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# Reducing Patient Exposure to Red Cell Transfusions through a Single Unit Transfusion Policy

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Patient Blood Management Practitioner



# NICE Guidelines NG24

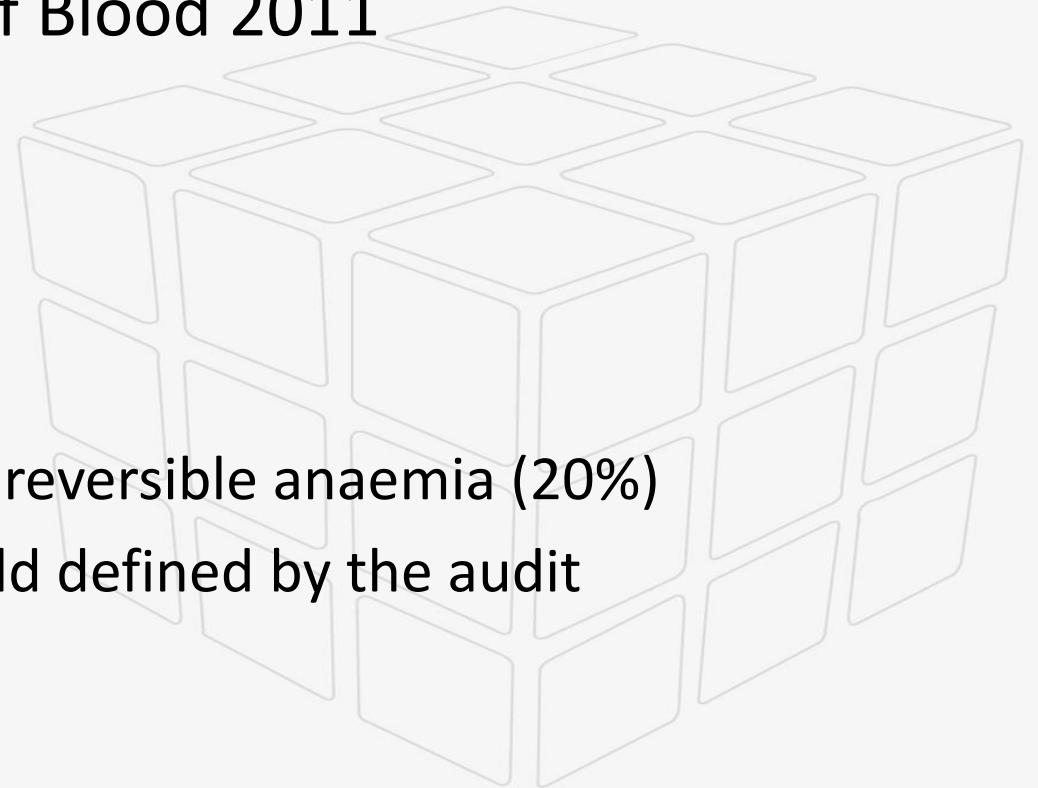
## Doses

- 1.2.5 Consider single-unit red blood cell transfusions for adults (or equivalent volumes calculated based on body weight for children or adults with low body weight) who do not have active bleeding.
- 1.2.6 After each single-unit red blood cell transfusion (or equivalent volumes calculated based on body weight for children or adults with low body weight), clinically reassess and check haemoglobin levels, and give further transfusions if needed.



## National Comparative Audit for Blood Transfusion of Medical Use of Blood 2011

- Red cells transfused
  - 65% = 2 units
  - 15% = 3 units
  - 6% = 4 units
- Transfusion in cases with possible reversible anaemia (20%)
- Transfusion above the Hb threshold defined by the audit algorithm (29%)
- Over-transfusion (33%)
  - *Transfusion to more than 20g/L above threshold*

