

USING BLOOD STOCKS MANAGEMENT SCHEME DATA TO CHANGE PRACTICE

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Background

The British Society for Haematology (BSH) guideline “A practical guideline for the haematological management of major haemorrhage” was published in 2015. It recommended that hospital laboratories seeing major haemorrhage due to trauma should consider having pre-thawed plasma on standby. The recommendation allowed Fresh Frozen Plasma (FFP) to be immediately available for the management of major bleeding.

Frozen blood components, including FFP were added to the Blood Stocks Management Scheme (BSMS) portfolio in August 2015 allowing an examination of wastage by reason on a national level.

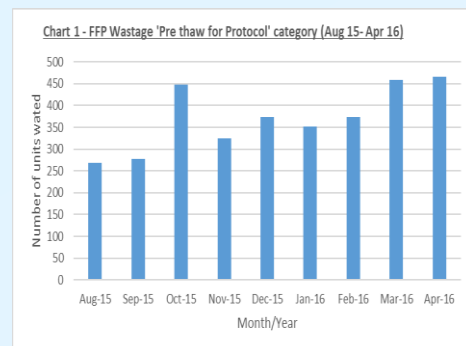


Chart 1 shows that significant numbers of FFP were being wasted in hospitals due to the 24 hour shelf life of thawed FFP.

The UK Standing Advisory Committee on Blood Components (SACBC) was asked by the Joint UK Professional Advisory Committee (JPAC) to review the current evidence on whether the shelf life of standard FFP following thawing could be extended from 24hrs to 5 days.

Method

Hospital FFP wastage data for the category ‘Pre thawed for protocol (PTPRO)’ was collected from Aug 2015 – May 2016 as the baseline. Following the change to the post thaw shelf life, data was collected for the period Jun 2016 – Dec 2017.

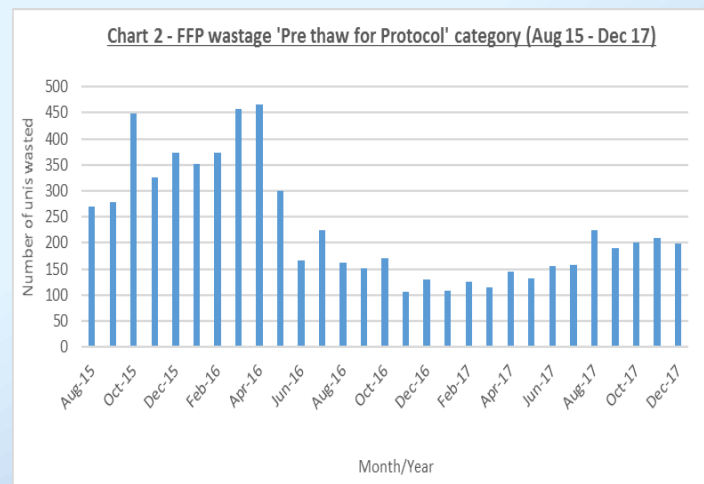


Chart 2 illustrates the decrease in PTPRO wastage following the change to post thaw shelf life of FFP.

Recommendations

In April 2016 BSH published an addendum to the 2004 Guidelines for the Use of Fresh Frozen Plasma, Cryoprecipitate and Cryosupernatant allowing storage of pre-thawed plasma at +4°C for up to 120 hours for use only in patients who develop unexpected major bleeding (e.g. following trauma).

Results

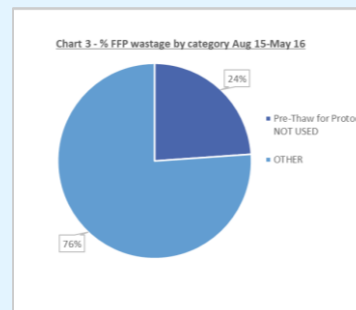
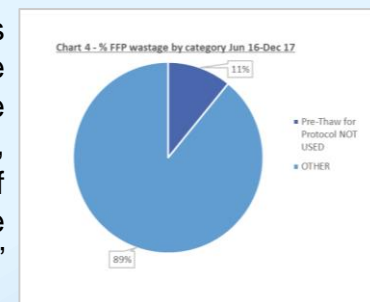


Chart 3 shows that, prior to the change in the shelf life of FFP, the proportion of FFP waste for the category ‘PTPRO’ was 24%.

Chart 4 shows that, post the change to the shelf life of FFP, the proportion of FFP waste for the category ‘PTPRO’ was 11%.



Conclusion

- BSMS data post May 2016 shows a reduction in the proportion of FFP wasted in the category ‘Pre thawed for protocol’ (PTPRO). A proportion of 24% prior to the change in shelf life compared with a proportion of 11% following the implementation of the change to the post thaw shelf life.
- Hospitals who haven’t yet implemented this change should consider doing so as significant reductions in wastage can be attained.
- The resulting change in the shelf life has resulted in a reduction in FFP wastage and allows for the immediate availability of FFP for the management of bleeding patients.
- The BSMS hospital data is useful in investigating, reporting and monitoring impacts of operational changes within the supply chain. It allows an integrated view and leads to changes in policy.

References: Hunt BJ et al, A practical guideline for the haematological management of major haemorrhage. *British Journal of Haematology*, 2015, **170**, 788-803