

# **Key Performance Indicators**

Quarter 1 - 2015/16

# Key Performance Indicators

## Purpose:

- Review the performance of NHSBT
- Assess the effectiveness of stock management
- Assist with demand planning
- Meet expected targets

# Key Performance Indicators

Includes:

- Age of red cells at dispatch
- Number of time expired platelet units
- O RhD Negative red cell issues
- Red cell stock
- Number of red cell, platelet and frozen component issues

# Age of Red cells at Dispatch

- We aim to maintain a balanced stock age profile across sites
- Stock movement costs are considered
- NHSBT operate a first in first out policy



# Age of Red Cells at Dispatch (Days)

| NHSBT Centre            | 2014/15     | Apr-15      | May-15      | Jun-15      | YTD         |
|-------------------------|-------------|-------------|-------------|-------------|-------------|
| Leeds                   | 13.0        | 12.4        | 12.9        | 13.8        | 13.1        |
| Sheffield               | 11.8        | 11.2        | 12.0        | 13.3        | 12.2        |
| Birmingham              | 12.1        | 11.9        | 12.3        | 13.6        | 12.6        |
| Brentwood               | 10.8        | 9.9         | 10.8        | 11.6        | 10.7        |
| Cambridge               | 13.3        | 12.3        | 13.0        | 15.0        | 13.4        |
| Manchester              | 12.3        | 12.3        | 13.7        | 14.2        | 13.4        |
| Lancaster               | 12.0        | 11.8        | 11.7        | 12.9        | 12.1        |
| Liverpool               | 12.3        | 11.1        | 11.5        | 12.7        | 11.8        |
| Newcastle               | 11.4        | 11.2        | 12.1        | 12.3        | 11.9        |
| Tooting                 | 13.1        | 12.8        | 13.6        | 14.3        | 13.6        |
| Southampton             | 13.0        | 12.0        | 12.8        | 13.4        | 12.7        |
| Filton                  | 11.8        | 10.4        | 10.7        | 12.0        | 11.0        |
| Plymouth                | 12.2        | 11.2        | 12.3        | 13.2        | 12.2        |
| Oxford                  | 12.4        | 11.0        | 12.0        | 13.7        | 12.2        |
| Colindale               | 10.1        | 9.5         | 10.5        | 10.7        | 10.3        |
| <b>National Average</b> | <b>12.0</b> | <b>11.5</b> | <b>12.2</b> | <b>13.1</b> | <b>12.3</b> |

| Blood Group | YTD  |
|-------------|------|
| A Neg       | 13.7 |
| A Pos       | 13.0 |
| AB Neg      | 12.5 |
| AB Pos      | 13.5 |
| B Neg       | 10.8 |
| B Pos       | 11.9 |
| O Neg       | 10.7 |
| O Pos       | 11.9 |

