Higher nosocomial infection (NI) rates (14.3% vs 5.8%; P < .0001)
- Longer ICU LOS (8.2 vs 3.3 days; P < .0001)
- Longer hospital LOS (18.3 vs 9.9 days; P < .0001)
- Higher mortality rates (21.8% vs 10.2%; P < .0001)

A blood transfusion is a living tissue transplant. With any transplant the human body is innately primed to react to something foreign. The safety implications of this are significant.

Remember-consider all the factors, not just Hb, before transfusing.

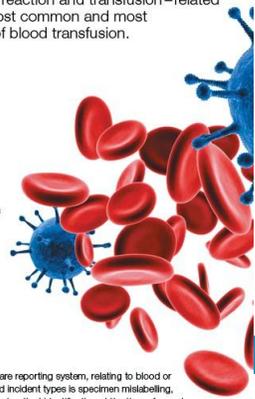
<p>GO Hb < 70 g/L Lower transfusions may be acceptable for patient without symptoms and/or where specific therapy is available.</p>	<p>Caution Hb 70 - 100 g/L Likely to be appropriate during surgery associated with major blood loss or if there are signs or symptoms of impaired oxygen transport.</p>	<p>STOP Hb > 100 g/L Not likely to be appropriate unless there are specific indications.</p>
---	--	--

1. Red blood transfusions are essential for oxygenating tissues. However, transfusions are not always necessary. The Australian Red Cross Blood Service (ARCBS) has developed a clinical practice guideline for transfusion. This guideline is based on the latest evidence and is available at www.transfusion.com.au. It is not intended to replace clinical judgement. ARCBS is a not-for-profit organisation. ARCBS is a member of the Australian Red Cross. ARCBS is a member of the Australian Red Cross Blood Service. ARCBS is a member of the Australian Red Cross Blood Service. ARCBS is a member of the Australian Red Cross Blood Service.

For more information about appropriate transfusion practices go to: www.cec.health.nsw.gov.au and www.transfusion.com.au



Blood Myth #3



Market Research into medical prescribing of red cells in elective transfusions

- JMOs were doing what the boss wanted
 - Posters removed 'push back' from consultants
 - Restrictive thresholds hazardous in some facilities for blood bankers!
 - Nurses, blood bankers, pathologists disempowered
 - Patient consent variable
-



Communications

- Assumption that guidelines exist, but little knowledge of details
- Most had not specifically seen the NHMRC Guidelines
- Some were familiar with the Red Cross guidelines
- Others felt they had seen guidelines, but could not specify from who (few made reference to hospital- or unit-specific protocols)

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)

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

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

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

Conclusions and recommendations

1. High personal confidence in prescribing habits, general assumption that they represent best practice
 - Often incorrect, yet reluctance to recognise this
2. 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
3. Most surprised by high rate of inappropriate transfusions, and nearly always assume it is other doctors at fault



Communications Campaign

- Co-funded by the National Blood Authority
- Need expertise!
- CEC appointed a communications/ public relations agency June 2008



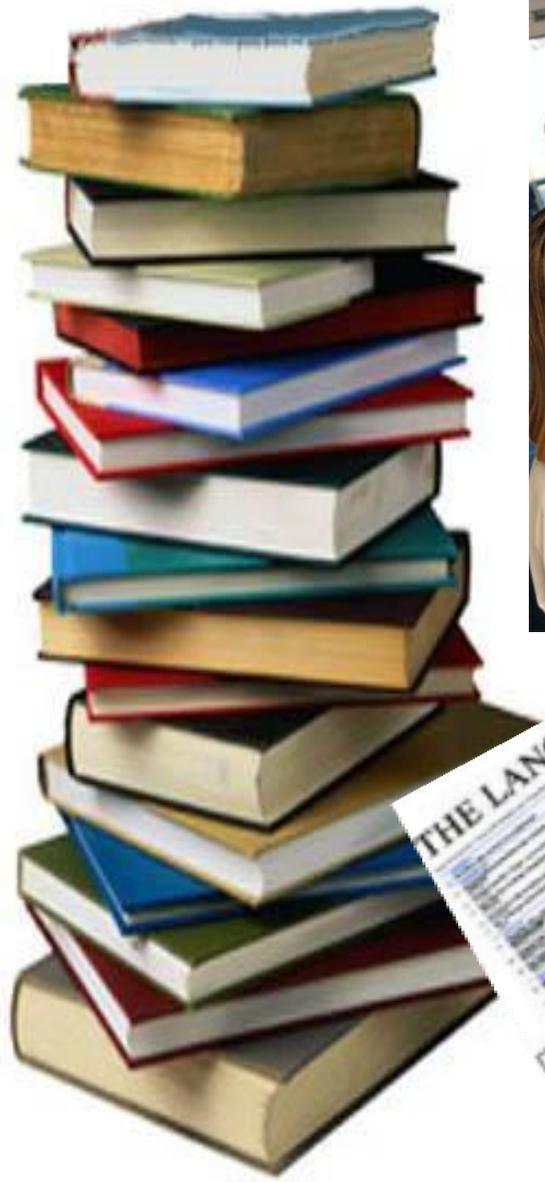
Communications Agency



- Advertising
 - Marketing
 - Web Development
 - On-line Communications
 - Public Relations
-

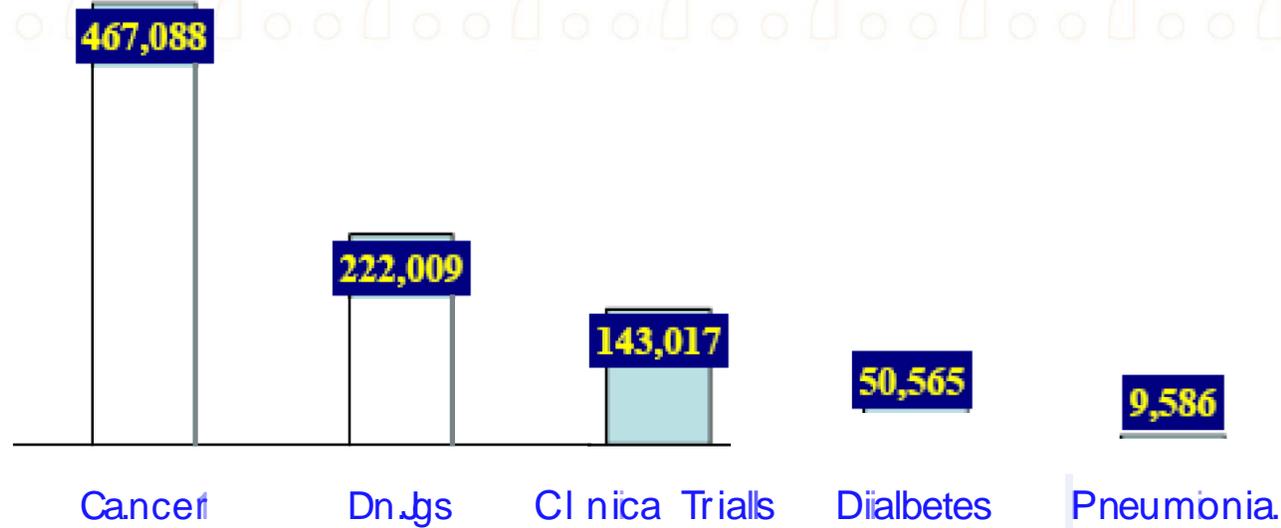


The *Transfusion* question



Keeping Up With Science

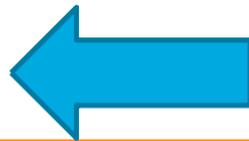
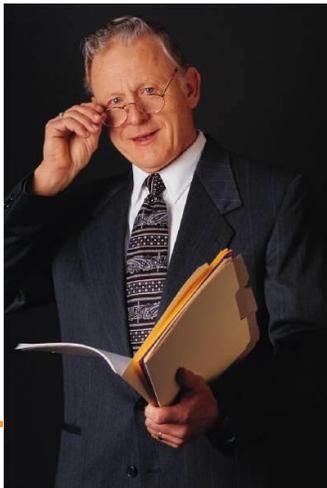
Number of New Articles 1989-98



Source: Advisory Board Company



Our Audience



Baby
Boomer



Social Media in 2010



A screenshot of a Facebook profile for a user named Zeth Green. The profile includes a profile picture, a cover photo, and a bio. The bio states: "Zeth Green is finding emerge...sync therapeutic. interest from work". Below the bio, there are sections for "About", "More From Zeth Green", "You are invited to...", "Birmingham UK Friends", "Information", and "Personal Info".



