

DON'T GIVE UNIT TWO WITHOUT REVIEW!

Single Unit Blood Transfusion QIP

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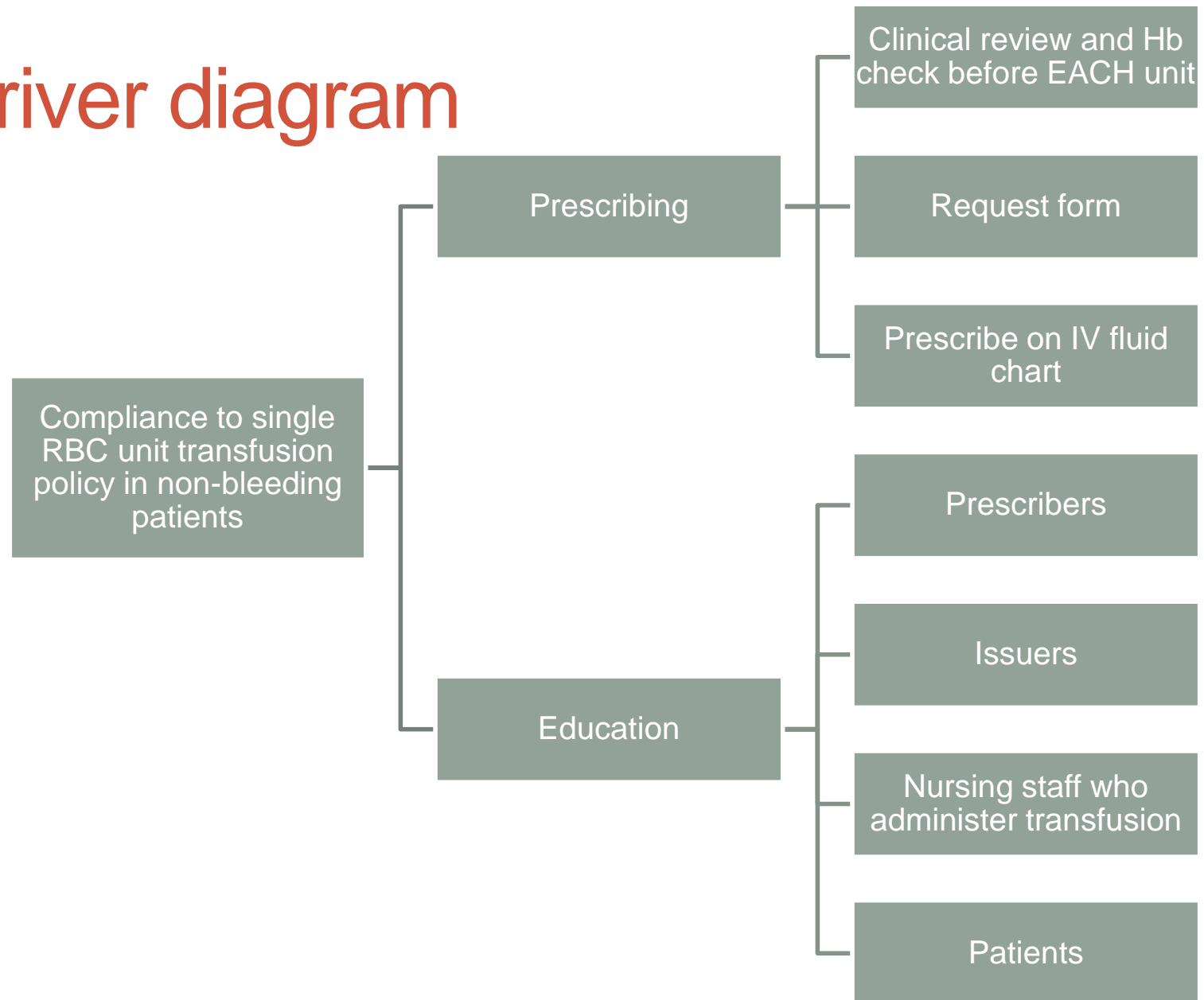
SMART Aim

- To increase the percentage of RBC transfusions given as single unit blood transfusions in non-actively bleeding patients (adults) from 45% to 80% by the end of April 2017 in acute medical patients in Nobles Hospital, Isle of Man.

Why single unit transfusions?

