

Patient Blood Management (PBM)



Norbert Lubenow

Regiondagar 2017-03-15



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<https://www.blood.gov.au/health-professionals>



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Cochrane Database of Systematic Reviews

Transfusion thresholds for blood cell transfusion

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[Conclusions](#)

Jeffrey L Carson , Simon Paul C Hebert

First published: 12 October 2010

Editorial Group: Cochrane Injuries and Prevention

DOI: 10.1002/14651858.CD0002



Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	Number of participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Liberal transfusion (Hb 9 g/dL to 10 g/dL)	Restrictive transfusion (Hb 7 g/dL to 8 g/dL)				
People receiving blood transfusions	841 per 1000	479 per 1000	RR 0.57 (0.49 to 0.65)	12,587 (31)	⊕⊕⊕⊕ High	-
30-day mortality	93 per 1000	90 per 1000	RR 0.97 (0.81 to 1.16)	10,537 (23)	⊕⊕⊕⊕ Moderate ^a	-
Myocardial infarction	17 per 1000	19 per 1000	RR 1.08 (0.74 to 1.60)	8303 (16)	⊕⊕⊕⊕ High	-
Congestive heart failure	36 per 1000	28 per 1000	RR 0.78 (0.45 to 1.35)	6257 (12)	⊕⊕⊕⊕ Low ^{b,c}	-
Cerebrovascular accident (CVA) - stroke	17 per 1000	13 per 1000	RR 0.78 (0.53 to 1.14)	7343 (13)	⊕⊕⊕⊕ High	-
Rebleeding	163 per 1000	144 per 1000	RR 0.75 (0.51 to 1.10)	3108 (6)	⊕⊕⊕⊕ Low ^{d,e}	-
Pneumonia	82 per 1000	76 per 1000	RR 0.94 (0.80 to 1.11)	6277 (14)	⊕⊕⊕⊕ High	-
Thromboembolism	10 per 1000	8 per 1000	RR 0.77 (0.41 to 1.45)	4019 (10)	⊕⊕⊕⊕ High	-



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Blodgivning

Blodgivaren behövde få vård eller undersökas av läkare			
År	2011	2012	2013
Hematom	10	5	10
Artärpunktion	3	1	2
Tromboflebit	3	2	2
Nervskada	6	11	9
Nervskada genom hematom	1	1	2
Allergisk reaktion, lokal	0	0	0
Allergisk reaktion, systemisk	1	0	1
Infektion, lokal	0	1	1
Vasovagal reaktion, omedelbar	27	36	44
Vasovagal reaktion, fördröjd	5	5	3
Skador i samband med vasovagal synkope	3	5	7
Annat	5	1	1
Summa	64	68	82

Hepatitis C virus	1
HTLV-I	2
Chagas disease	<1
Transfusion-associated bacterial sepsis	
red cells	1
platelets	20
West Nile virus	<1
Malaria	0.5
Babesia	1
Syphilis	<0.01
Other	
Transfusion-associated circulatory overload	5,000
Iron overload	Dependent on trans-fused volume
Nonimmune hemolysis	Rare
Air embolism	Rare
Creutzfeldt-Jakob disease	Not reported in US

Allvarlig avvikande händelse/biverkan vid blodtransfusion

Allvarlig avvikande händelse/biverkan vid blodtransfusion			
År	2011	2012	2013
Inga kliniska symtom trots fel komponent/fel patient transfunderad	21	18	20
Akut hemolytisk reaktion	4	4	2
Fördröjd hemolytisk reaktion	4	3	2
Febril icke-hemolytisk reaktion	54	47	46
Anafylaktisk reaktion	18	20	18
Svår allergisk reaktion	31	27	32
Hypotension	3	6	10
Transfusionsrelaterad akut lungskada (TRALI)	2	6	1
Lindrig TRALI	7	2	0
Transfusionsrelaterad cirkulationsöverbelastning (TACO)	7	5	7
Transfusionsrelaterad dyspné (TAD)	18	17	12
Akut transfusionsrelaterad smärta	8	8	8
Transfusionsöverförd smitta	5	4	4
Post-transfusionspurpura (PTP)	0	1	0
Andra biverkningar	12	16	21
Summa	194	184	183



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Patient Blood Management is a multidisciplinary, evidence-based approach to optimising the care of patients who might need blood transfusion. Patient Blood Management puts the patient at the heart of decisions made about blood transfusion to ensure they receive the best treatment and avoidable, inappropriate use of blood and blood components is reduced.

