Reducing Platelet Wastage by Increasing Stock Levels at UHS

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Introduction

- Donations are Altruistic gifts our responsibility to ensure appropriate use
- Supply chain is becoming stressed
- Amber and pre-amber alerts issued
- NHSBT forecasts predict 1800 new platelet donors are required to meet 6% annual demand increase

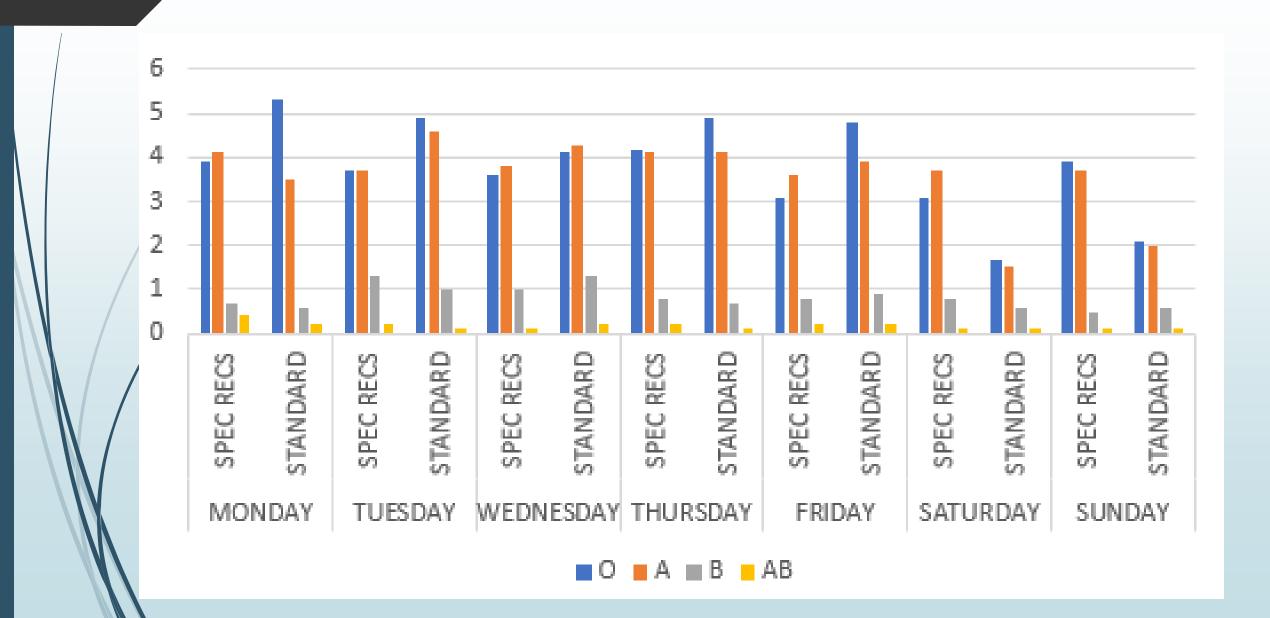
UHS Wastage

- UHS are a large acute teaching hospital with multiple specialities
- Categorised as a very high user by BSMS
- Received 8326 units of platelets last year
- ► Platelet WAPI was at 10.1%
- ► 60 90 units wasted per month
- **■** Costing UHS >£250 000

