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

Heather Clarke – Royal Derby Hospital

Jo Shorthouse – NHS Blood and Transplant

Heather Clarke – Royal Derby Hospital
Jo Shorthouse – NHS Blood and Transplant

Nothing to declare!

NHS Blood and Transplant

NHS University Hospitals of Derby and Burton NHS Foundation Trust

Project Summary

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

NHS Blood and Transplant

NHS University Hospitals of Derby and Burton NHS Foundation Trust

What and Why ?

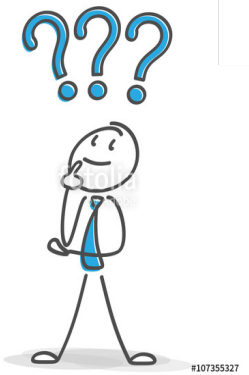
- Implement a single unit/appropriate use protocol into Royal Derby Hospital
- Invest in staff: Increase overall knowledge, understanding around appropriate transfusion in both lab and clinical areas
- Encourage lab staff to look at the reasons for transfusion requests, check relevant patient results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

NHS Blood and Transplant

Methods

NHS University Hospitals of Derby and Burton NHS Foundation Trust

Data collection:

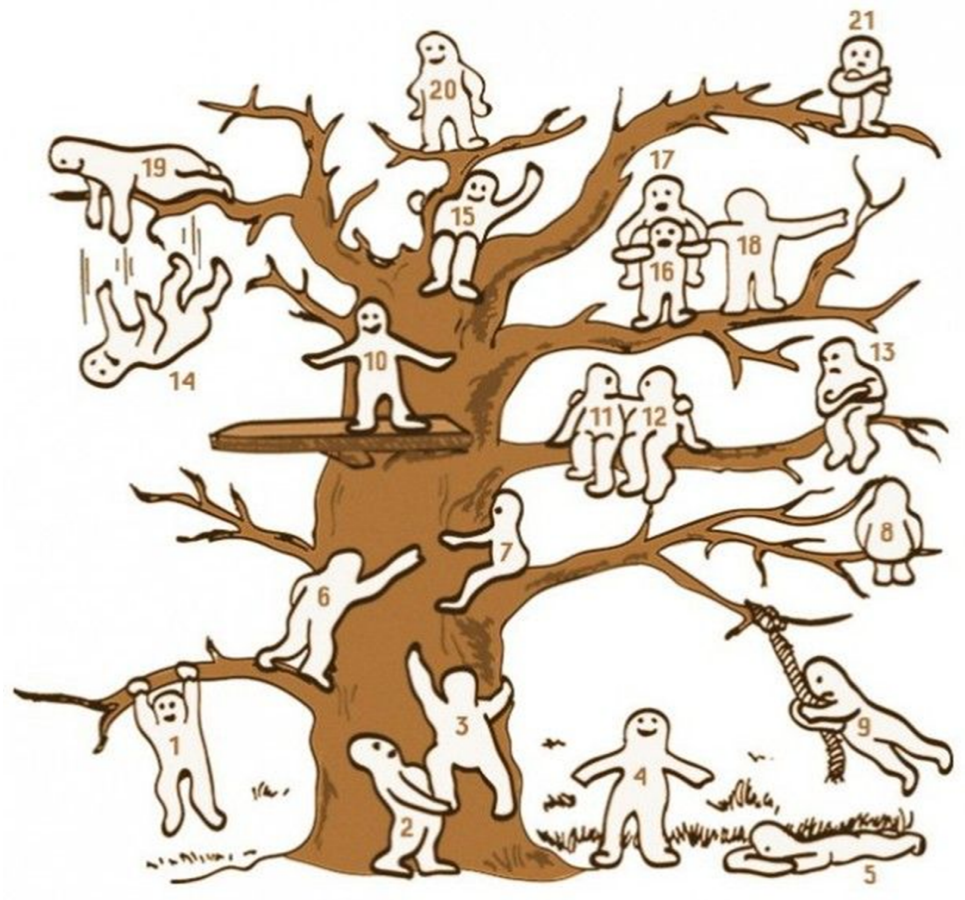
- The following data collected pre and post implementation:
  - No. of red cell units requested
  - No. of single unit red cell requests
  - No. of red cell units issued
  - No. of red cell units transfused
  - No. of requests referred to TPs

- 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.

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?