*Data excludes irradiated  
and paediatric units*

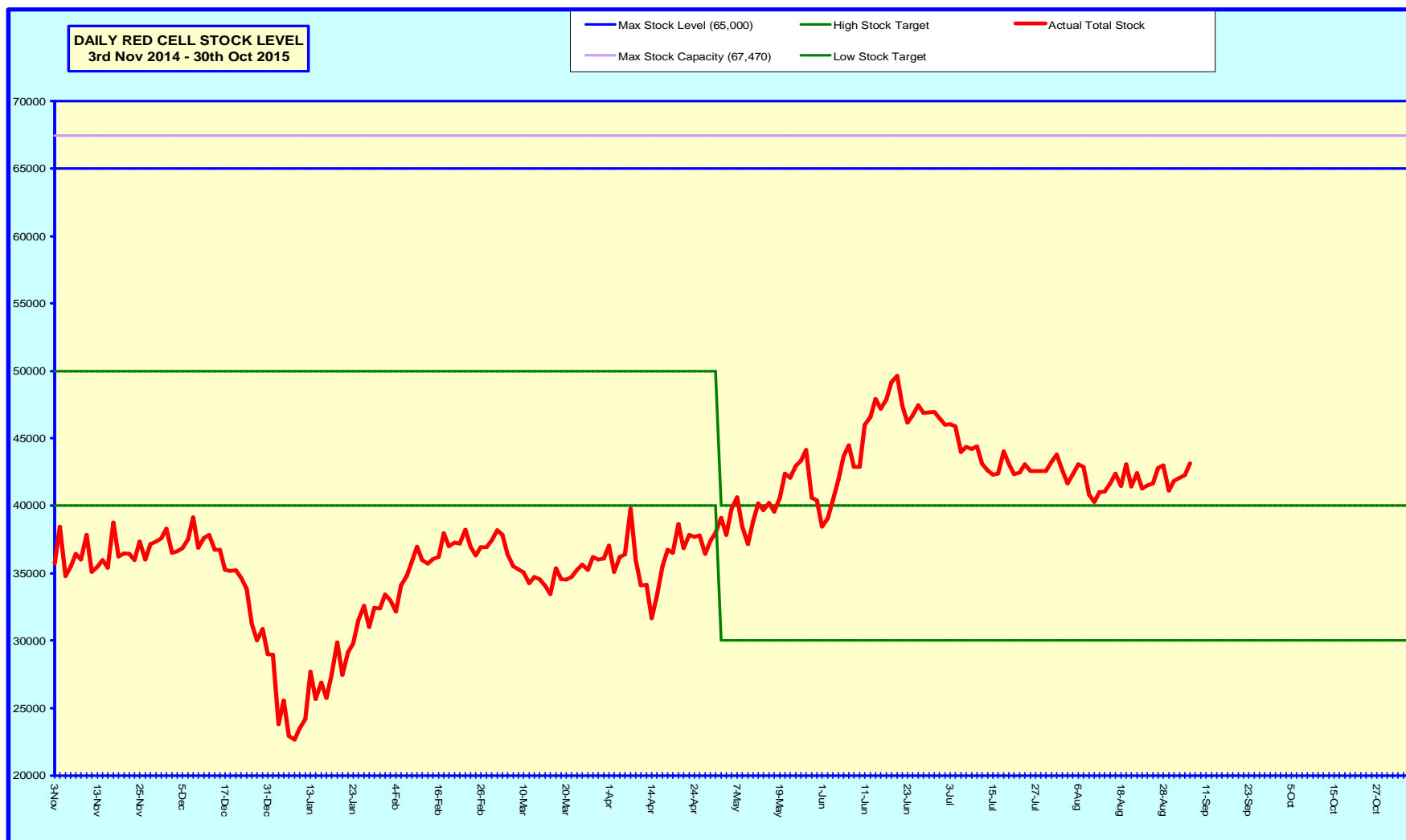
The YTD national average has increased slightly to 12.3 days; (2014/15: 12.0 days)