Patient Blood Management är en multidisciplinär evidensbaserad strategi för att optimera vård av patienter som kan behöva transfusion av blod.

Patient Blood Management sätter patienten i centrum av beslut om blodtransfusion för att säkerställa den bästa behandlingen och att undvikbara, onödiga användningar av blodkomponenter uteblir.

<http://www.transfusionguidelines.org.uk/uk-transfusion-committees/national-blood-transfusion-committee/patient-blood-management>



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Preoperative

Intraoperative

Postoperative

PATIENT BLOOD MANAGEMENT

Ein Qualitätsprojekt der Universitätsmedizin Greifswald

Blutkonserven sind knapp !

Jede unnötige Transfusion vermeiden.

Rationaler Einsatz von Blutkonserven

- Hb < 3,7 mmol/l
TRANSFUNDIEREN!
- Hb 3,7-5,0 mmol/l
NUR MIT BESONDERER BEGRÜNDUNG!
- Hb > 5,0 mmol/l
NUR IM AUSNAHMEFALL!

Anämie vermeiden

- ✓ OP- Wartezeit nutzen
- ✓ Eisenmangel behandeln
- ✓ Restriktive Blutabnahmen

Blutsparende Maßnahmen

- ✓ Gerinnungsfragebogen unauffällig
- ✓ Pausierung gerinnungshemmender Medikamente
- ✓ Einsatz von Anti-fibrinolytika



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Entwurf und Übersetzung des PBM-Toolkit zur Verfügung der Blutkonserven und Transfusionsmedizin

PLAY YOUR PART!

NHS

Blood and Transplant

SAVE

1

O D Neg

A WEEK



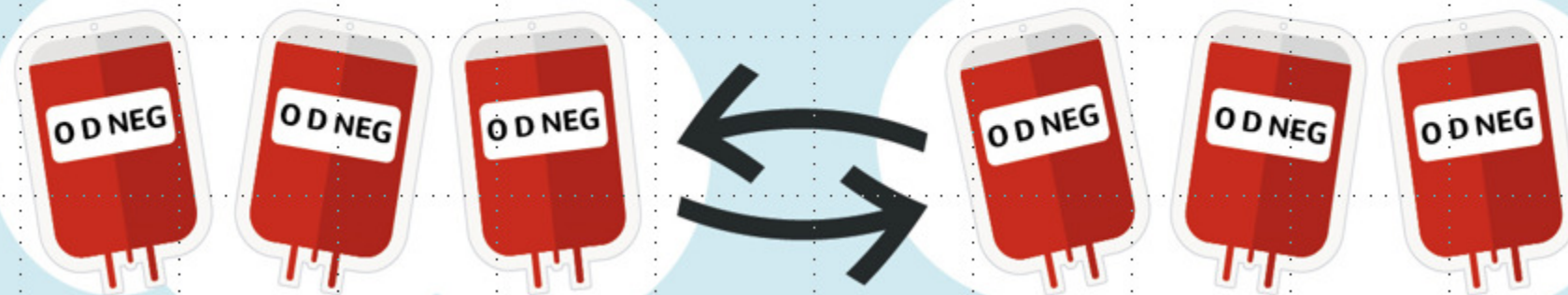
It only takes one to make a difference

For more information or to access resources from the "Toolkit" visit hospital.blood.co.uk or contact your local Transfusion Team



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STOCK SHARING



Sharing of **O D NEG** stock between organisations would support an overall reduction in **O D NEG** within the system