☐


☐


☐

4. Describe your reasons for your smiley choice above.

NHS Blood and Transplant

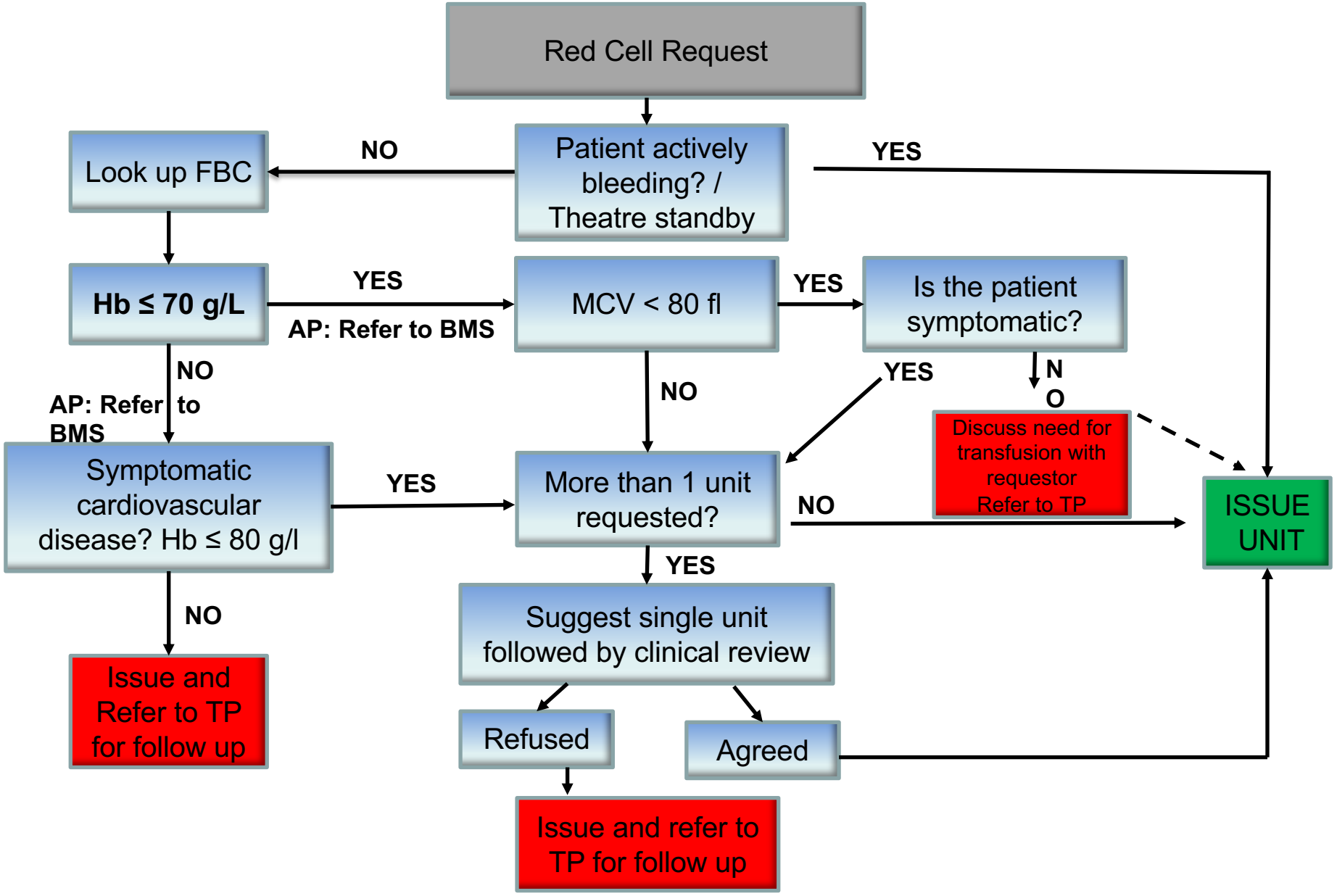
Methods

NHS University Hospitals of Derby and Burton NHS Foundation Trust

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



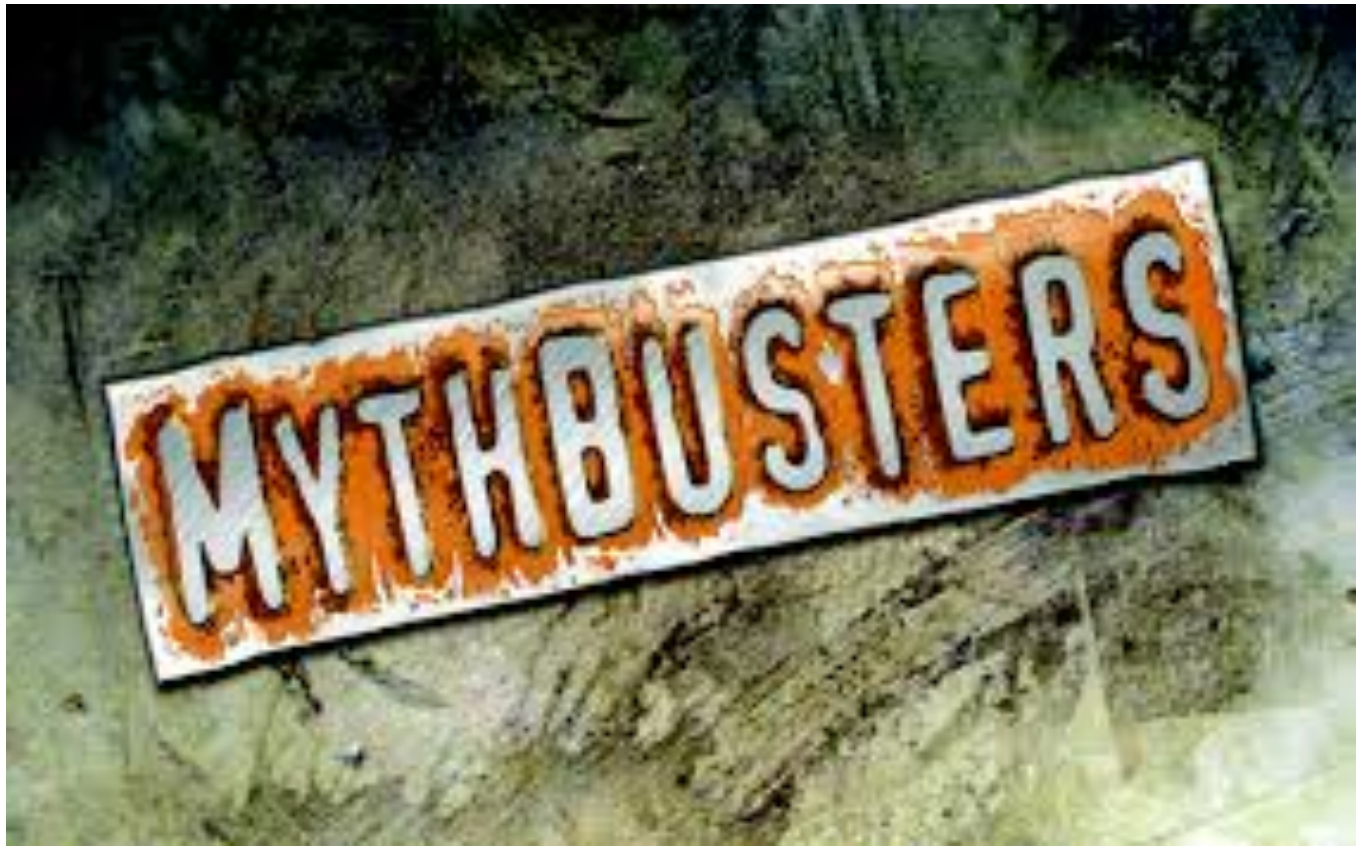
Empowerment to question inappropriate transfusion requests

What are the obstacles?

NHS Blood and Transplant

NHS University Hospitals of Derby and Burton NHS Foundation Trust

Myths to bust!



NHS Blood and Transplant

NHS University Hospitals of Derby and Burton NHS Foundation Trust

Myth 1

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

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

NHS Blood and Transplant

NHS University Hospitals of Derby and Burton NHS Foundation Trust

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

NHS Blood and Transplant

NHS University Hospitals of Derby and Burton NHS Foundation Trust

Myth 3

‘I don’t have the authority to question’