Platelet Usage Audit by Speciality

| | | | Sep-22 | | | Oct-22 | | | Nov-22 | | | Dec-22 | | | Jan-23 | | | Feb-23 | |
|---|-------------------------|--------|------------|--------|--------|------------|--------|--------|------------|--------|--------|------------|--------|--------|------------|--------|--------|------------|--------|
| | Department | Issued | Transfused | Wasted |
| | Emergency Medicine | 6 | 6 | 0 | 11 | 7 | 1 | 7 | 6 | 0 | 4 | 2 | 0 | 8 | 5 | 2 | 15 | 7 | 5 |
| | Cardiovascular & Thorac | 177 | 123 | 15 | 180 | 125 | 15 | 190 | 148 | 10 | 169 | 119 | 16 | 186 | 143 | 14 | 155 | 106 | 20 |
| \ | Haem/Onc | 503 | 356 | 49 | 626 | 442 | 50 | 414 | 321 | 29 | 537 | 404 | 35 | 294 | 216 | 22 | 373 | 288 | 30 |
| | Critical Care | 153 | 112 | 13 | 91 | 59 | 10 | 129 | 92 | 14 | 73 | 49 | 9 | 74 | 54 | 9 | 46 | 27 | 8 |
| | Paeds | 98 | 77 | 6 | 39 | 28 | 4 | 63 | 48 | 9 | 49 | 31 | 9 | 51 | 35 | 6 | 56 | 40 | 7 |
| | Neuro | 9 | 4 | 3 | 15 | 8 | 2 | 21 | 14 | 0 | 21 | 13 | 0 | 20 | 10 | 0 | 23 | 11 | 5 |
| | General Medicine | 28 | 21 | 2 | 8 | 7 | 0 | 1 | 1 | 0 | 8 | 7 | 1 | 5 | 3 | 0 | 3 | 3 | 0 |
| | Surgical | 7 | 3 | 0 | 12 | 7 | 1 | 11 | 9 | 1 | 21 | 8 | 2 | 13 | 13 | 0 | 14 | 9 | 1 |
| | Trauma & Orthopaedics | 7 | 2 | 1 | 8 | 3 | 2 | 4 | 2 | 1 | 2 | 1 | 1 | 4 | 2 | 1 | 0 | 0 | 0 |
| | Obs & Gynae | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 |
| | External Hospitals | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTALS | 988 | 704 | 89 | 993 | 689 | 85 | 841 | 641 | 64 | 884 | 634 | 73 | 655 | 481 | 54 | 687 | 492 | 76 |

Average Platelet Usage Per Day

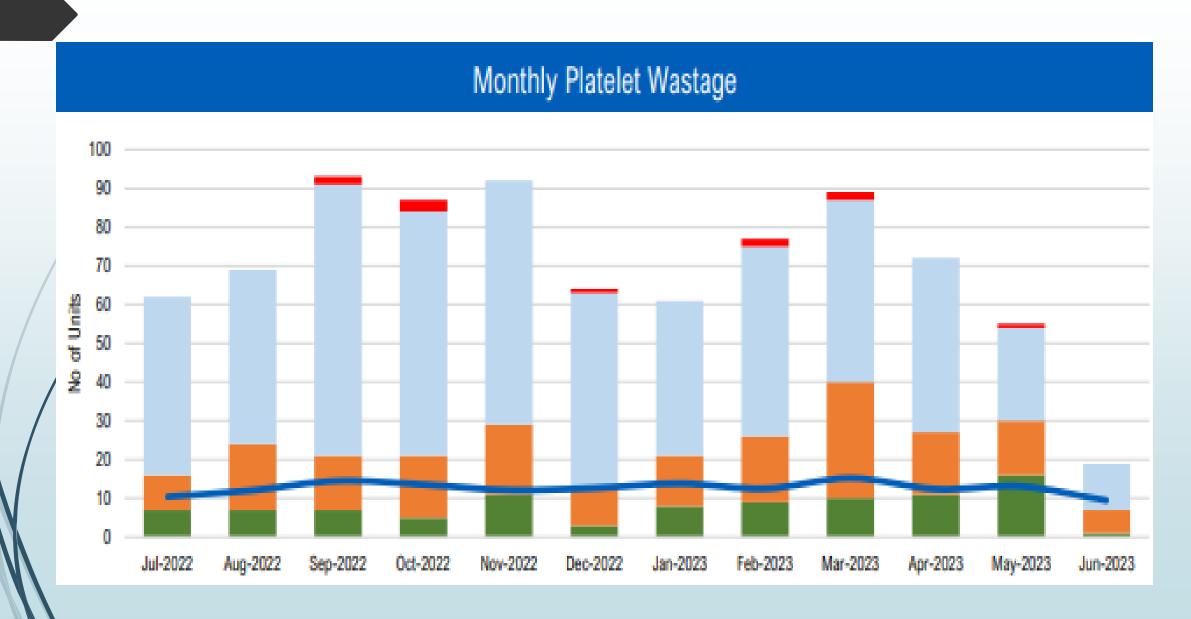


Stock Levels

- To reduce the time taken from ordering to availability we decided to trial increasing our stock levels
- Consulted with NHSBT to check feasibility
- Suggested all stocks are Irradiated, CMV- and HT-

