

**National Comparative Audit of  
Blood Transfusion  
2016 Audit of Red Cell & Platelet  
Transfusion in Adult Haematology  
Patients  
Action Plan**

FY2 P.Swann & FY2 E.Pearlman

# What was the audit

- Adults with known haematology malignancy or myeloid failure syndrome
- In January 2016
- All RBC and platelet transfusions
- Across the United Kingdom, 136 hospitals contributed data

# Reminder of RBC indication codes

- R1 Acute blood loss >30% blood loss
- R2 Surgery/medical/critical care: **No** significant cardiac/respiratory disease and normovolaemic, Hb <70
- R3 Surgery/medical/critical care: **With** cardiac/respiratory disease or for symptoms e.g. chest pain, hypotension or tachycardia that is unresponsive to fluid resuscitation or cardiac failure, Hb<80
- R4 Chronic Anaemia: maintain Hb to prevent symptoms of anaemia
- R5 Radiotherapy: Hb<100
- R6 Exchange transfusion

# Caveats

- Sample sizes for WSH were small in some cases
- Total of 21 RBC transfusions and 8 platelet transfusions
- Weight not recorded in all patients

# What WSH did well

| Results  | National | WSH  |
|--|----------|------|
| Hospital guidelines should agree with national guidelines    | 70%      | 100% |
| Hb measured within 24 hours if the patient was an inpatient  | 94%      | 100% |
| Hb measured within 72 hours if the patient was an outpatient | 94%      | 93%  |
| Single unit platelet transfusion                             | 93%      | 100% |
| Pre procedure platelet transfusion considered appropriate    | 84%      | 100% |
| Therapeutic platelets considered appropriate                 | 87%      | 100% |

# What WSH could improve on

| Results  | National | WSH     |
|--|----------|---------|
| Patients who were anaemic and had no additional risk factors were transfused when their Hb was 70g/L or higher | 83%      | 50%     |
| Single unit transfusions   | 18%      | 14%     |
| When > 1 unit given Hb checked between units   | 11%      | 20%     |
| Single unit transfusion for in-patients <50kg  | 33%      | No data |
| Single unit transfusion for out-patients <50kg   | 22%      | No data |
| Prophylactic platelet transfusions considered appropriate in reversible bone marrow failure                    | 72%      | 32%     |
| Prophylactic platelet transfusions considered appropriate in chronic bone marrow failure                       | 43%      | 0%      |

# Action Plan

- Weight must be recorded on all transfusion prescription charts
- Transfusion consent document to be made on Ecare and trialled for haematology patients
- Education sessions for Macmillan department about national transfusion guidelines and audit results

# Action plan - RBC

- Transfusion plan to be created on Ecare for patients with chronic bone marrow failure
- For patients having chemotherapy or with fluctuating blood product needs use hospital transfusion guidelines
- All RBC transfusions to be approved by haematology CNS, registrar or consultant whether inpatients or outpatients
- Only transfuse those under 50kg more than one unit in exceptional circumstances



# Action plan - platelets

- With *reversible* bone marrow failure platelet count should be below 10 before prescribing platelets.
- With *irreversible* bone marrow failure and no bleeding guidance suggests no platelet transfusion is required – implementation of this guidance needs to be reviewed by haematology consultants