YTD Range: 10.3 – 13.6 days

# Age of Red Cells at Dispatch



# Daily Red Cell Stock Levels



Target range for red cell stock now 30,000 – 40,000

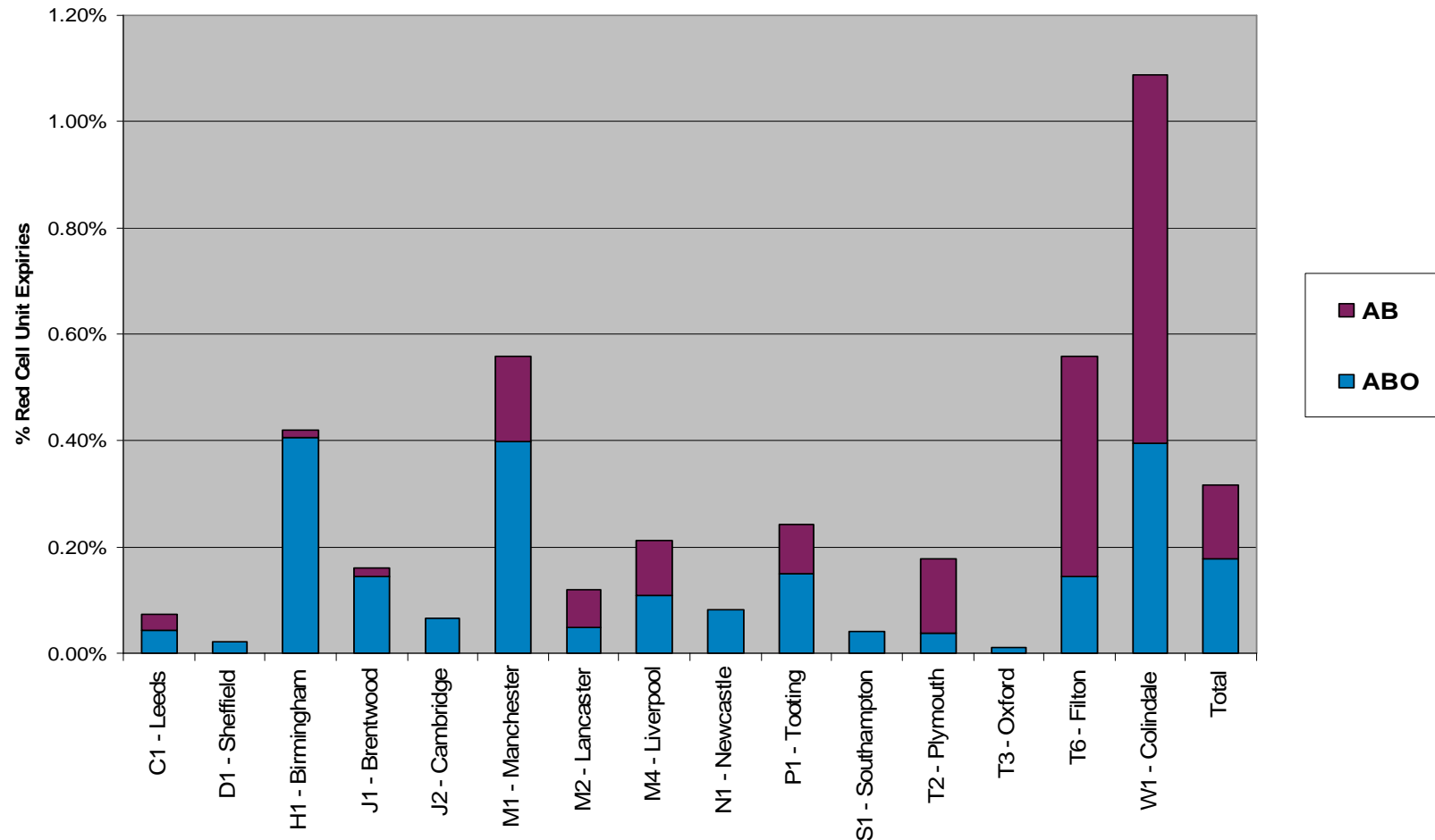
## Time Expired Red Cells

| Blood Group  | YTD         | Monthly Average |            |
|--------------|-------------|-----------------|------------|
|              |             | YTD             | 2014/15    |
| A -          | 173         | 58              | 55         |
| A +          | 120         | 40              | 37         |
| B -          | 61          | 20              | 22         |
| B +          | 70          | 23              | 33         |
| O -          | 94          | 31              | 54         |
| O +          | 195         | 65              | 86         |
| AB -         | 62          | 21              | 18         |
| AB +         | 507         | 169             | 234        |
| <b>Total</b> | <b>1282</b> | <b>427</b>      | <b>539</b> |

(YTD per 10,000 issued: 2013/14 - **75**;  
2014/15 – **39**; 2015/16 – **32**)



# Red Cell Expiries as % of Red Cell Issues – YTD June 2015



YTD red cell expiries for all blood groups is 0.32% (0.14% AB) of red cell issues (equates to 1282 red cell units nationally)

2014/15: 0.39% (0.21% AB)

# % O RhD Negative Red Cells Issued

- Directly related to hospital demand
- Maintaining an adequate O RhD negative stock is a persistent challenge



