

Role of the Blood Stocks Management Scheme in Hospital Inventory Management in England, Wales and Northern Ireland

The Blood Stocks Management Scheme (BSMS) was launched in 2001 as a partnership between hospitals and blood services to maximise the use of donated blood by increasing the understanding of blood inventory management across the whole supply chain. Hospitals from England, Wales and Northern Ireland are currently participating in the BSMS.

Central to the work of the BSMS is VANESA, a data management system where hospital and blood service data is collected. Hospitals using VANESA can benchmark their data using categories based on their hospital profile. The most commonly used categories include hospital size (based on red blood cell (RBC) or platelet (PLT) usage category), geographical location (based on the Regional Transfusion Committee) and the clinical specialities available within the hospital. Once appropriate benchmarking categories have been selected within VANESA, users can view inbuilt tables and charts to compare their data with similar hospitals. Figure 1 is an example of a line chart. This shows the selected users Issuable Stock Index (ISI) for O D Negative RBCs compared to other hospitals within the

same benchmarking cluster. ISI is a calculated field and gives the user an idea of how much stock they are holding in terms of 'days use'.

When the BSMS was established there was little data available from hospitals regarding inventory management markers such as stock and wastage. Keeping sufficient stocks of red cells and platelets within NHS Blood and Transplant (NHSBT) was a challenge. Inventory management of red cells and platelets has become increasingly important in both hospitals and blood services to prevent unnecessary wastage.

The BSMS is a source of information and an education provider for staff within both hospitals and blood services. Educational events focussing on topical areas of the blood supply chain provide a much-valued resource for those involved with improving inventory management.

During 2018 the BSMS team has used its bank of data and detailed knowledge to collaborate with small groups/individual hospitals to improve their RBC stock

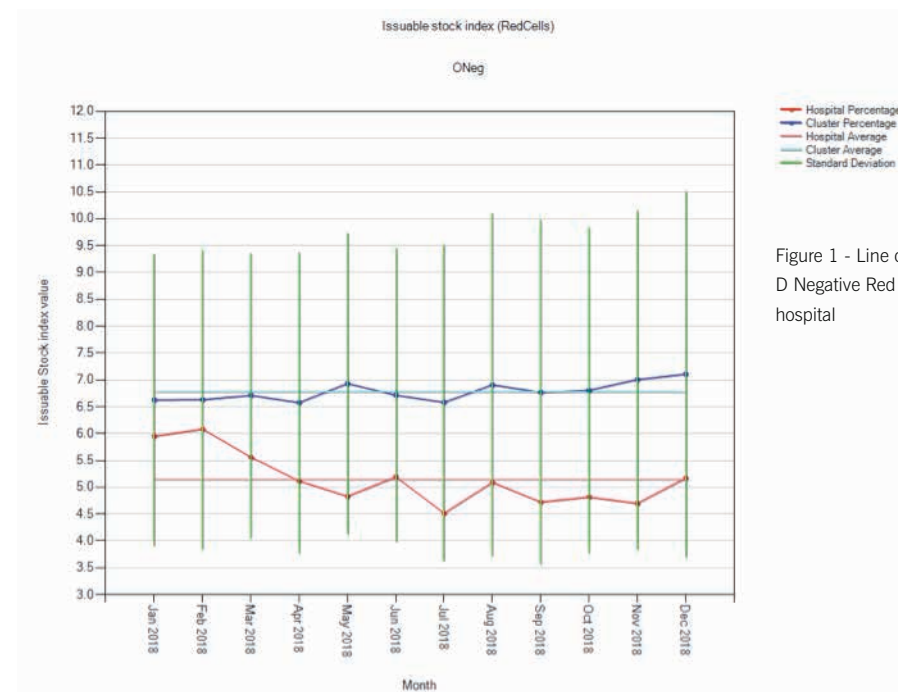
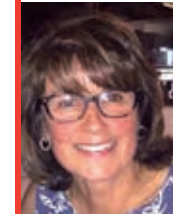


Figure 1 - Line chart demonstrating ISI for O D Negative Red Cells in a 'Very High User' hospital



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levels and hence reduce inappropriate wastage. Previous work undertaken by the BSMS has shown a direct link between red cell time expiry wastage, the amount of stock held and the age of that stock. By reviewing the ordering of blood components against the usage recorded in VANESA it is possible to revise ordering patterns, reduce time expiry wastage and make financial savings. Figure 2 is an example of the reduction in time expiry (TIMEX) wastage of RBCs following a stock management review.

Increasingly hospitals within England are ordering O D Negative RBCs of high specification e.g. C-, E-, K-, which has led to non-specific O D Negative RBCs time expiring within NHSBT. By engaging with small groups of hospitals it has been possible to discuss the data, educate and change ordering practice to mirror national guidance.

In conclusion the BSMS has made a significant contribution to improved blood inventory management in hospitals and blood services by using the data held within VANESA. This data can assist hospital blood transfusion laboratories in reviewing their own stock holding based on usage, helping to reduce time expiry wastage that not only results in cost savings but also conserves the nation's blood supply.

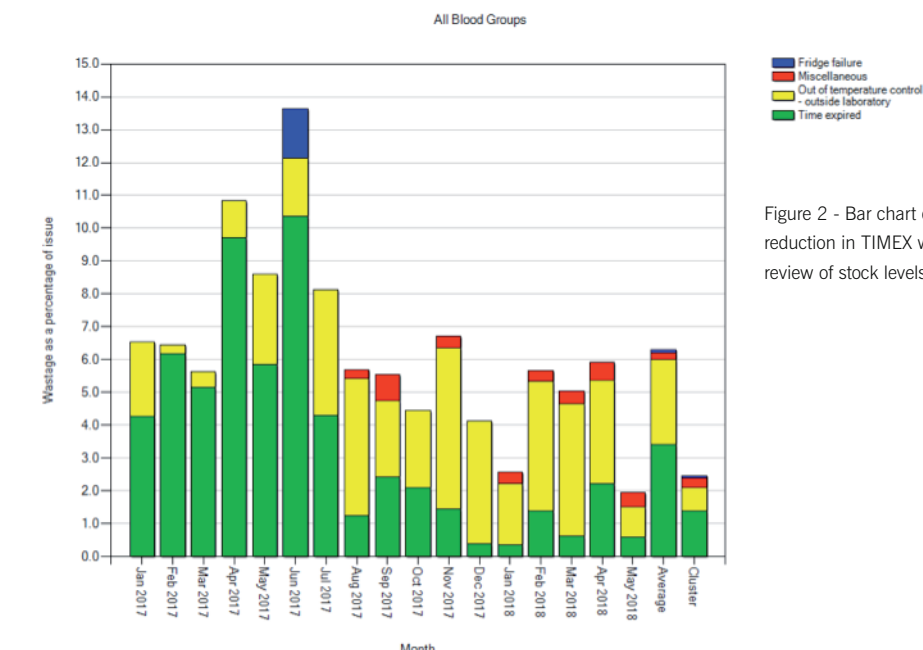


Figure 2 - Bar chart demonstrating a reduction in TIMEX wastage following BSMS review of stock levels in November 2017.