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…

NHS Blood and Transplant

Results

NHS University Hospitals of Derby and Burton NHS Foundation Trust

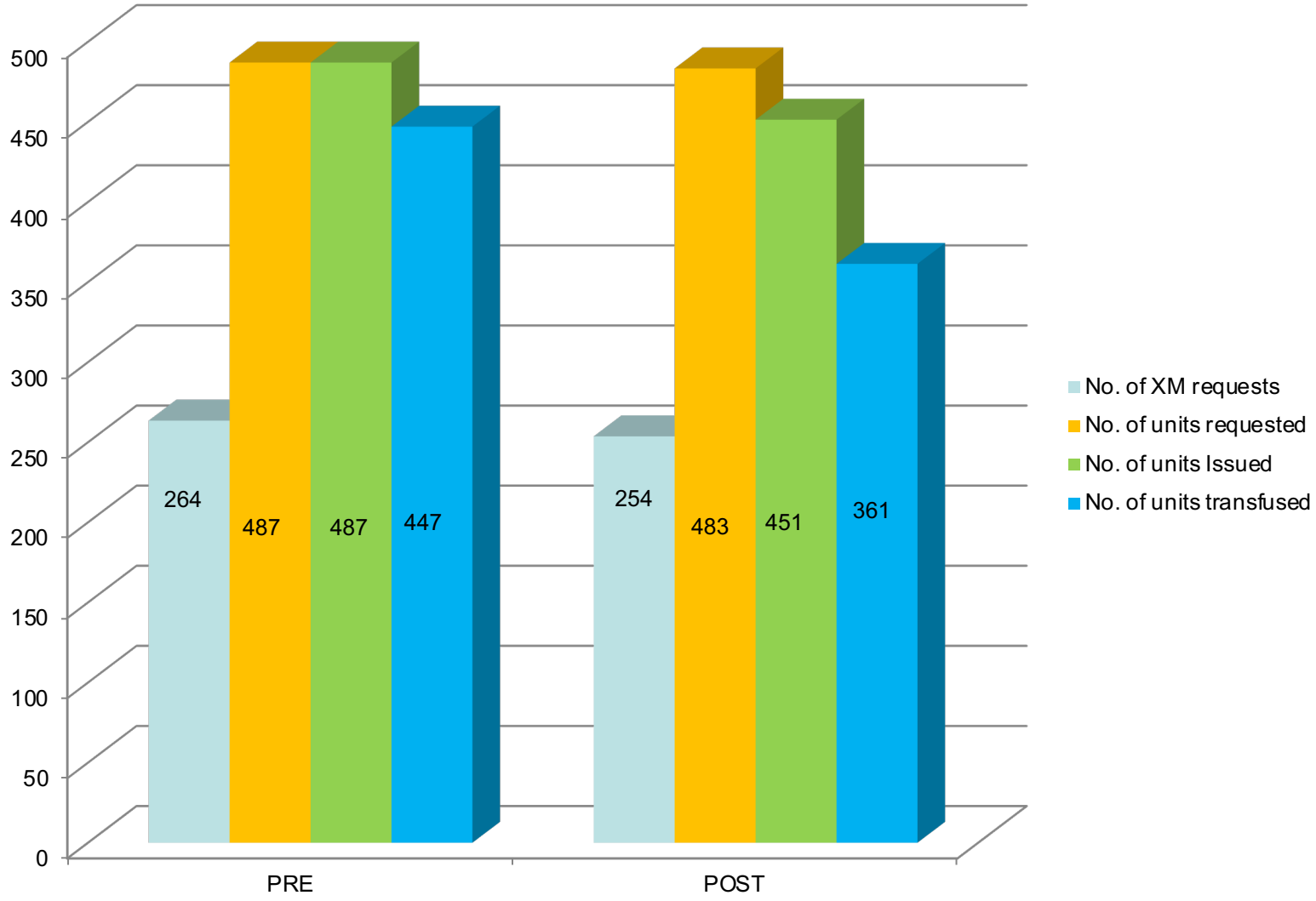
PRE – Implementation – no questioning taking place

	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

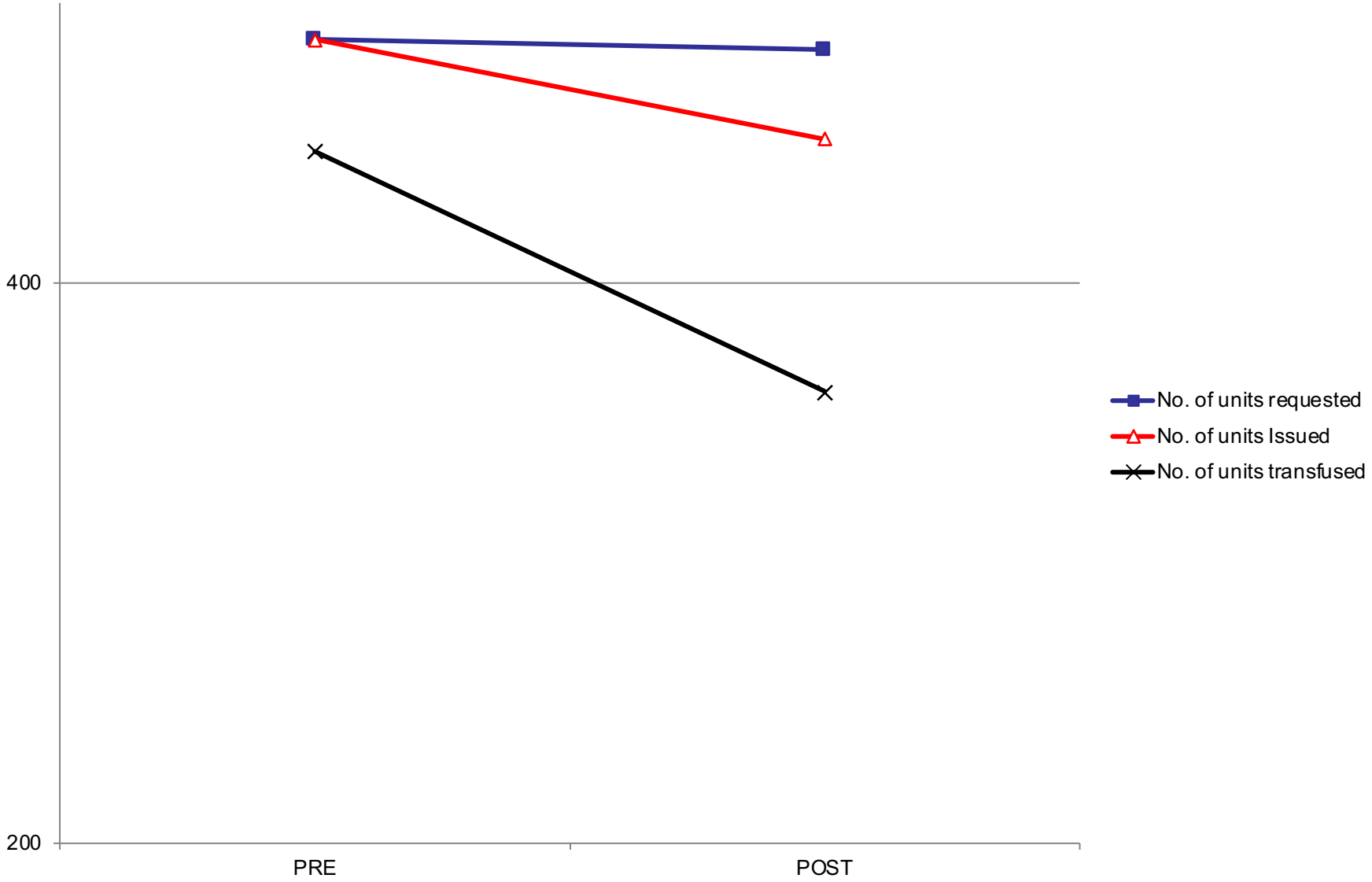
POST- Implementation – appropriate questioning taking place

