

# A Network Approach to Reducing Blood Wastage

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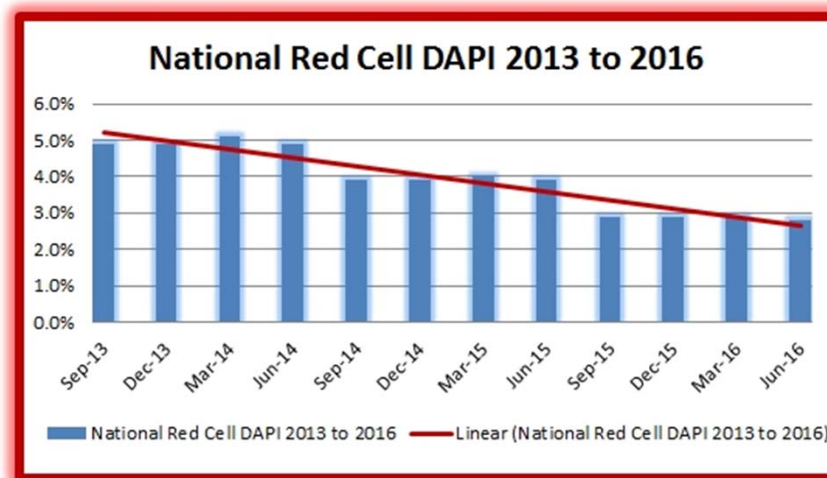
# Main Reasons for Blood discards

- Time Expired
  - 42 days – some use 35 days
  - Irradiated 14 days – 24h at Westmead
- Out of Temperature
  - Storage temperature (2-6°C)
  - Transport temperature – up to 24 hour (1-10°C)
  - Issued to a patient but not used (30 min outside a controlled fridge)
- Damaged
  - Damaged on the ward
  - Damaged in transport

# National Blood Wastage Reduction Strategy 2013-17

National Blood Authority  
[www.blood.gov.au/wastage](http://www.blood.gov.au/wastage)

- Work smarter to reduce unnecessary wastage.
- Address issues contributing to blood wastage.
- Develop and implement targets for blood and blood product wastage.
- Develop and promote better practice inventory management.
- Enhance awareness of unit price.
- Enhance collaboration across the sector.



