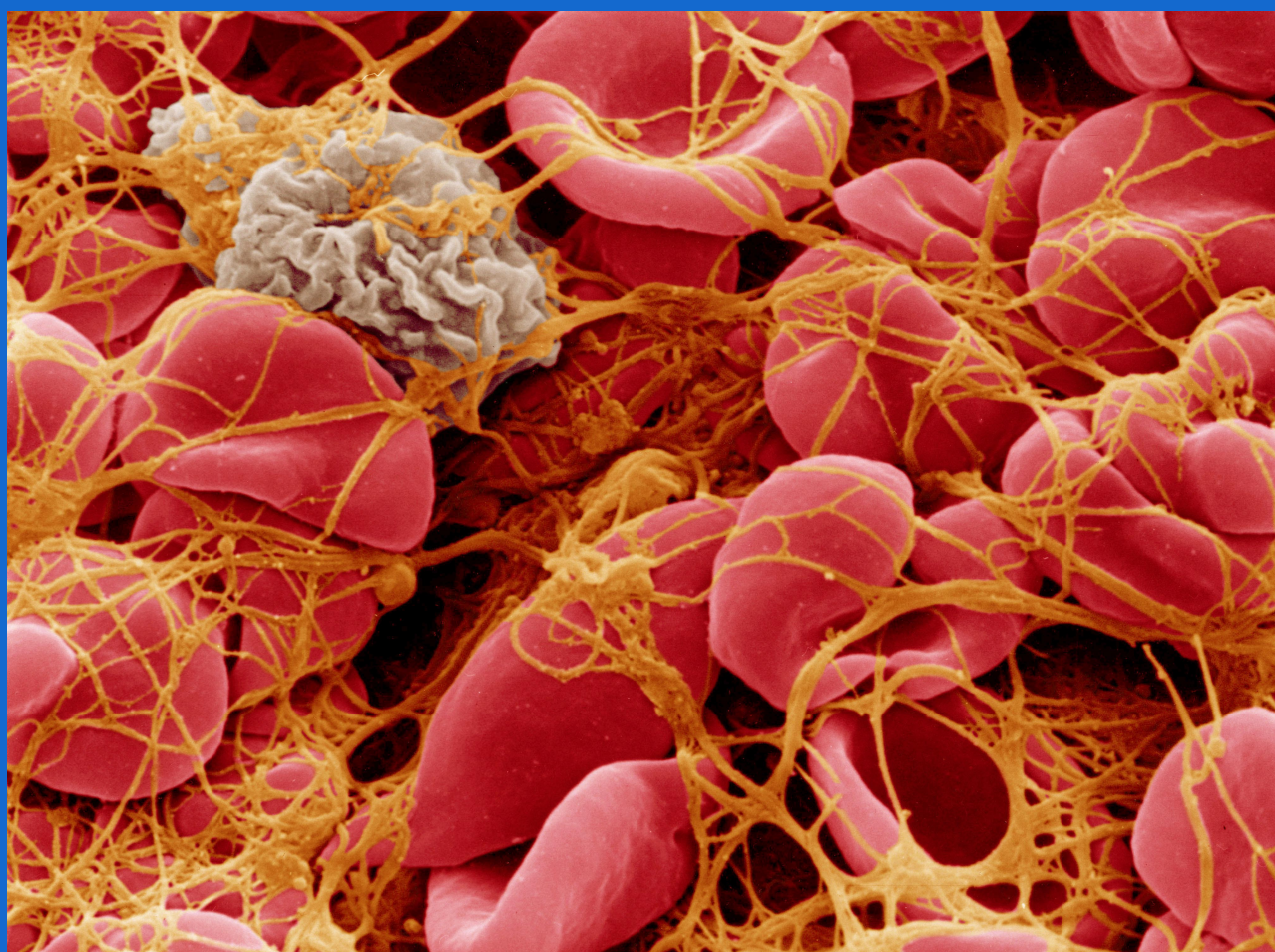


# 2017 Repeat Audit of Red cell and Platelet Transfusion in Adult Haematology Patients



# Haematology Audit July 2017

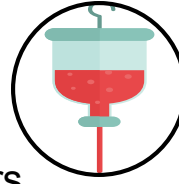


**153** hospitals participated, **148** hospitals also participated in the 2016 audit



**4098** patients

median age 73 years



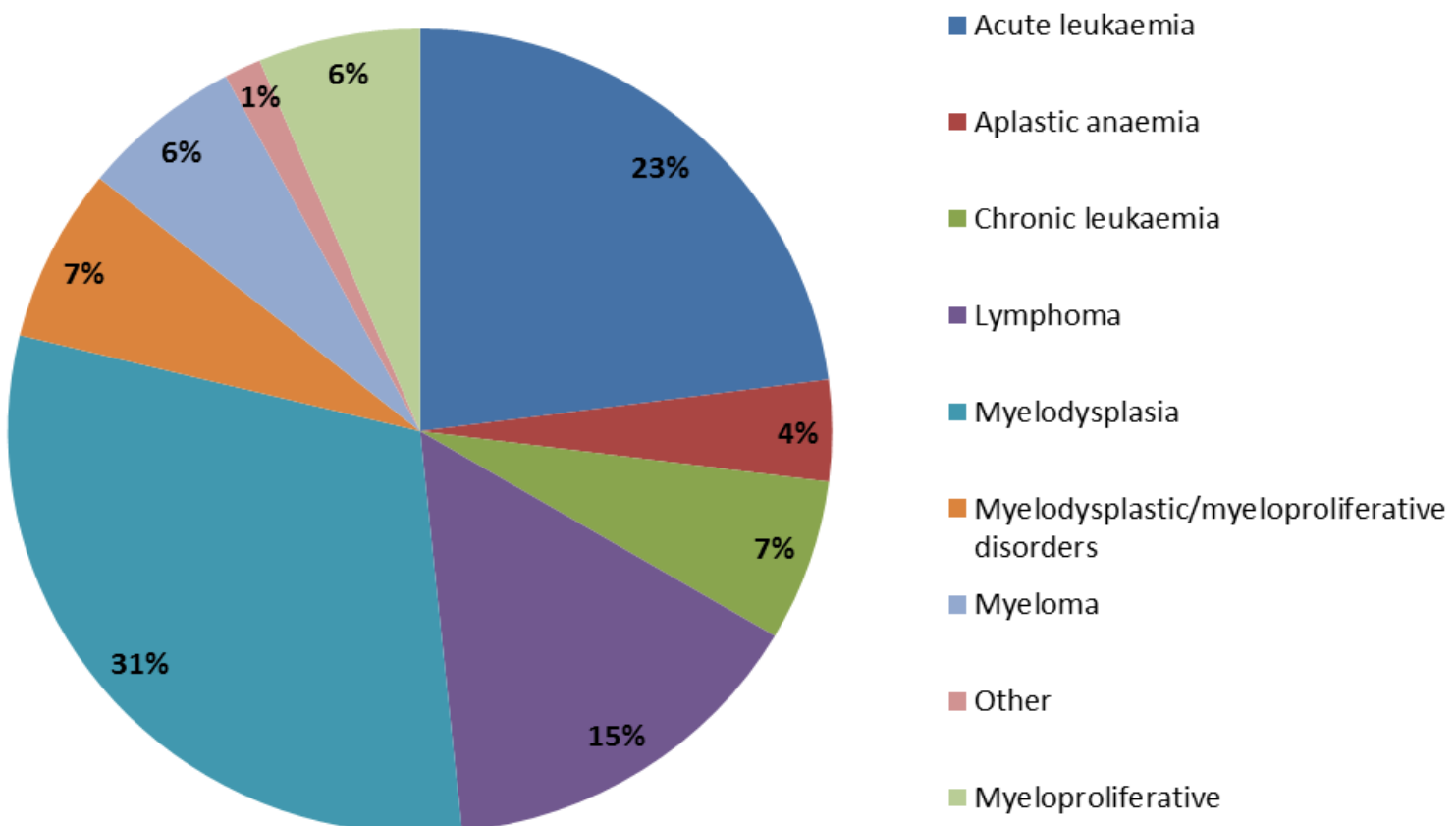
**3830** red cell transfusions

**1553** platelet transfusions



**72%** of all patients were managed without curative intent (transfusion alone or low dose chemotherapy)

## Haematological Diagnosis



# Organisational Audit



**11%** of hospitals did not have written transfusion guidelines  
(12/107)

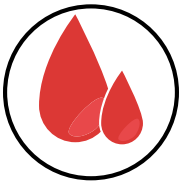


Approximately **29%** used a higher haemoglobin for people without additional risk factors