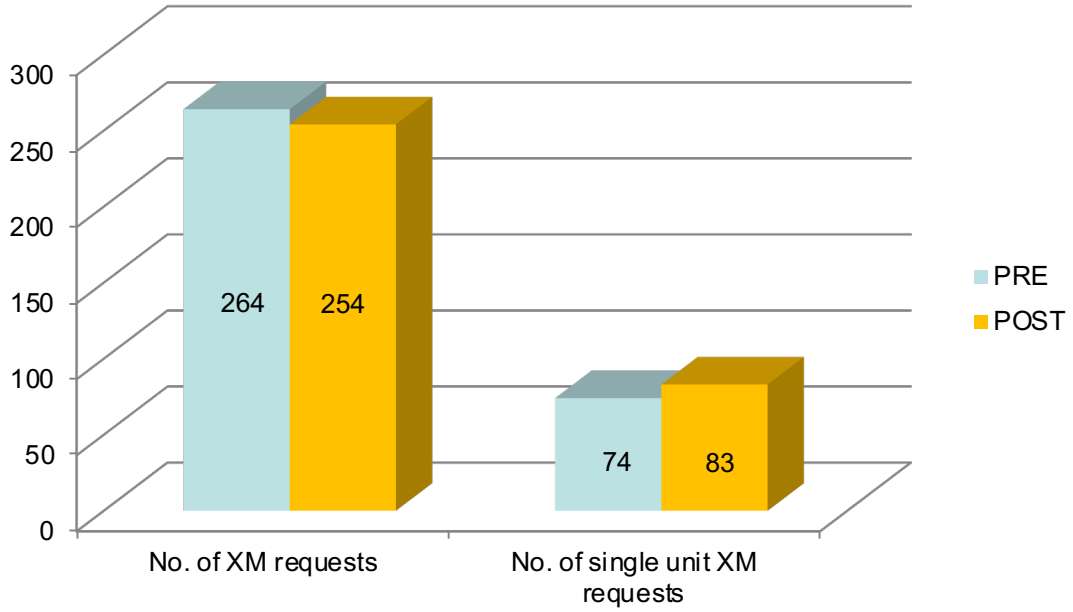
	No. of XM requests	No. of units requested	No. of units Issued	No. of single unit XM requests	% of single unit XM requests	No. of units transfused	No. of referrals to TP
JAN 2019	267	543	495	76	29	393	0
FEB 2019	226	432	404	70	31	318	0
MAR 2019	268	475	455	103	38	373	0

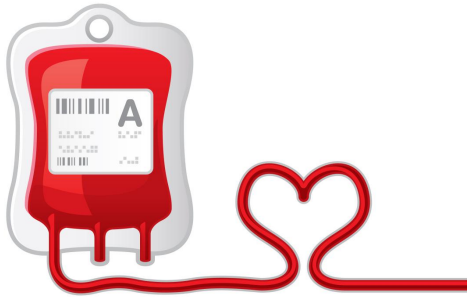
Comparison of Pre and Post Implementation Data