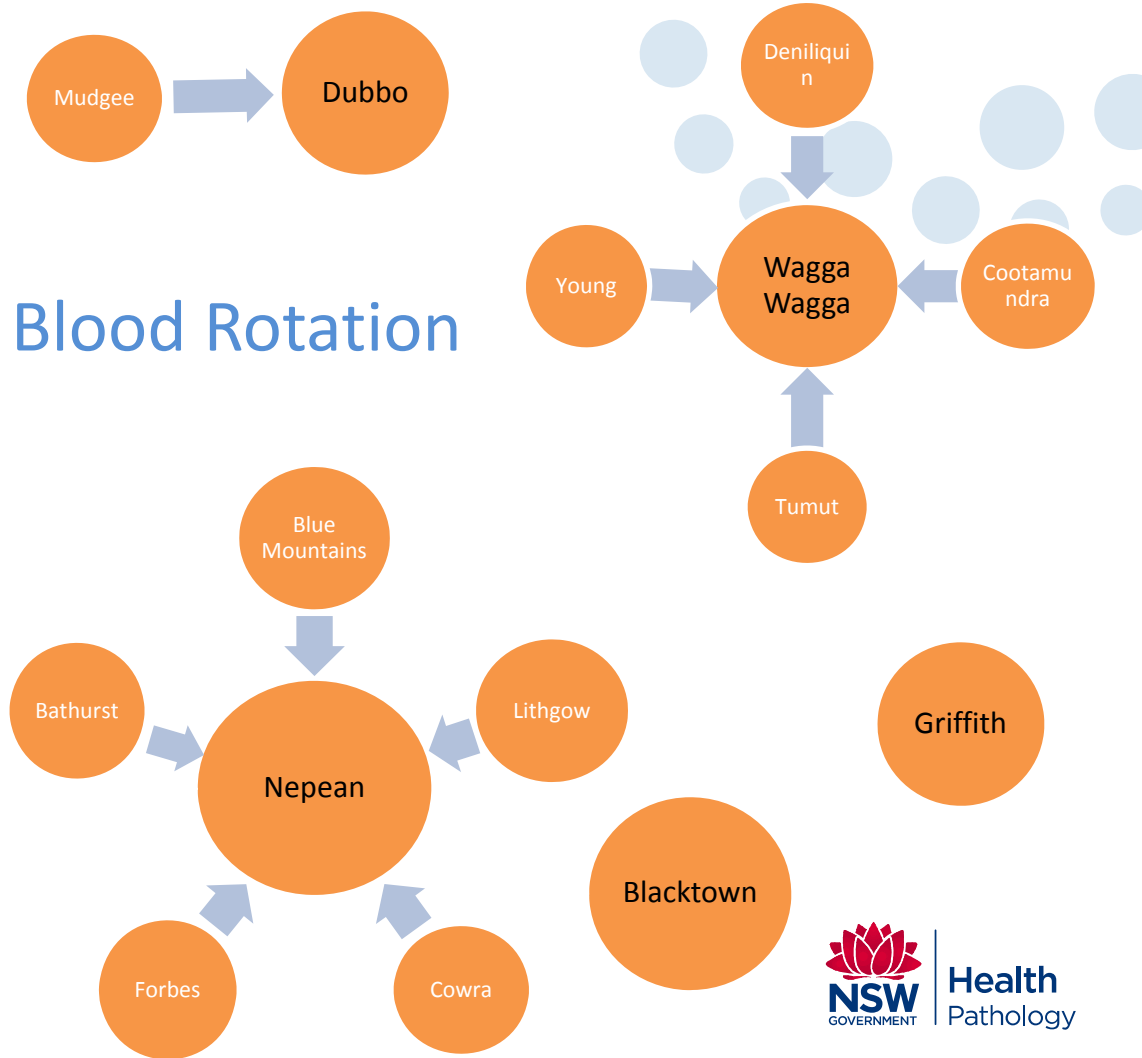
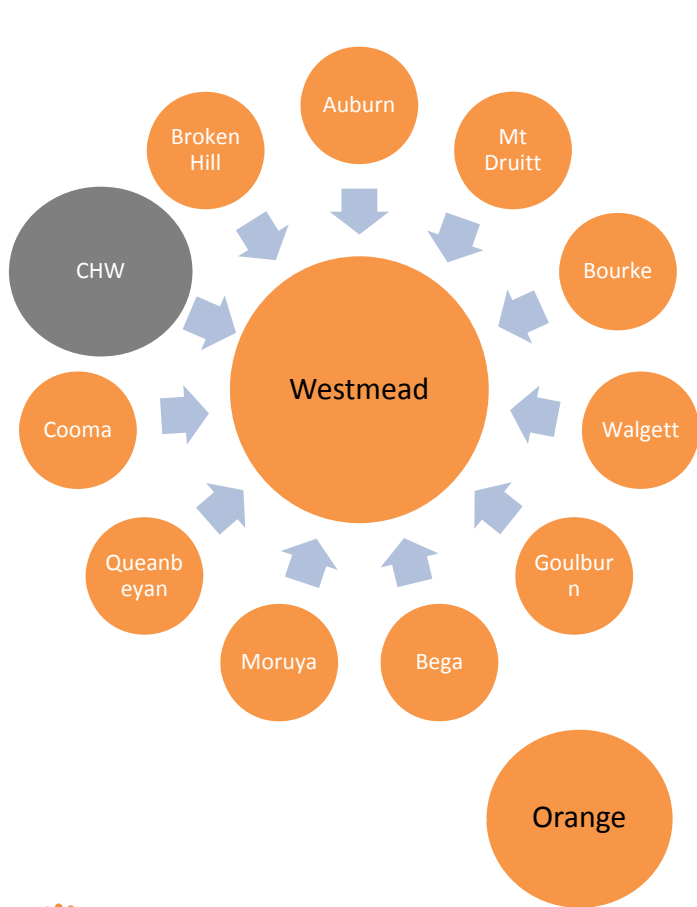
# Pathology West Laboratory Locations