# % O RhD Negative Red Cells Issued

| NHSBT Centre     | 2014/15 | Apr-15 | May-15 | Jun-15 | YTD   |
|------------------|---------|--------|--------|--------|-------|
| Leeds            | 11.0%   | 11.2%  | 10.8%  | 11.0%  | 11.0% |
| Sheffield        | 11.3%   | 12.7%  | 12.1%  | 12.0%  | 12.3% |
| Birmingham       | 12.1%   | 12.4%  | 12.3%  | 12.7%  | 12.5% |
| Brentwood        | 11.8%   | 12.0%  | 10.5%  | 10.9%  | 11.2% |
| Cambridge        | 10.6%   | 10.1%  | 11.6%  | 12.2%  | 11.3% |
| Manchester       | 11.4%   | 12.5%  | 13.4%  | 12.1%  | 12.7% |
| Lancaster        | 11.5%   | 11.8%  | 10.8%  | 13.5%  | 12.0% |
| Liverpool        | 11.5%   | 11.4%  | 12.0%  | 11.5%  | 11.6% |
| Newcastle        | 13.0%   | 13.4%  | 13.1%  | 14.2%  | 13.6% |
| Tooting          | 14.0%   | 13.5%  | 14.6%  | 15.0%  | 14.4% |
| Southampton      | 12.3%   | 12.4%  | 12.1%  | 13.4%  | 12.6% |
| Plymouth         | 13.3%   | 14.2%  | 12.2%  | 12.7%  | 13.0% |
| Oxford           | 12.4%   | 13.4%  | 13.3%  | 14.2%  | 13.7% |
| Filton           | 11.3%   | 10.7%  | 11.3%  | 12.4%  | 11.5% |
| Colindale        | 11.4%   | 11.6%  | 11.1%  | 10.9%  | 11.2% |
| National Average | 12.1%   | 12.3%  | 12.4%  | 12.7%  | 12.5% |

