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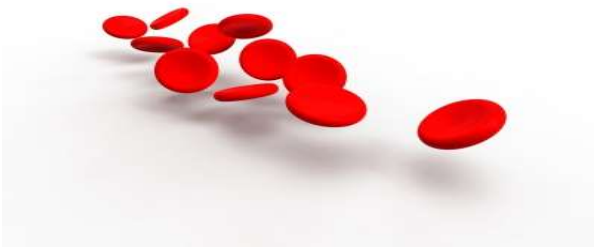
Empowerment of Lab Staff to Improve Appropriate Red Cell Use in Adults



Heather Clarke – Royal Derby Hospital

Jo Shorthouse – NHS Blood and Transplant

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Project Summary

- What's the project about?
- Why we did it?
- How we did it? – Methods etc
- Who was involved?
- Results
- Conclusion

What and Why ?

- Implement a single unit/appropriate use protocol into Royal Derby Hospital
- Invest in staff: Increase overall knowledge, understanding around appropriate transfusion in both lab and clinical areas
- Encourage lab staff to look at the reasons for transfusion requests, check relevant patient results and increase their confidence to discuss an inappropriate request with the requester

What and Why?

- Improve patient outcomes and reduce the number of inappropriate red cell transfusions
- Improve compliance to NICE Blood Transfusion Quality Standard QS138 : Standard 3
- Improve compliance with Choosing Wisely campaigns in UK

  'Why give two when one will do?'

Initial actions/decisions…..

- Produce lab algorithm to support staff in decision making
- Which wards ? – medical (stable non-bleeding patients)
- Which grades of lab staff?
- Production of training package
- Inform clinical staff on the wards about the project

Methods

Data collection:

- The following data collected pre and post implementation:
  - No. of red cell units requested
  - No. of single unit red cell requests
  - No. of red cell units issued
  - No. of red cell units transfused
  - No. of requests referred to TPs

- Also the no. of occasions where less red cell units were actually transfused than issued
- And….. the no. of occasions where single red cell unit transfusions took place even though more than one unit may have been originally requested.

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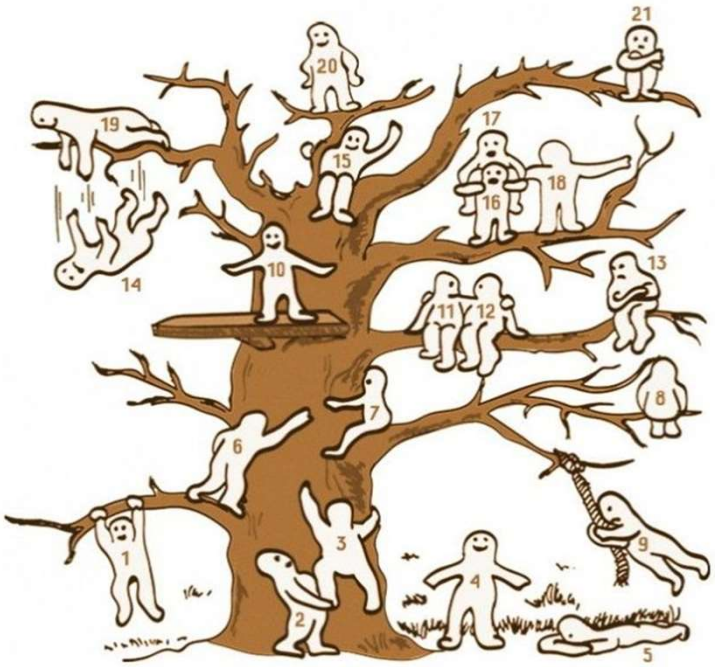
Methods

Staff self-assessment:

Before initial training, post training and post implementation



Methods – Staff self-assessment

Post-Implementation Self-Assessment Questions

1. What are your thoughts on this project now?

2. Where are you currently on the jelly-baby tree?

3. How do you feel about clarifying / questioning a request for red cells?

☐

☐

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4. Describe your reasons for your smiley choice above.