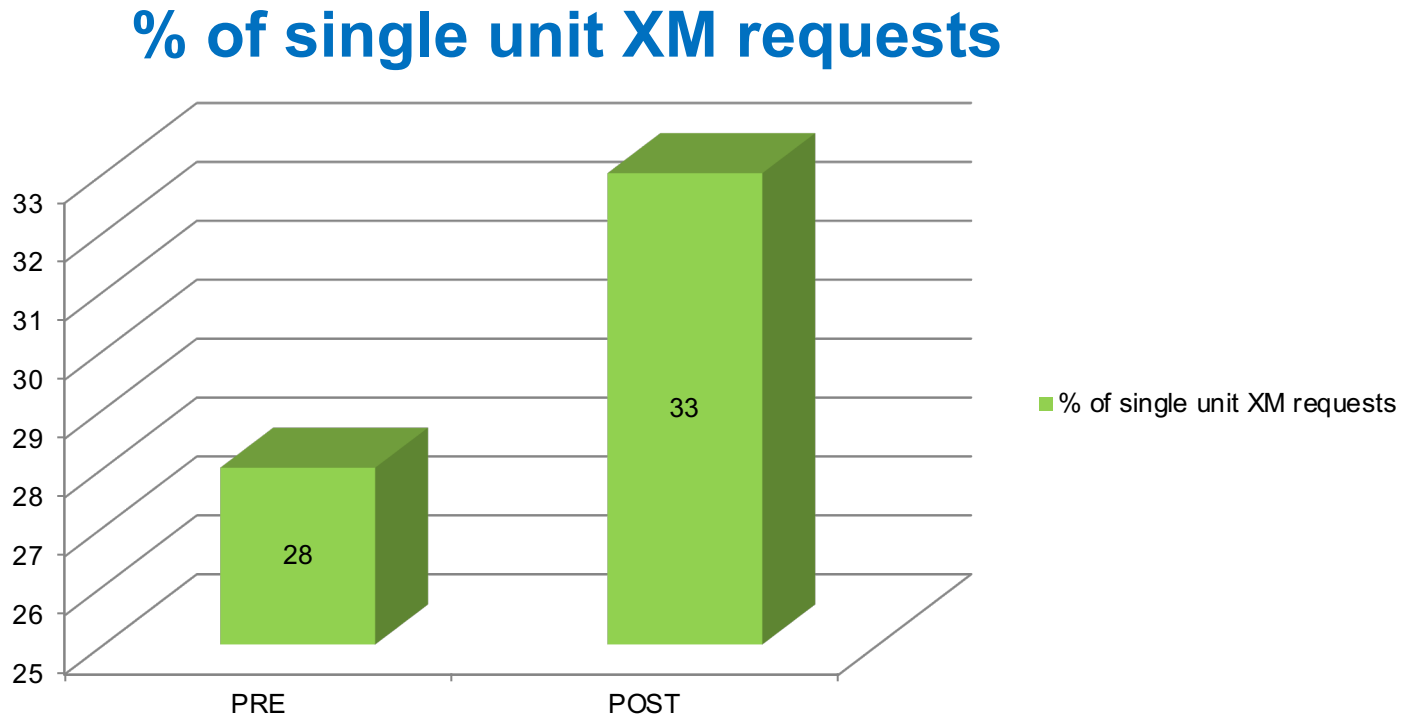


Comparison of Pre and Post Implementation Data




300
250
200
150
100
50
0
264
254
74
83
No. of XM requests
No. of single unit XM requests
PRE
POST


A


% of single unit XM requests
33
32
31
30
29
28
27
26
25
28
33
PRE
POST
% of single unit XM requests

NHS Blood and Transplant

NHS University Hospitals of Derby and Burton NHS Foundation Trust

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……..

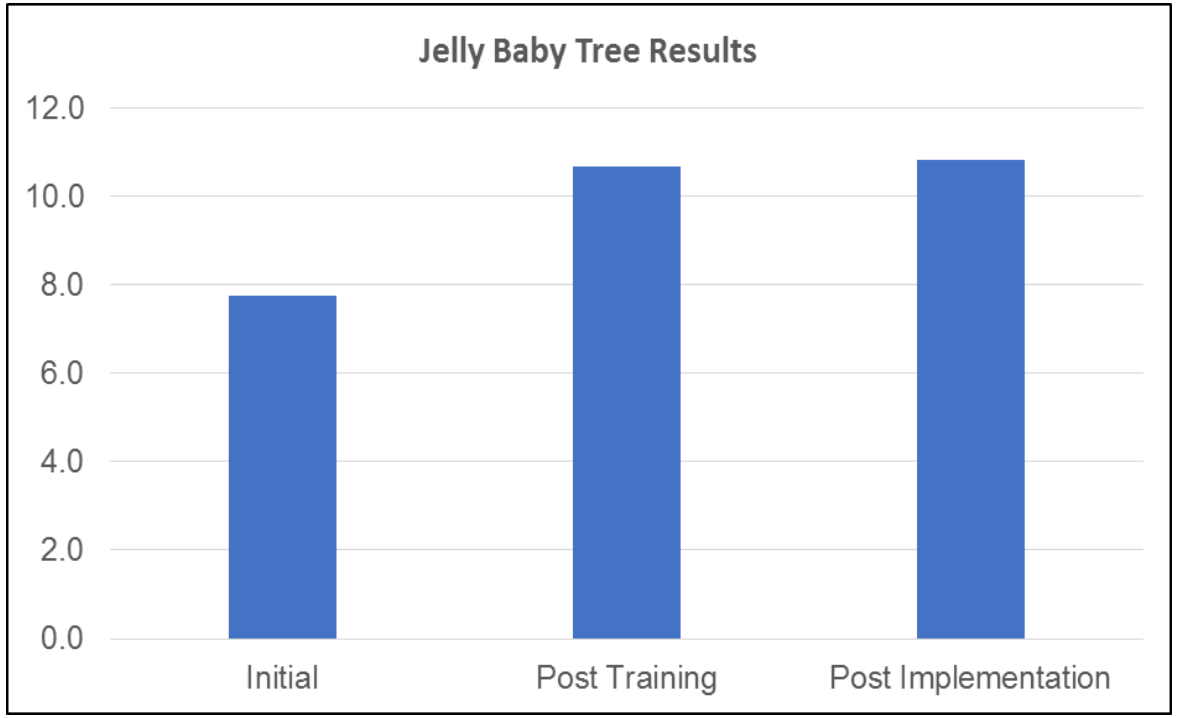
Post-implementation – questioning taking place

