



#### NHSBT PBM team and North Bristol NHS Trust Single unit transfusion project

Project Leads: Katy Cowan and Elmarie Cairns

Project Team: Dr Karen Mead, Dr Christina Laxton, Dr Nirosha De Zoysa & Nasreen Edgington

**Caring Expert Quality** 





## **Transfusion Committee**

- Orthopaedics
- Elective orthopaedic cases
- Fractured neck of femurs







# **Agreed Objectives**

- To increase single unit transfusion
- To increase Hb check / clinical assessment between units transfused
- Improve education for all grades of staff nursing and medical
- To make blood transfusion in elective orthopaedic and #NOF surgery more appropriate.







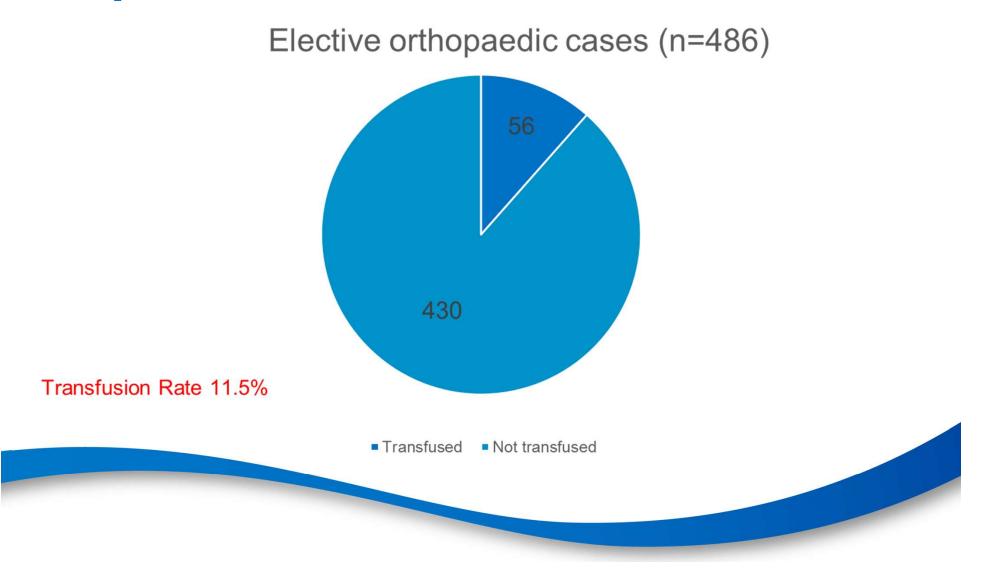


- Retrospective data collection September 2017 February 2018
- Intensive education of ward nursing staff (2 wards) and both junior and speciality trainee medical staff August and September 2018
- Data collection September 2018 February 2019
- Analysis of data







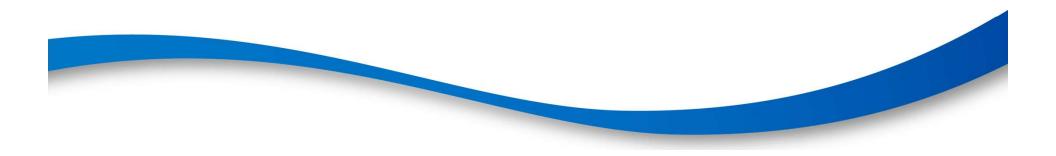






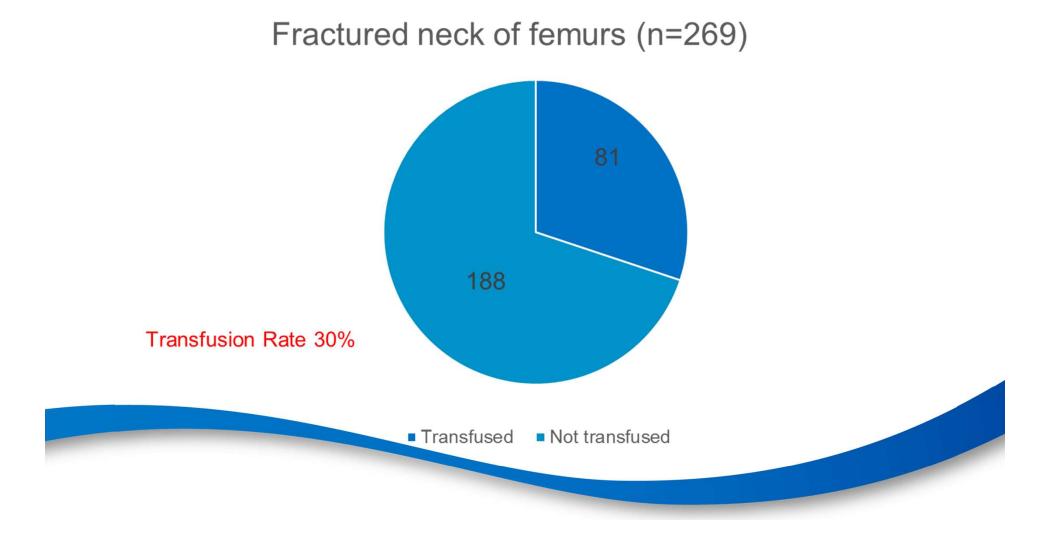
Elective orthopaedic cases

- Of the 56 patients transfused, 19 had a single unit transfusion (34%)
- Total number of units in this patient group = 130