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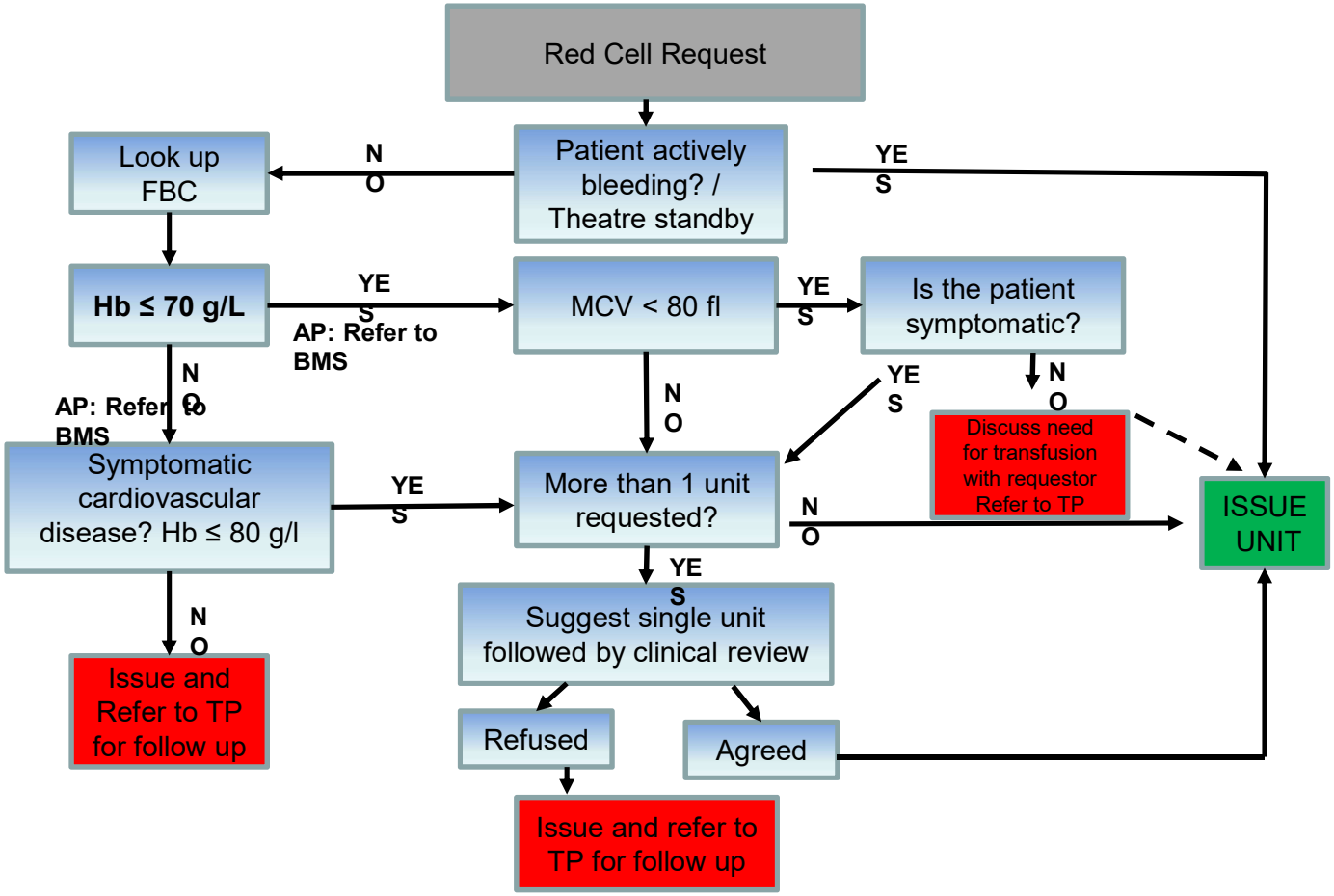
Methods

Lab staff training sessions/interactive workshops:

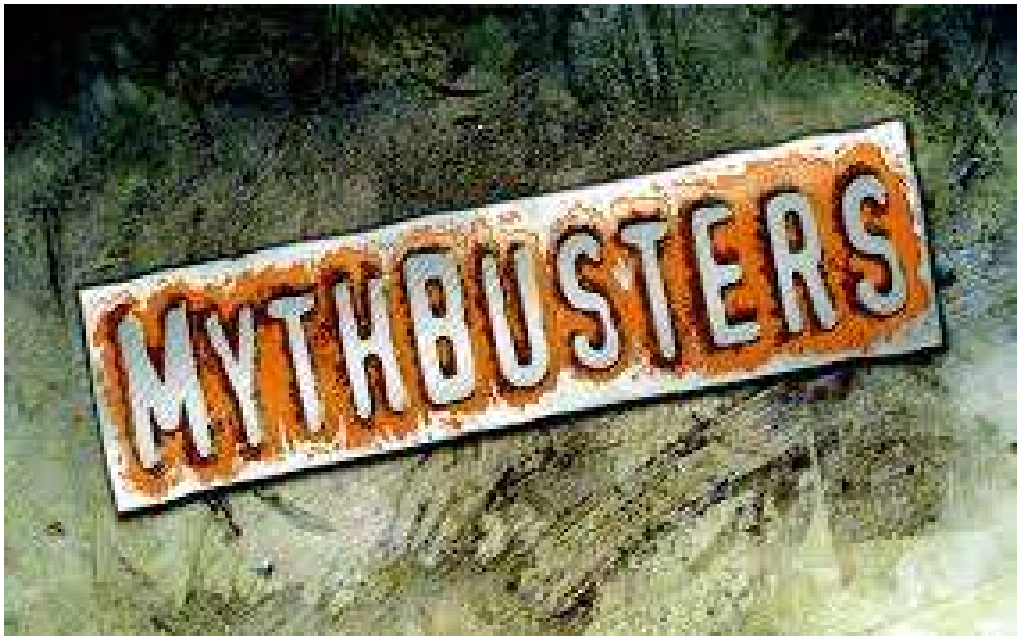
- Background to why appropriate use of blood components is important for ***patient safety***
- PBM
- Causes and types of anaemia
- HCPC responsibilities
- Awareness of the important role of lab staff in the transfusion process and collaboration
- Interactive case studies
- Lab algorithm
- Empowerment and myth busting of barriers to questioning inappropriate requests

Algorithm for Reviewing Red Cell Requests



Empowerment to question inappropriate transfusion requests

Myths to bust!



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Myth 1

‘We’re just here to provide a service – no questions asked’

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Need to be a service which advises ***and*** questions:

We share a collective responsibility to ensure appropriate use of blood:

1. To help prevent patients receiving inappropriate transfusion… PATIENT SAFETY
2. To protect a vital and finite blood supply
3. To save money

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Myth 2

‘Doctors know more than us about blood transfusion’

- Clinical transfusion education in medical school and as FY1/2s
- Pick up practice on wards…good and bad
  - Non-haematology consultants & GPs can be ‘out of date’
  - Trainee doctors reluctant to challenge consultant’s authority – this is where you can help...

- Laboratory staff complete lengthy training and education in blood transfusion science
- Annual competencies, CPD programme, NEQAS
- Knowledge extensive in certain areas *but possibly lacking in clinical relevance*
  - Can offer valuable support and education
  - Can direct to guidelines, haematology advice

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Myth 3

‘I don’t have the authority to question’

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Facts

Know your rights *and* responsibilities

- **BMS:**
  - HCPC registration – must take responsibility for own actions
- **Medical staff:**
  - GMC and medical liability insurance - as above, but with extra cover

- Be aware of your place in the clinical pathway – **does the buck stop with you?**
- Any avoidable delay in provision may result in patient harm

So what does that mean?

THIS IS IMPORTANT

- You have the authority to ***discuss/question*** a request, but…
- You do NOT have the authority to ***refuse*** it

- It's important they know you aren't saying 'No' you are just seeking advice or more information
- So…if you get a request that doesn't 'fit' the guidelines…

