



e-Network Forum

CALIFORNIA BLOOD BANK SOCIETY

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Strategies to improve utilization of blood products by emergency room physicians

A colleague in the Pacific Northwest reports that her institution has recently monitored RBC and FFP ordering practices by their emergency room physicians. Their **initial audit** of emergency room blood ordering practice was performed to determine the crossmatch-to-transfusion (C/T) ratio for RBC usage, and the ratio of FFP units thawed-versus-dispensed (T/D) for FFP usage. Most of the RBC and FFP orders originating from their emergency room are for patients treated for **GI or postpartum bleeding**, etc, but not those seen with acute trauma. Interestingly, their **results showed** a RBC C/T ratio of 1.59 and a FFP T/D ratio of 1.86, suggesting that units of RBCs were being ordered to be crossmatched, yet not transfused, and units of FFP were being thawed but not transfused.

This audit will be further refined to examine the same measures by ordering physician, patient diagnosis, clinical presentation, i.e. acute versus chronic bleed, and in the case of FFP orders, if vitamin K therapy has been initiated.

The inquiring colleague adds that it is their local practice to **determine a patient's INR result prior to thawing FFP**, and that the INR result must be 1.5 or above for an order to thaw FFP to be honored. Thus, their FFP T/D ratio takes into account a prospective screening that limits FFP orders for patients with normal or near normal prothrombin time activity. (The inquiring colleague did not address orders for FFP if a patient has TTP).

In spite of limiting the thawing of FFP to patients with INR results of 1.5 or above, **some orders to thaw FFP are generated by emergency room physicians, yet the thawed products are eventually not transfused**. For example, in one case an emergency room physician ordered 4 units of FFP for a patient with an INR of 6. Eventually, the patient's physician cancelled the FFP order because the patient was not actively bleeding.

The inquiring colleague would like to compare their local results (RBC C/T and FFP T/D ratios) to those of other facilities, in the hope of learning benchmarking data, and in hope of learning strategies to improve the efficiency of blood product use in the emergency room. **e-Network colleagues who have performed similar audits are encouraged to share the results with the forum.**



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CBBS e-Network Forum Editor & Moderator

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Addenda: