Where do A D Negative platelets go ?

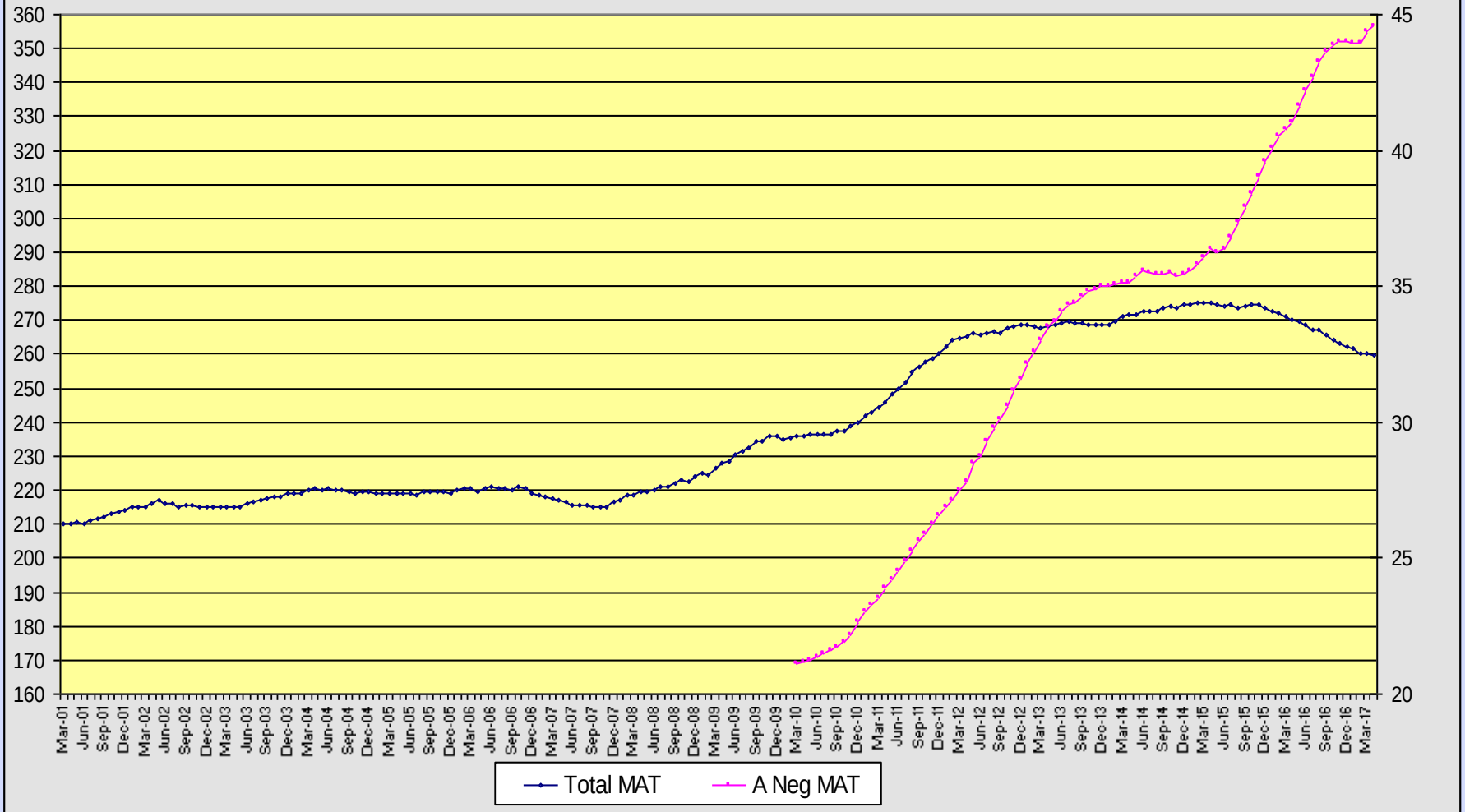
BSMS Roadshows 2017

Clive Hyam
BSMS Data Analyst

Presentation includes

- Context
- Audit format
- What we found
- Recommendations

Moving Annual Total of Platelet Issues to Hospitals - 000s



Context

- 8% donor population A D-
  - In 2016 8 shortage alerts to hospitals
  - Demand August 2016 =15% all platelet orders
  - NHSBT actions:
  - Escalated donor marketing activity
  - ↑ platelets generated from pools
  - Adverse effect on age of RBCs to generate pools
- Level of demand unsustainable → snapshot audit of A D- platelet use

Audit

- Audit of A D- platelets was undertaken with hospitals to:
  - understand where they are being used
  - make recommendations to encourage better practice
- Method
  - Up to 10 random A D- platelet units issued to 268 hospitals
  - April to August 2016
  - Hospital response 167 (62%)
  - 1348 units of platelets audited

Usage category of participating hospitals

- % of total A D- platelet issues – larger numbers issued to Very High use hospitals
- A D- issues higher than in population of 8% for all categories except the very low.