Web 2 Icons



A screenshot of the YouTube video player interface. It shows the "Broadcast Yourself" logo, navigation tabs for "Videos", "Categories", "Channels", and "Community", and a search bar.

A screenshot of a YouTube video player. The video title is "Joe Riley On The Tragic Fire of June 18th". The video shows a man in a suit and glasses speaking. The player includes a progress bar, volume control, and various sharing options.



A screenshot of the Crikeyblogs website. The header features the "crikeyblogs" logo and a cartoon character. The main content area displays several blog posts, including "Corporate Engagement", "The Poll Bludger", "Obama or McCain?", "Politycs", "LiteraryMinded", and "Jonathan Green". Each post includes a title, a brief description, and a date.



theTransfusionquestion

the debate starts soon

www.thetransfusionquestion.com.au

30% of all
red blood cell
transfusions are
inappropriate



But how do you
define 'inappropriate'?

Join the debate at www.thebloodwatch.com.au
Blood Watch, a Program of the NSW Clinical Excellence Commission.

question.com.au

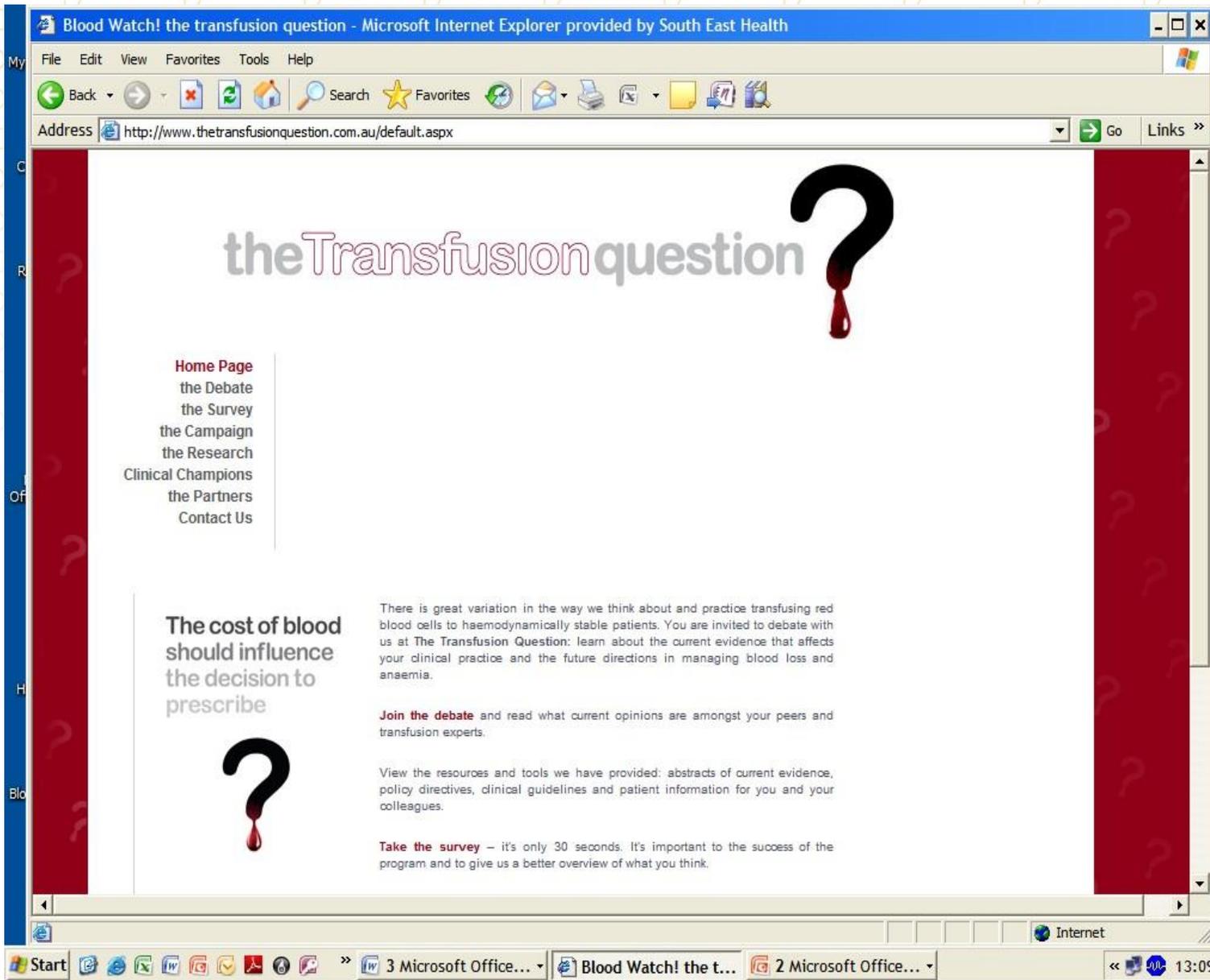
Two units
are better
than one



True or False

Join the debate at www.thebloodwatch.com.au
Blood Watch, a Program of the NSW Clinical Excellence Commission.

question.com.au



- Abstracts/
research
- Debate
- Survey
- Clinical Leads
- About CEC,
NBA, ARCBS

bleeding.

22/10/2008 8:57:19 PM

James Isbister Said

Thanks Bruce and Richard, your comments should be broadcast from the medical hilltops, where ever they may be. Perhaps Google may do the job and they will rise to the top of page one!

21/10/2008 3:23:35 PM

Bruce D. Spiess, MD, FAHA Said

The use of 2 units is an old practice that dies hard. Each unit of blood is precious and if one unit is enough to restore adequate oxygen carrying content then that is what a patient should get. This out dated practice does result from the 1960's when people first started to think about oxygen carrying capacity and calculate oxygen content by the equation. As such it was clear that if you were dealing with a 70kg person to give just one unit would only add about 5-7% of increased Hgb and the thought was that it simply was not a big enough boost. Since we rarely know why we are transfusing to begin with (in the 1-2 unit dosages) then having an old rule of thumb like this only sentences patients to twice the risk and creates twice the shortage. The whole goal of re-focussing on transfusion today is to say do we really know what we are doing? And further, in this particular patient do we really have a solid idea of risk and benefit. I put it to the readership that most 1-2 unit transfusions are treating a physician anxiety (I need to do something, or well maybe a transfusion would help), rather than a real physiologic oxygen delivery analysis or a thoughtful risk benefit ratio discussion.

Bruce Spiess, MD

Virtual Faculty

Virtual Faculty – Dr Bruce Spiess, Prof. James Isbister, Prof. Cliff Hughes, Dr Tim McCullouch, Dr Stephen Flecknoe-Brown, Dr Richard Seigne, Trudi Gallagher, Dr Amanda Thomson, Ms Bernie Harrison, Dr Stephen O’Mara, Dr Ross Kerridge, Dr Michael Nichol, Dr Anne Duggan.



Results of the Campaign

- At the end of Phase1(Sept 2008 -Jan 2009), **1,118 unique visitors** to the website
- Each visitor spent an average of **5:02 mins** and 60% of visits was direct traffic



Phase 2- Sept 2009- Jan 2010

Target groups:

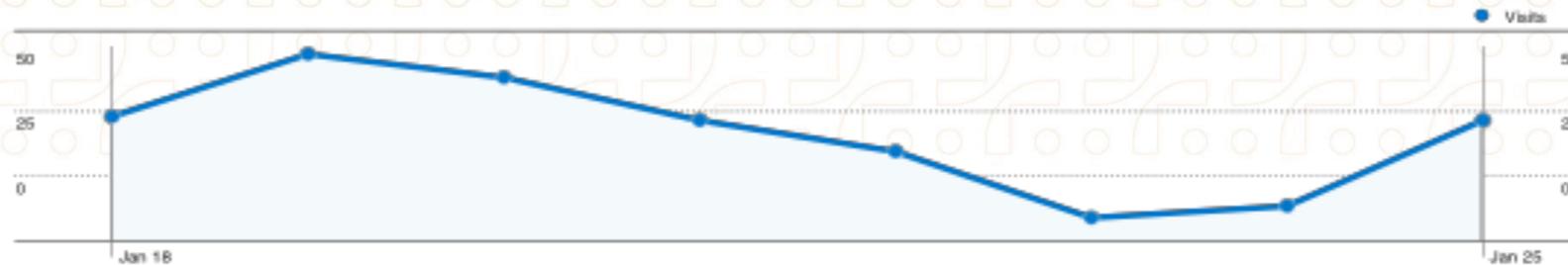
- Anaesthetists
- Gastroenterology
- Obstetrics & Gynaecology