- Blood transfusion (2015) NICE guideline NG24
 - “Consider **single-unit red blood cell transfusions** for adults [...] who do not have active bleeding”
- National Blood Transfusion Committee PBM Recommendation number A9
 - “transfuse **one dose of blood component at a time**, e.g. one unit of red cells or platelets, in non-bleeding patients and **reassess patient clinically and with further blood count** to determine if further transfusion is needed”

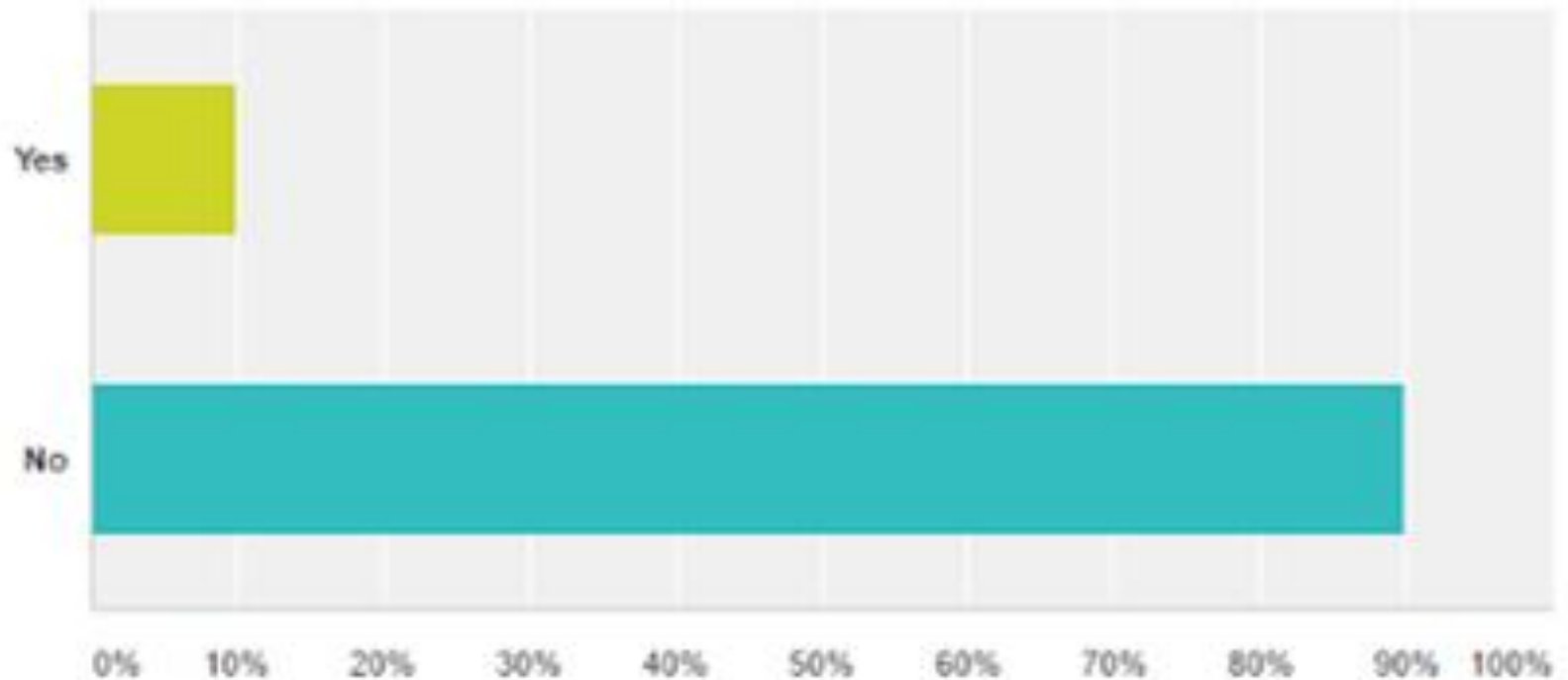
Driver diagram



Investigation

Before this survey, had you heard about a single unit RBC transfusion policy?

