CREATING A STREAMLINED BLOOD DOCUMENTATION WORKFLOW FOR APHERESIS PROCEDURES

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INTRODUCTION

Epic lacks a streamlined "out of the box" technical solution for documenting large volume apheresis procedures for red blood cell or fresh frozen plasma. This gap leads to clinicians using the paper-driven transfusion administration record. Paper workarounds bypass electronic safety checks and increases mental burden. This challenge provided an opportunity to use tools provided by Epic using a creative approach.

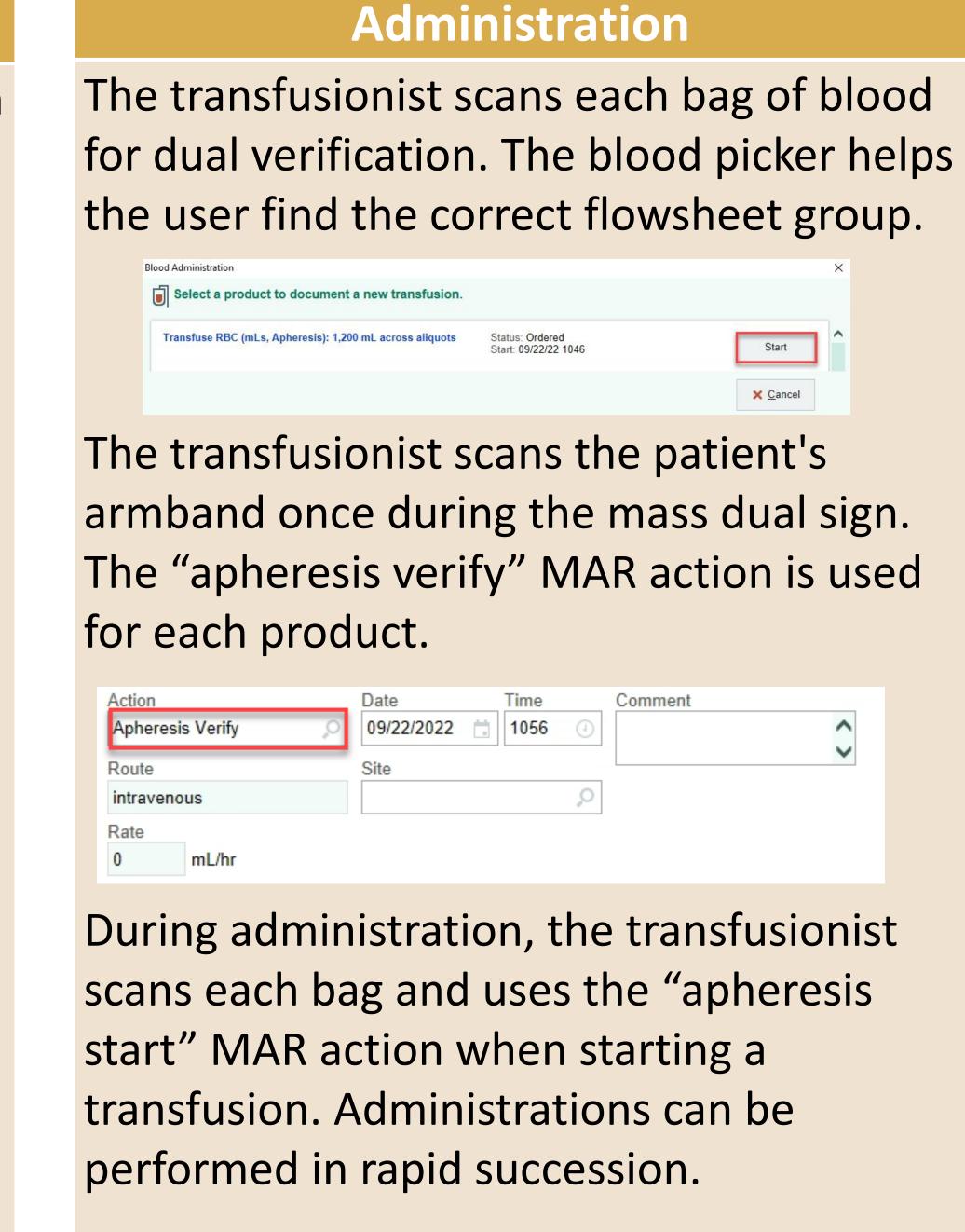
METHODS AND RESULTS

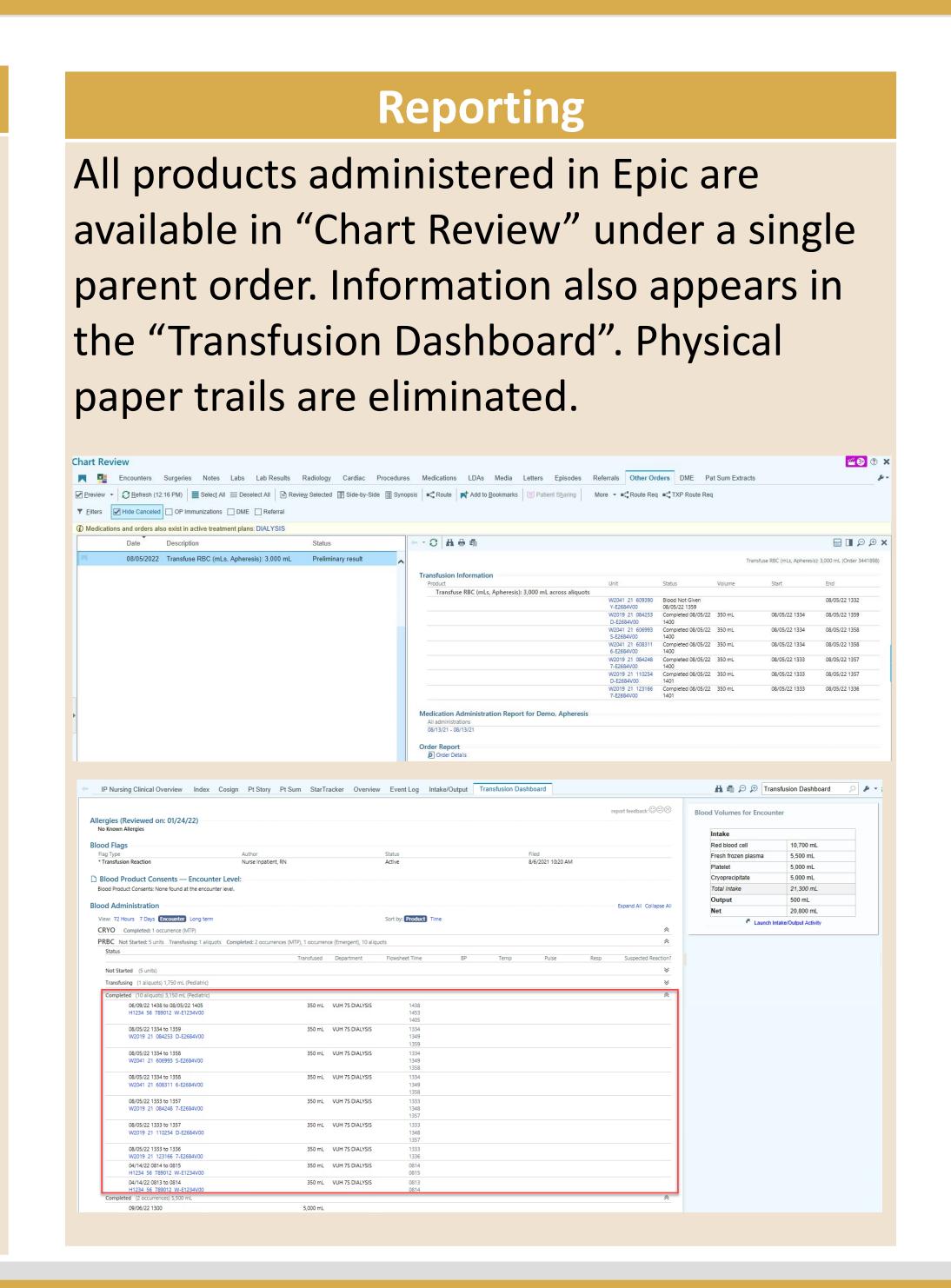
Ordering Products are ordered with a transfusion indication of "red cell exchange" or "plasma exchange." The delivery method selected is "blood bank to prepare cooler." ✓ Accept X Cancel Remove outine STAT 5 mL/kg 10 mL/kg 15 mL/kg Transfusion indication Acute Blood Loss with hemodynamic instability Symptomatic anemia Severe hemolytic anemia (hct <18 or hgb < 6) Anticipation of Hematopoietic failure Pre-op transfusion for anticipated blood loss ECMO pump prime or protocol Sickle cell disease Has consent been obtained? Delivery of blood product Nurse to release when ready (MOST COMMON, use for all inpatient areas DO NOT use for OR or for exchange transfusion) Send now via tube (Primarily used by OR or in urgent situations at VUMC This unique combination triggers the specialized workflow.

