

# O rr-eally?

A look at the appropriate use of O D negative red cells

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BMSEDG#11

A thick, solid blue line that curves across the bottom of the slide, starting from the left edge, dipping down, and then rising towards the right edge.

# What I'm going to discuss

- O D Negative patient requirements
- O D Negative specifications – routine and emergency
- Types of O D negative requests
- Impact on blood stocks
- Do you really need it? Is my order OK?
- Hospitals & Science website



# O D Negative patient requirements

- In 2019, JPAC published guidance on “The appropriate use of group O D negative red cells”
- In 2020, JPAC also provided “Appropriate Specification for Emergency Red Cells”
- These encourage O D- & K- RBC appropriate use, without contributing to shortages
- Usage of red cells has reduced by 25% over the last 15 years
- Despite this, demand for O D Negative red cells has continued to rise

# Indications for usage of Group O red cells

- Major Haemorrhage
- Unknown blood group (discrepancy, HCST, mixed field, complex pheno)
- Patients with known blood group without a current valid blood group sample
- Patients with only one ABO group result at the time when blood is required
- Non group O patients with a current valid blood group and a negative antibody screen where group specific red cells are not readily available

# D Negative specifications

The use of D negative red cells should be prioritised on the basis of gender and age for the following clinical reasons:

- D negative patients with immune anti-D
- D negative females (including D variants)
- Female patients of unknown blood group (in an emergency) with child-bearing potential
- Children (<18 years old) of unknown blood group in an emergency

# Ordering O D Negative

*Helping to ensure stocks are available to all*



Entry of 'Emergency Use' or 'Flying squad' in OBOS line notes ensures our Hospital Services team will issue O D Negative units which are less than 14 days old from donation. Please refrain from entering additional text such as 'fresh as possible', 'long dated' or similar text when ordering emergency units

## JPAC

Please continue to follow National Blood Transfusion Committee guidance on the JPAC website - [specification of Emergency blood](#)

- Women over 51 years to receive O D Positive
- Women & Children receive O D Negative, K negative. No requirement for C-, E-
- CMV- to be considered only in the maternity setting



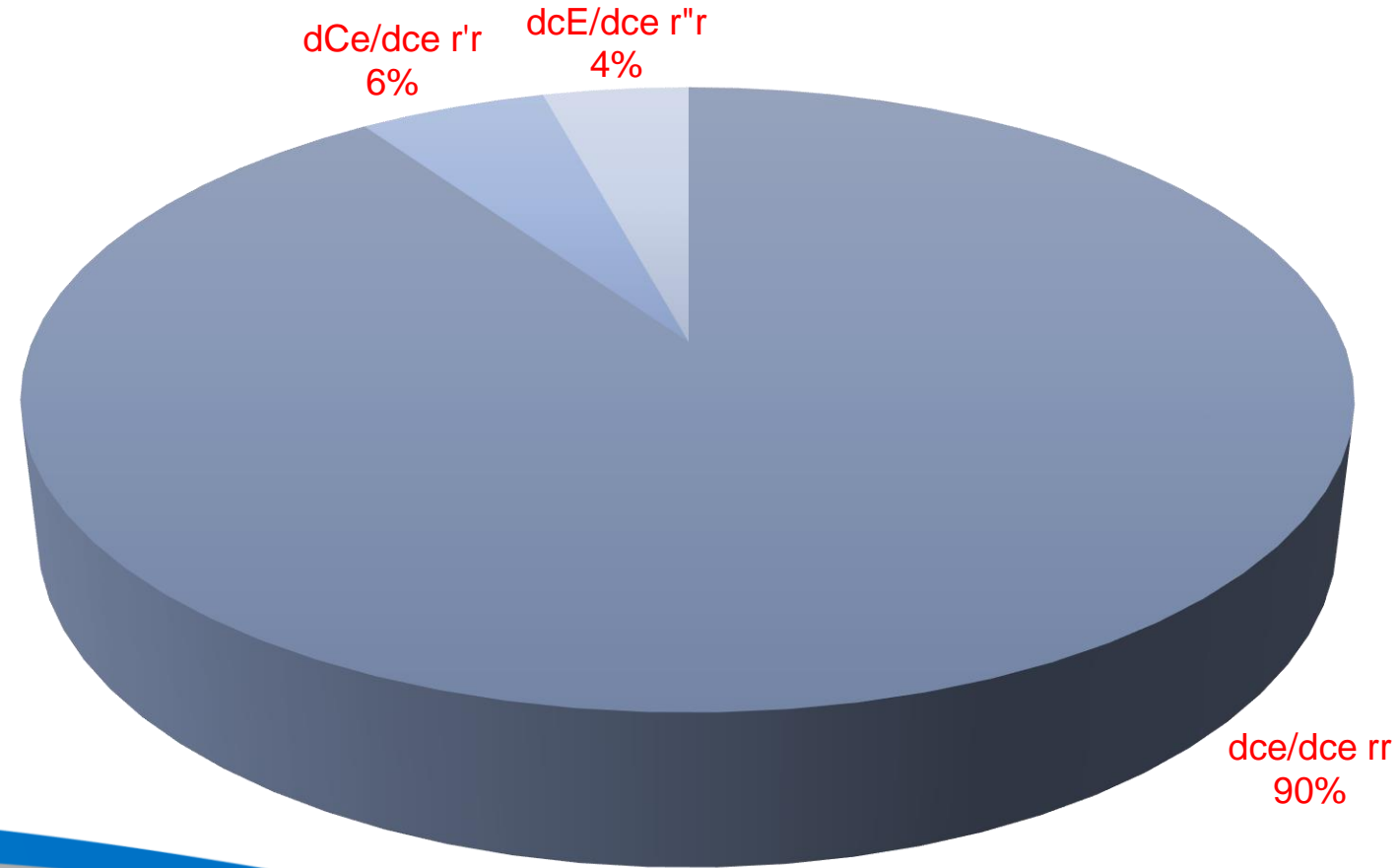
Utilise the max age life box on OBOS only where it is clinically appropriate