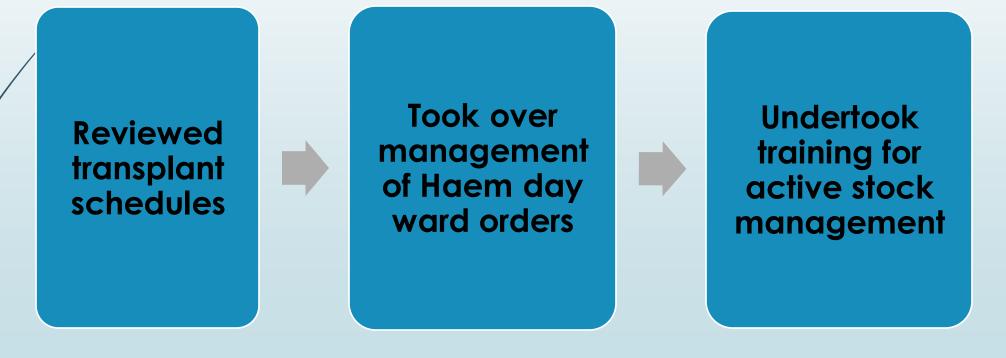
| Blood Group | Current Stocks | Proposed Stocks |
|-------------|----------------|-----------------|
| A+ | 2 + 2xSR | 8 |
| A- | - | 2 |
| O+ | 2 + 2xSR | 8 |
| 0- | - | 2 |
| B+ | - | 2 |

Immediate results



Further changes

- Unable to communicate increased stock levels to the clinical areas due to SHU closure
- To show a sustained wastage reduction the BT lab had actively manage stocks



Platelet Stock Management - MLAs

In order to continue to reduce platelet wastage, we need a Working Together approach. The following points should be considered prior to performing the hourly run:

- About 10 minutes before the run, check the expiring stock sign on the front of the platelet <u>rocker</u>
- If there are still units listed as expiring today, then check if there
 are any platelets for the next hourly <u>run</u>
- Any platelets (<u>non HLA</u>/ HPA/ WAS) for the run should have their expiry date checked, if they have long expiration dates, they should be checked by the issuing BMS to see if these can be swapped for short-dated units
- Be aware that certain patient requirements / events happening in the lab mean that platelet swapping may not be feasible at this time

Platelet Stock Management - Phones

In order to continue to reduce platelet wastage, we need a Working Together approach. When taking platelet requests please consider the following points:

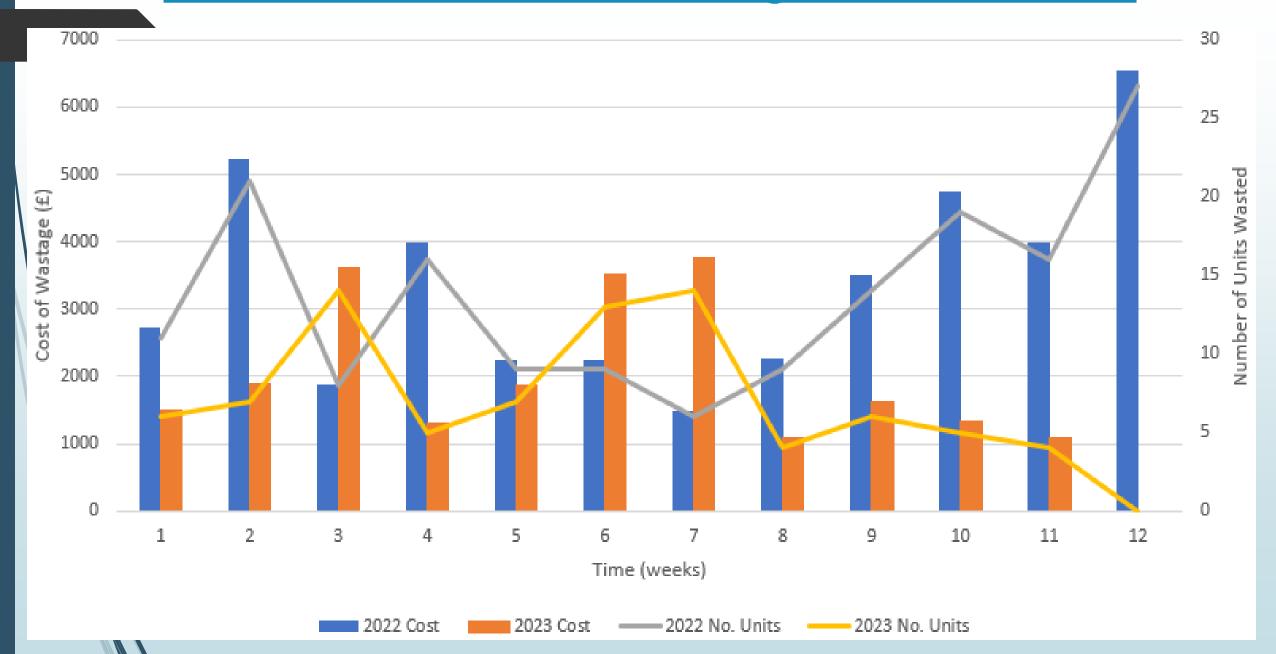
- Check the platelet rocker to see if we have that group & requirements in stock:
- We do not routinely stock gaed packs or group AB, these will need to be ordered
- > Regularly transfused patients should receive their own ABO group
- > Transplant patients should follow their transplant schedule
- D+ platelets should go to D+ patients only (if urgent then prophylactic anti-D can be used to prevent sensitisation)
- > Any out of group platelets require HT- unless the recipient is group Q
- Cardiac Theatres are happy to accept anything we deem <u>suitable</u>
- Give a realistic issuing timeframe & offer to deliver the platelets on the next hourly run, record this on the request <u>card</u>
- Select appropriate platelets based on patient requirements and expiry dates – try to select the shortest dated unit <u>first</u>
- Place on the issuing bench and handover any relevant information to a BMS
- Throughout the day wards will need to be contacted to see if they still require their platelets – return to stock & enter a lab comment if <u>not</u>

Platelet Stock Management - Issuing

In order to continue to reduce platelet wastage, we need a Working Together approach. When issuing platelets please consider the following points:

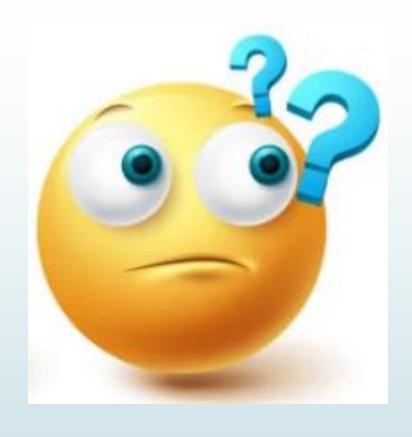
- It is your responsibility to have an overall awareness of your stock levels and periodically update the expiring stock sign on the <u>rocker</u>
- Carefully check platelets selected by APs ensure they are suitable for the patient:
 - Regularly transfused patients should receive their own ABO group (out of group is acceptable to avoid wastage)
 - > Transplant patients should follow their transplant schedule
- > A+ HT- are our trauma group platelets
- D+ platelets should go to D+ patients only (unless trauma)
- Any out of group platelets require HT- unless the recipient is group Q
- Cardiac Theatres are happy to accept anything we deem suitable
- MLAs may approach you to see if platelets about to leave the lab can be swapped for <u>shorter-dated</u>/ expiring units. Ensure you check the bottom half of the <u>rocker</u>
- Be mindful that just because you have issued expiring platelets to a patient, does not mean that these can't be returned and re-issued to a patient requiring their platelets on the next hourly <u>run</u>
- Check C7 platelets against the appointments on the ARIA list, if the appointment time has passed, contact C7 to see if the platelets are still needed

12 Week Pilot Results – Wastage for 2022 & 2023



Limitations

- **■** Closure of Southampton SHU
- **■** Lack of communication
- Lack of staff/ time
- Appropriate ordering/ usage
- Variation in wastage reporting to BSMS



Any Questions?