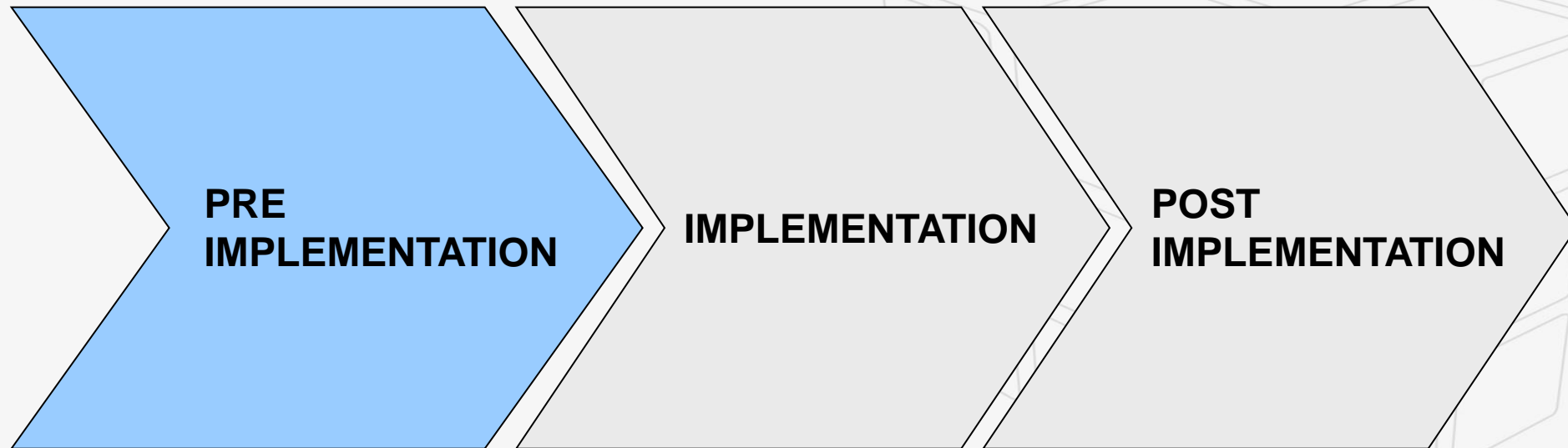


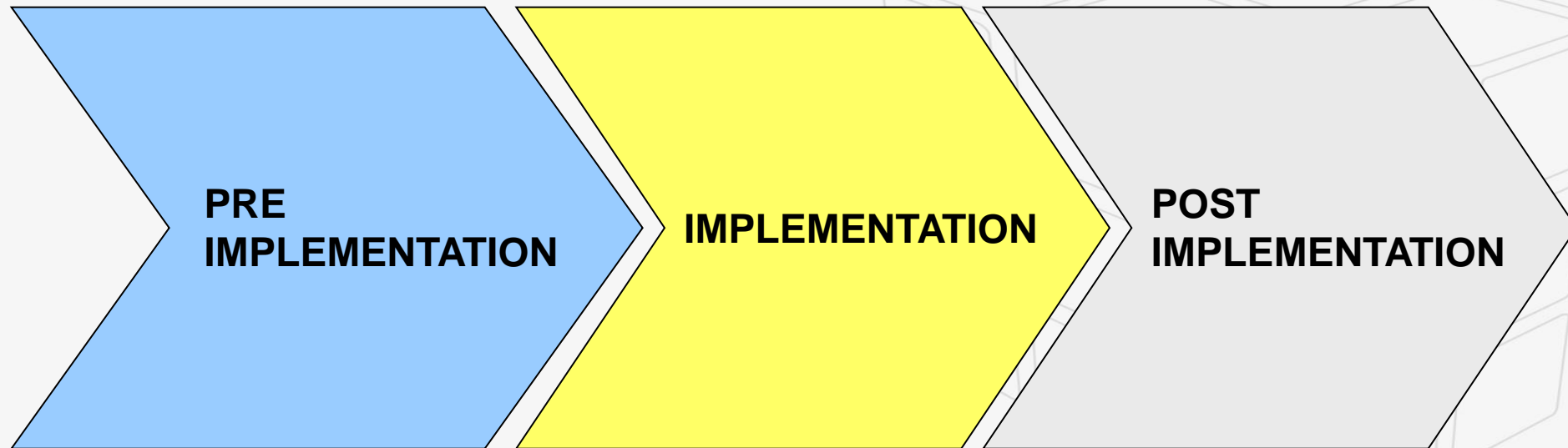