# Types of O D negative requests

Blood and Transplant



# Phenotypes of UK O D neg Donors



dce/dce rr  
90%

dCe/dce r'r  
6%

dcE/dce r''r  
4%

Of this ~91% will be K-



# High Spec O D negative



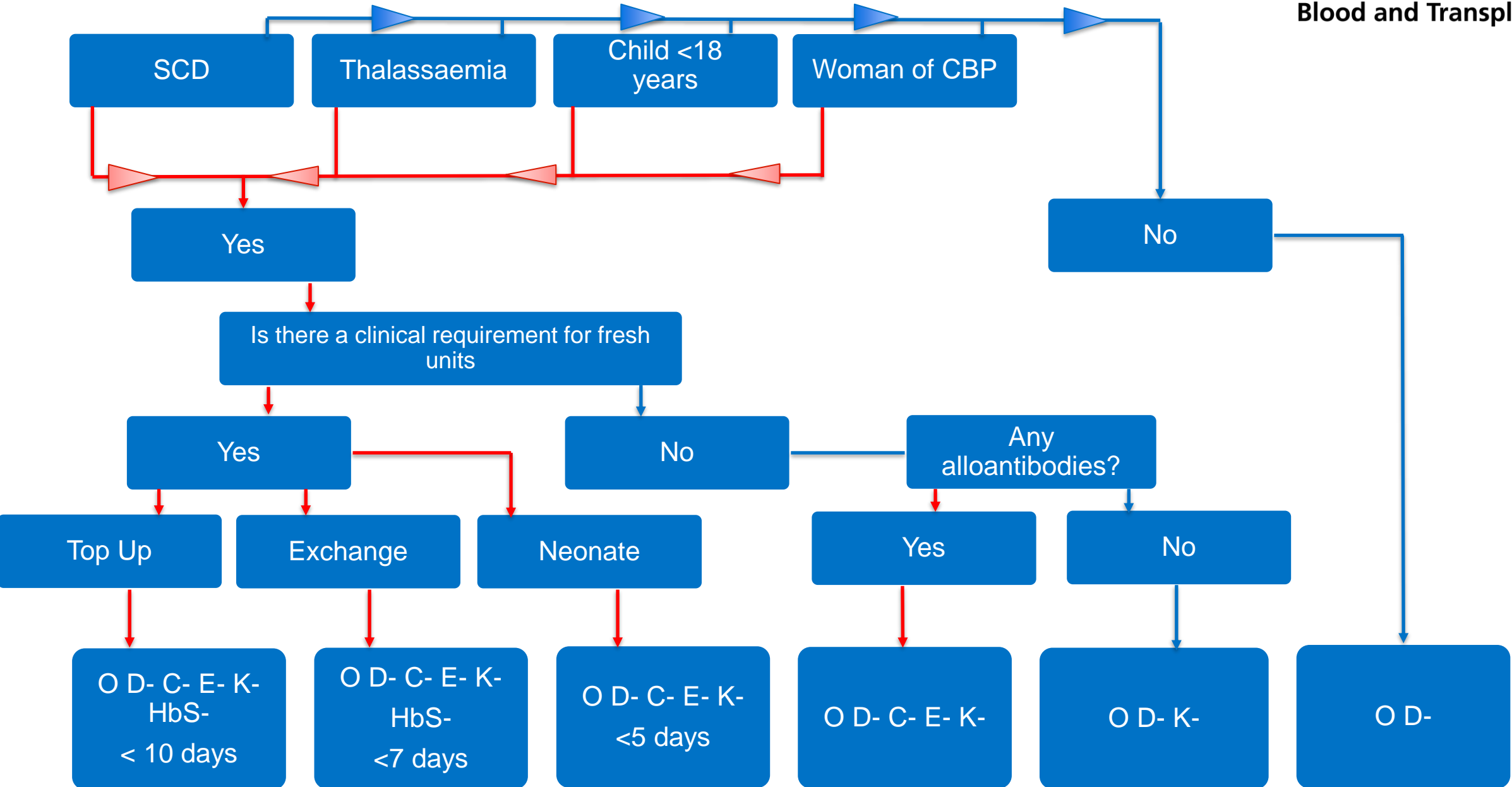
- O D- C- E- K- HbS- ➤ rr K- HbS-
- O D- C- E- K- ➤ rr K-
- O D- K- ➤ rr K-, r'r K-, r''r K-
- O D- ➤ rr K-, rr K+, r'r K+, r''r K+, r'r K-, r''r K-