Answered: 10 Skipped: 0



QIP Criteria

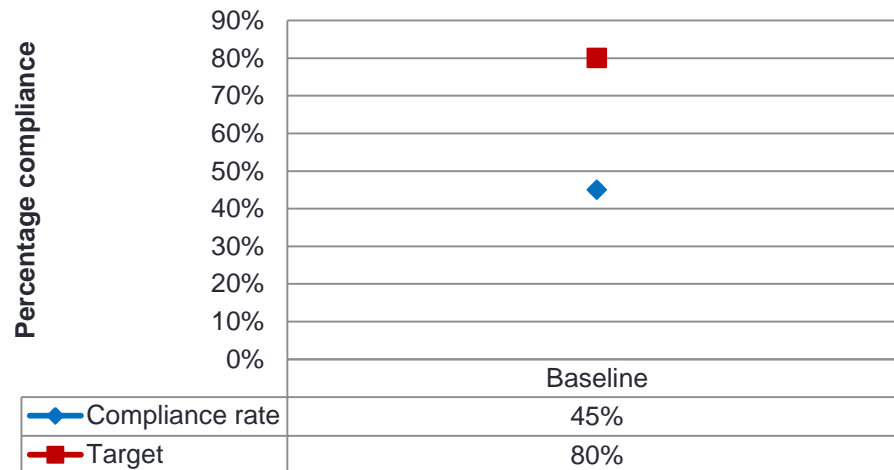
	Inclusion criteria	Exclusion criteria
Bloods request slips from	<ul style="list-style-type: none">• 5 acute medical wards/Medical Outliers• Observed period of time	<ul style="list-style-type: none">• Surgery• A & E• Critical Care• Day unit/Cottage hospital
Blood request slips for		<ul style="list-style-type: none">• Active bleeding• Known regular transfusions for haematological disorders

Balancing measures

	Possible negative effect	Possible positive effect	Measure
Blood Transfusion Staff Workload	Increased workload	Decreased workload	Staff can still order 2 units crossmatched if they feel clinically indicated – still prescribe them separately
Time spent in hospital	Increased length of stay	Decreased length of stay	
Cost of Hb check	Increased cost of transfusion pathway	Decreased cost due to result of Hb check	

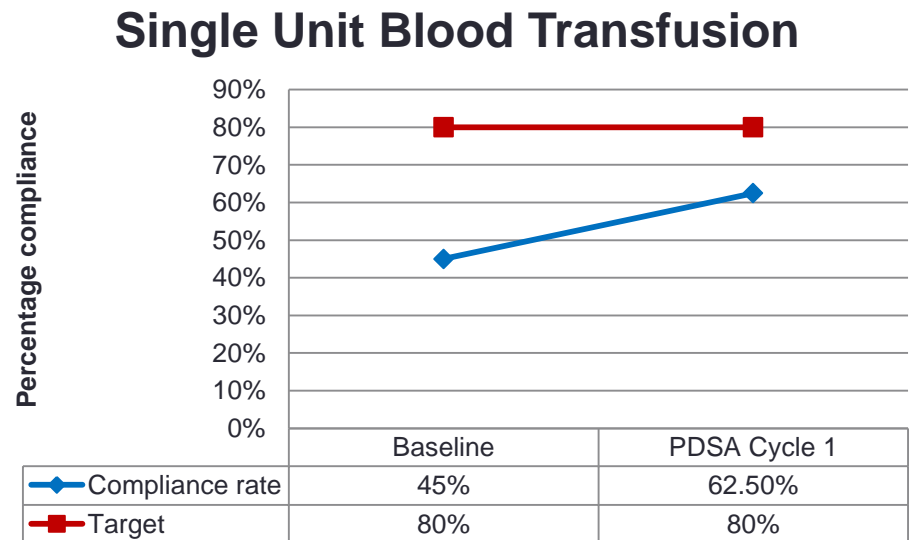
Methodology

Single Unit Blood Transfusion



PDSA cycle 1 – Educating the doctors

- Gave three presentations over the course of one week
 - Post-graduate medical education meeting
 - Foundation Doctor teaching
 - Core Medical Trainee teaching



PDSA cycle 2 - Media

- Put posters up in the acute medical wards and the doctors offices
- Emailed all medical doctors employed in the hospital



SINGLE Unit Blood Transfusions
reduce the risk of an adverse reaction

**Don't give unit two
without review**

**Before you transfuse
your patient:**

- What is your patient's current haemoglobin level?
- What is your patient's target haemoglobin level and would this be achieved by transfusing one unit?