PBM Certification Process

- Two-year certification with onsite biennial reviews
- Awarded by Joint Commission HCO number
- One day visit
 - If AABB accredited for Blood Bank and/or Transfusion Services then one Joint Commission Reviewer
 - If not AABB accredited then one Joint Commission Reviewer and one AABB reviewer
- Blends the AABB quality systems-based approach and The Joint Commission tracer methodology
- Does not replace or shorten the time spent during the hospital and the laboratory accreditation review of Blood Bank and Transfusion Services
- No Intracycle Monitoring activity
- No direct reporting of Performance Measures



The Joint Commission®

Patient Blood Management Certification

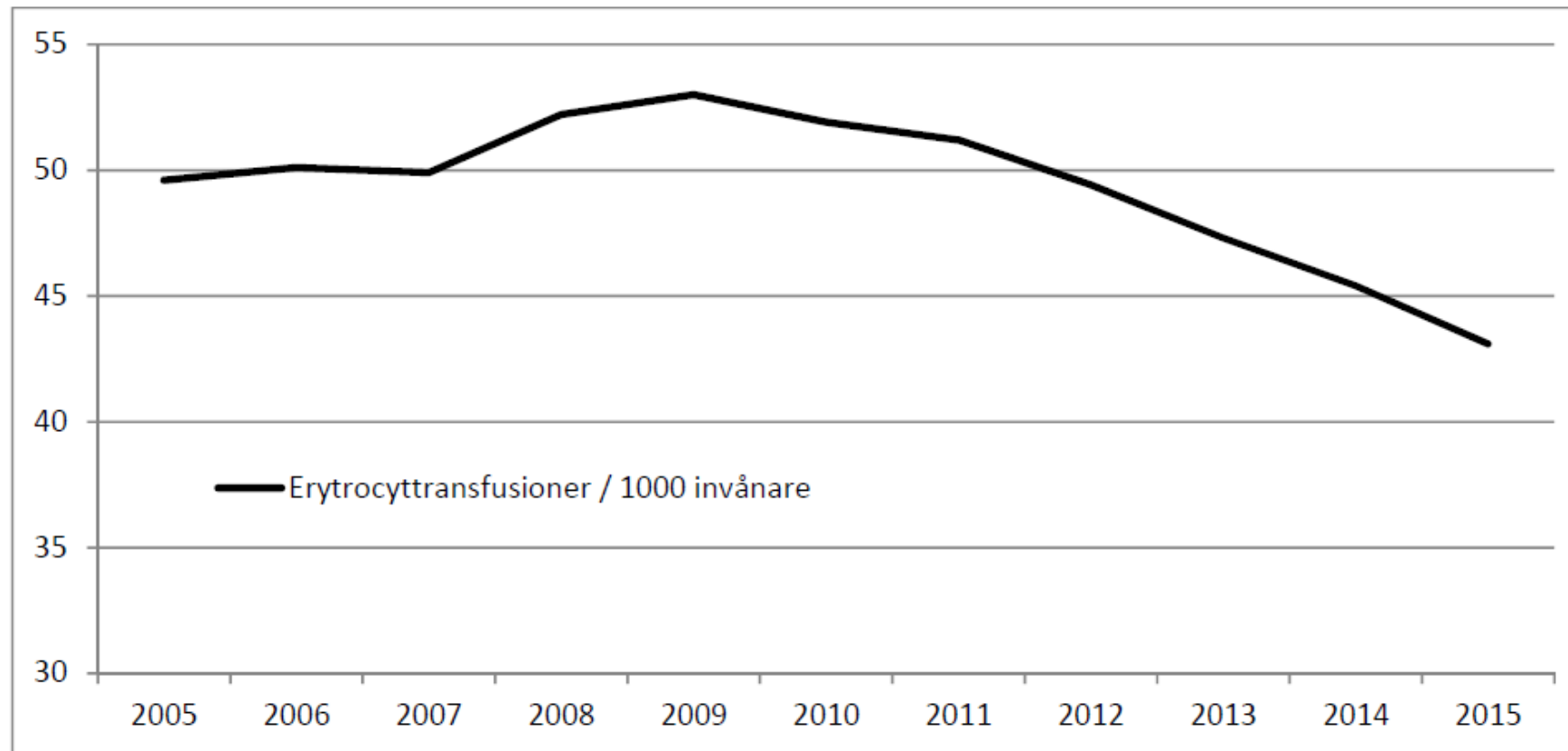
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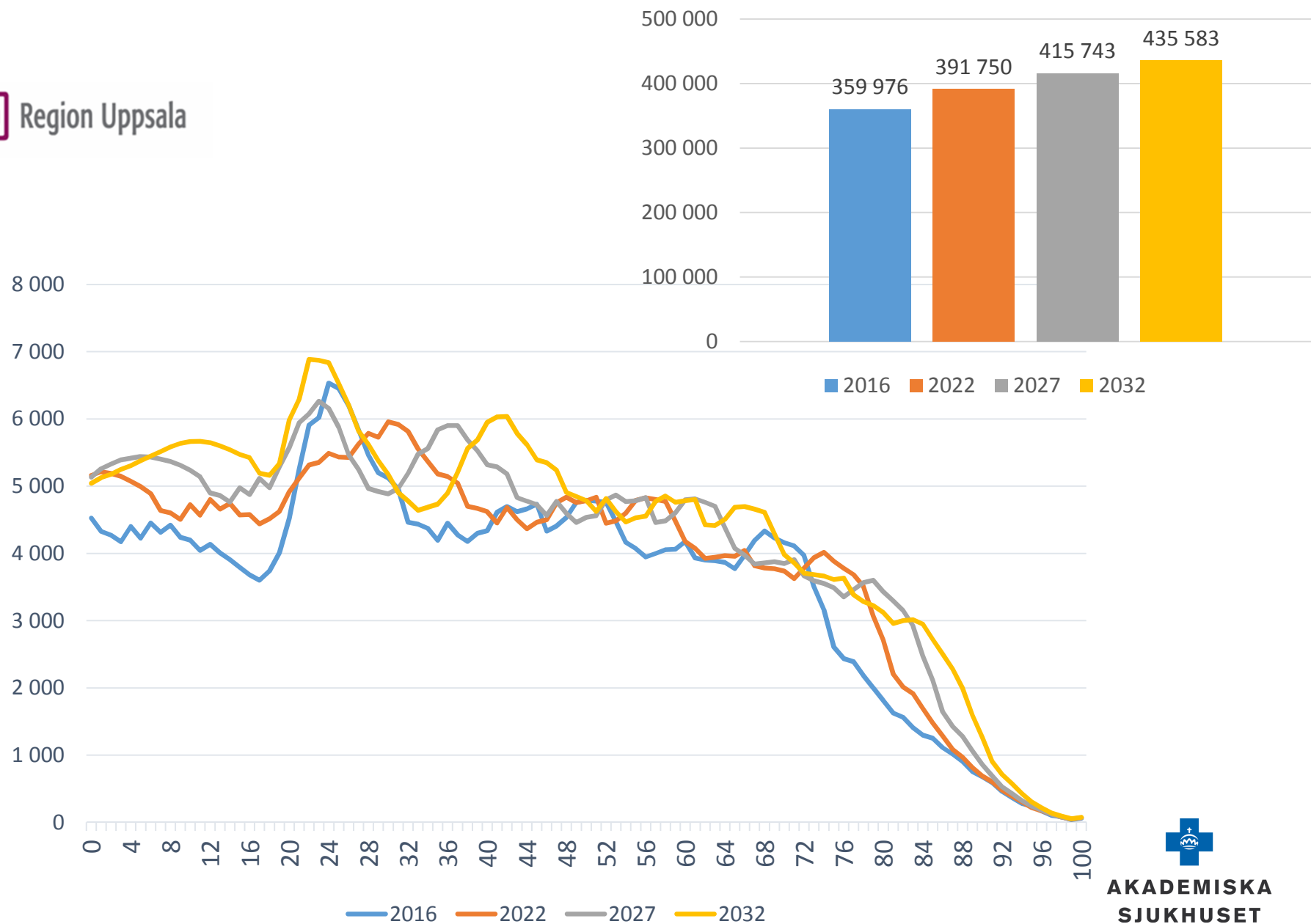
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Figur 18. Antalet transfunderade erythrocytenheter per 1000 invånare 2005-2015