The % O RhD negative issues have shown a gradual increase

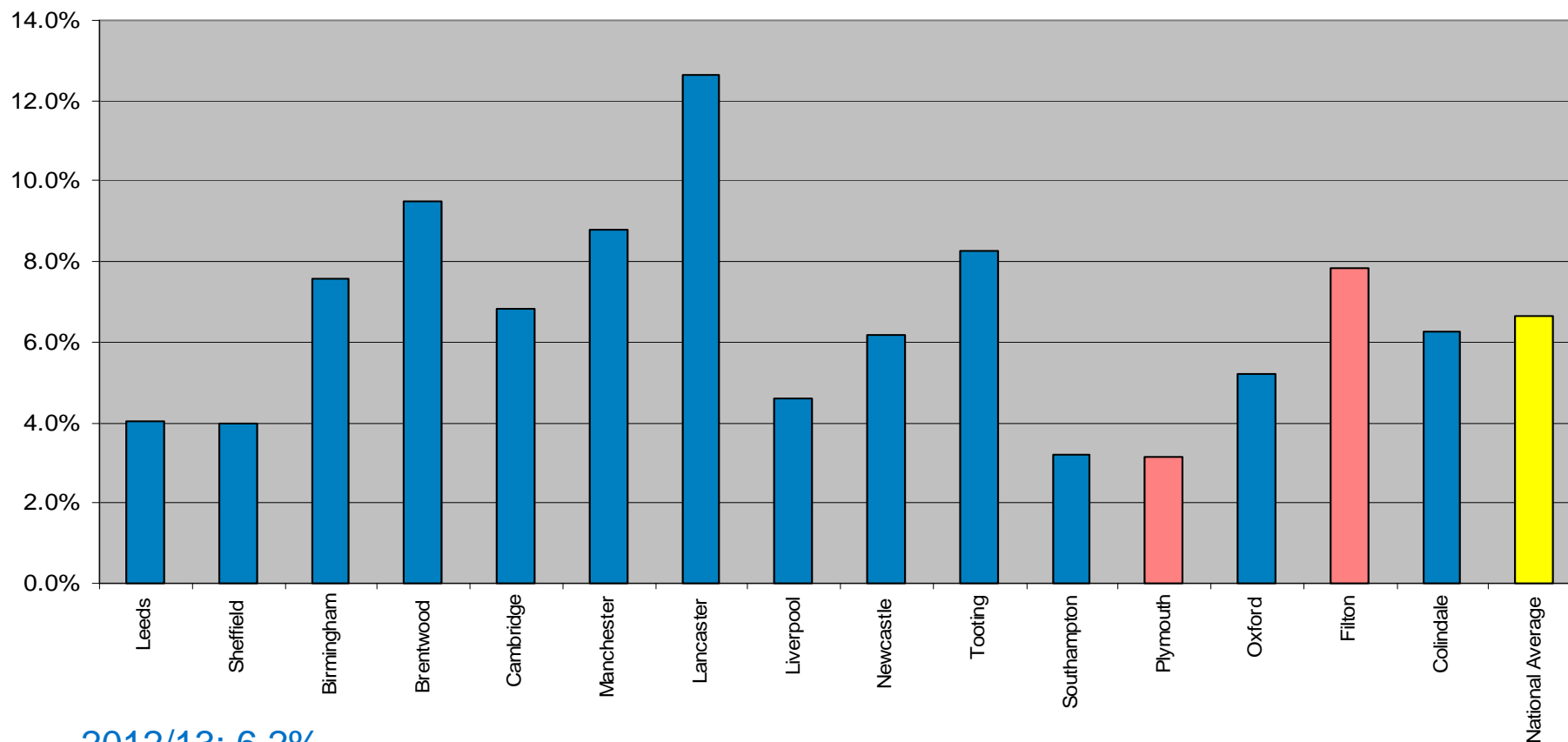
2012/13: 11.5%

2013/14: 11.8%

2014/15: 12.1%

2015/16: 12.5%

# Platelet Expiries as a % of Platelet Issues (exc. B/H)



2012/13: 6.2%

2013/14: 5.8%

2014/15: 5.4%

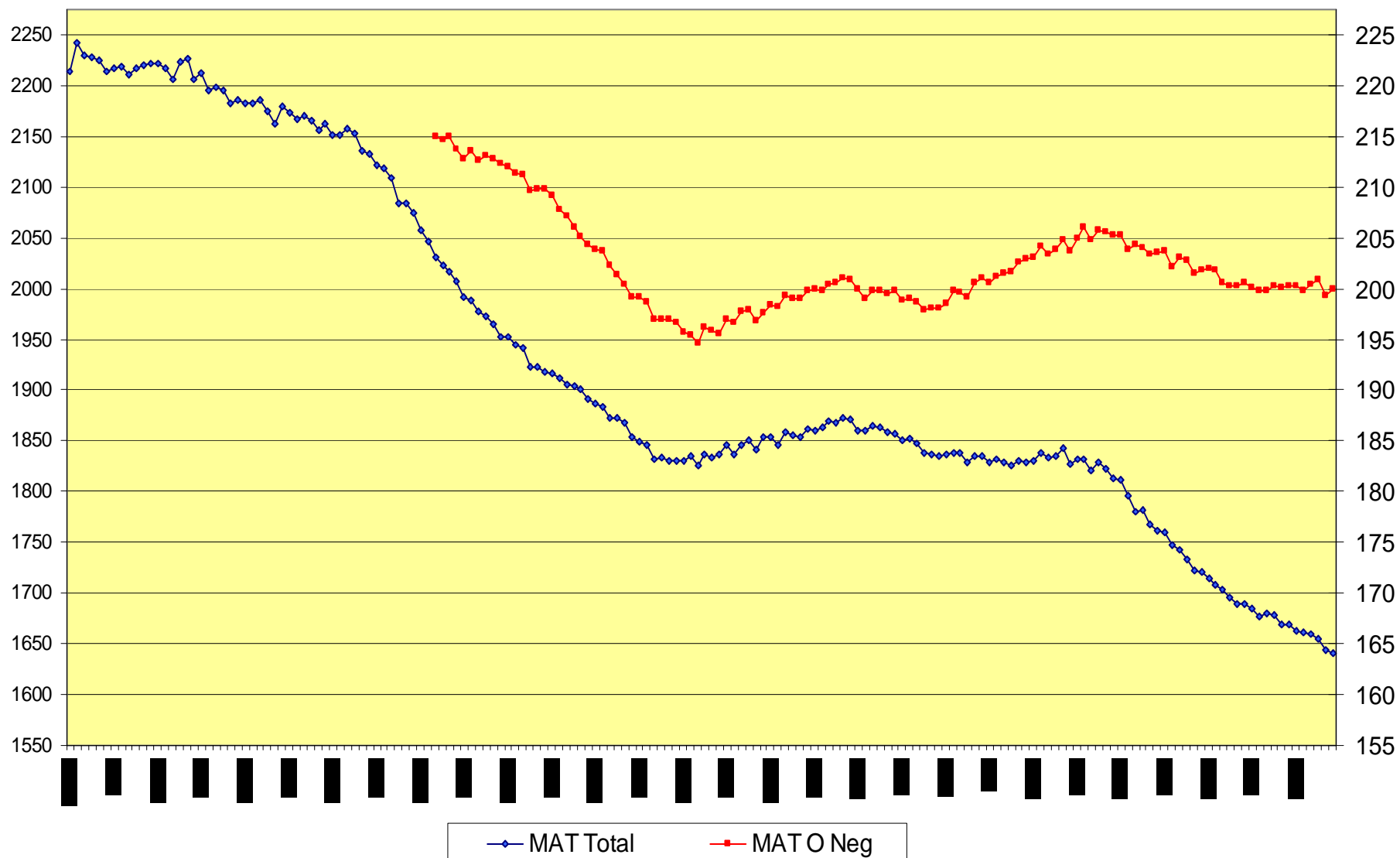
