UC San Diego Health

Proposed Blood Product Dashboard

Richa Sheth MD[1], Laura Stephens MD[1,2], Daniel A. Sweeney MD[1,3]

[1]Department of Medicine, University of California San Diego
[2]Division of Transfusion Medicine, Department of Pathology, University of California San Diego
[3]Division of Pulmonary, Critical Care, and Sleep Medicine, Department of Medicine, University of California San Diego

Background

Blood product transfusions are one of the most common therapeutic procedures performed in hospitalized patients. It is important to be able to gather pertinent blood product data efficiently and for transfusions to happen in a timely fashion.

Current delays in the blood product transfusion workflow include:

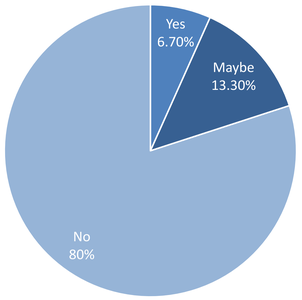
- Inability to determine if a transfusion consent is on file
- An incomplete "Transfusion" summary tab in EPIC
- Lack of a centralized location for pertinent blood product data
- Difficulty with identifying the status of blood product orders
- Lack of information about how many units of a product a patient has received

As a result, blood product transfusions may be delayed, leading to delays in patient care.

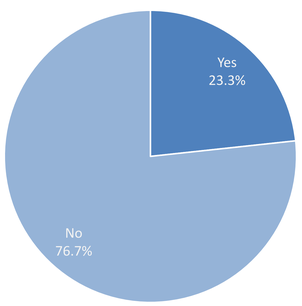
Survey Results

UCSD Internal Medicine residents were asked to complete a survey about their experiences with ordering blood products.

Do you feel that you are able to obtain information about blood products on EPIC in an efficient manner? This includes data about the last type and screen, prior transfusion reactions, positive antibodies, and special blood product attributes.



Do you feel that there is a good system in place on EPIC to count the number of transfusions a patient has received?



Resident concerns with the current "Transfusion" tab include inability to quickly calculate the total units of product a patient has received, difficulty finding information about previous transfusion reactions and antibodies, and having to double check that a patient's T&S is active or their consent form is signed prior to ordering blood.

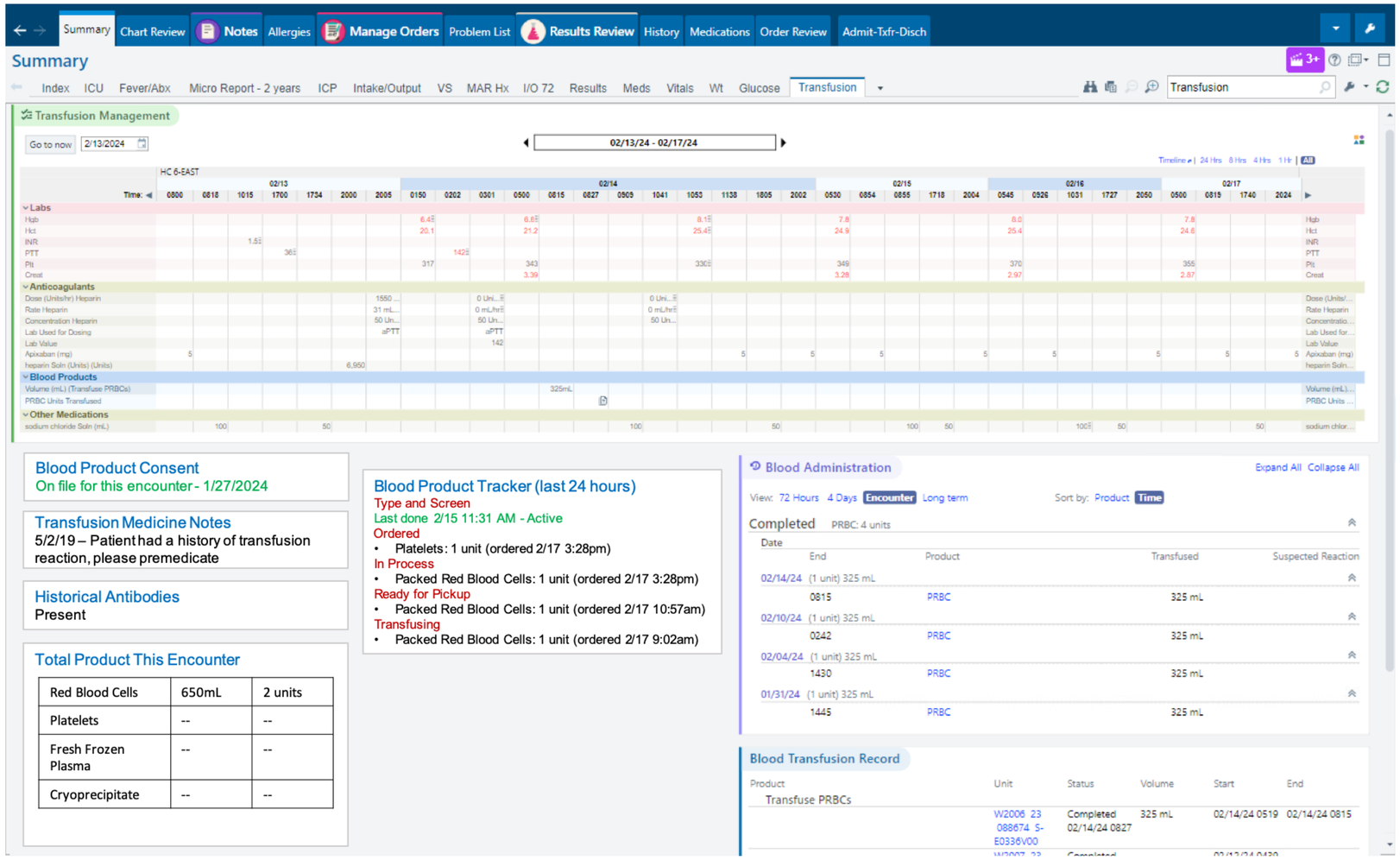


Figure 1: Example of the proposed Blood Product and Transfusion Dashboard.

Proposed Solution

An updated "Blood Product and Transfusion Dashboard" within EPIC (Figure 1) to serve as a centralized location for blood product data.

The dashboard will include:

- Active Type and Screen
- Lab data: Hgb, Plt, Coags, Haptoglobin, Fibrinogen
- Blood consent status
- Historical presence of red cell antibodies
- Current anticoagulant medications
- Prior Transfusion Medicine notes
- Intuitive descriptions of transfusion status
- Total blood products received during current admission

Expected Outcomes and Next Steps

With implementation of this dashboard, we expect:

- Decrease in time it takes to obtain blood product data
- Decrease in time from products being ordered to initiation of transfusion
- Improved workflow for nursing, providers, and the Blood Bank staff
- Fewer adverse outcomes related to delays in blood product transfusion

After implementation of the dashboard, next steps include gathering timestamp data to evaluate for improved order to transfusion time, and gathering user opinions to improve user experience.

Contact Information: risheth@health.ucsd.edu