# Strategies Adopted at Pathology West to Reducing Blood Wastage

- Raising awareness – presentations, meetings, regular updates.
- Setting blood stock levels that are appropriate for each Laboratory
- Rotation of old blood from small laboratories to larger centres
- Ordering and receiving blood directly from the ARC Blood Service

# Strategies Adopted at Pathology West to Reducing Blood Wastage

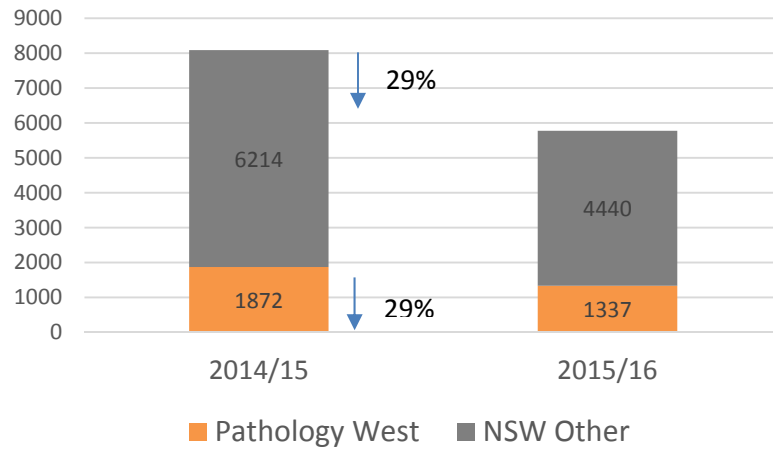


# Strategies Adopted at Pathology West to Reducing Blood Wastage

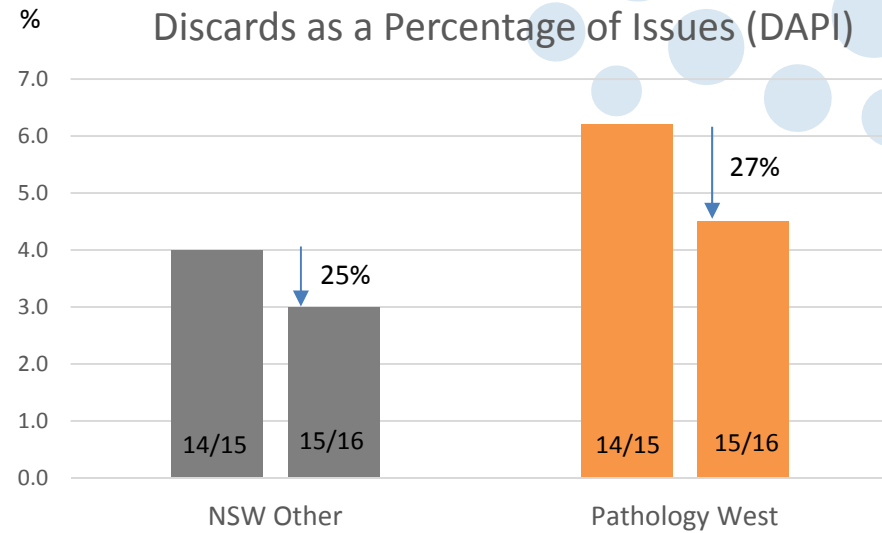
- Inventory management
  - For small and medium-size laboratories, do not stock A RhD Negative or B RhD Positive blood.
  - Use older blood first – arrange your blood stock so that older units are at the front.
  - Use group compatible blood rather than group specific to help clear the aging stock.
  - When O RhD Negative blood are close to expiry, use them for patients of other blood types.
  - When practicable, crossmatch blood just before it is required for transfusion; do not store crossmatched blood in the fridge for long.
  - Consider any crossmatched units sitting in the fridge before ordering new stock.
  - Train and educate all your staff about blood wastage reduction strategies.