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Results

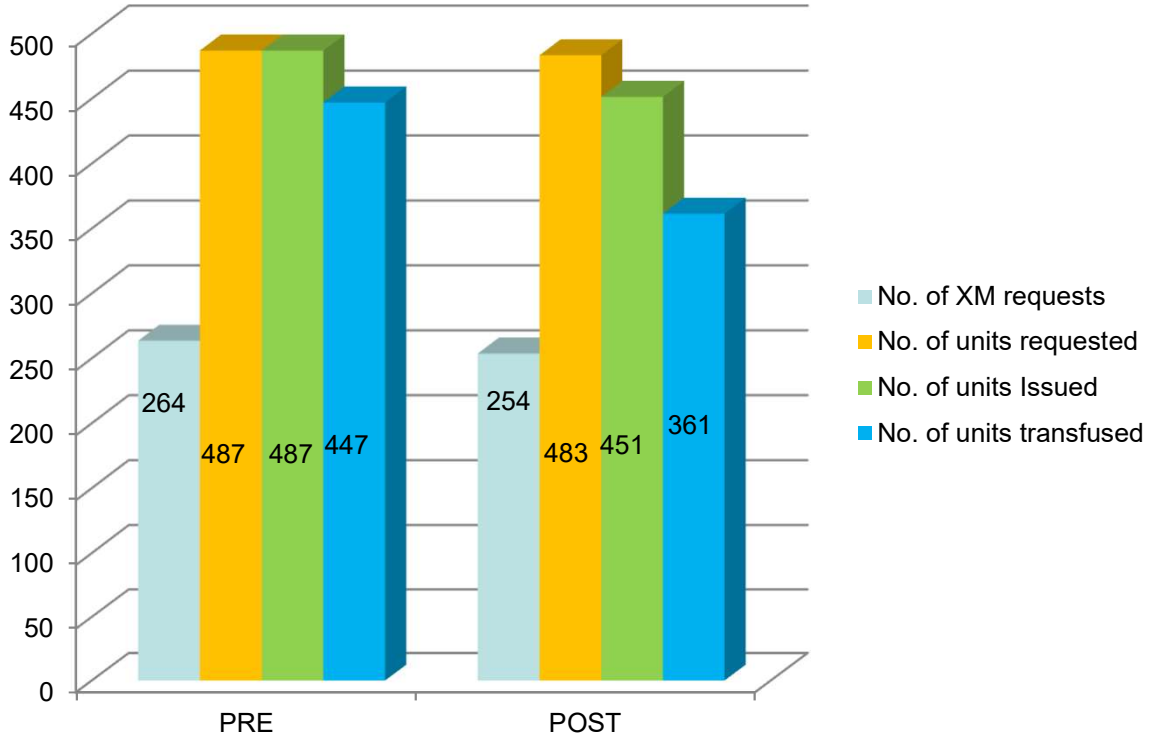
PRE – Implementation – no questioning taking place

	No. of XM requests	No. of units requested	No. of units Issued	No. of single unit XM requests	% of single unit XM requests	No. of units transfused	No. of referrals to TP
AUG 2018	221	425	425	51	23	396	0
SEPT 2018	306	549	549	97	32	498	0

POST- Implementation – appropriate questioning taking place