O D neg blood is not required to be O rr K- unless there is a clinical need

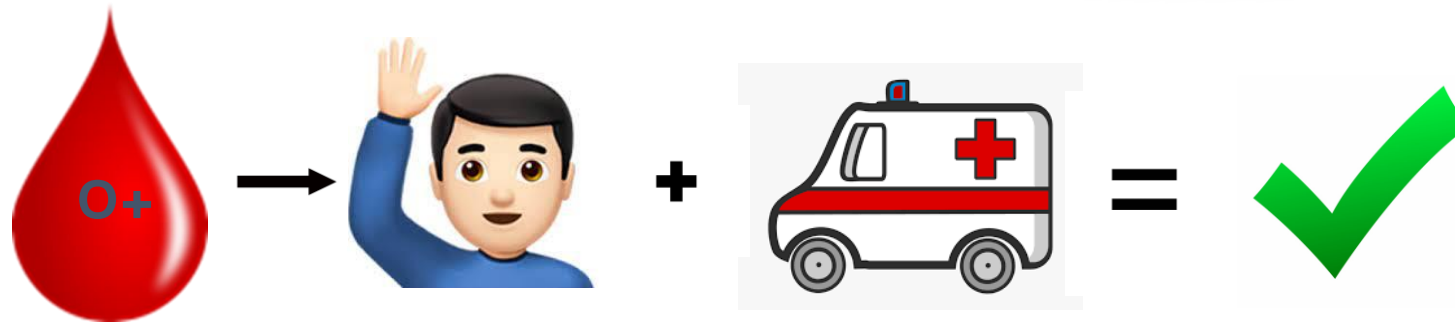


JPAC

# Ordering O D negative requests



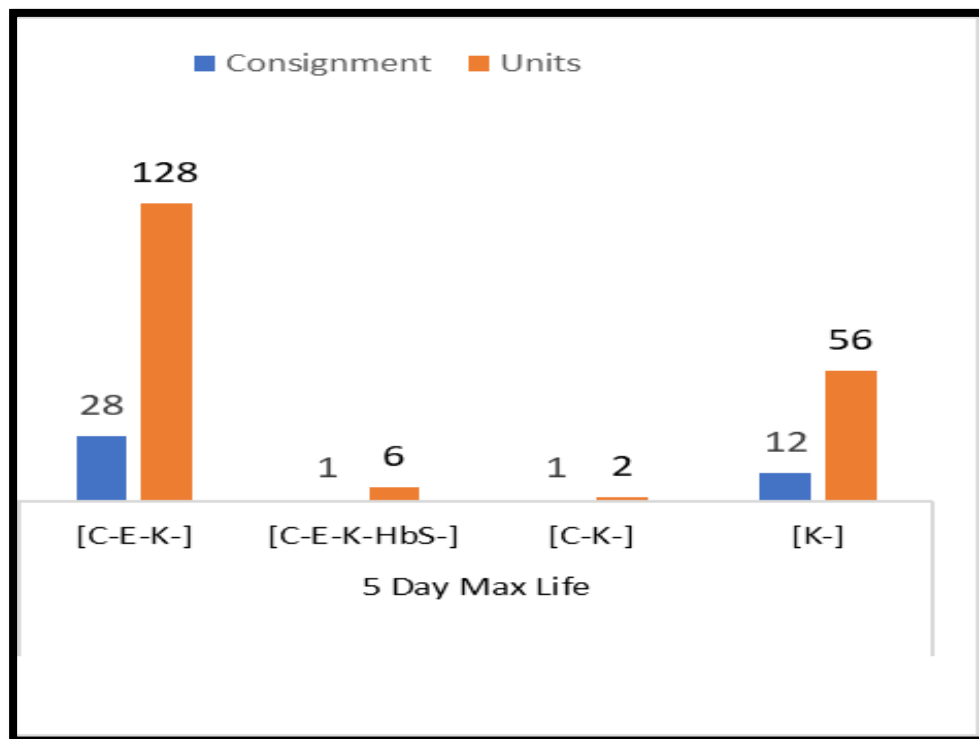
# O Pos to Bleeding Men



- NBTC O D Neg Working Group project
- **National Objective** – To promote the use of O Pos to adult males in trauma/MH
- More information on the PBM page:  
<https://hospital.blood.co.uk/patient-services/patient-blood-management/o-d-negative-red-cell-toolkit/>

# Types of O D negative requests

## Blood and Transplant



Red blood cells | Platelets | Frozen products | White blood cells | Order notes

Product\* Red Cells | hD\* | Qty\* 4 | CMV- | HT- | Aph | HEV- | Req. | Remove

Phenotypes(Negative for) ☒ K

Tick here if order is for a Transfusion

Tick here if order is for a Transfusion

Select Blood Chars

Selected Blood Characteristics (Negative for these antigens)

Notes: Please select (only)

Order for stock

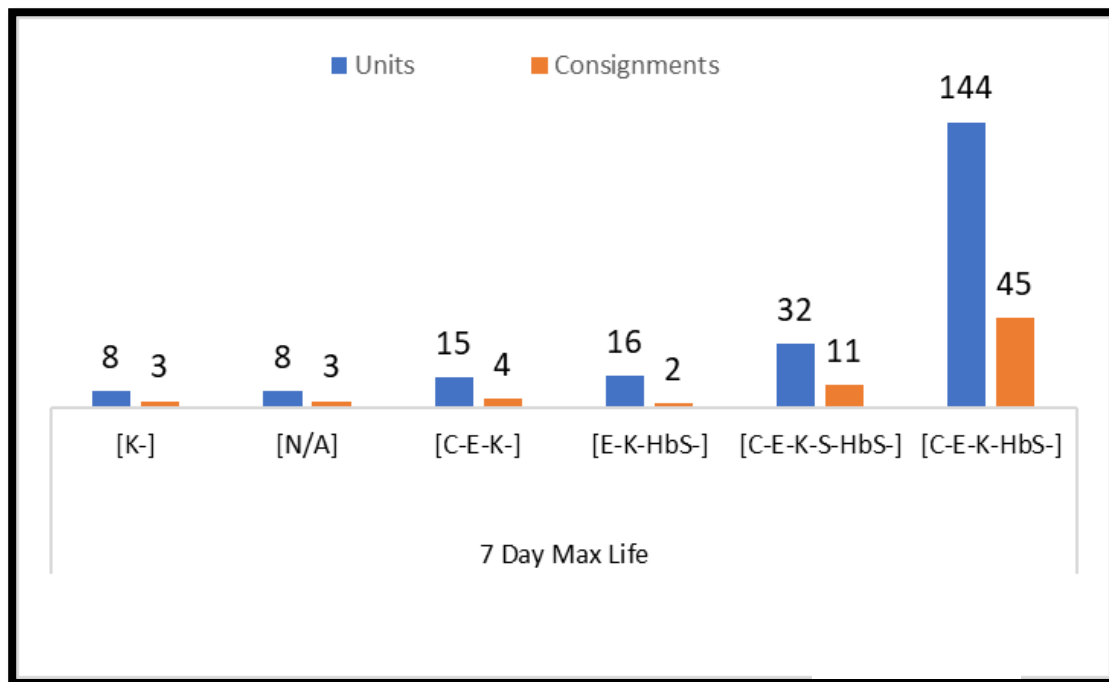
NOTES: This field is for request only. If you cannot provide a specification you require, please contact your local services department. Do not enter a specification.