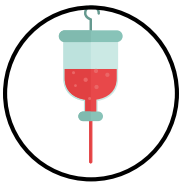


Only **28%** stated that platelet transfusions were not required in chronic bone marrow failure

## Clinical Audit - Red cells

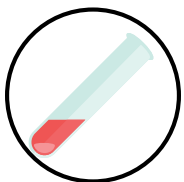


**58%** of red cell transfusions were for chronic anaemia (2187/3780) **76%** of red cell transfusions were considered appropriate



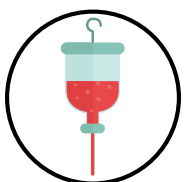
**43%** of inpatients and **24%** of outpatients had single unit transfusions  
(527/1217) (629/2602)

Compared to **27%** of inpatients and **13%** of outpatients in 2016



**12%** of inpatients and **1.3%** of outpatients had an Hb measured between red cell units  
(80/684) (25/1941)

Results were similar in patients weighing less than 50kg. 5 outpatients weighing less than 50kg received 3 unit transfusions.



**24%** of stable patients with reversible bone marrow failure were transfused with an haemoglobin less than or equal to 70 g/L  
(195/815)

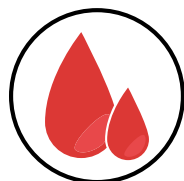
Compared to **17%** in 2016

**44%** of patients with reversible bone marrow failure and cardiovascular disease were transfused with an haemoglobin less than or equal to 80 g/L  
(32/72)

Compared to **30%** in 2016

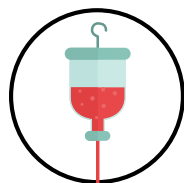
# Clinical Audit - Platelets

## Prophylaxis - 79%



**51%**  
(629/1223)

of platelet transfusions were for patients with chronic bone marrow failure



**94%**  
(1144/1218)

of patients had a single unit transfusion

Compared to **93%** in 2016 and **90%** in 2010

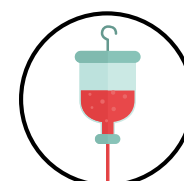


**75%**  
(443/590)

of prophylactic platelet transfusions were considered appropriate in reversible bone marrow failure

**42%**  
(246/579)

of prophylactic platelet transfusions were considered appropriate in chronic bone marrow failure



**65%**  
(305/469)

of patients with reversible bone marrow failure had a platelet transfusion when the platelet count was 10 or less

Compared to **61%** in 2016 and **54%** in 2010

## Pre-procedure - 9%



**7%**  
(9/138)

only had a bone marrow biopsy

**27%**  
(37/138)

of pre-procedure platelet transfusions were considered appropriate

## Therapeutic - 9%



**88%**  
(127/145)

of therapeutic platelet transfusions were considered appropriate

# Key Recommendations

## Improving Local Guidelines



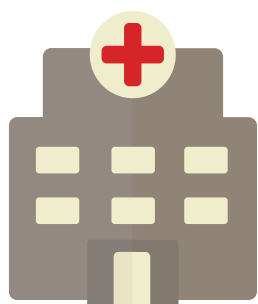
- 1 Local hospital guidelines must be easily available and should reflect national guidelines for blood transfusion
- 2 Local hospital guidelines should state that prophylactic platelet transfusions are not required:  
A) Prior to bone marrow aspirates and trephine  
B) In stable patients with chronic bone marrow failure.
- 3 Local hospital guidelines should state how to manage transfusion in patients at high risk of Transfusion Associated Circulatory Overload (TACO).

## Improving Local Audit



- 1 Information technology solutions are required to allow regular non labour intensive audit of transfusion practice.
- 2 Until IT solutions are available resource to allow staff to perform regular local audit of transfusion practice is required.

## Improving Clinical Practice



- 1 Each patient should have a transfusion plan in the medical records that will include:
  - a transfusion threshold and target
  - document reasons that justify deviation from existing standards
- 2 In the absence of active bleeding, use the minimum number of red cell units required to achieve a target haemoglobin and consider a single unit transfusion.
- 3 One adult therapeutic dose of platelets is required for prophylaxis. Pre-procedure consider the size of the patient, previous platelet count increments and the target platelet count.
- 4 Risk assess the patient for transfusion-associated circulatory overload (TACO). TACO is the transfusion reaction most commonly associated with death.