2015/16: 6.7%

# Issue Data

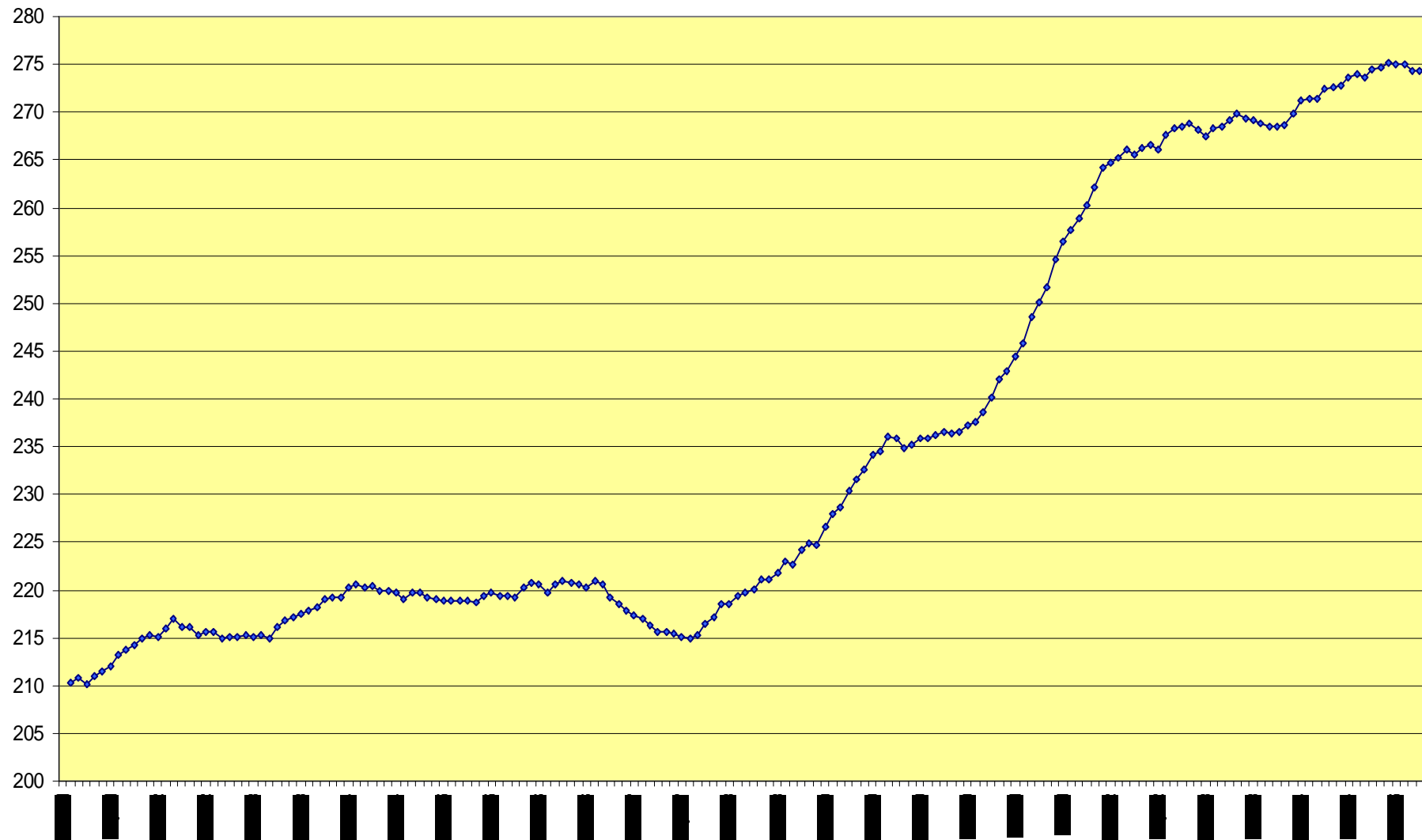
- Red cell demand is continuing to decrease whilst O neg red cell issues remain relatively stable
- Platelet use is continuing to steadily increase
- Frozen component: FFP use is slowly declining whilst Cryo use is increasing