Emails drove traffic

www.thetransfusionquestion.com.au/
Visits for all visitors

Jan 18, 2010 - Jan 25, 2010
Comparing to: Site



222 Visits

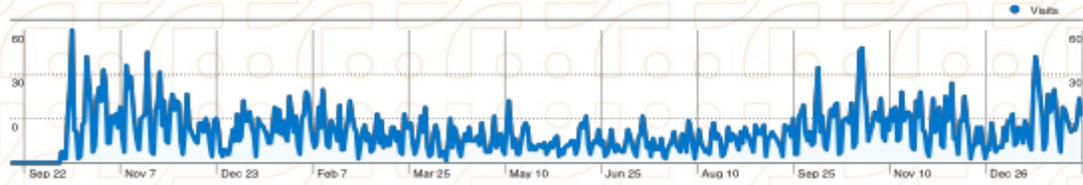
27.75 Visits / Day

Monday, January 18, 2010	14.41% (32)
Tuesday, January 19, 2010	21.62% (48)
Wednesday, January 20, 2010	18.92% (42)
Thursday, January 21, 2010	13.96% (31)
Friday, January 22, 2010	10.36% (23)
Saturday, January 23, 2010	2.70% (6)
Sunday, January 24, 2010	4.05% (9)
Monday, January 25, 2010	13.96% (31)

Overall Stats Sep 08 – Feb 2010

www.thetransfusionquestion.com.au/
Dashboard

Sep 16, 2008 - Feb 10, 2010
 Comparing to: Site



Site Usage

7,069 Visits

53.43% Bounce Rate

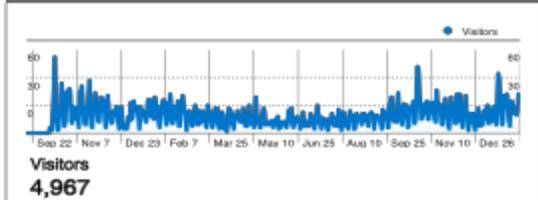
22,284 Pageviews

00:02:52 Avg. Time on Site

3.15 Pages/Visit

70.21% % New Visits

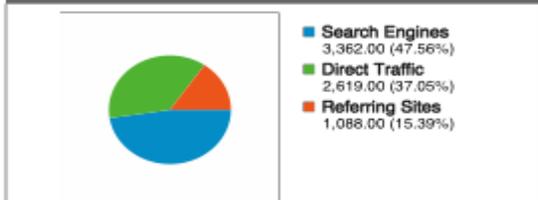
Visitors Overview



Map Overlay



Traffic Sources Overview



Content Overview

Pages	Pageviews	% Pageviews
/Discussion.aspx	3,687	16.55%
/	3,274	14.69%
/default.aspx	1,577	7.08%
/Debate7.aspx	1,293	5.80%
/Debate2.aspx	1,171	5.25%



2,554 visits came from 69 countries/territories

Site Usage					
Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate	
2,554	2.94	00:02:30	69.50%	53.72%	
% of Site Total: 100.00%	Site Avg: 2.94 (0.00%)	Site Avg: 00:02:30 (0.00%)	Site Avg: 69.54% (-0.06%)	Site Avg: 53.72% (0.00%)	
Country/Territory	Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
Australia	1,782	3.43	00:02:57	60.55%	43.60%
United States	327	1.62	00:01:02	92.97%	81.35%
United Kingdom	138	1.92	00:01:29	88.41%	77.54%
New Zealand	44	3.41	00:04:39	72.73%	47.73%
Canada	27	1.33	00:00:50	100.00%	88.89%
India	27	1.67	00:01:34	100.00%	81.48%
Philippines	27	1.15	00:00:39	88.89%	88.89%
Malaysia	15	1.93	00:01:05	100.00%	46.67%
Switzerland	13	2.62	00:03:27	53.85%	53.85%

Visitor by Country

- Australia
- USA
- UK
- New Zealand



This country/territory sent 1,822 visits via 33 cities

Site Usage					
Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate	
1,822	3.40	00:02:57	60.70%	44.07%	
% of Site Total: 69.81%	Site Avg: 2.92 (16.39%)	Site Avg: 00:02:29 (18.11%)	Site Avg: 69.66% (-12.85%)	Site Avg: 54.10% (-18.53%)	
City	Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
Sydney	1,031	3.68	00:03:06	54.51%	36.37%
Melbourne	223	2.83	00:02:25	76.23%	60.09%
Brisbane	159	3.02	00:02:18	66.67%	52.20%
Perth	123	2.61	00:02:39	64.23%	56.10%
Adelaide	64	3.84	00:04:04	62.50%	45.31%
Newcastle	61	3.84	00:03:04	62.30%	39.34%
Canberra	43	3.33	00:02:07	55.81%	51.16%
Raymond Terrace	31	3.16	00:05:01	41.94%	48.39%
Cranbourne	19	3.32	00:03:19	68.42%	47.37%

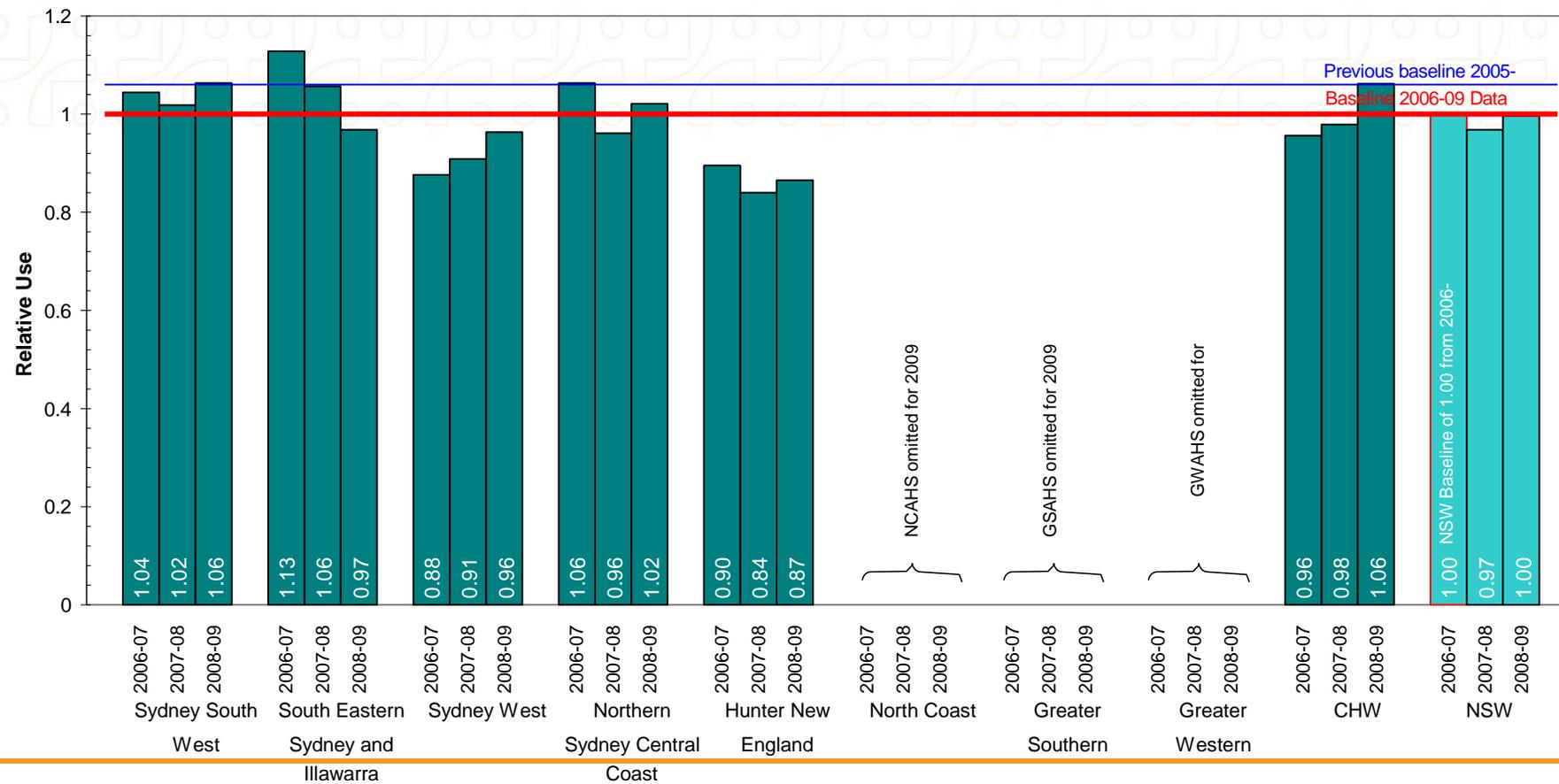
Visitor Break down- Australia

1. Sydney
2. Melbourne
3. Brisbane
4. Perth

Was there any change to clinical practice?