	No. of XM requests	No. of units requested	No. of units Issued	No. of single unit XM requests	% of single unit XM requests	No. of units transfused	No. of referrals to TP
JAN 2019	267	543	495	76	29	393	0
FEB 2019	226	432	404	70	31	318	0
MAR 2019	268	475	455	103	38	373	0

Comparison of Pre and Post Implementation Data



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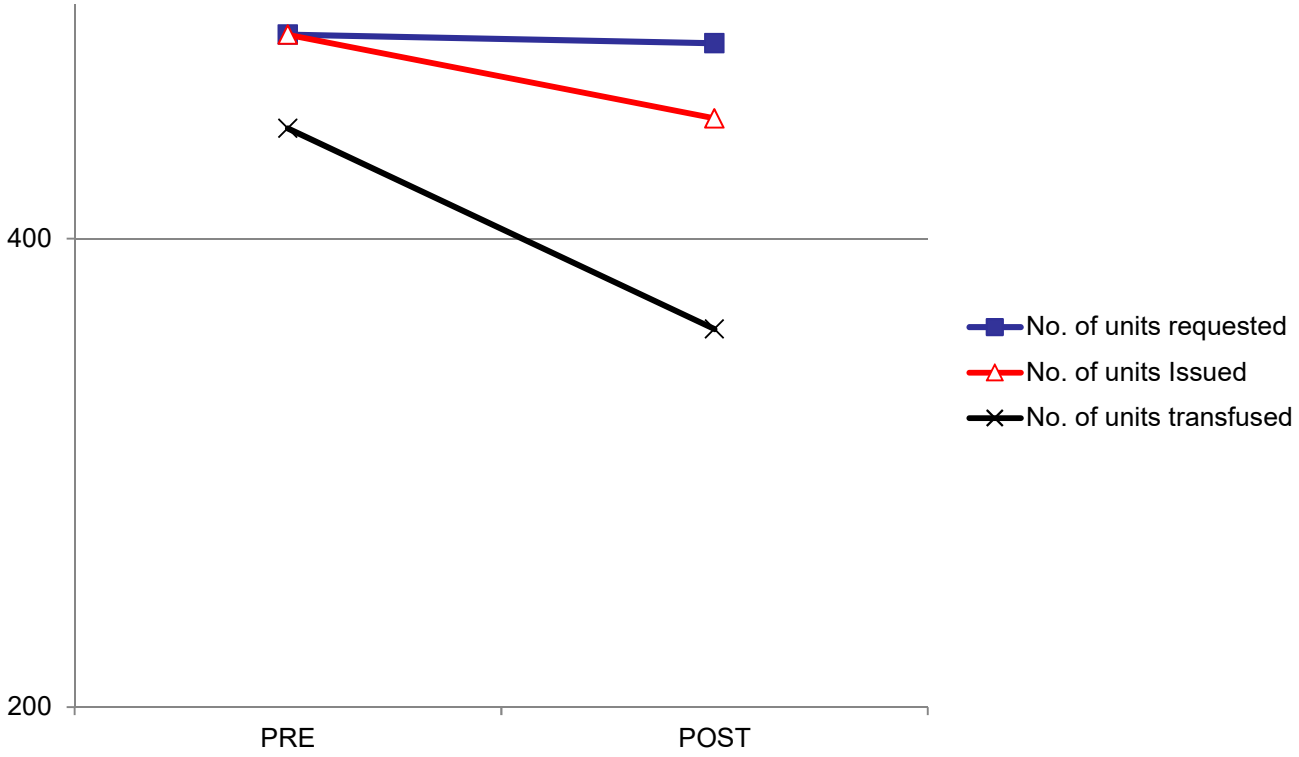