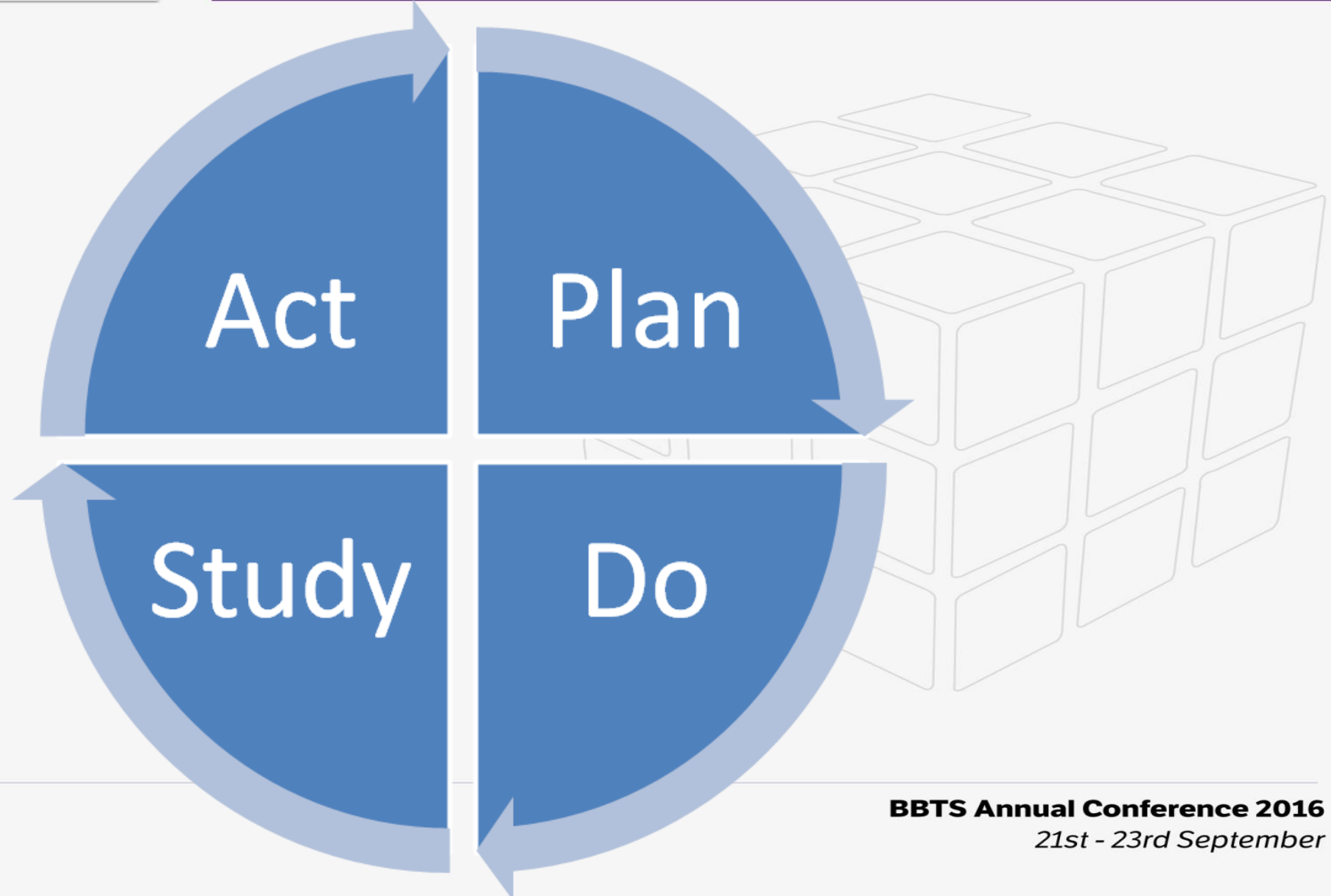