Order for stock



# Types of O D negative requests

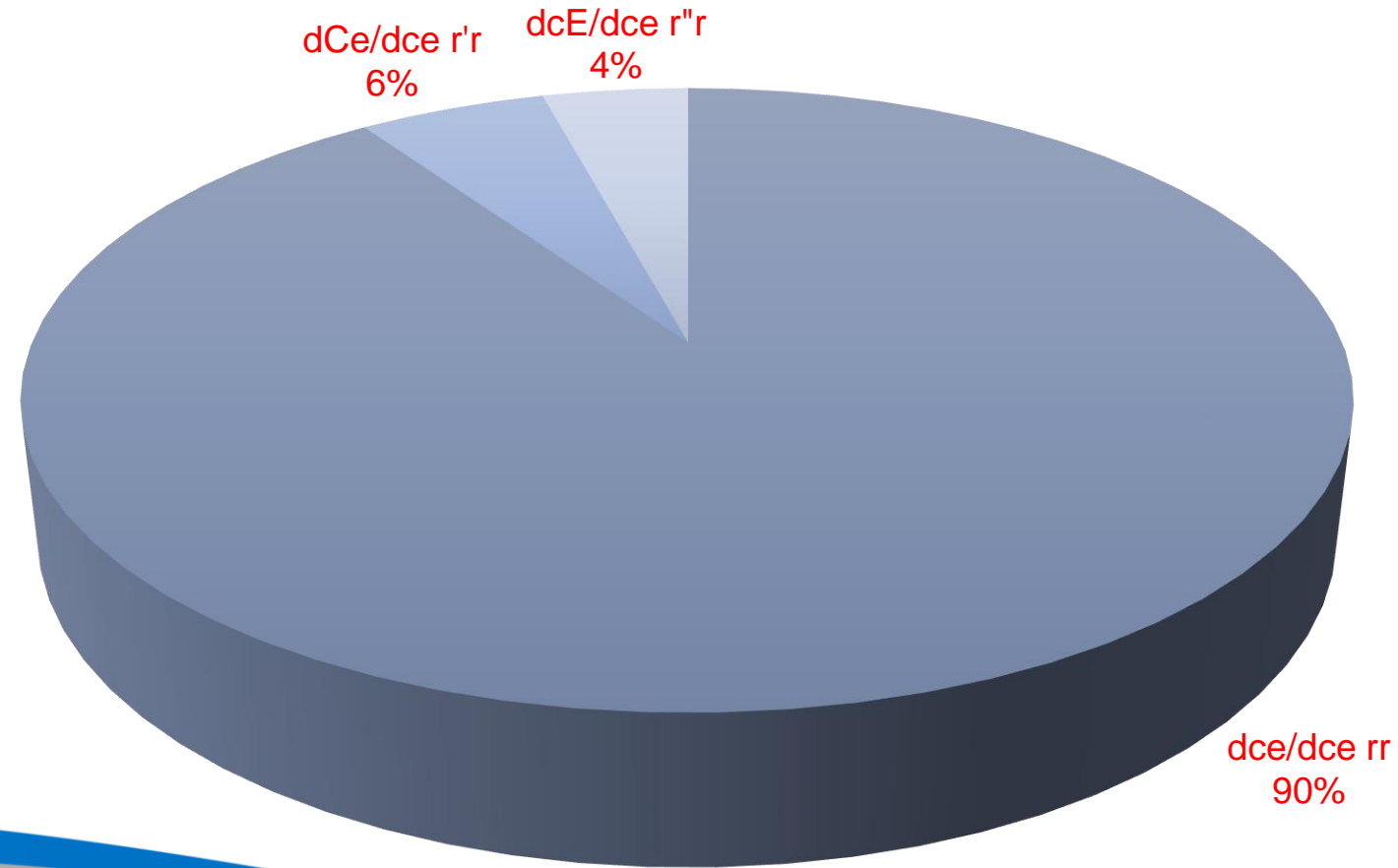
## Blood and Transplant



Red blood cells	Platelets	Frozen products	White blood cells	Order notes
Product*	ABO*	RhD*	Qty*	CMV- HT- HbS- IgA Aph HEV- Req. Remove
Red Cells	O	NEG	6	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Phenotypes(Negative for these antigens) <input checked="" type="checkbox"/> C <input checked="" type="checkbox"/> E <input type="checkbox"/> (c) <input type="checkbox"/> (e) <input checked="" type="checkbox"/> K Tick here if order is for a Sickie Patient <input checked="" type="checkbox"/> Tick here if order is for a Thalassaemic Patient <input type="checkbox"/>				
<div>Select Blood Chars</div> <div>             Patient information              Patient name / ID <input type="text"/> </div> <div>             Selected Blood Characteristics              (Negative for these antigens)           </div> <div>             (Do not include clinical information)              Maximum blood age              Please specify maximum age in days if necessary.              By default, blood supplied is less than 23 days old. <input type="text" value="7"/> days           </div> <div>             Notes: Please select from drop-down box (one per patient only)              FREE TEXT BOX <input type="text"/> </div> <div>             NOTES: This field is for request and delivery details. If you require the product specification you require, please contact your local hospital supplier.              For Mr O' <u>really</u> <input type="text"/> </div>				



# Phenotypes of UK O D neg Donors



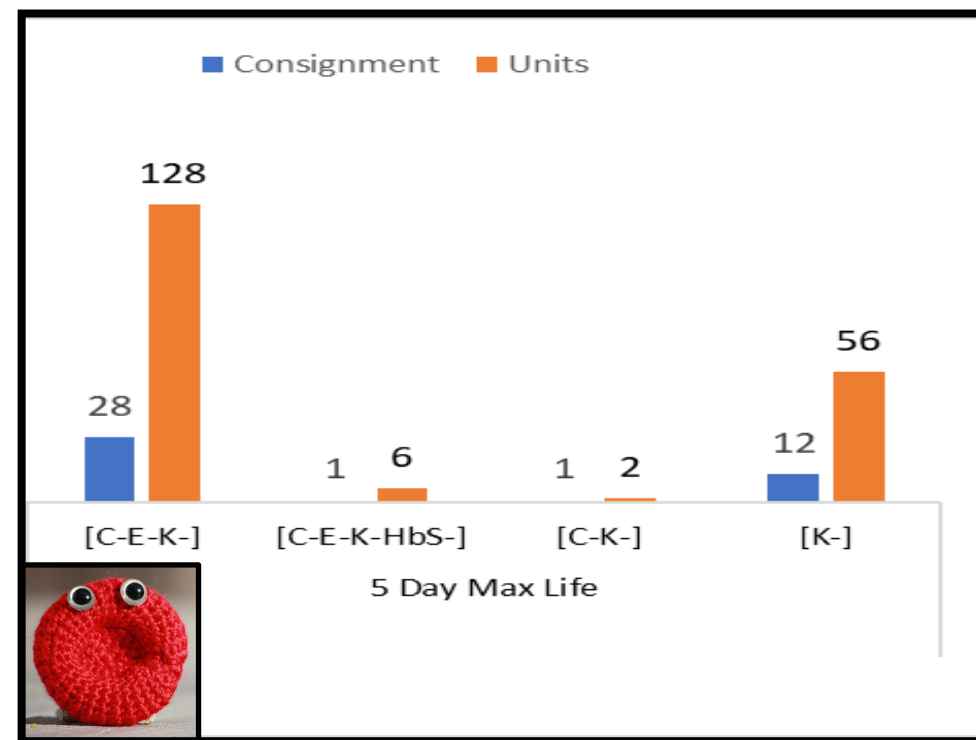
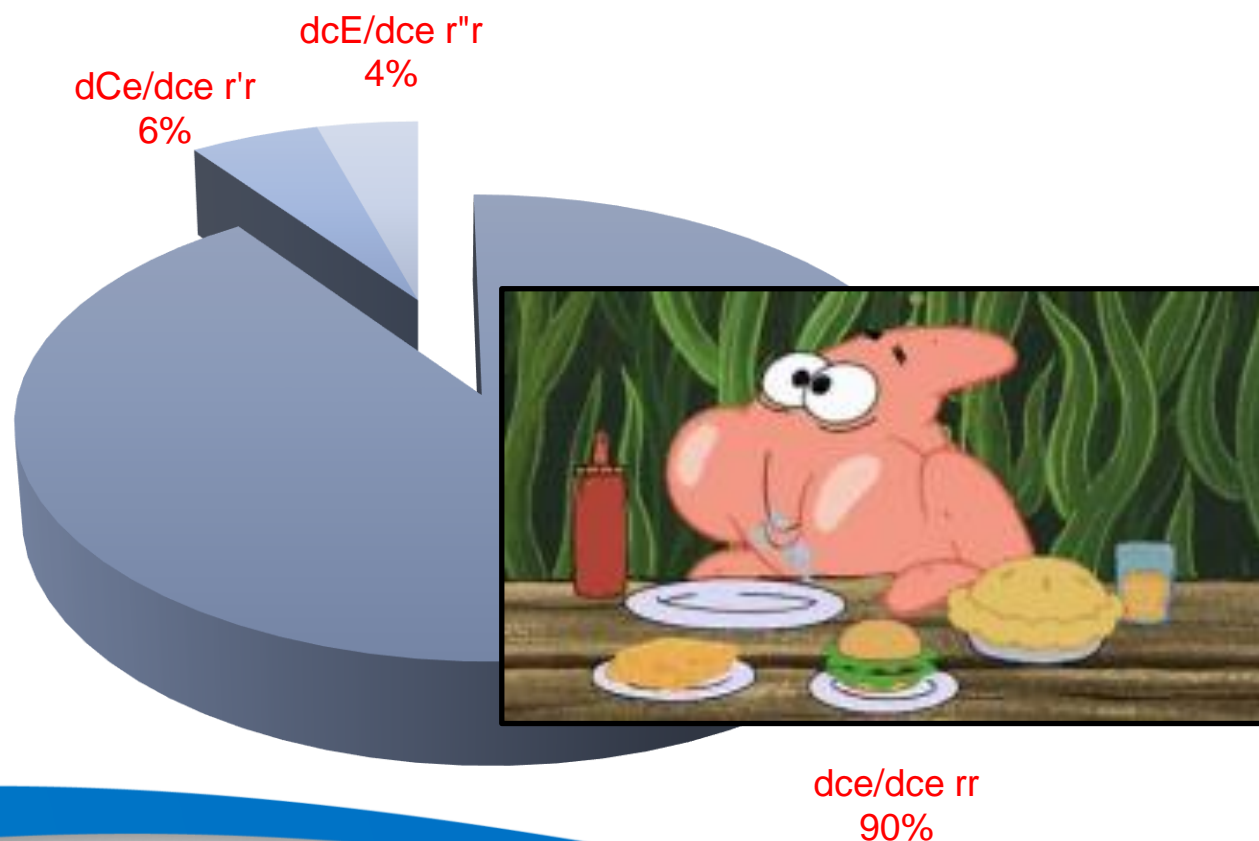
dce/dce rr  
90%