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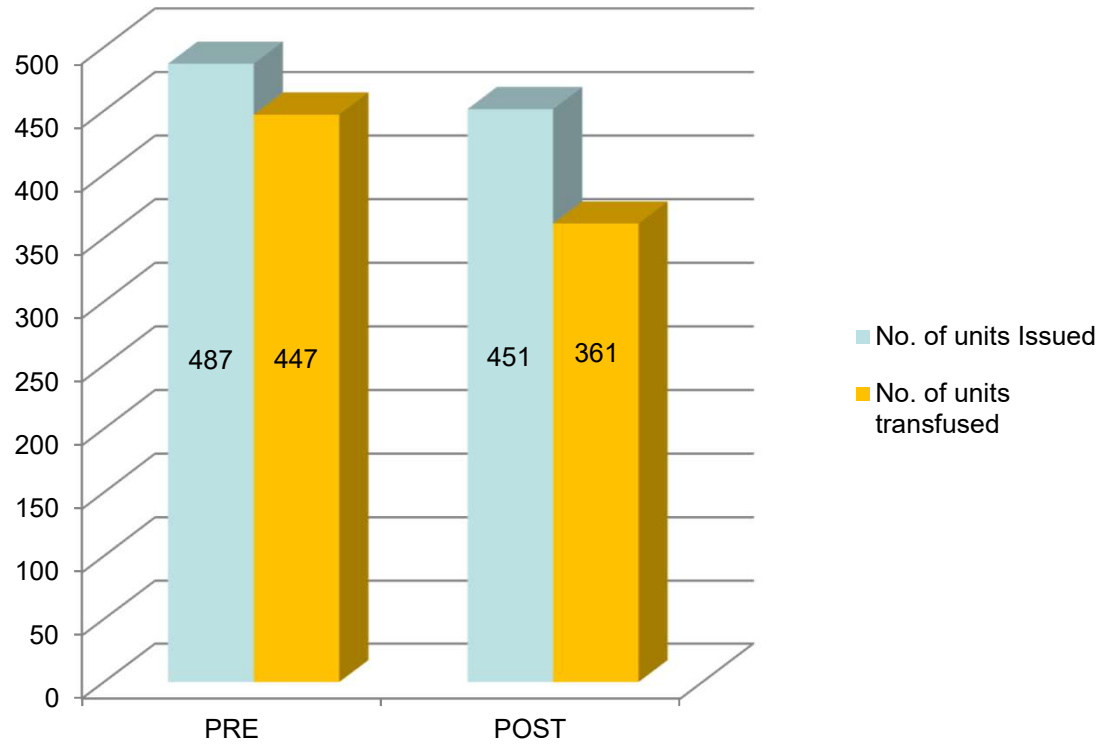
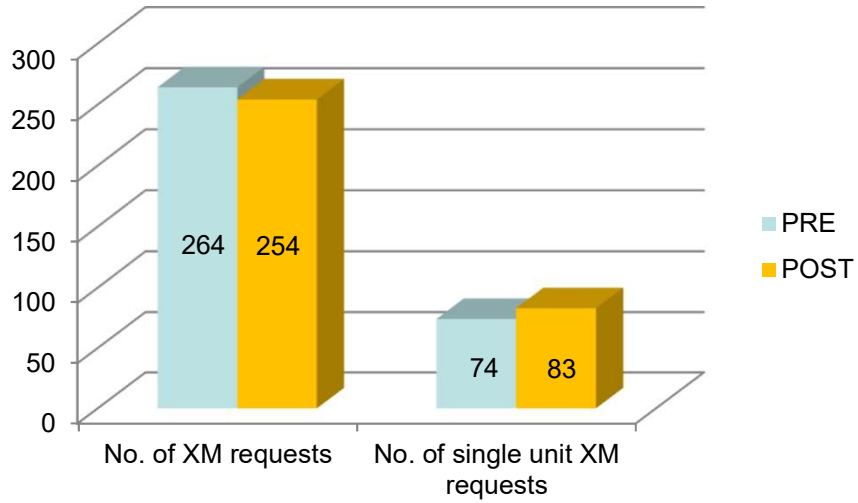
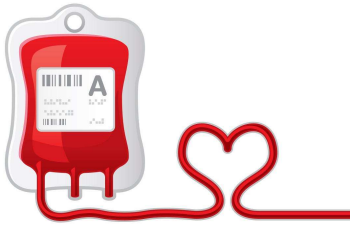
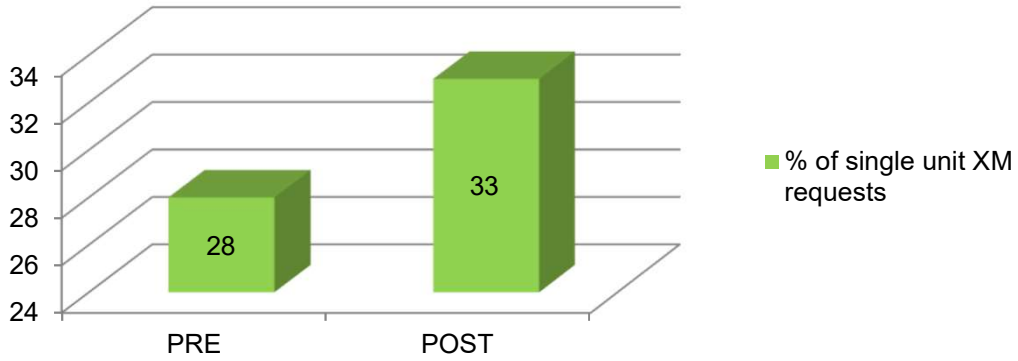
No. of units issued vs No. of units transfused