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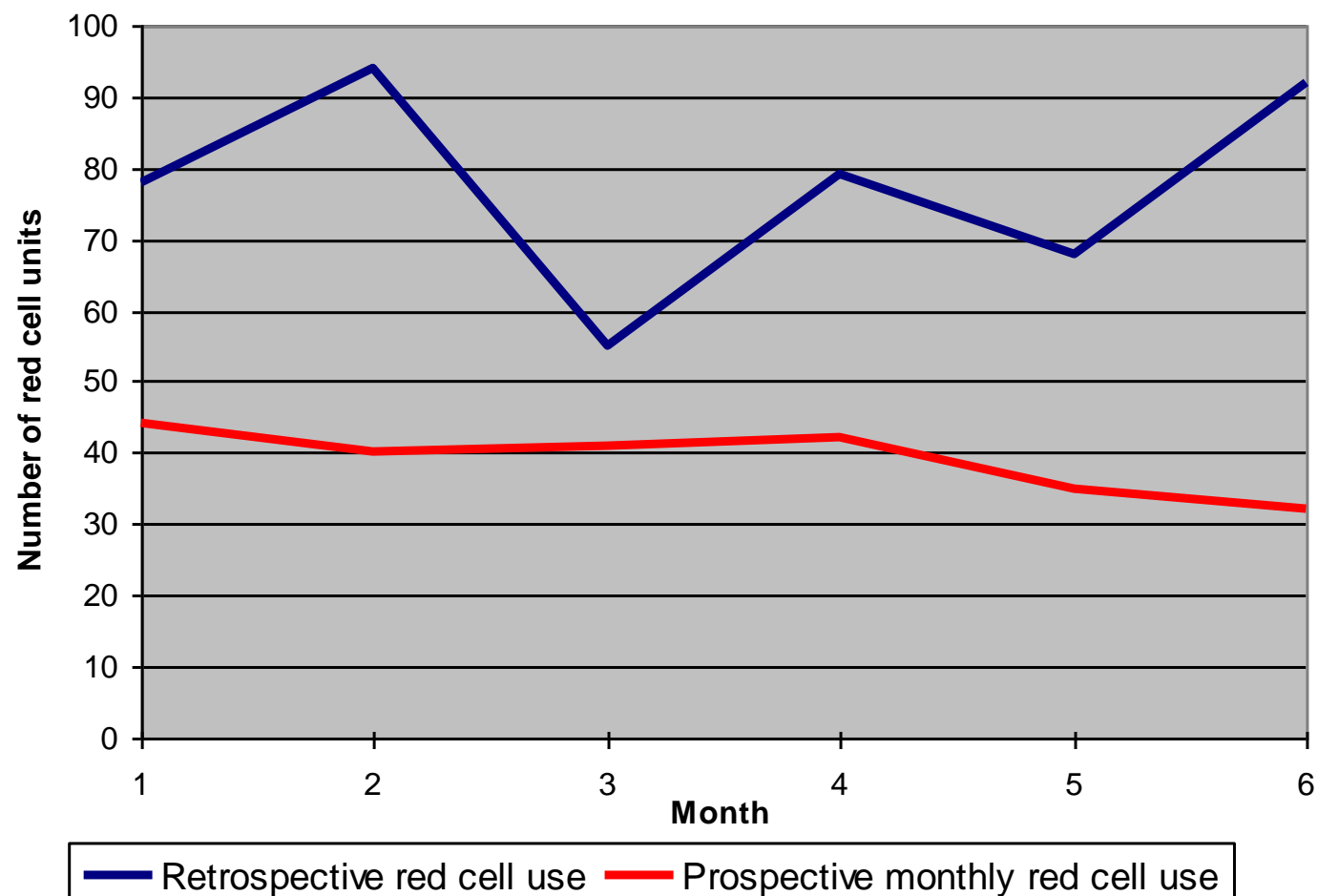