**Red Cell Relative Use Rate
NSW Public Hospitals (in the Area Health Service of treatment
plus the Children's Hospital Westmead) and is calculated as a
case mix adjusted relative to use index for overnight separations
in 2006/07 and 2008/09 where the REVISED benchmark is the
NSW 2006/07 baseline.**



REPORT

The impact of the blood watch programme on the elective surgical blood usage in NSW – a population-based linkage project

Bernie Harrison

Jack Chen

Carolyn Der Vartanian

Paul Tridgell

Cliff Hughes

PUBLICATION

Harrison BT, Chen J, Der Vartanian C et al. Improving red cell transfusion in the elective surgical setting: an improvement collaborative with evaluation. *Vox Sanguinis, International Journal of Transfusion Medicine*, (2015) DOI: [10.1111/vox.12237](https://doi.org/10.1111/vox.12237)2014

The current project aims

□ To provide a comprehensive description of the red cell blood transfusion practice using linked data among several selected surgery groups:

- orthopaedics
- obstetrics and gynaecology
- cardio-thoracic surgery
- general surgery
- colorectal surgery



Data Source

Four linked population-based data bases:

1. APDC (Admitted Patients Disease Classification: ANDRG, patients demographic and the diagnostic related groups)
2. Blood bank data (time and quantity of red cell units issued)
3. Pathology lab data (Serial Hb tests results for a particular patient stay)
4. Emergency Department Admission Database (database to be used to excluded those patients admitted through ED from the analysis)

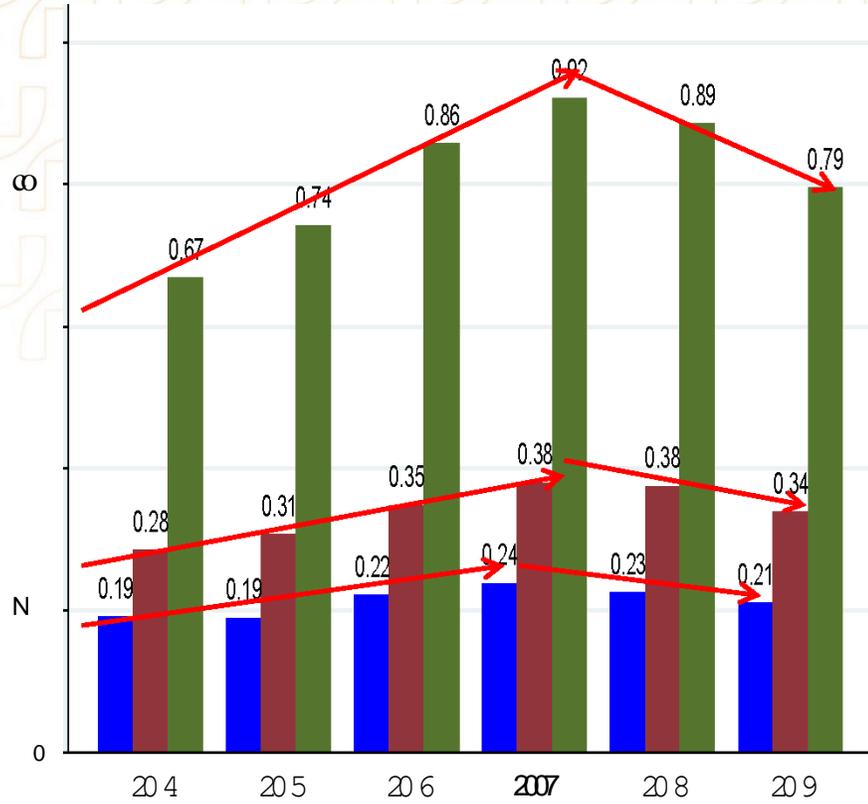


Study outcomes: three clinical indicators and four processes measures (7)

1. % of having a blood transfusion
 2. No of times a patient was transfused during admission
 3. No of units of blood transfused per admission
 4. The number of pts having two or + units blood issued at once per transfused admission
 5. % of patients who had a transfusion with minimum Hb $\geq 100\text{g/L}$
 6. % of patients who had a transfusion with minimum Hb $\geq 70\text{g/L}$ & $< 100\text{g/L}$
 7. % of patients who had a transfusion with minimum Hb $< 70\text{g/L}$
-

figec1

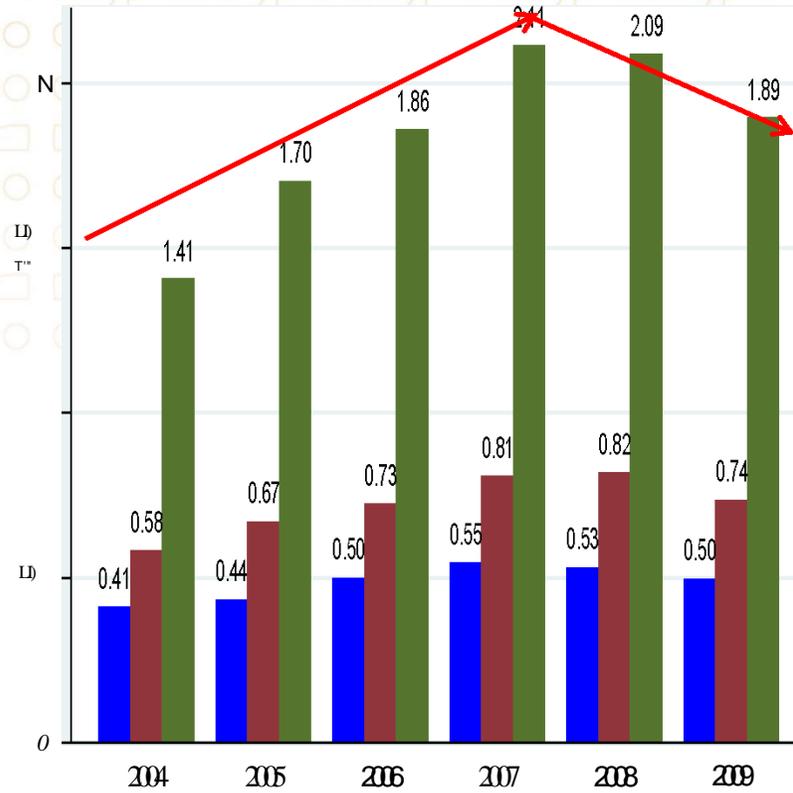
Carbhaic potal



- proportion of transfusion
- Transfusion times per admission
- Transfusion units per admission