# Discards and DAPI 2014/15 and 2015/16

## Red Blood Cell Discards

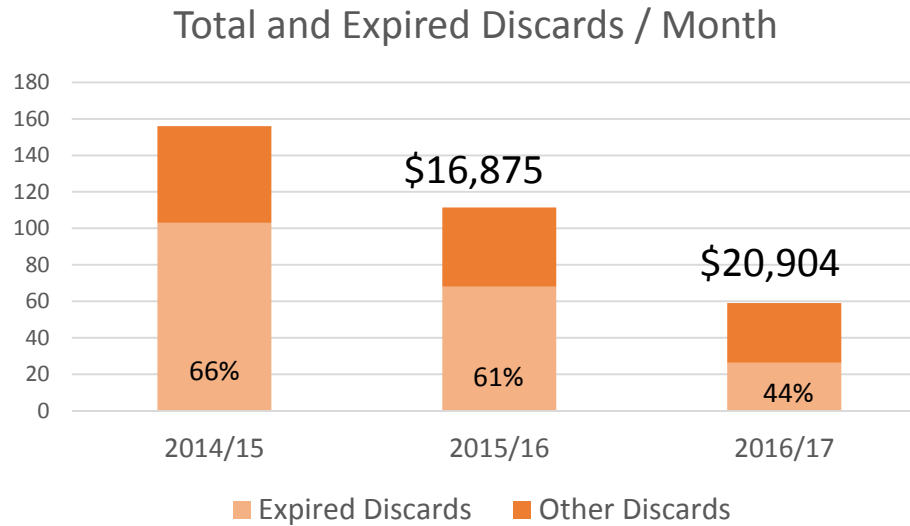


## Discards as a Percentage of Issues (DAPI)





# Total and Expired Discards in Pathology West

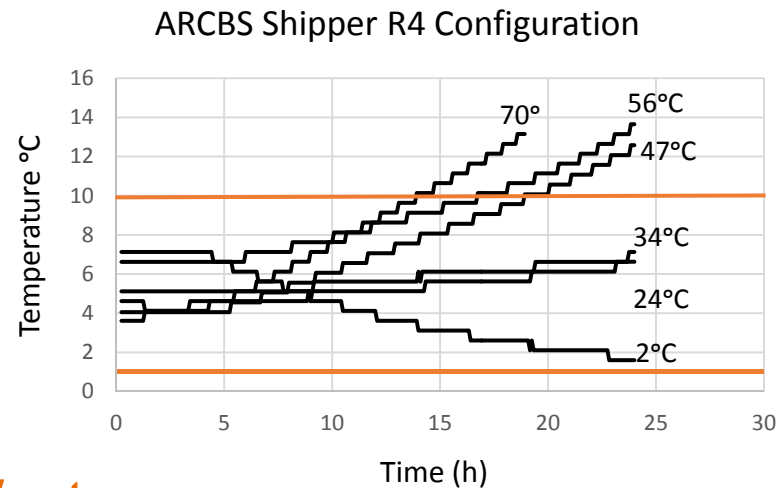


Total savings 2015/16: **\$202,000**

Estimated additional savings 2016/17: **\$250,000**

# Managing Challenges

- Old blood influx at the hub laboratories
  - Blood rotated before it is too old at around half life
- Setting the minimum safe stock of Red blood Cells.
  - Currently working with IT to generate a report to show inventory changes per product over a period of 1 year.
- Transporting blood in extreme temperatures (-5°C to +44°C).
  - ARCBS Shipper tested in artificial environment



# Acknowledgement

Dr Elizabeth Tegg – Clinical Director of Haematology, Pathology West

Dr Leo Pasalic – Chair of the Transfusion Discipline Committee, Pathology West

Hayley Keenan  
Shylee Rutland  
Aaron Keenan } Supervising Scientists Assisting with Blood rotation

Transfusion staff at all 27 Laboratories in Pathology West

National Blood Authority – National blood waste reduction

Transfusion Clinical Stream – NSW blood waste reduction