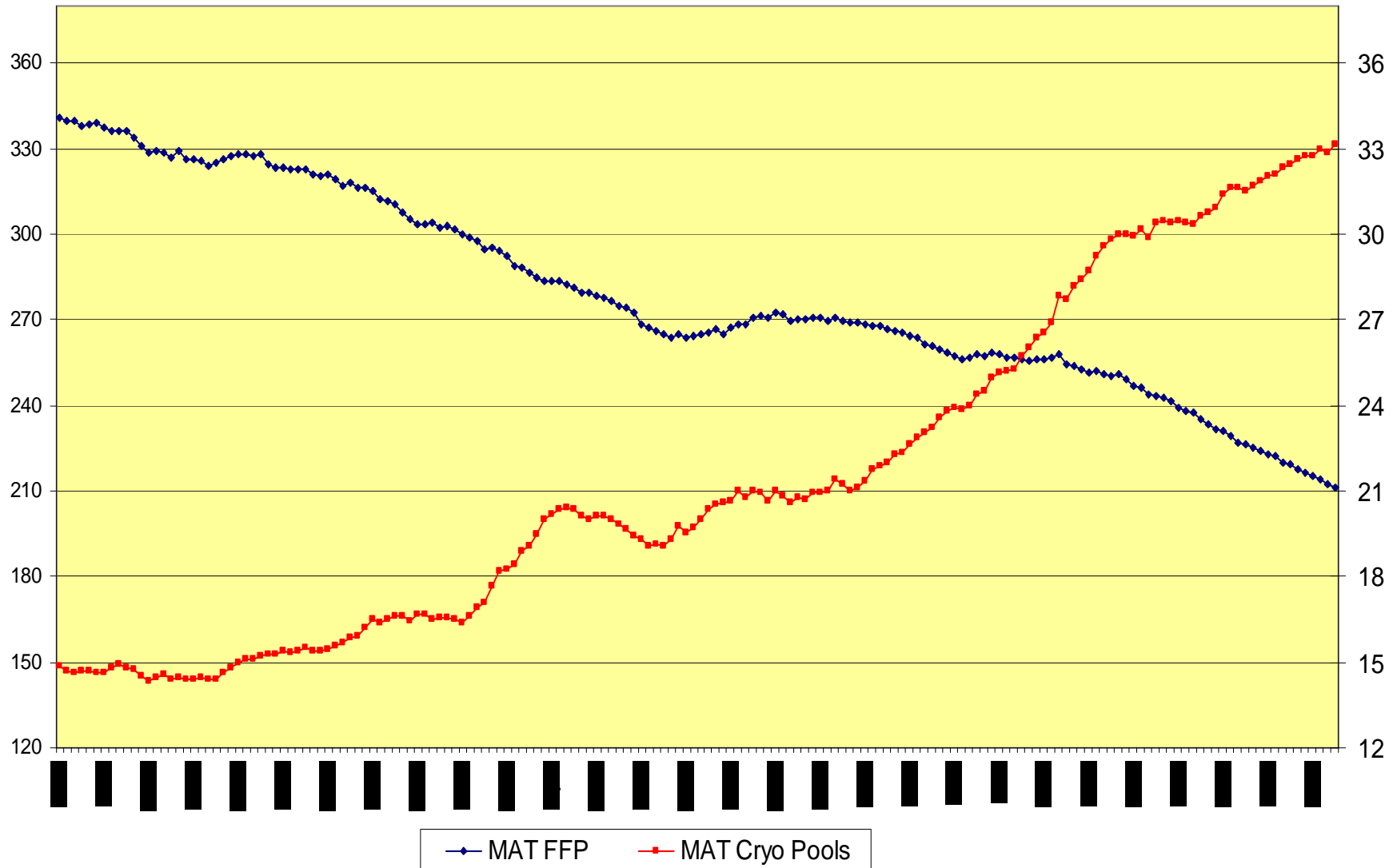
# Moving Annual Total of Red Cell Issues to Hospitals (000's)



# Moving Annual Total of Platelet Issues to Hospitals (000's)



# Moving Annual Total of FFP and Cryo Issues to Hospitals (000's)





**Thank you**  
Any Questions?