

Ready to Transfuse Blood for Neonates

The Opportunity

In an effort to reduce donor exposure, babies who require red cell transfusion are assigned a “Mother” unit at the time of an initial blood transfusion request. Preparation of small aliquots (20-30 ml) from the “Mother” unit for neonatal transfusion requires several steps. Previously, both blood bank staff and NICU staff participated in blood component preparation.

Blood Bank:

- Draw aliquot from “Mother” unit into small transfer bag
- Irradiate blood component (to prevent graft vs. host disease)
- Label unit with patient demographic information and product information
- Issue to NICU

NICU staff:

- Draw product into syringe
- Re-label syringe with demographic information
- Initiate transfusion

Audit of transfusion practice suggested that this process posed the following risks:

- Regulatory non-compliance secondary to re-labeling outside of blood bank
- Potential mislabeling of the blood after transfer to the syringe
- Product wastage due to multiple transfers.

Aim/Goal

Develop a procedure to provide “ready to transfuse” blood products for neonatal transfusion.

The Team

- Monique Mohammed MS(ASCP)SBB
- Leslie Richardson-Weber MT(ASCP)
- Susan Young RN

The Interventions

Adopted use of prepackaged integrally connected filter, blood bag, and syringe set. This system afforded the opportunity to reduce the number of product manipulations; the need for re-labeling outside of the blood bank; and blood wastage.



The Results/Progress to Date.....

- The Blood Bank successfully incorporated the process change without impacting staff workflow.
- The NICU staff is highly satisfied with the “ready to transfuse” product.
- Although there is an added cost for the prepackaged set, cost per aliquot is decreased by 19% when blood savings are considered. .

Lessons Learned

The collaboration between Blood Bank and key stakeholders (NICU) led to an innovative change in practice and improved patient safety related to transfusion.

Next Steps/What Should Happen Next:

Continue monitoring of effectiveness of practice change.



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