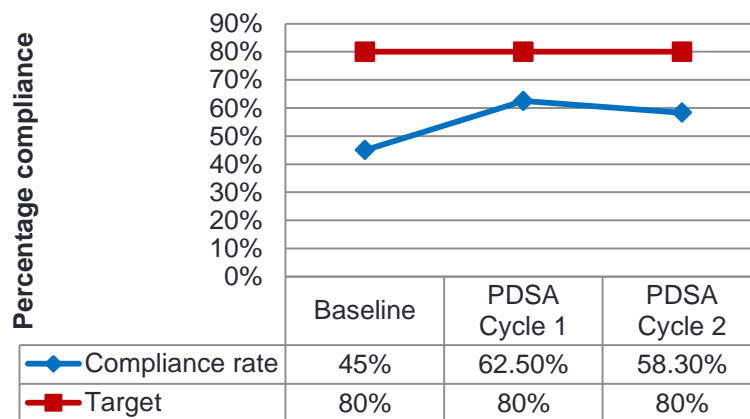
**Each unit transfused is an
independent clinical decision**

Clinically re-assess your patient after each unit is transfused.

- ✓ Is your patient still symptomatic?
- ✓ Is further transfusion appropriate?

Only order one unit at a time for non-bleeding patients.
Document the reason for the transfusion.¹

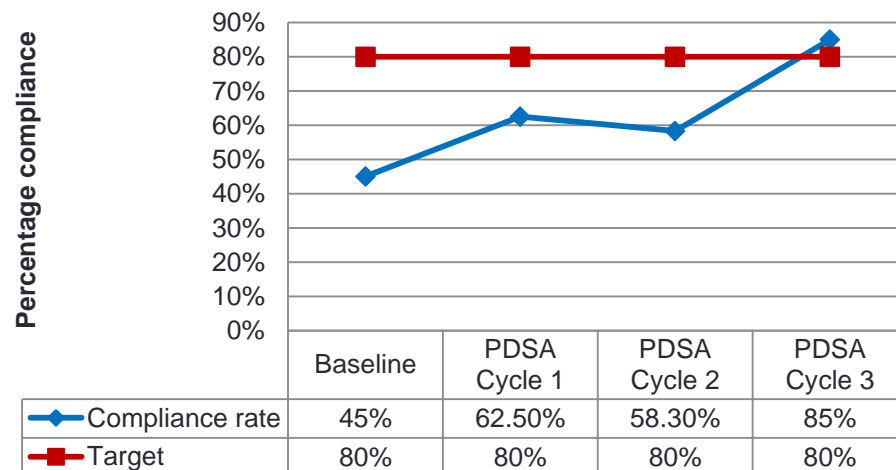
Single Unit Blood Transfusion



PDSA cycle 3 – Educating ALL stakeholders

- Email to ALL stakeholders
- Presentation to blood transfusion committee
- Presentation to nursing staff during handovers