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 ☺

Results

Staff self-assessment



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)

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)

NHS Blood and Transplant

NHS University Hospitals of Derby and Burton NHS Foundation Trust

Conclusion

BPOSITIVE

NHS
University Hospitals of Derby and Burton
NHS Foundation Trust

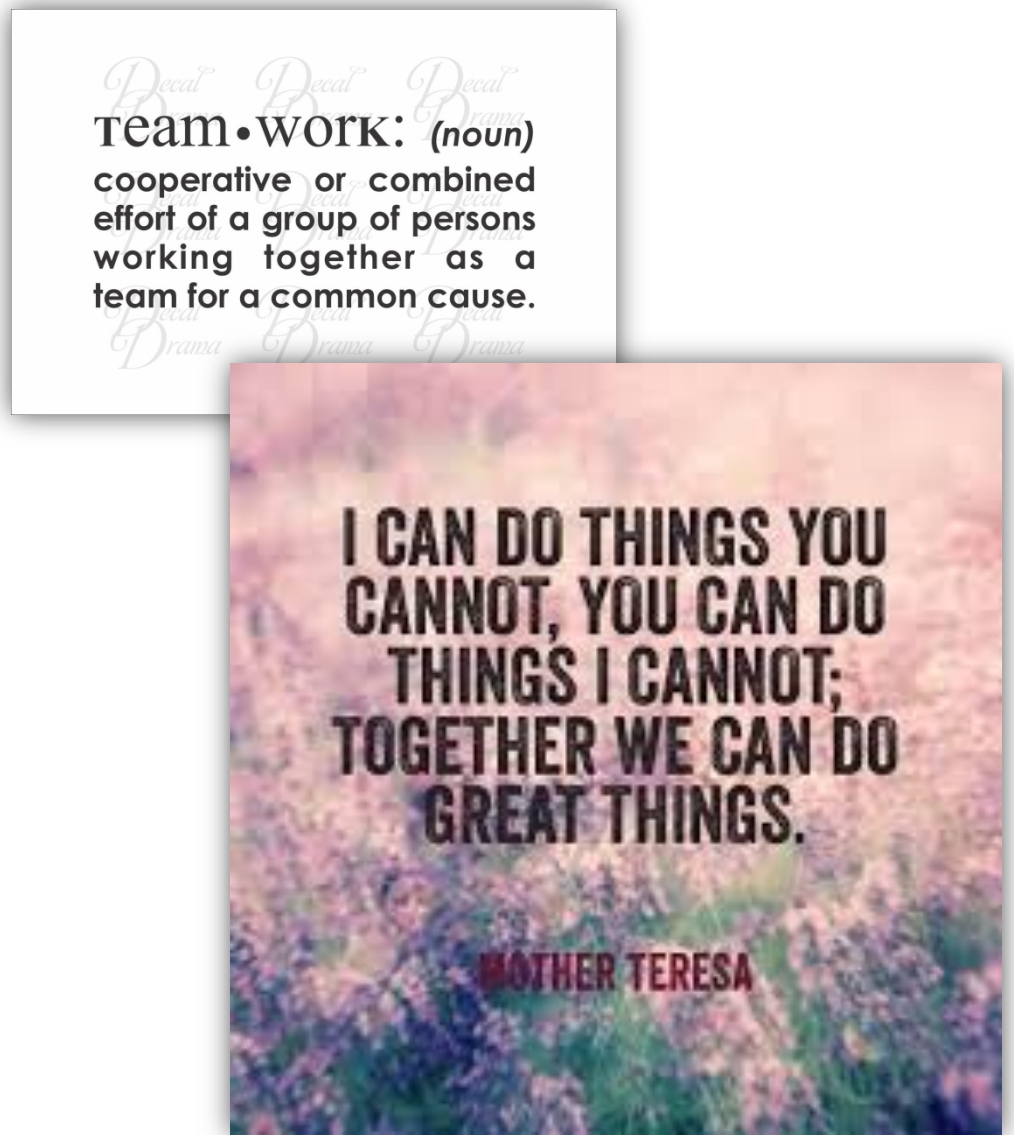
Conclusion

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’