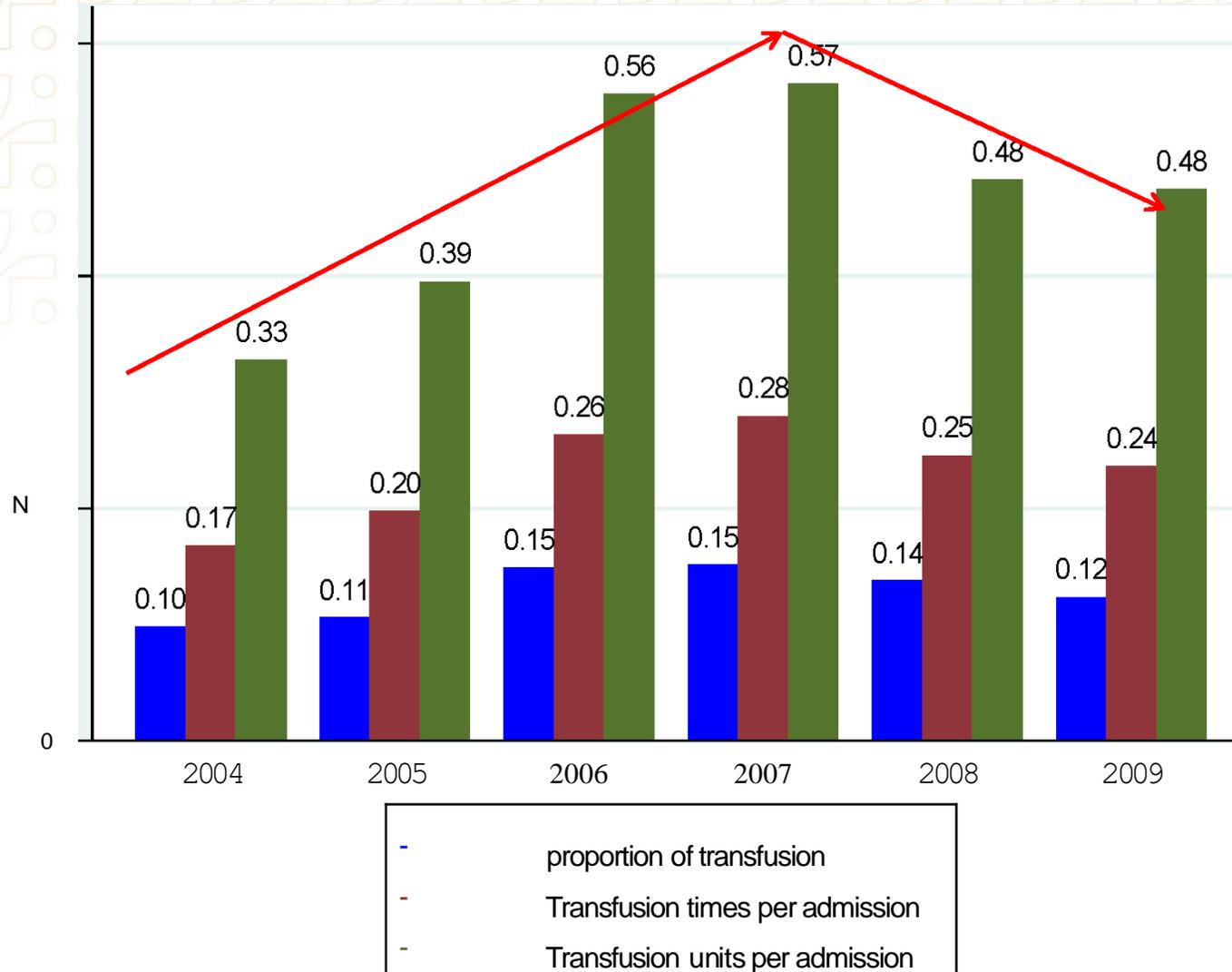
figec2

Carbhaic- seelad DRGs

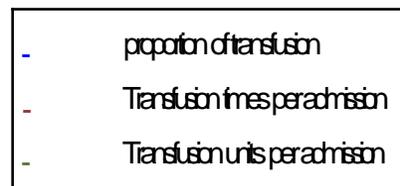
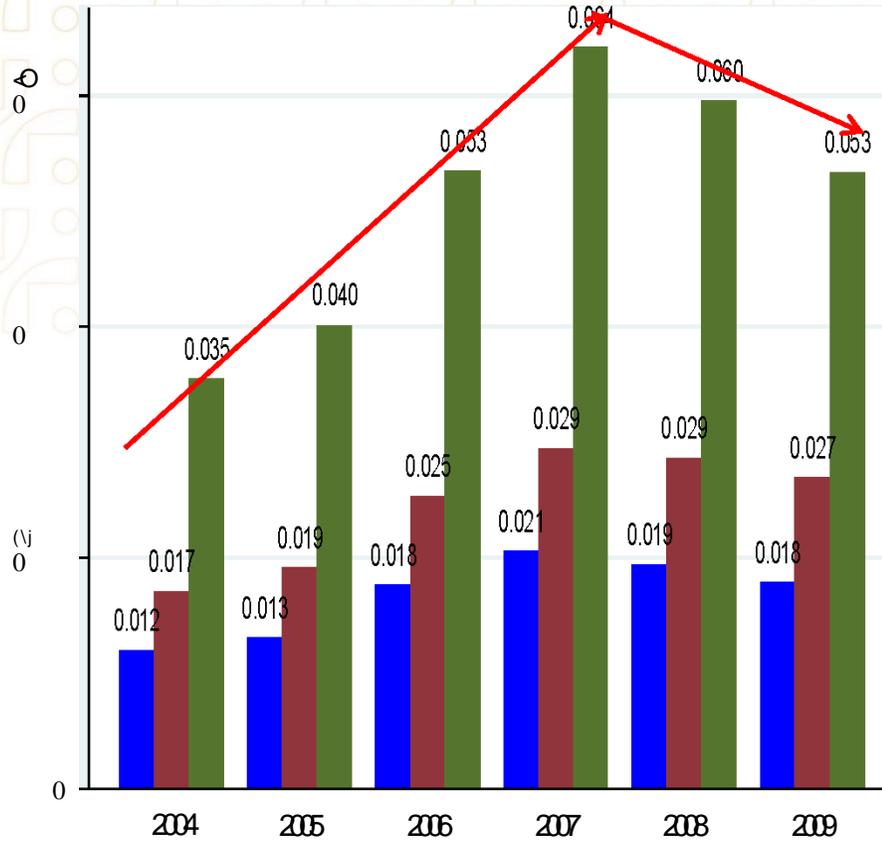


- proportion of transfusion
- Transfusion times per admission
- Transfusion units per admission

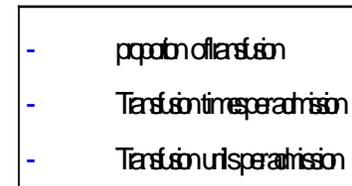
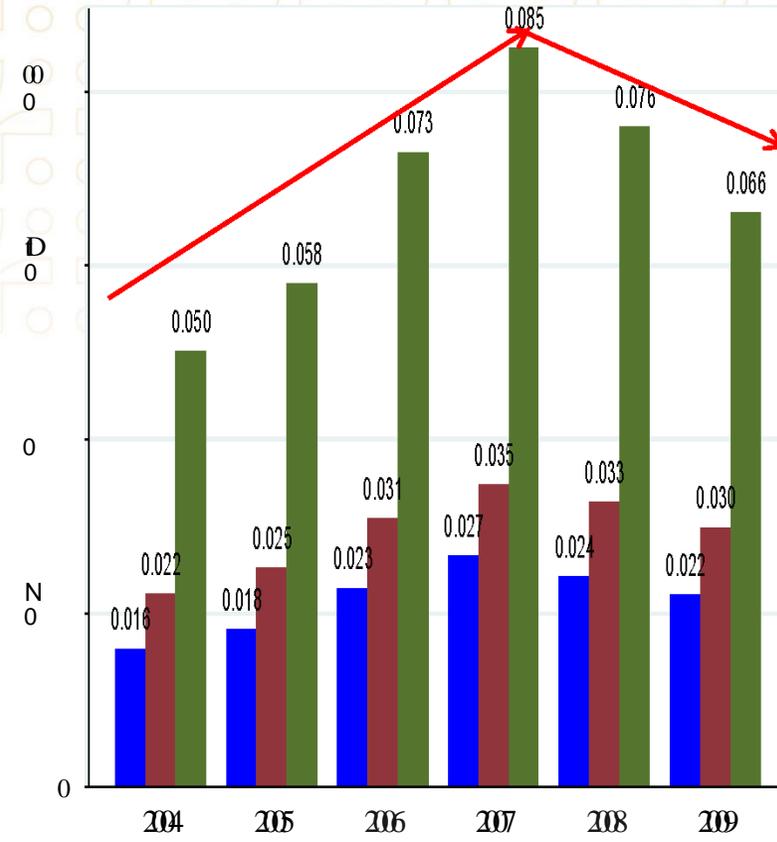
Colorectal surgery group