% of single unit XM requests

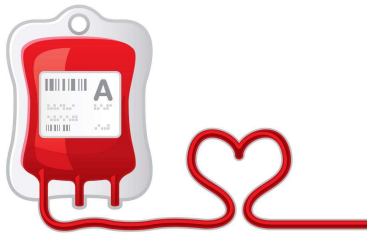




Results

- **Pre-implementation-** of the units transfused an average of **34%** became single unit transfusions even though more than one unit may have been originally requested

- **Post-implementation-** of the units transfused an average of **39%** became single unit transfusions even though more than one unit may have been originally requested



Results

Additional information identified:

Pre- implementation – no questioning taking place

Out of 527 XM requests 208 (39%) resulted in less units being transfused than were issued

Which is good……

Post-implementation – questioning taking place

Out of 761 XM requests 161 (21%) resulted in less units being transfused than were issued

Less units are now actually being requested post implementation- which is excellent ☺

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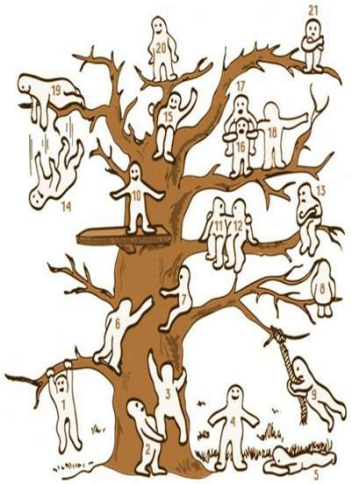
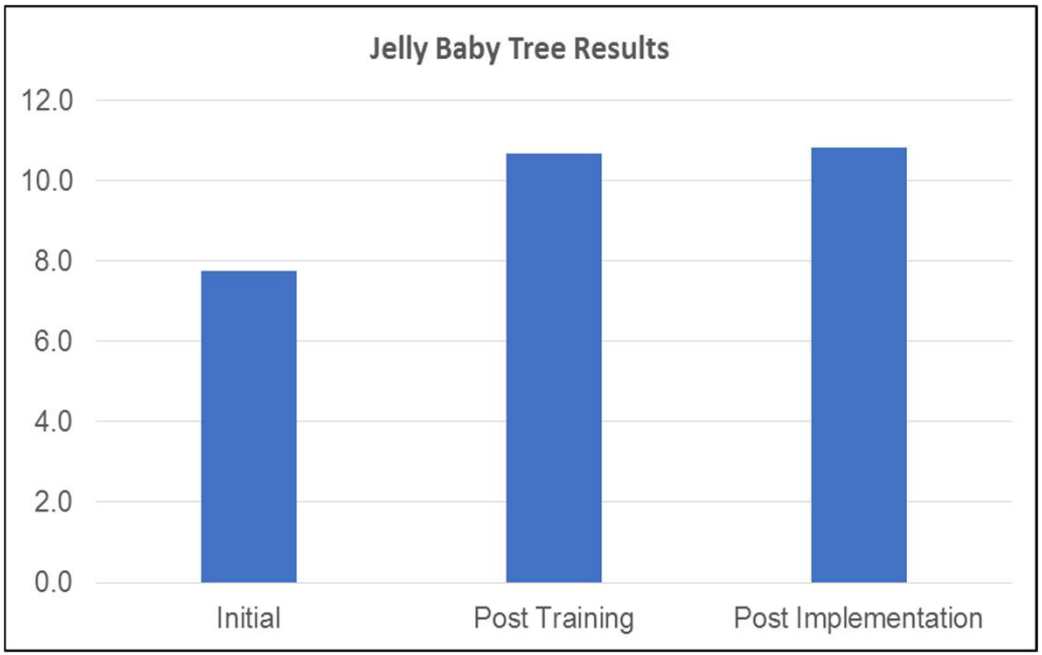
Results

Staff self-assessment





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Results

Staff self-assessment:

Trainee BMS:

- Initial assessment: " Am a trainee BMS, not sure where my limits are when questioning doctors" (JB 7)
- Post training assessment: "more confident now I have the ideas and explanation of why we should question" (JB 10)
- Post implementation assessment: "I am happy to question requests that I feel are inappropriate and haven't had much push back from staff. I have noticed more single unit requests" (JB 10)

Associate Practitioner:

- Initial assessment: "Project is a good idea. Am reasonably confident in questioning" (JB 10)
- Post training assessment: "Yes I can do it! Great idea, now more confident in offering advice (JB 11)
- Post implementation assessment: " Feel more confident. Project worth implementing. Message seems to be getting across to clinical area" (JB15)

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Results

Staff self-assessment:

Experienced BMS

- Initial assessment: " Interested in the project. Already have some experience in questioning (JB 10)
- Post training assessment: "Good ideas, will be beneficial to patients and clinical staff" (JB10)
- Post implementation assessment: "Good initiative: Drs responding well and are getting used to requesting 1 unit instead of 2 in iron deficiency cases. Seem to need to question requests less" (JB 15)

Senior BMS

- Initial assessment: " Useful project, giving staff the opportunity to increase in confidence" (JB15)
- Post training assessment: "Looking forward to it" (JB 15)
- Post implementation assessment: "Noticeable increase in confidence of staff to question. Whole lab finally moving away from the "no questioning culture" and are embracing the project" (JB 15)

BPOSITIVE

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Conclusion

The empowerment project has shown positive benefits for patient safety:

- A decrease in the overall number of transfusions taking place
- An increase in the number of single unit transfusions post implementation
- An increase in staff confidence to question inappropriate requests
- An increased awareness by lab staff of their essential role in the ‘transfusion process’

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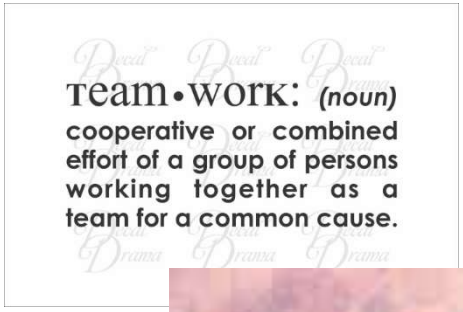
Collaboration