Collaboration

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



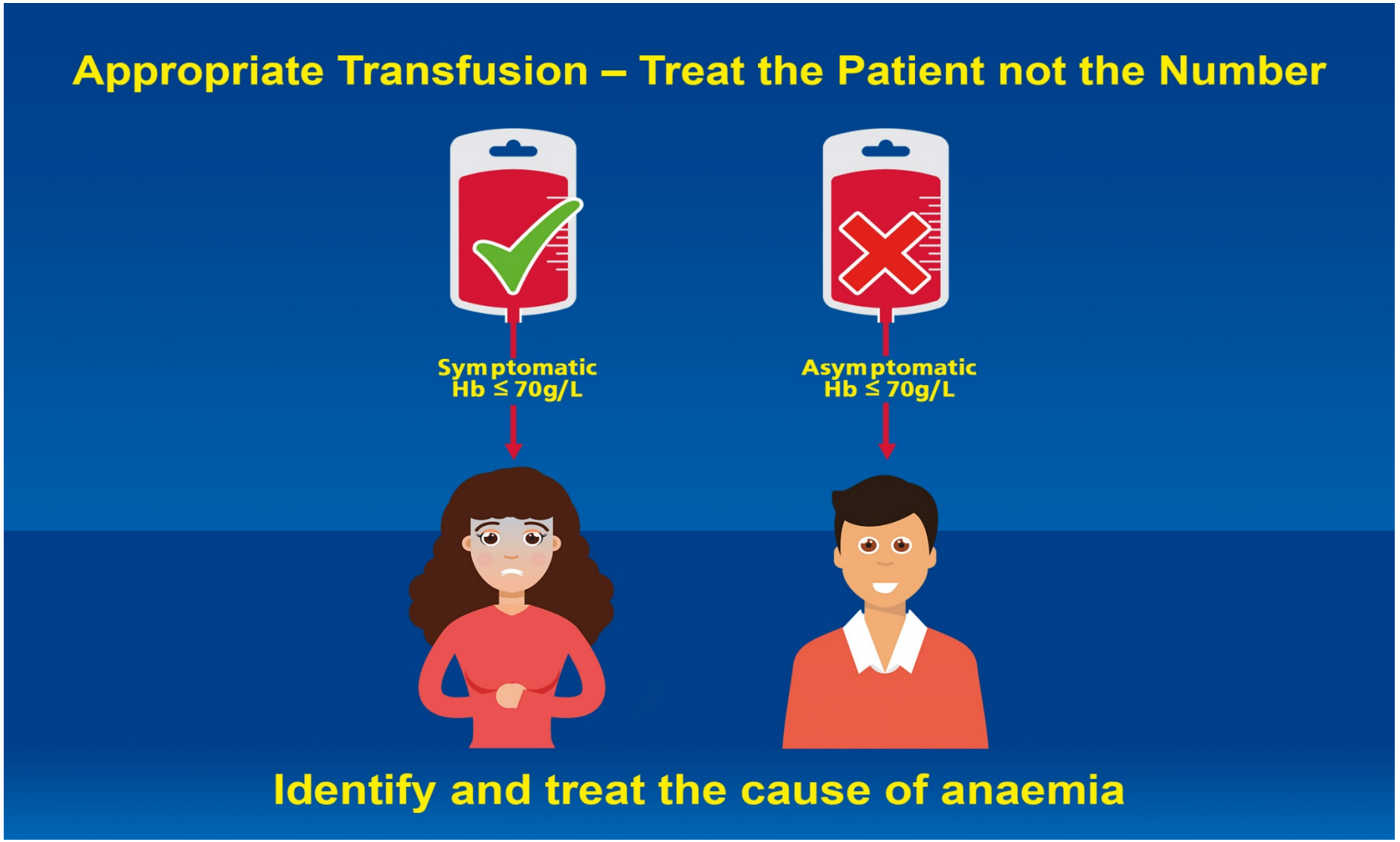
NHS Blood and Transplant

NHS University Hospitals of Derby and Burton NHS Foundation Trust

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

Infographic



NHS Blood and Transplant

NHS University Hospitals of Derby and Burton NHS Foundation Trust

Any questions?

With thanks to:

Kat Kacinova – TP Royal Derby Hospital
Aimee Burtenshaw – TP Royal Derby Hospital
Sandra Dodds – TP Royal Derby Hospital
Trevor Harden – Senior BMS Royal Derby Hospital
Odette Colgrave - NHSBT