dCe/dce r'r  
6%

dcE/dce r''r  
4%

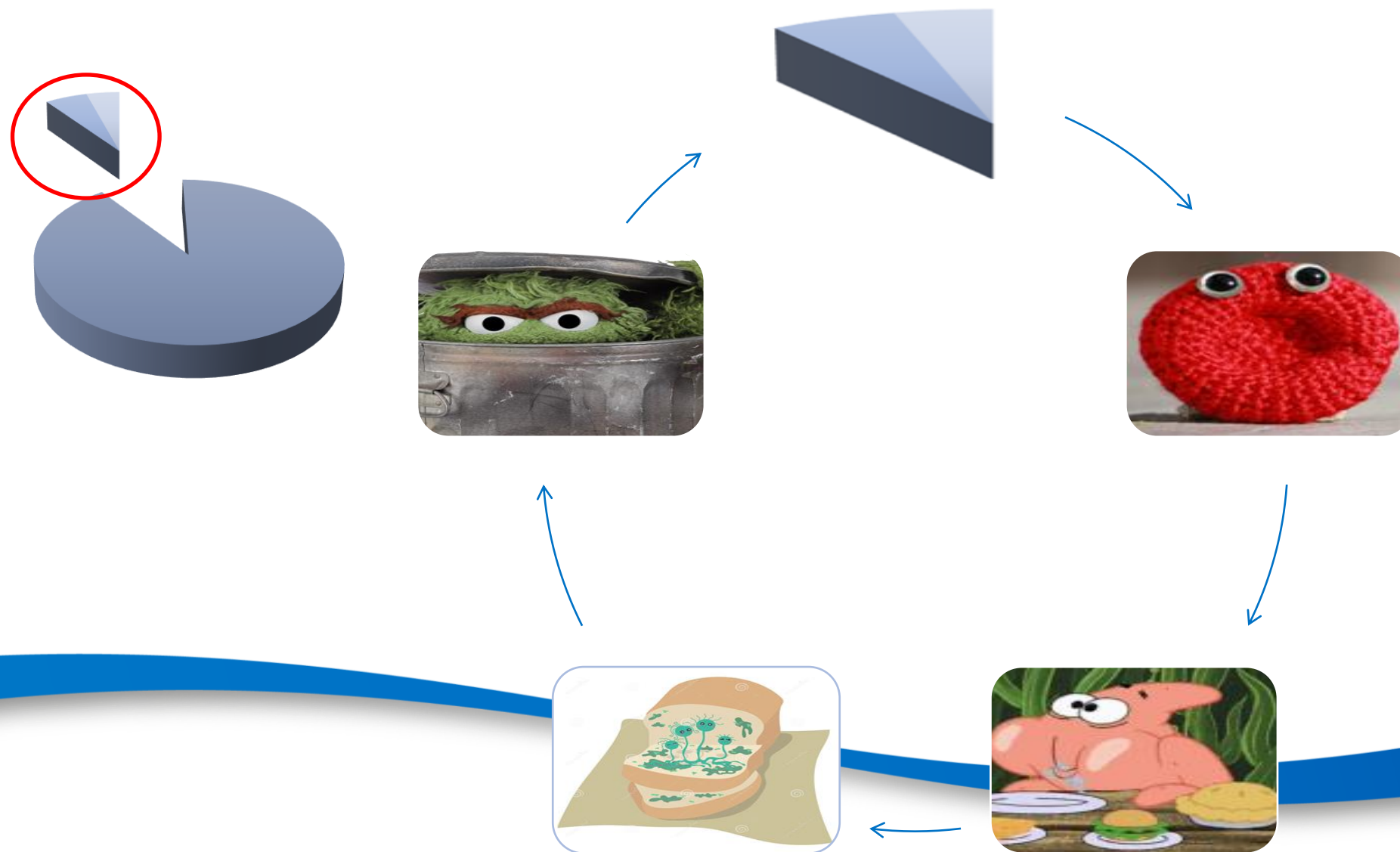
Of this ~91% will be K-

## Impact on blood stocks





# Impact on blood stocks





# Always ask yourself.....

- Do you **rr**-eally need it?
- Is my **order** **OK**?