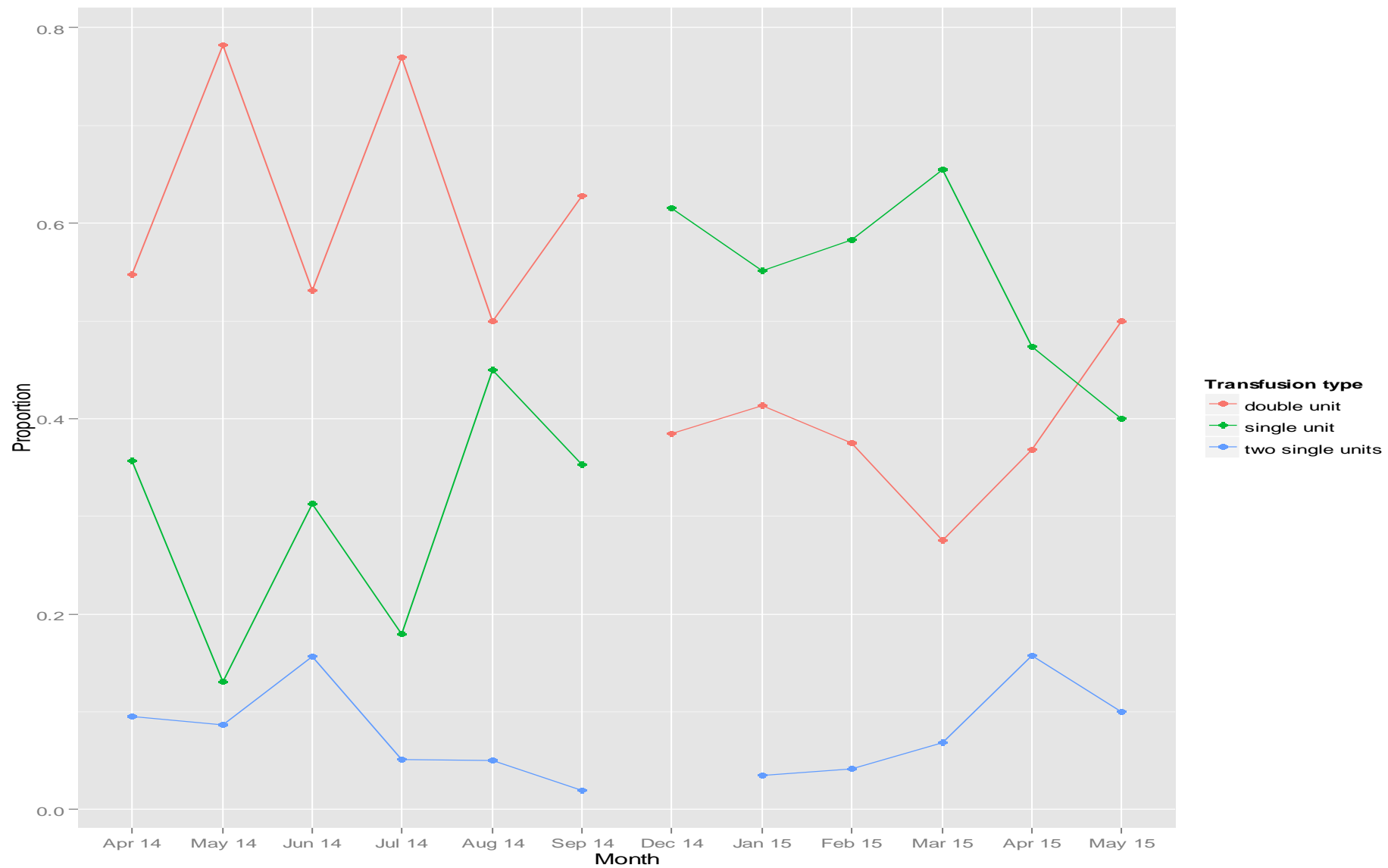




### Monthly red cell usage - Retrospective v prospective









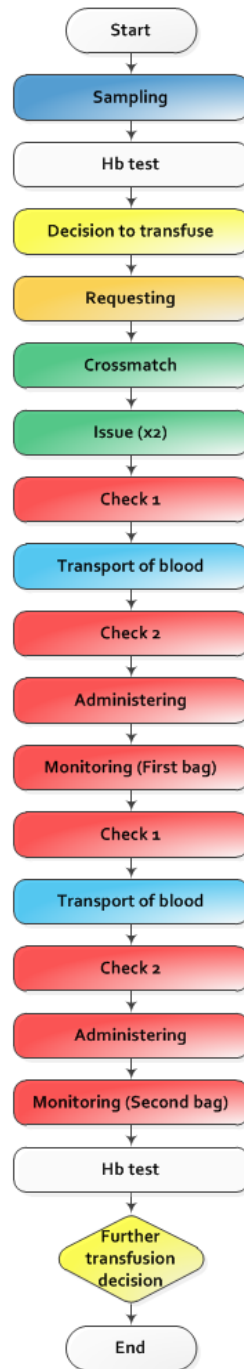
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