The transfusionist retrieves the cooler from the blood bank. Next, the transfusionist counts the number of bags in the cooler and completes the task for numbers of products received.
Ordered O9/22/22 Transfuse RBC (mLs): 1,200 mL - Transfusion, Standing Count: 1 Occurrences, Prio: Routine, Status: Sent Scheduled Task Status O9/22/22 1041 How many bags of blood product did you recieve from the blood bank? Step 1: Activate Flowsheet Rows From admission, onward) Transfusions to release Ordered O9/22/22 1040 > Transfuse RBC (mLs): 1,200 mL Transfusion (0 of 1 released) Release Unscheduled
The number of releases available dynamically updates based on the answer. Step 1: Activate Flowsheet Rows (From admission, onward) Transfusions to release Ordered Start
O9/22/22 1040 > Transfuse RBC (mLs, Apheresis): 1,200 mL Transfusion (0 of 10 released) Release Unscheduled All flowsheets are released by clicking the "release" link.

Releasing

Vanderbilt University Medical Center, Nashville, TN, USA





CONCLUSION

This specialized workflow allows transfusionists to order, release, and document large volume transfusions in real time with precision. It has been validated to work in real world clinical scenarios. Two departments (7 South Dialysis and Doctor Office Towers 6) are currently using this workflow with the ability to scale if needed.

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