



Strategies for reducing the use of group O RhD negative red cell units

St George's University Hospitals NHS Foundation Trust serves a population of 1.3 million across Southwest London. There are 1100 beds. Tertiary services such as cardiothoracic medicine and surgery, neurosciences and renal transplantation are provided to around 3.5 million people from Surrey and Sussex. St George's is one of four major trauma centres in London, with trauma patients delivered to our helipad on a daily basis.



An average of 6.4% of the red cell units requested by St George's are O RhD-. We have managed this through a number of interventions:

Stock holding (General)

We minimise stock levels of group O RhD- units.

(20 units held in Blood Bank; 6 units in ED; 2 units in each of three satellite fridges).

Stock holding (Emergency group O)

There is a rigorous rotation policy to reduce time-expired wastage of all units.

Satellite fridge in ED Resus is stocked with 6 units of **O RhD+** and 6 units of **O RhD-** in colour coded boxes (**blue for O RhD+** ; **pink for O RhD-**) for use in unknown trauma cases.

Use of RhD+ units for male patients is audited.

Substitutions (bleeding male patients)

When the transfusion laboratory is notified of a major haemorrhage in a male patient, RhD+ units are issued from the outset.

Male patients with major bleeding, who are known to be RhD-, will initially be issued with RhD- red cell units. The second request for red cell units will lead to the issue of RhD+ units, provided that the antibody screen is negative.

Substitutions (Sickle cell/special requirements)

Ro red cell units are requested as appropriate. NHSBT prefers advance orders...

Requests for irradiated red cell units will be ABO & RhD identical; we do not hold any stock irradiated O RhD- red cell units.

We benefit from excellent clinical support for switching BMT patients after engraftment.

Rapid grouping:

The process has been validated for rapid transition from group O to ABO identical.

Dedicated Transfusion Practitioner for trauma:

Therefore inappropriate use of O RhD- red cell units is dealt with quickly.

For further information please contact:

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