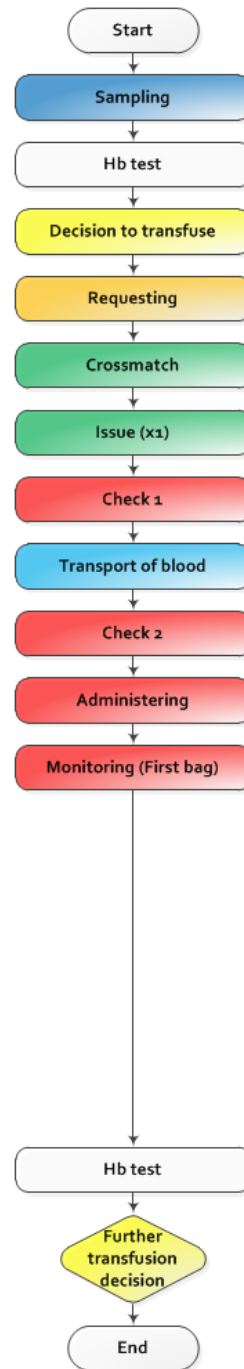
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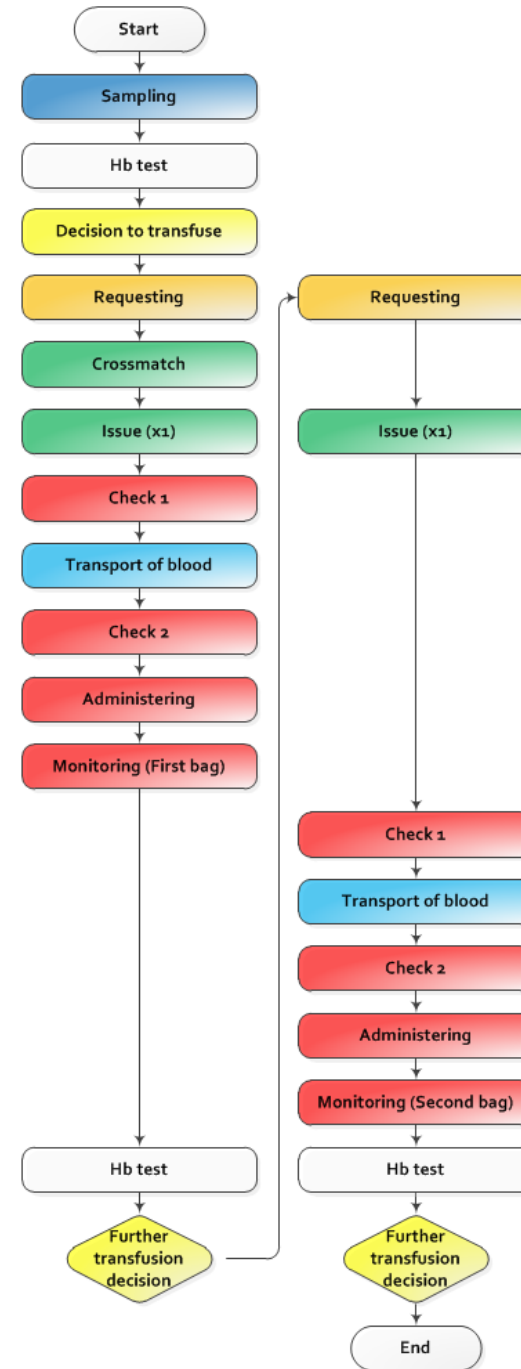
### Double Unit