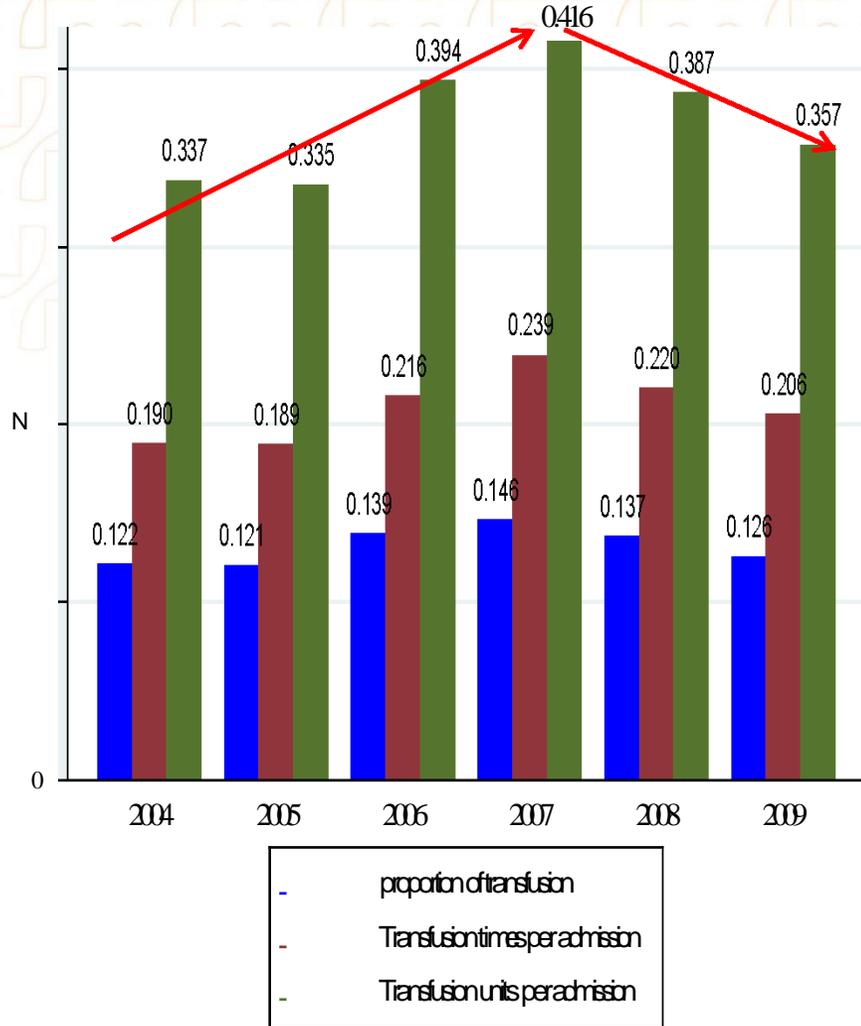
Gynaecology and obstetrics group total



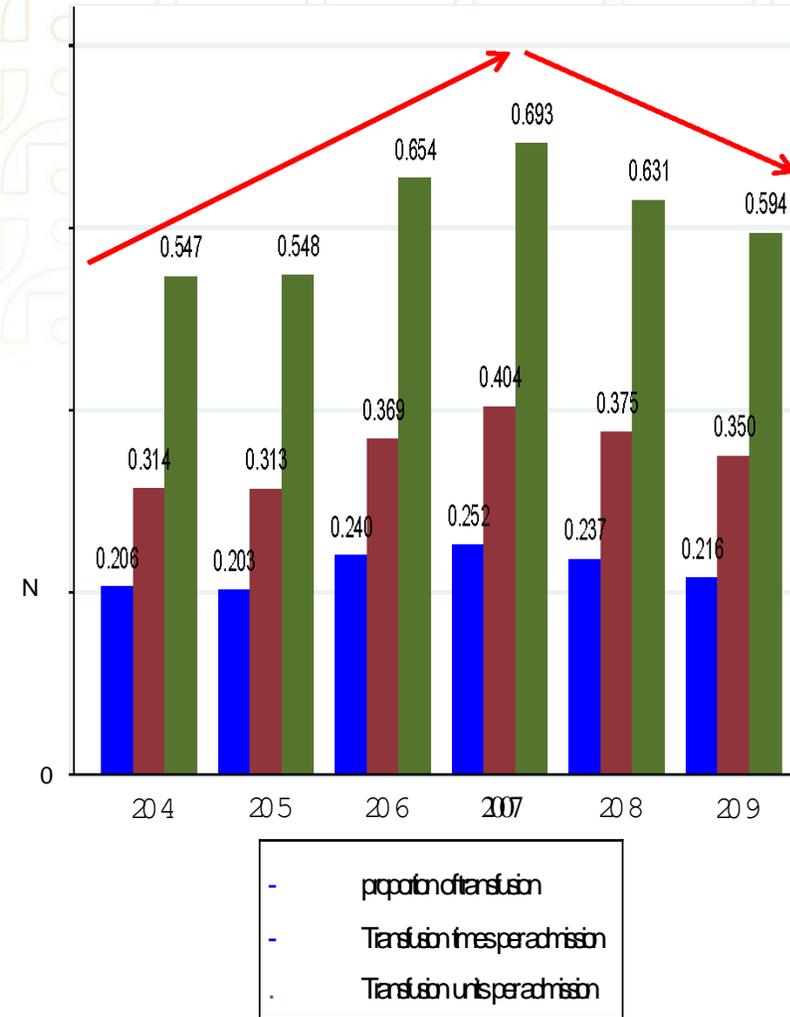
Gynaecology and obstetrics group selected DRGs



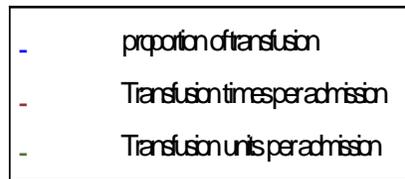
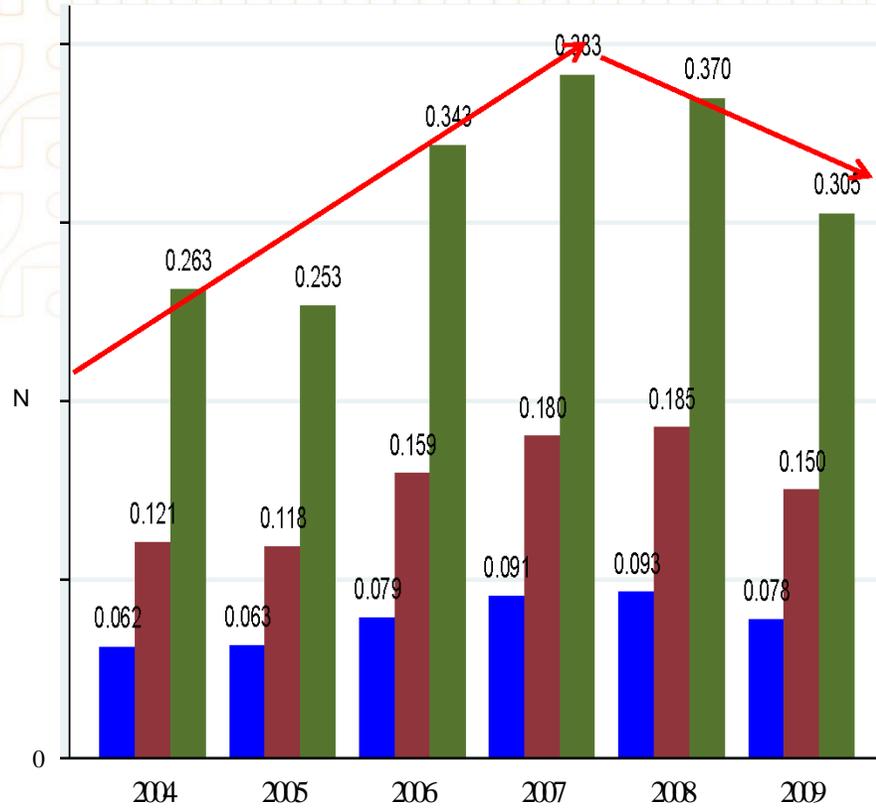
Ойрээд групподол



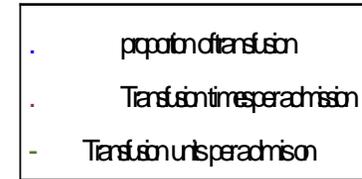
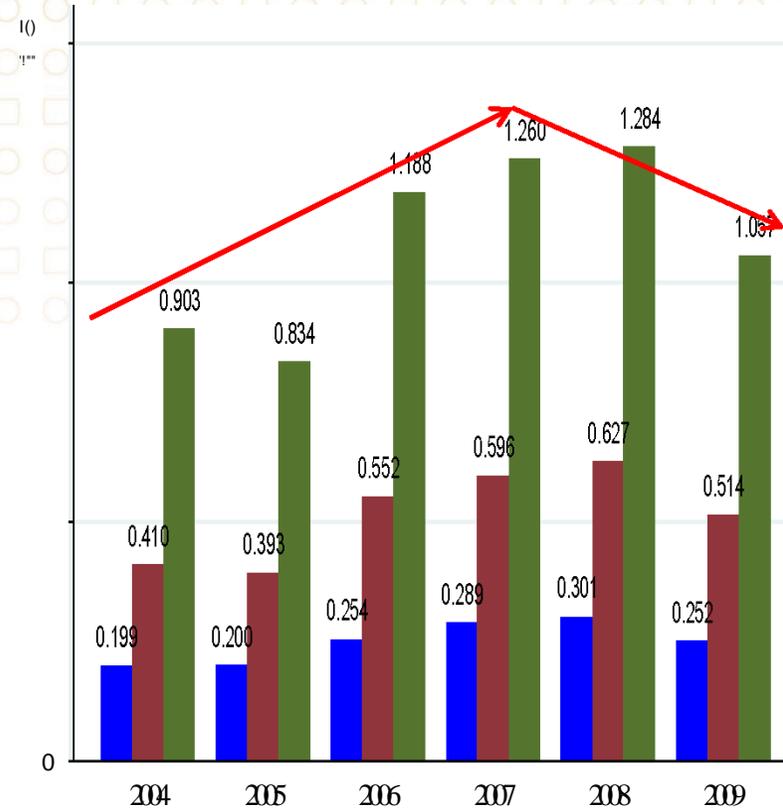
Ойрээд : selected DRGs