Fractured neck of femur cases

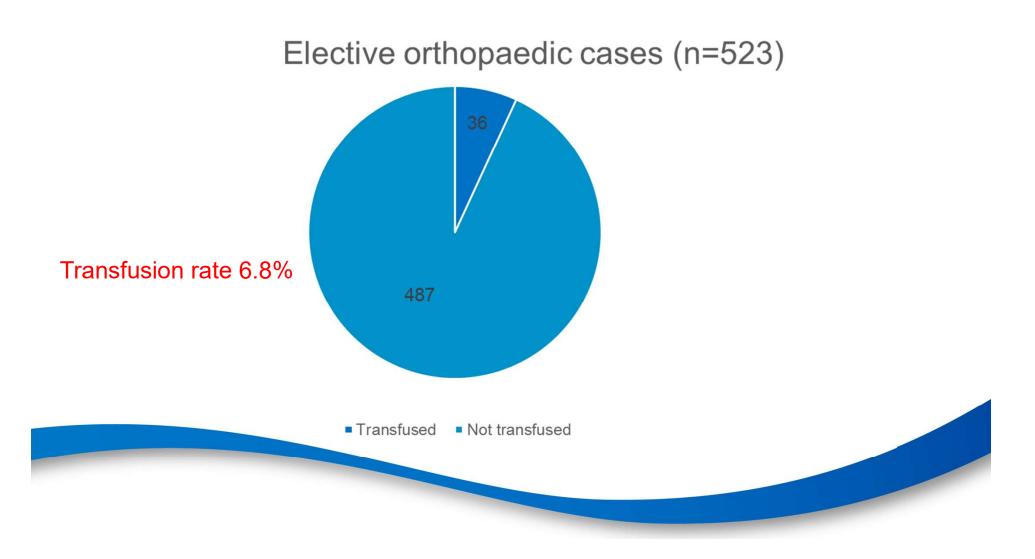
- Of the 81 patients transfused, 35 had a single unit transfusion (43%)
- Total number of units in this patient group = 176

 Grand total of units transfused over the 2 groups of patients = 306













Elective orthopaedic patients

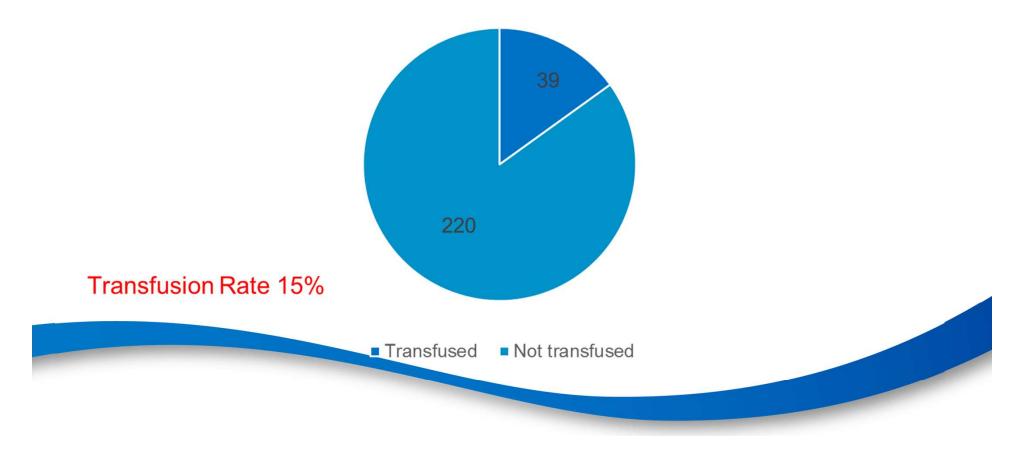
- Of the 36 patients transfused, 13 had a single unit transfusion (36%)
- Total number of units in this patient group = 80







#### Fractured neck of femurs (n=259)







#### Fractured neck of femurs

Of the 39 patients transfused, 24 had a single unit transfusion (61.5%)

Total number of units in this patient group 61

Grand total of units transfused over the 2 groups of patients = 141



	2017 - 2018	2018 - 2019
Elective orthopaedic surgery		
Transfusion Rate	11.5%	6.8%
Single unit transfusions	34%	36%
Total number of units	130	80
Fractured neck of femurs		
Transfusion Rate	30%	15%
Single unit transfusions	43%	61.5%
Total number of units	176	61
Grand total units	306	141
Units saved: 165		
Saving: £22,017.60		





#### **Elective cases**

Subsequent findings

- Evidence that reduced Tx rates = Shorter LOS
- 2017 / 2018 486 elective cases with a Tx rate 11.5%
- 2018 / 2019 523 elective cases with Tx rate of 6.8%