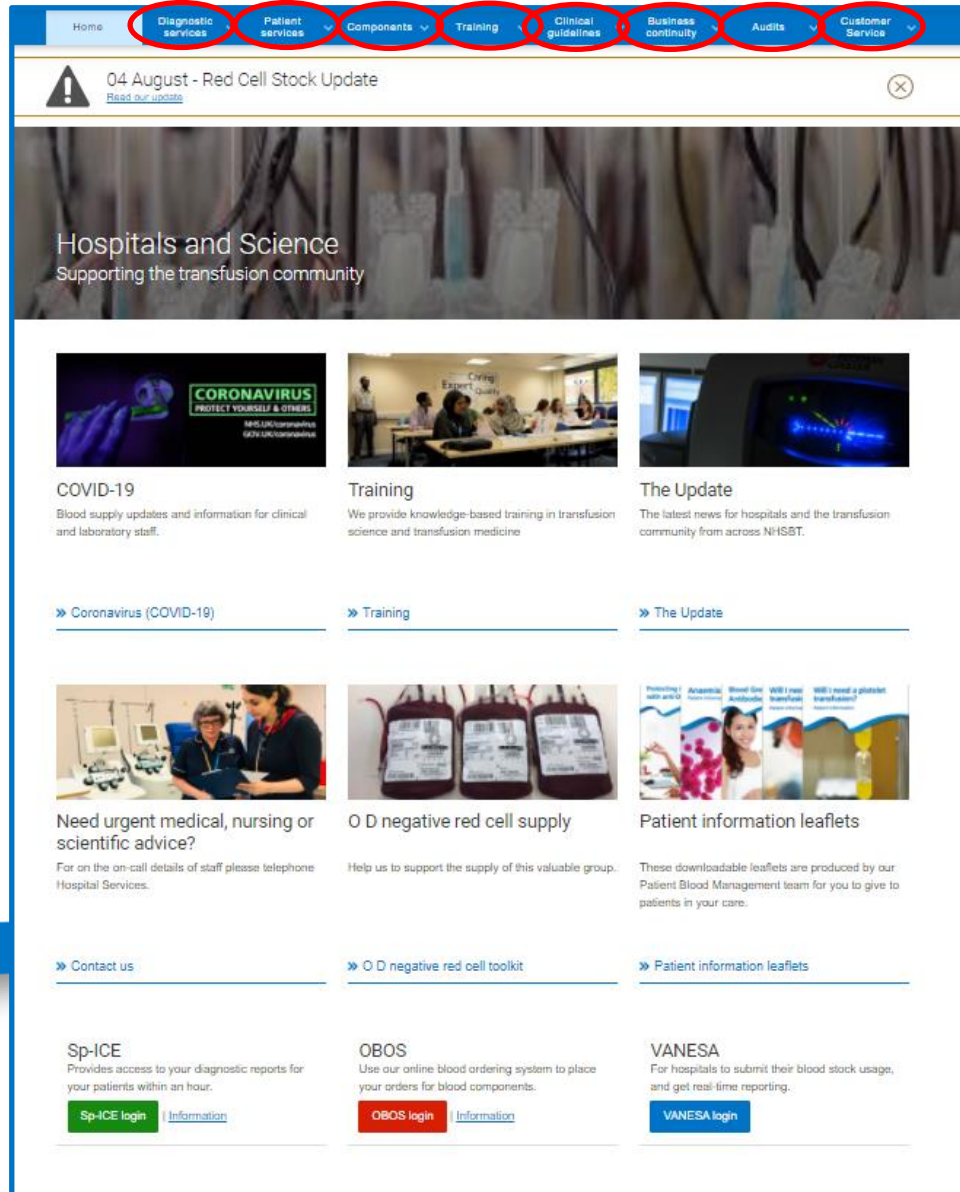
**K**oming soon to a **screen** near you?



# Hospitals and Science Website



Blood and Transplant



- Diagnostic Services
- Patient Services
- Components
- Training
- Clinical Guidelines
- Business Continuity
- Audits
- Customer Service

# Hospitals and Science Website



Blood and Transplant

The screenshot shows the NHS Blood and Transplant website. At the top is a navigation bar with links: Home, Diagnostic services, Patient services, Components, Training, Clinical guidelines, Business continuity, Audits, and Customer Service. A notification banner at the top left reads "04 August - Red Cell Stock Update" with a "Read our update" link. The main content area is titled "Patient Blood Management" and includes a sub-header "Patient Blood Management (PBM)". Below this, there is a paragraph about PBM being a multidisciplinary approach. A sidebar on the right lists "PBM In this section" with links: O D negative red cell toolkit, Obstetric Anaemia toolkit, Platelets, Education, Patient information leaflets, Pre-operative anaemia, Single unit blood transfusions, Campaign resources, Consent for transfusion, Transfusion resources, and Newsletters. The main content area also features a section for "O D negative red cell toolkit" with a description and a link to "Access the certified and non-certificated eLearning courses". Below this, there are sections for "Transfusion 2024: safe patient care for the next 5 years" and "SaBTO recommendations for patient consent for blood transfusion".

04 August - Red Cell Stock Update  
[Read our update](#)

Home / Patient services / Patient Blood Management

## Patient Blood Management

### Patient Blood Management (PBM)

PBM is a multidisciplinary, evidence-based approach to optimising the care of patients who might need a blood transfusion.

PBM follows a number of international and national initiatives over the past 20 years supporting the safe and appropriate use of blood. It was launched in England in June 2012, experts and influencers in the field considered how to ensure the adoption of the Patient Blood Management approach. The conference and subsequent [recommendations](#) had the support of NHS England.

PBM is a success story, the reduction in inappropriate transfusion helps to ensure the availability of blood components when there is no alternative, however NHS Blood and Transplant (NHSBT) continues to work with NHS England and the National Blood Transfusion Committee to further support NHS Trusts to manage their blood use effectively. Audits have shown that there remains inappropriate use of blood and blood components.

For all things PBM follow us on Twitter [@PBM\\_NHS](#)

Our latest resource - Anaemia eLearning package

This is in 3 parts and provides a straightforward introduction to anaemia with tailored modules for primary and secondary care.

Access the certified and non-certificated [eLearning courses](#)

### O D negative red cell toolkit

O D negative red cell toolkit

### Transfusion 2024: safe patient care for the next 5 years

The [Transfusion 2024](#) report highlights key priorities for clinical and laboratory transfusion practice for safe patient care across the NHS over the next five years. The publication follows a joint symposium held in March 2019 by the National Blood Transfusion Committee (NBTC) and NHS Blood and Transplant (NHSBT) supported by NHS England and Improvement.