### Single Unit

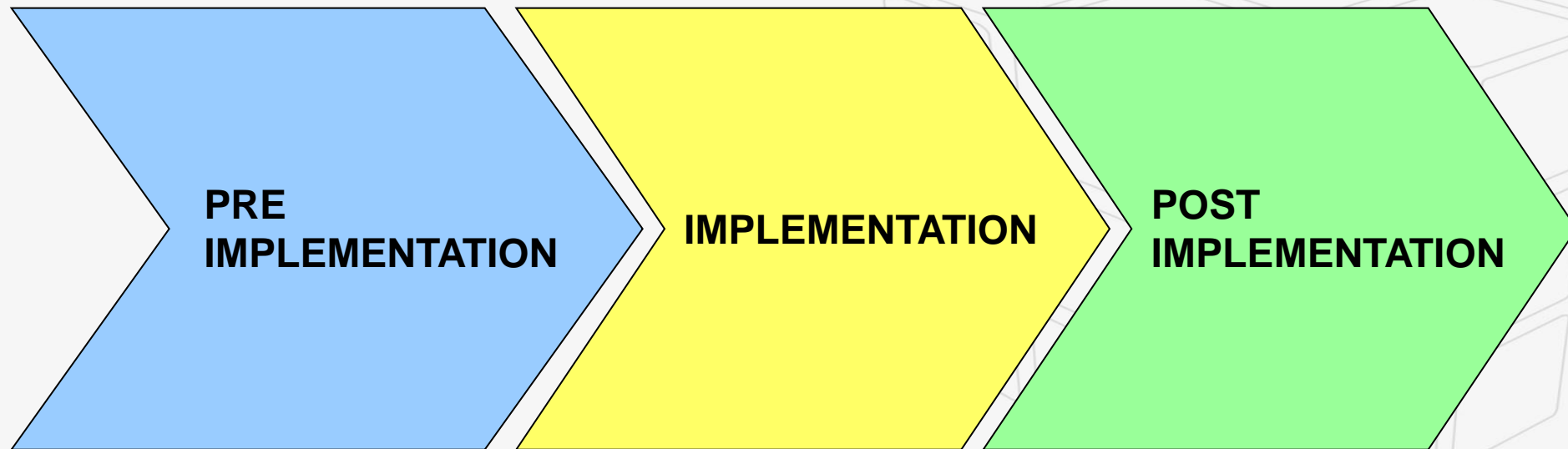


### Two Single Units





Stage	Mean time (min)	Staff member	Staff cost per Hour (£)	Consumable costs (£)	Total costs (£)
Sampling	10	Allied health professional support worker (band 2)	£24.00	-	£4.00
Transport (sample collection)	5	Administration and estates (band 2)	£24.00	-	£2.00
Hb test	0		-	£1.50	£1.50
Requesting	1.02	Nurse (band 5)	£43.00	-	£0.73
Crossmatch	34.22	Scientific and professional staff (band 6)	£44.00	-	£25.09
Issue	5.6	Scientific and professional staff (band 6)	£44.00	-	£4.11
Check 1	2.5	Nurse (band 5)	£43.00	-	£1.79
Transport (unit)	10	Administration and estates (band 2)	£24.00	-	£4.00
Check 2	2.5	Nurse (band 5)	£43.00	-	£1.79
Administering	5	Nurse (band 5)	£43.00	£120.00	£123.58
Monitoring	20	Nurse (band 5)	£43.00	-	£14.33
Decision to transfuse	0		-	-	-





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**26 deaths**  
**8 preventable**

**Risk 1:100,000**

**Risk of death from error**  
**1:320,000**

**166 patients suffered**  
**serious harm**



**1 in 3**

**WERE PREVENTABLE**



SERIOUS HAZARDS OF TRANSFUSION

**SHOT**

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