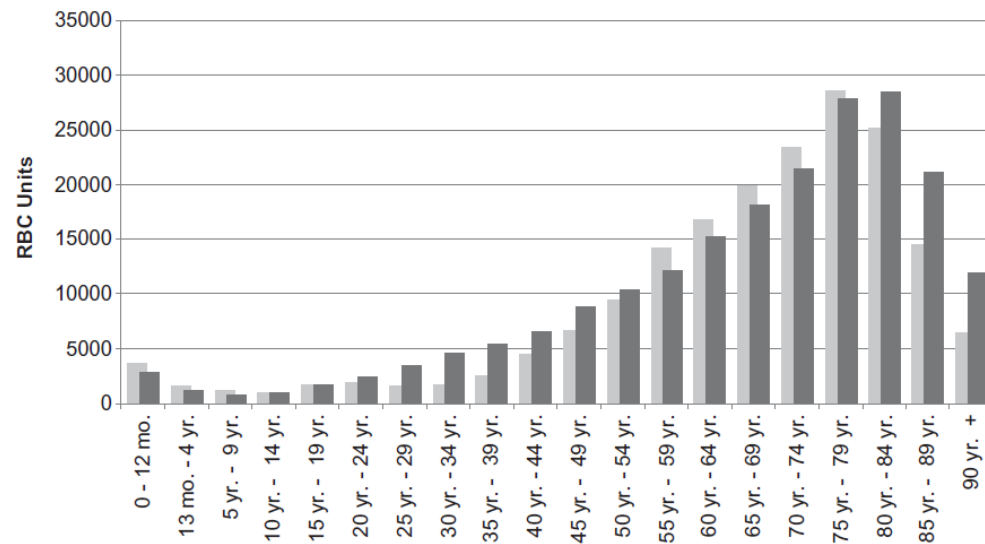


Fig. 4. Estimated transfusions by sex and age group: Ontario, 2008. (■) Females; (■) males.

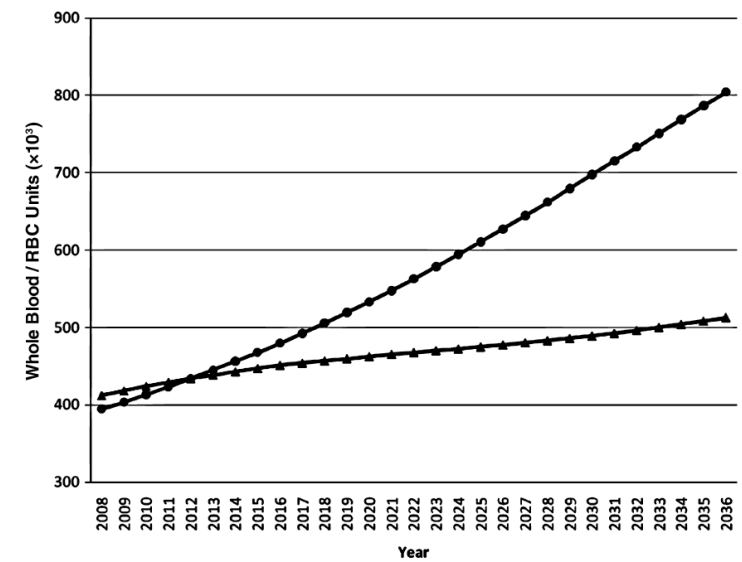


Fig. 5. Projected blood demand and supply: Ontario, 2008 through 2036. (●) Hospital transfusions (demand); (▲) Ontario donations shipped (supply).



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