Genesugr group C



Genesugr group selected DRGs



A summary of the results for the clinical outcomes

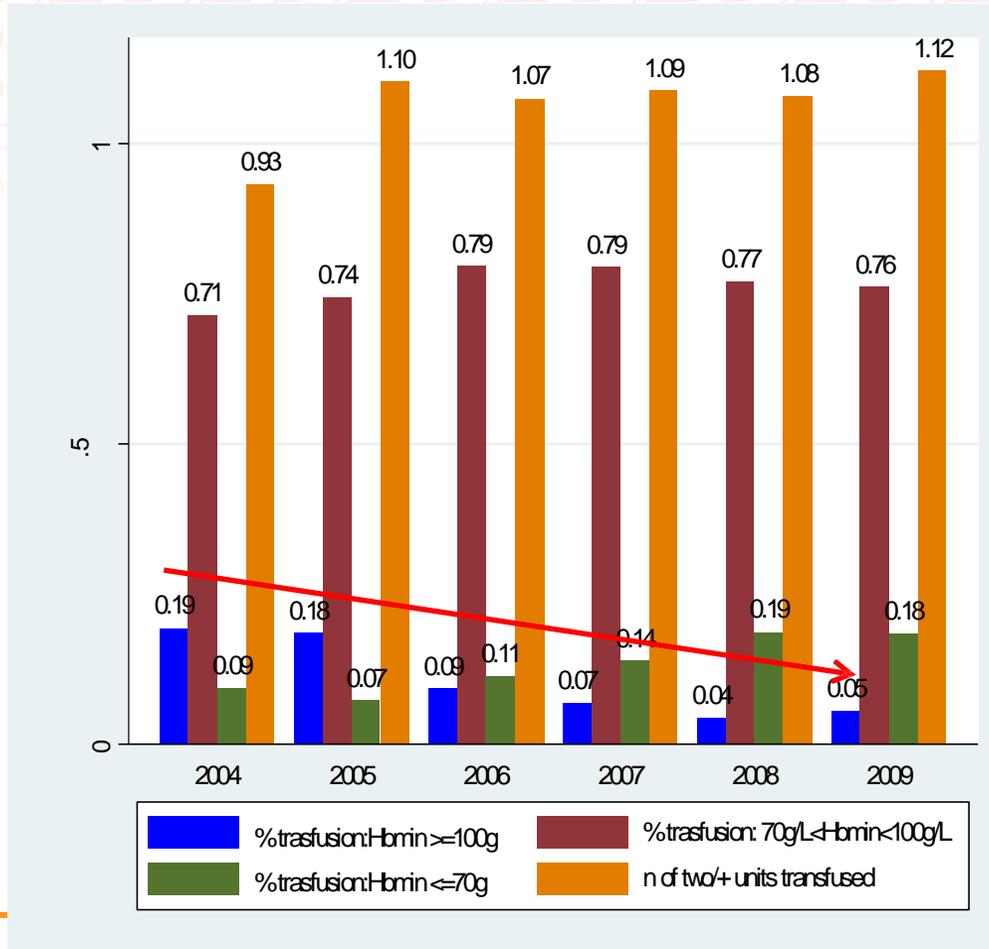
Group		% transfused	Times of transfusion	Units transfused
Cadiothoracic				
	Pooled	↓	↓	↓
	Selected DRGs	↓	↓	↓
Colorectal				
	Selected DRGs	↓	↓	↓
Gynaecology&Obstetrics				
	Pooled	↓	↓	↓
	Selected DRGs	↓	↓	↓
Orthopaedic				
	Pooled	↓	↓	↓
	Selected DRGs	↓	↓	↓
General				
	Pooled	↓	↓	↓
	Selected DRGs	↓	↓	↓

↓: Means there is statistically significant reduction of the outcome in 2009 in comparison to the outcome in 2007