The recommendations for action build on the successes of previous initiatives regarding the safe and appropriate use of blood now co-ordinated across the NHS as Patient Blood Management. There is emphasis on a skilled and trained workforce, better use of data and technology, integrated models of working and promoting inter-operable digital solutions.

### SaBTO recommendations for patient consent for blood transfusion

In December 2020 SaBTO (Advisory Committee on the Safety of Blood, Tissues and Organs) published updated [recommendations](#) on obtaining patient consent for blood transfusion. These provide additional guidance specific to consent for blood transfusion, including identification of which patients should be consented and duration of consent. The work was undertaken by SaBTO and the final report amended after professional and lay consultation.

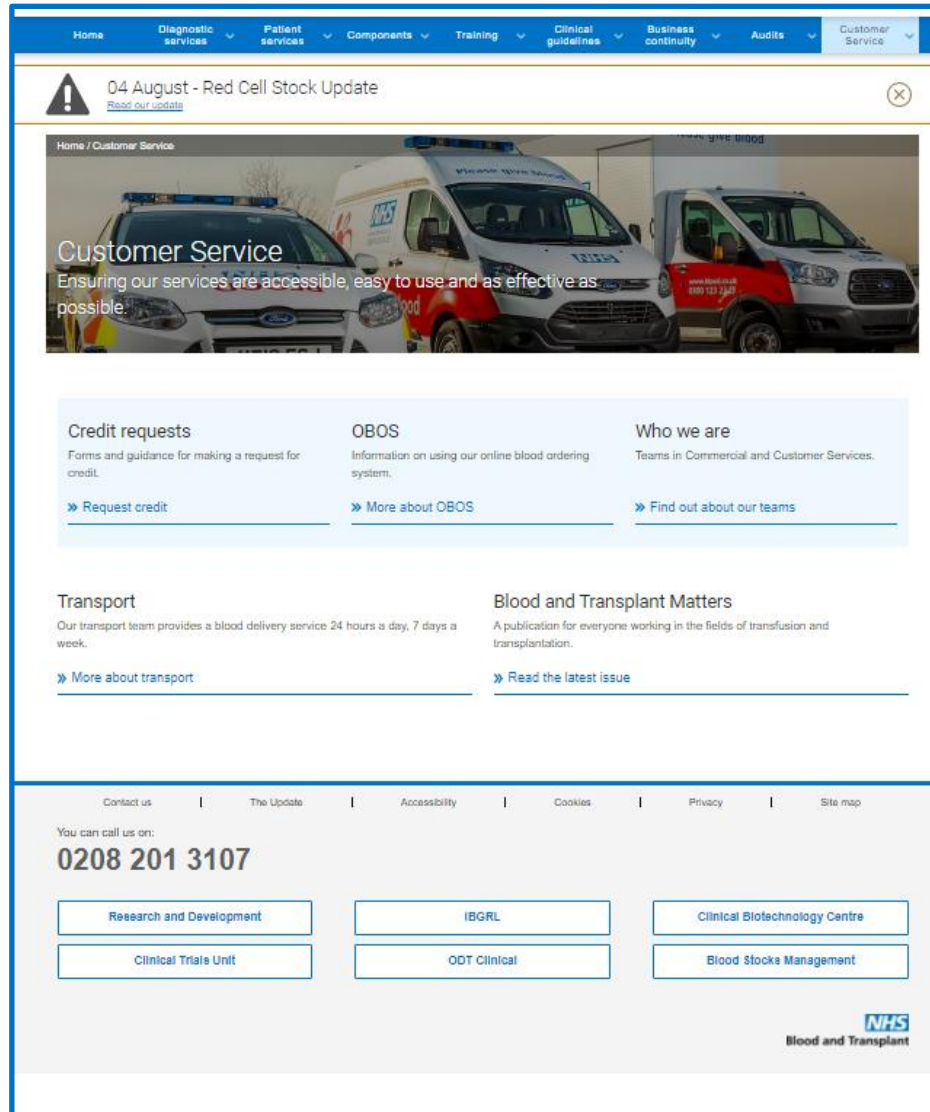
[Find out more about patient consent](#)

### Choosing Wisely UK: improving conversations

[Choosing Wisely UK](#) is part of a global initiative aimed at improving conversations between patients and their doctors and nurses; it is an opportunity to promote good practice, and ensure that patients receive appropriate information and advice. The initiative is supported by the Royal College of Physicians and the Royal College of Nurses. For more information on the initiative, visit [Choosing Wisely UK](#).

- O D negative red cell toolkit
- Information to prevent wastage
- Promote the safe and appropriate use of O D negative red cells
  - Current Demand
  - Guidance
  - Good Practice
  - Infographics

# Hospitals and Science Website



- Customer Services

- Advice on blood components and our services
- Investigating complaints and compliments
- Measuring your satisfaction
- Improve our customers' experience
- Supporting you to deliver the best care for your patients

- PBM

- Promote the safe and appropriate transfusion of all blood components across England
- Provide education, resources, specialist advice and support
- Essential link between supply and demand for blood components
- National Comparative Audits of Blood Transfusion (NCABT)



# Thank you for listening

Thanks to Deepa Takhar and Richard Whitmore



# Biomedical Scientist

Empowerment and Discussion Group



## Thank you for joining us today!

Please remember to complete the feedback form, link in the chat

We look forward to seeing you at our next meeting:



29<sup>th</sup> Sept 2021, 14:00



MS Teams