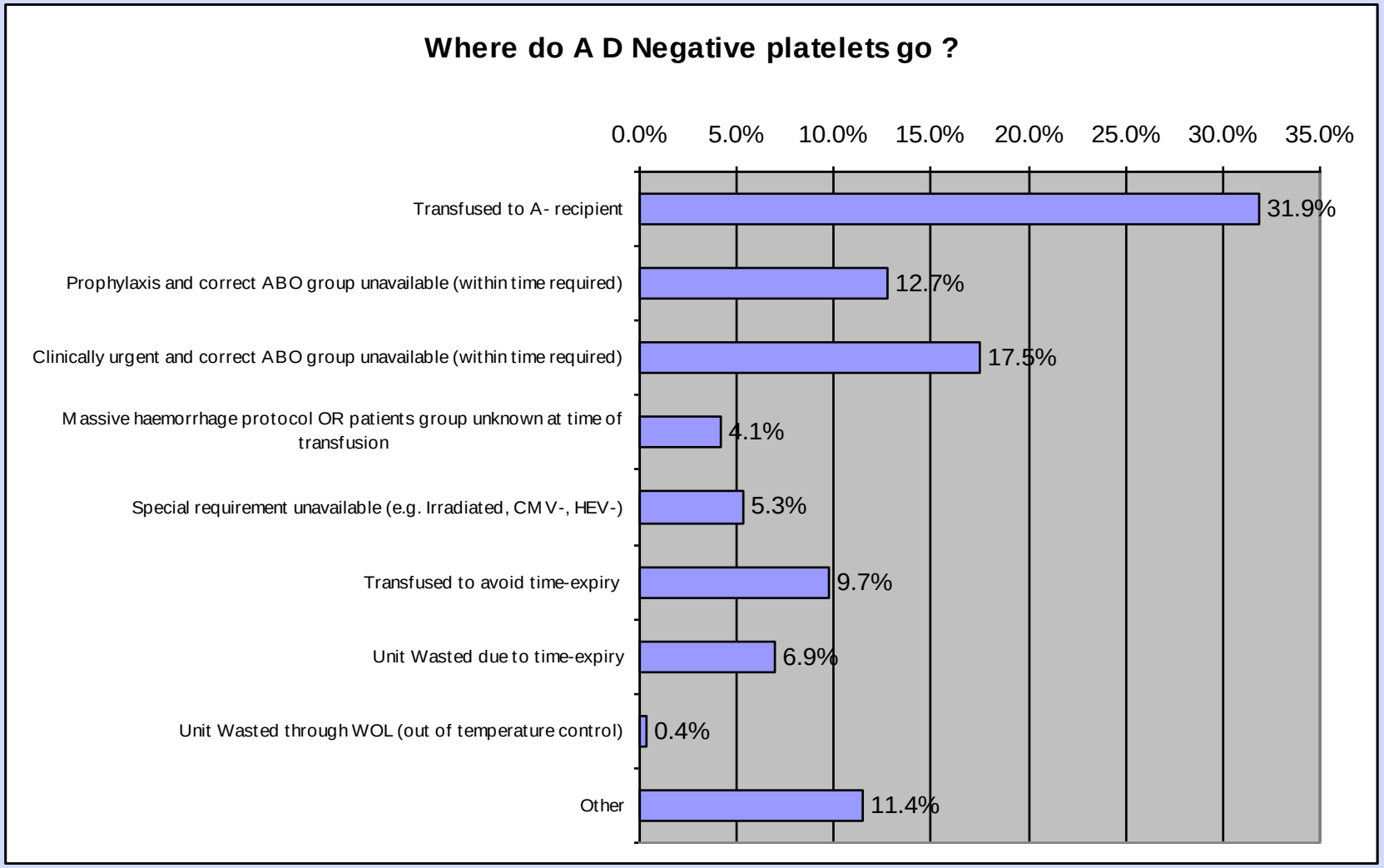
Usage Category	A Neg issues as % of total	A- Issues in Category Q1 2016
Very high	15.8%	5229
High	16.3%	2728
Moderate	17.7%	1976
Low	14.9%	481
Very Low	0.4%	27

Survey response by usage category

Usage Category	hospitals in Category	Surveys Received	Category Range	A- Issues in Category Q1 2016
Very high	34	28	>2000	5229
High	51	43	>950 and <=2000	2728
Moderate	65	54	>400 and <=950	1976
Low	51	36	>120 and <=400	481
Very Low	67	6	<=120	27

- Few responses from Very Low category hospitals
- Expected as some hospitals in this group did not receive any A D- platelets during the study period
- This group excluded from some of the further analysis

Where did the A D Negative Platelets Go ?

