

# EMERGENCY O D NEGATIVE RED BLOOD CELL USE IN A THEATRE SATELLITE FRIDGE AUDIT



The Newcastle upon Tyne Hospitals  
NHS Foundation Trust

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## Introduction

An audit report was presented at the Hospital Transfusion Committee (HTC) meeting in March 2020 following recommendations from the re-audit commissioned by the National Blood Transfusion Committee (NBTC) entitled: "2018 Survey of Group O D Negative Red Cell Use".

One of the recommendations from the survey was to consider reducing the number of O D negative red cell units held in satellite fridges to better conserve stocks of this limited blood component. A local retrospective audit was performed on the usage of emergency O D negative red cell units in a theatre satellite blood fridge to establish whether such units are used appropriately.

## Aims & Objectives

To establish if the units of Emergency O D Negative Red Blood that are stored in a satellite fridge are utilised appropriately.

The aims were:

- Determine how many units were issued to the satellite fridge.
- Determine how many units were transfused from the satellite fridge.
- If transfused, was it appropriate?
- If transfused, was the Major Haemorrhage Protocol (MHP) subsequently activated?

## Results & Discussion

The local audit identified that, of the 78 emergency O D negative red cell units issued to the satellite fridge, only 8 units were transfused across 6 incidents (fig 1). The findings suggested that where emergency units were required by theatre they were supplied via activation of MHP thereby negating the need for satellite emergency O D negative units.

For the patients who received 2 emergency units each, both had been admitted through the emergency route (Emergency Department/Delivery Suite) therefore enough time had elapsed whereby the MHP could have been activated prior to the patient's transfer to theatre.

The audit concluded that the routine supply of 2 emergency O D negative red cell units should be initially reduced to 1 and re-audited 12 months later.

Presentation of the local audit findings at the HTC led to agreement that the MHP was sufficient to cover emergency use in theatres and as such the stock of emergency O D negative red cells in the theatre satellite fridge should be removed altogether.

Emergency O D negative red cell usage and G&S validity

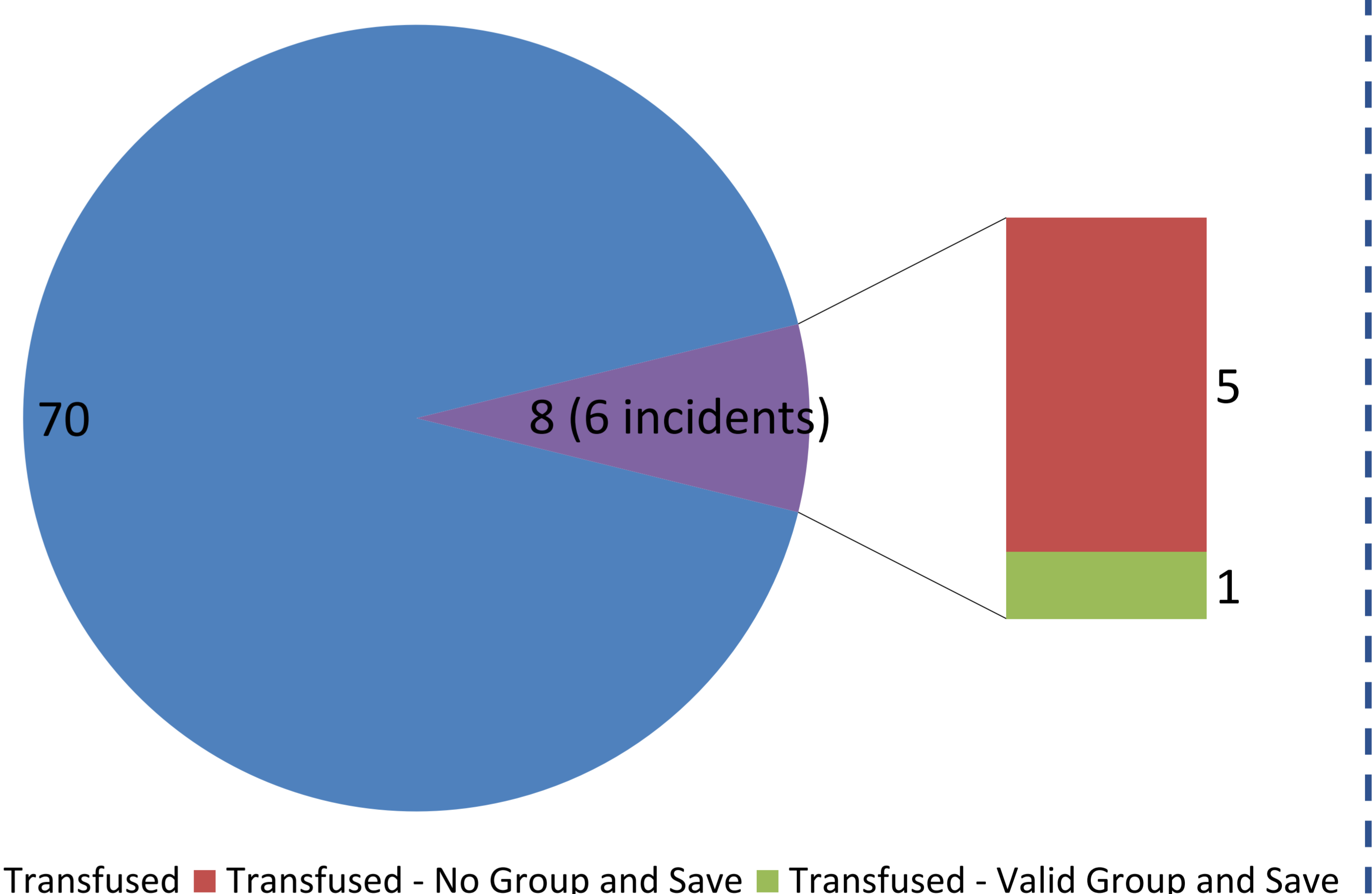


Fig.1 – Chart showing emergency O D negative red cell usage and G&S validity