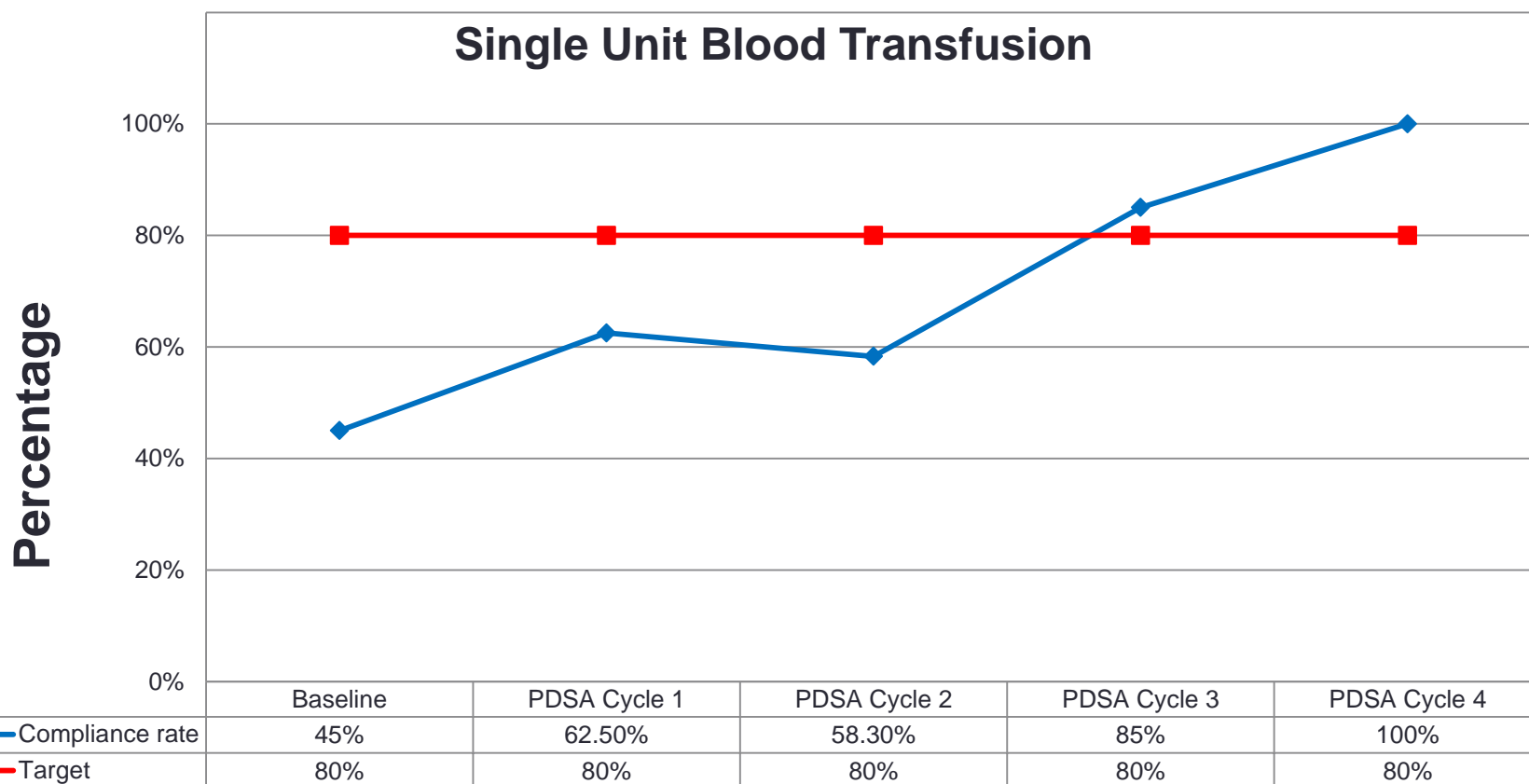
Single Unit Blood Transfusion



PDSA cycle 4 – non-intervention

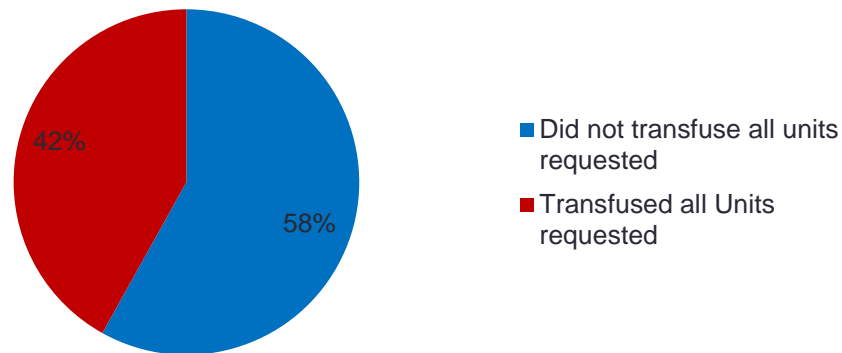
- Observed

Single Unit Blood Transfusion



Secondary Outcome

Transfusing of all requested units from requests for >1 Units that were transfused according to single unit policy during the course of our project



What went well

What went well	What could have gone better
Outcome – hospital policy, 100% compliance	Timing
Reception	Temporary staff
Data collection	Access to database
PDSA cycles	
Saved at least £2000 in 4/12	

Lessons for the future

- Organisation
- Include multidisciplinary team earlier
- Selection criteria for QIP
 - Small data group
 - Easily collected data
 - Patient centred
 - Evidence based medicine
- Sustainability
- Consider negative impact of change and try and countermand it

In the future

- Publicize that it is now official hospital policy including link to policy wording
- Modify online eLearning
- Tailor RBC electronic request system (Coming soon to Nobles!)
- Patient education
- Transfusion pathway
- Reaudit in October 2017
- Retrospective study on impact on length of patient stay

Team Members

- Dr Aqeem Azam
- Dr Sarah Clegg

Many thanks to:

- Our supervisor Dr Matthew Todd
- Blood Transfusion Committee – especially Steven Doyle and Iain Taylor
- Moira Daines – BT staff

- And all the staff at Nobles who took the change on board so graciously!

References

- Blood transfusion (2015) NICE guideline NG24
- Implementation Guide Single Unit Transfusion Policy (Dec 2015) NHSBT Patient Blood Management Team with Kings College Hospital and University Hospital Lewisham
- <http://hospital.blood.co.uk/media/28230/component-price-list-2016-2017.pdf>

Questions?