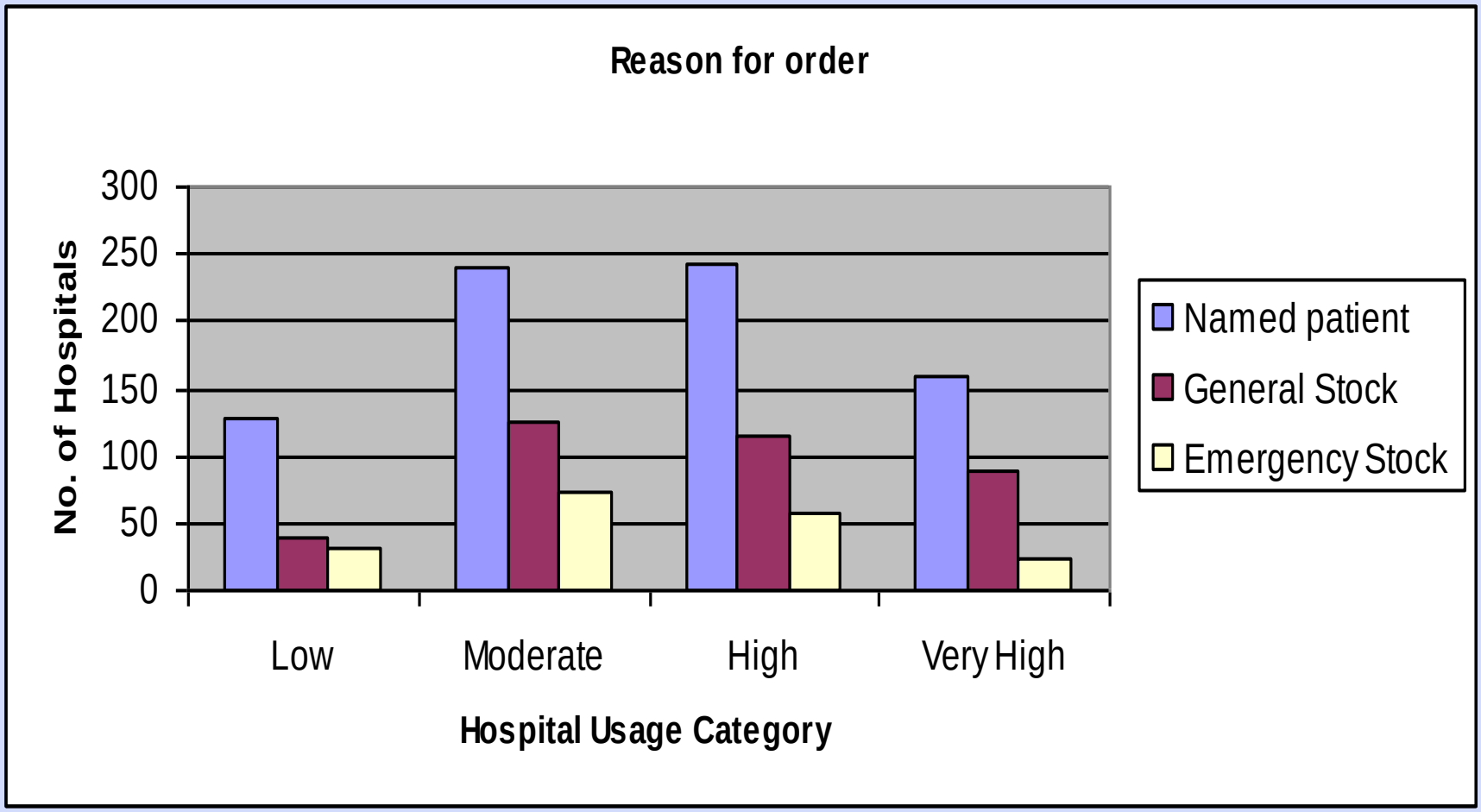


In summary

- 32% A D- recipients.
- 35% non A D- recipients for following reasons:

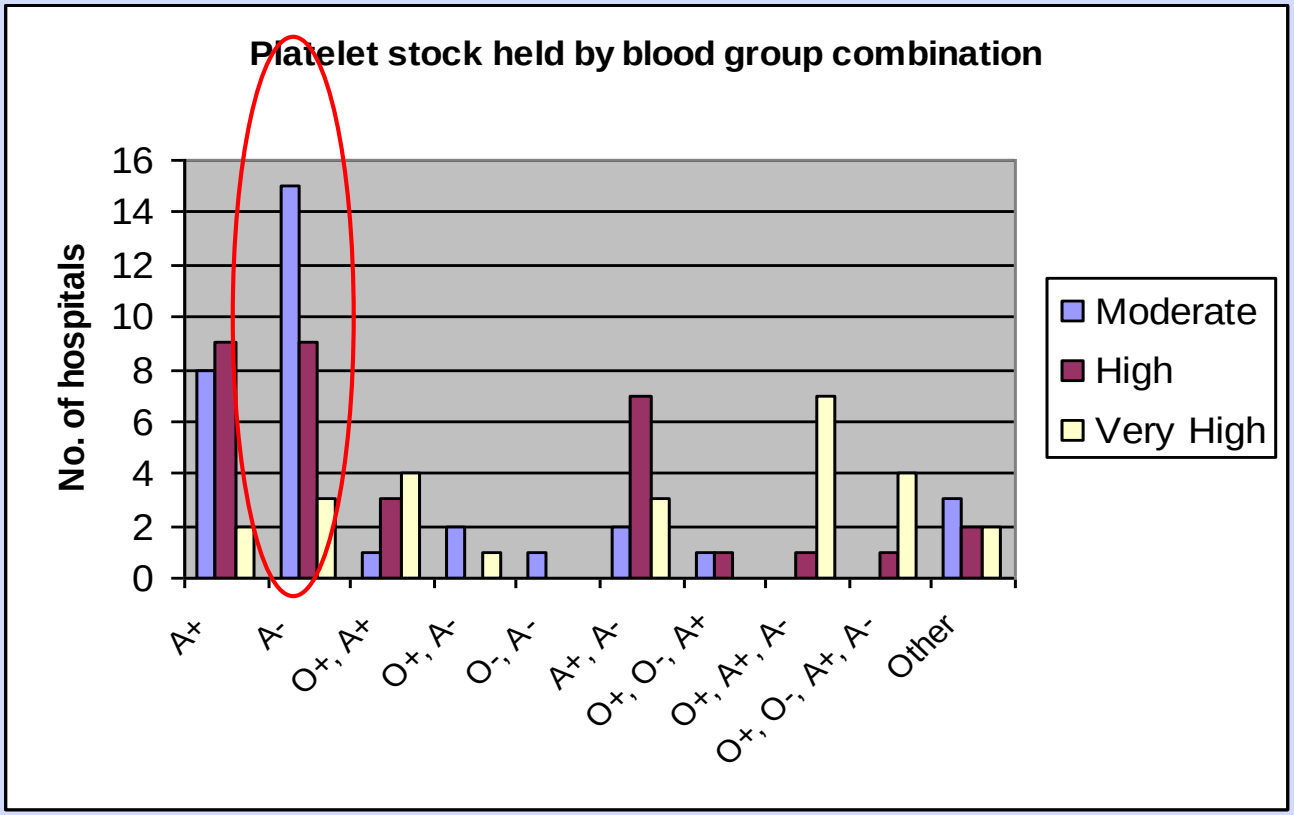
  (correct ABO/ D match unavailable in the time required)
  - prophylaxis or,
  - clinically urgent or,
  - special requirement
- 4.1% transfused for massive haemorrhage protocol or recipient's blood group unknown
- 7% time expired
- ~10% to avoid time expiry

Why were the A D negative platelets ordered ?



Stock platelets

Majority Very High/ High users hold stock & usually mix of ABO/D
As hospital platelet issues ↓ stock was more likely A D-/A D+
26 hospitals only stocked A D- platelets



Conclusions

- Common practice for hospitals to stock A D- platelets believing suitable for all patients

BSH Guidance

- Best practice ABO/D match
- Miss-match acceptable:
  - When urgent or specific requirements necessary if -ve for HT agglutinins
  - To prevent wastage due to time expiry if -ve for HT agglutinins and either suspended in PAS or non group O
- D- platelets only essential for D- women of childbearing age

Recommendations

- Hospitals should hold ABO/D platelet group stock to maximise use of matched platelets
- If only stock A D- platelets review use and consider alternative group/s