

BLOOD USAGE STUDY - Platelets

Date of Report: July 8, 1998

**Findings:**

- Patient Population: 30 Patients (Some patients received multiple units and/or multiple transfusions. In this study, “number of patients” refers to number of transfusions reviewed.)
- Time Frame: Second Quarter 1998
- Data Sources: Open and Closed Medical Records, Transfusion Services Logs
- Resources: Hospital Policies regarding Transfusion of Blood or Blood Components, Transfusion Services Policies and Procedures relating to Platelet Handling, Distribution and Dispensing, Medical Staff Criteria for Appropriate Indications for the Ordering of Platelets.
- Criteria: High Risk
- Dimensions of Performance: Appropriateness, Availability, Continuity, Effectiveness, Timeliness, Competency and Safety.
- Indicators:

<b>Aspect of Care: Ordering</b>	#	%
Blood or Blood Component was ordered appropriately according to approved Medical Staff Criteria as evidenced by documentation in the Medical Record.	30/30	100%
<b>Aspect of Care: Handling, Preparing, and Dispensing</b>		
Stat unit of Blood or Blood Component was handled, prepared, and dispensed to the Nursing Unit within 60 minutes of the receipt of the crossmatch specimen in Transfusion Services as evidenced by documentation in the Medical Record and Transfusion Services Daily Work Logs.	8/9	89%
Stat unit for blood or blood component was obtained from Transfusion Services within thirty minutes of notification that the unit was ready for dispensing as evidenced by documentation in the Transfusion Services' log	7/9	78%
<b>Aspect of Care: Administration</b>		
Blood or Blood Component administration was begun within 30 minutes of release from Transfusion Services as evidenced by documentation in the Medical Record.	30/30	100%
Blood or Blood Component was administered safely according to Hospital Policy guidelines as evidenced by documentation in the Medical Record of:		
1. Two registered nurse signatures witnessing the correct identification number on the Blood or Blood Component bag.	30/30	100%
2. The start time and completion time of the transfusion are noted.	30/30	100%
3. Patient Blood Pressure and Temperature are recorded at the start of the transfusion.	30/30	100%
<b>Aspect of Care: Effect on the Patient</b>		
The effect of the Blood or blood component on the patient was noted by the Healthcare team as evidenced by documentation in the Medical Record of:		
1. Transfusionist completes transfusion reaction section of the Transfusion Form.	29/30	97%
2. Post transfusion Lab studies are ordered and noted by the physician.	28/28*	100%

\*Two (2) patients expired prior to completion of post transfusion lab studies.

**Conclusions:**

- The review of the indicators for platelets demonstrates an area of concern related to the dispensing of blood or blood components. The Blood Bank did not dispense the unit of platelets within 60 minutes for 1 of the 9 stat transfusions. This is related to the fact that platelets are very expensive and the hospital does not keep them in stock. The process to obtain platelets is to have the courier (if he is at the hospital) go to the Blood Center to pick up the units, or to have the Blood Center deliver the units (when the courier is not available). When the courier is available, the process can be completed in

less than or close to one hour. It often takes longer when The Blood Center has to deliver the units. This is markedly improved from platelet review in 1997.

- Twice nursing did not pick up the stat units within 30 minutes of notification that the unit was ready. This indicator has shown steady improvement over the past year. Rising from 43% during platelet review in 1997. The two cases have been referred to the appropriate clinical coordinators for review and staff education.
- Documentation of the administration and the effect of the transfusion demonstrates continued improvement.

**Recommendations/Actions:**

- The indicators will continue to be used to measure the process of transfusion of blood or blood components during the current year. This data will be trended to identify further areas of concern within the process.
- The process for obtaining units should not be changed because the cost of keeping the units is too high and the usage requirements fluctuate with too much variance to allow for consistent stocking levels.
- The results of this study will be shared with the Nursing, Blood Bank, and Medical Staff to allow these disciplines the opportunity to assess the process of transfusion of blood or blood components within their own Departments.
- The minutes of the Transfusion Committee will be utilized as the communication tool by being forwarded to the Medical Executive Committee, Nursing Quality Improvement Coordinator, and the Quality Management Department.