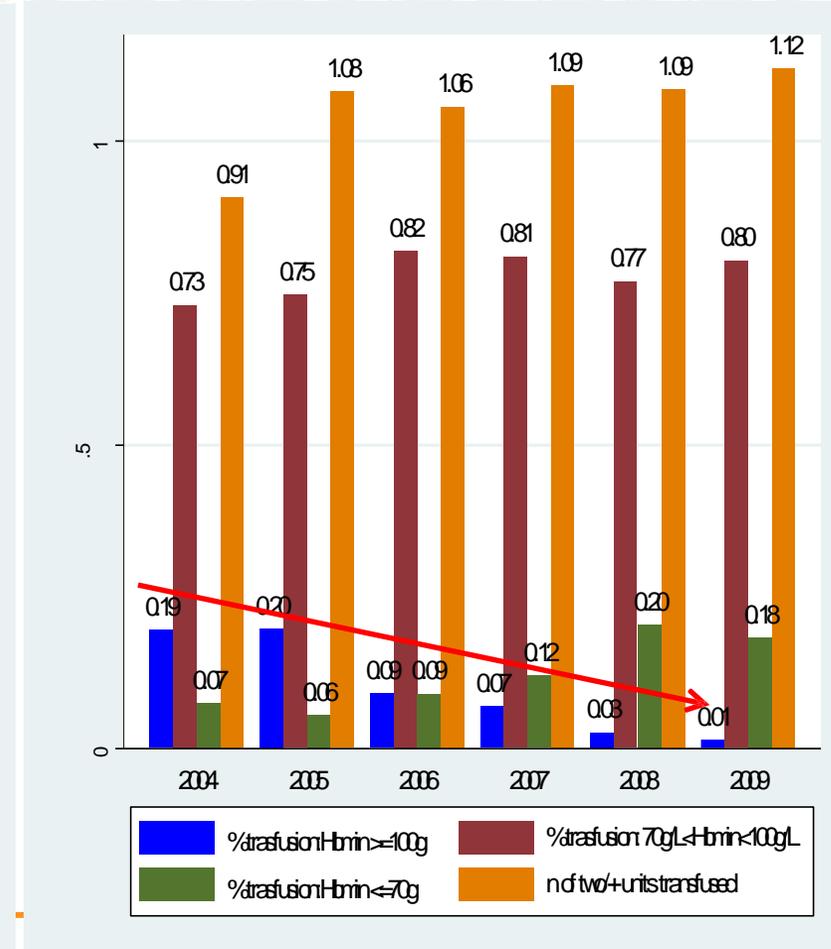
The process indicators

59

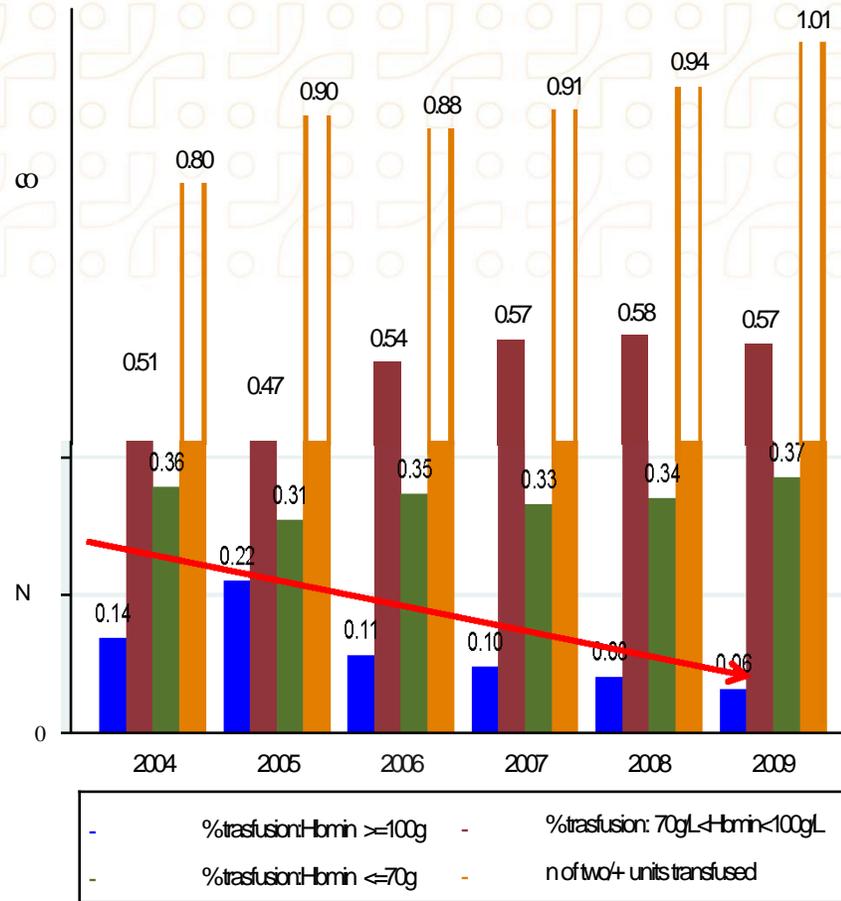
Coelhaicsugaygopod



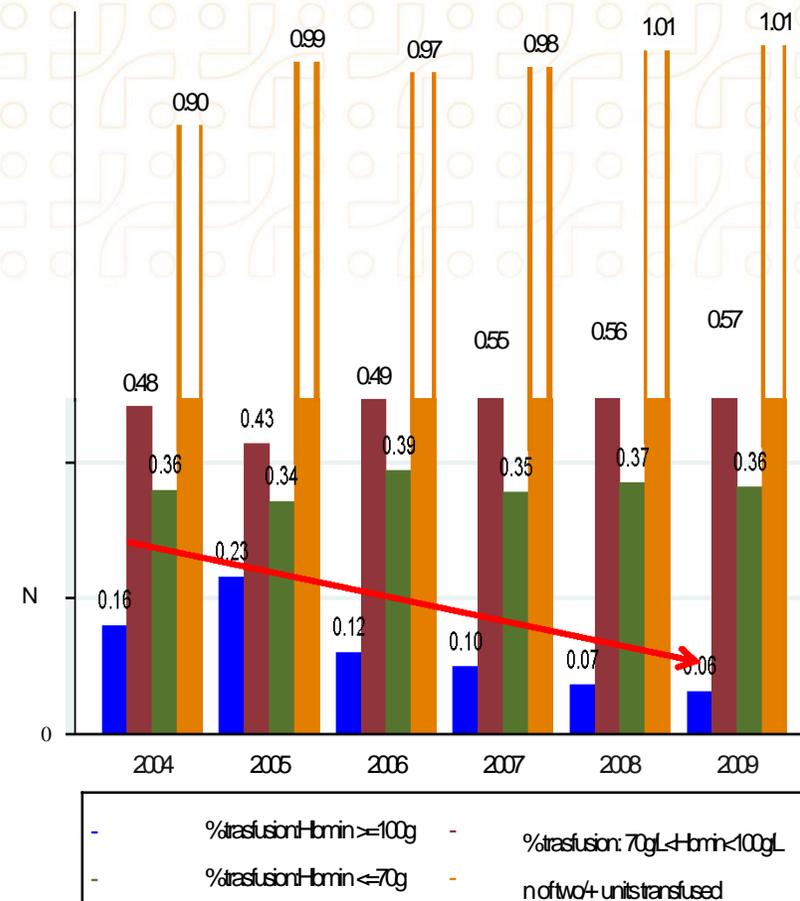
Coelhaicsugaygopod seeded DRG



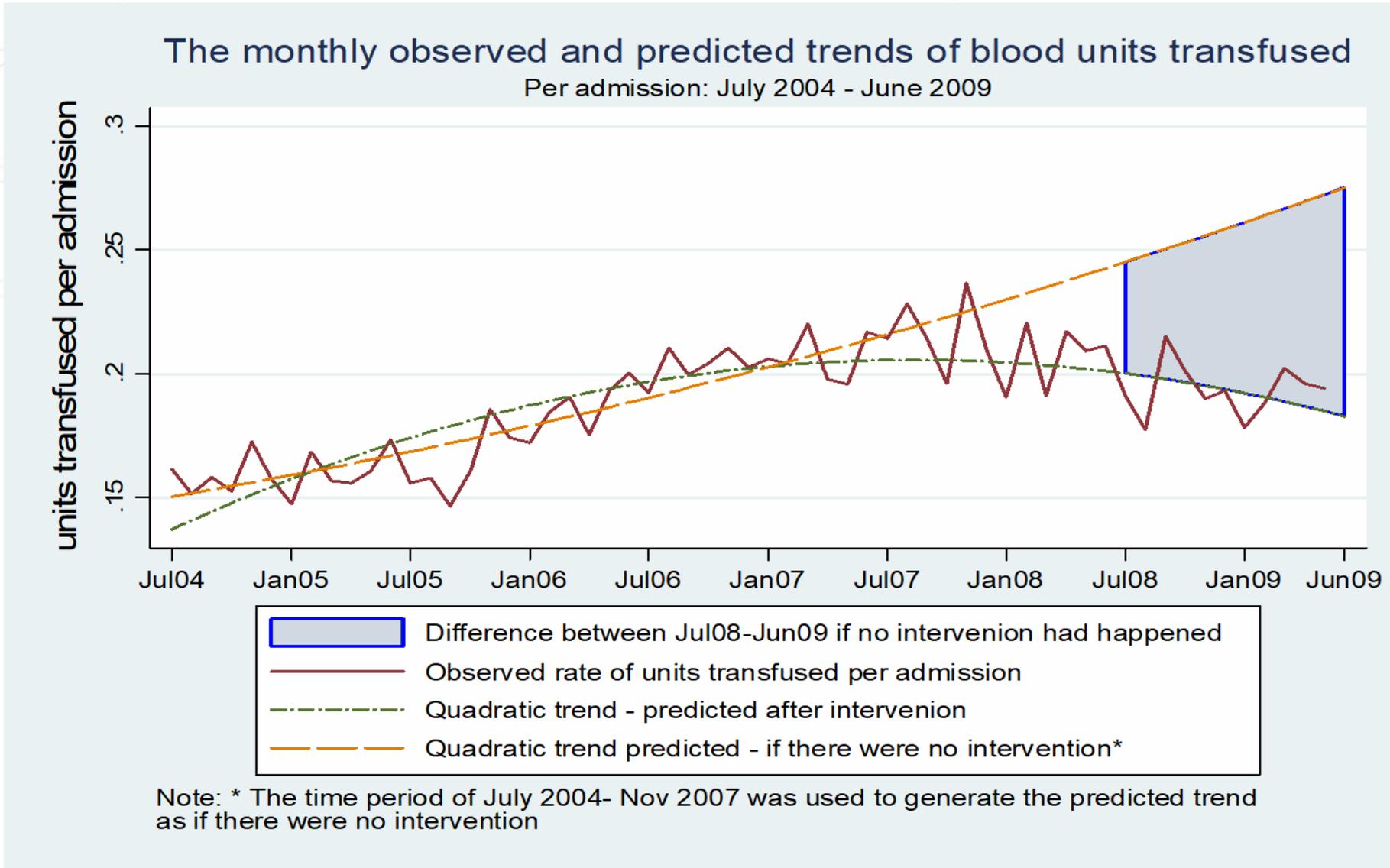
Gynaecology and obstetrics group: pooled



Gynaecology and obstetrics group: selected DRGs



What is the possible avoided blood transfusions following Blood Watch interventions



Results for avoided Tx

- **12,225 units saved** between July 2008 and June 2009, possibly due to the extensive blood watch interventions that have been put into places.
 - This equates to a **27.4% reduction** in surgical blood use
 - This would equate to a **\$4.352m annual saving** based on the calculated direct costs of red cell transfusion @ \$356 per unit.
 - Note that our estimate is conservative and related only to the five elective surgical groups.
-

Debrief

“Strength lies in differences, not in similarities.”

– Stephen Covey.

Not about being politically correct or ‘ticking the box’

It is through diversity and collaboration we get growth

- Beware of Group Think!
- Need different experiences, skills, perspectives
- Makes for improved problem solving, insights etc

What's in it for me? (WIFM)

1. Part of something bigger than self
2. Sense of purpose (get the vision)
3. Sense of achievement
4. Reward and recognition
5. New skills
6. New friends!
7. Success for the organisation
8. Success for customers
9. Success for patients



Conclusions

Don't compete for
knowledge –
compete on
implementation

Diversity is good

Different opinions
are good

Shared
vision/mission –
essential

Open
communication

Clear goals and
objectives

Knowledge sharing

Positive
reinforcement

Accountability





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