- Working together is the key
- Stronger as a team with a common goal – best practice for best patient outcome



Considerations

- This is an on-going project which needed to “bed in”
- It is an initiative that needs re-visiting
  - possible slippage in questioning with time
  - Clinical area…… new medics etc
- Production of infographic for training and keeping the project high on the agenda

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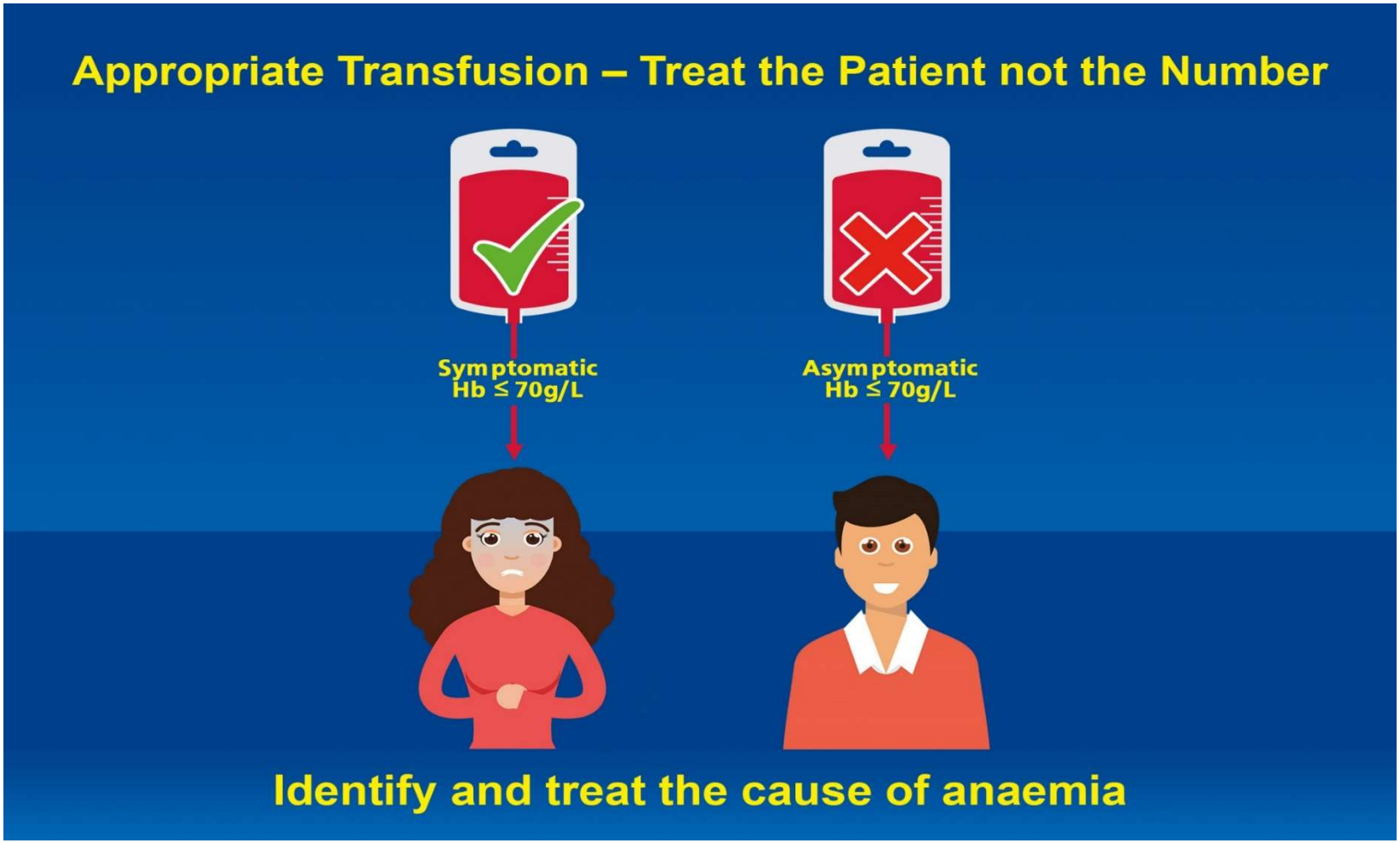
Infographic



Any questions?

With thanks to:
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