Quest Diagnostics

Quest Diagnostics Nichols Chantilly
At
Shady Grove Adventist Hospital and
Washington Adventist Hospital

BLOOD BANK STAFF MEETING

MINUTES

(11/06/2014)

PRESENT: 11.06.2014 @ 0635-0740 (SGAH) STEPHANIE CODINA, YVONNE NGWA, DIPTI PATEL, ANNE RIENKS, HAMERE TADESSE
11.06.2014 @ 1545-1620 (SGAH) STEPHANIE CODINA, SARAH DELINGER, HOJAT GOUDARZI, NAMRATA SHRESTHA
11.07.2014 @ 0630-0715 (WAH) STEPHANIE CODINA, MARIA MORRIS, TSEGAYE NEGASH

DISTRIBUTION: BLOOD BANK STAFF MEMBERS

MEETING COMMENCED

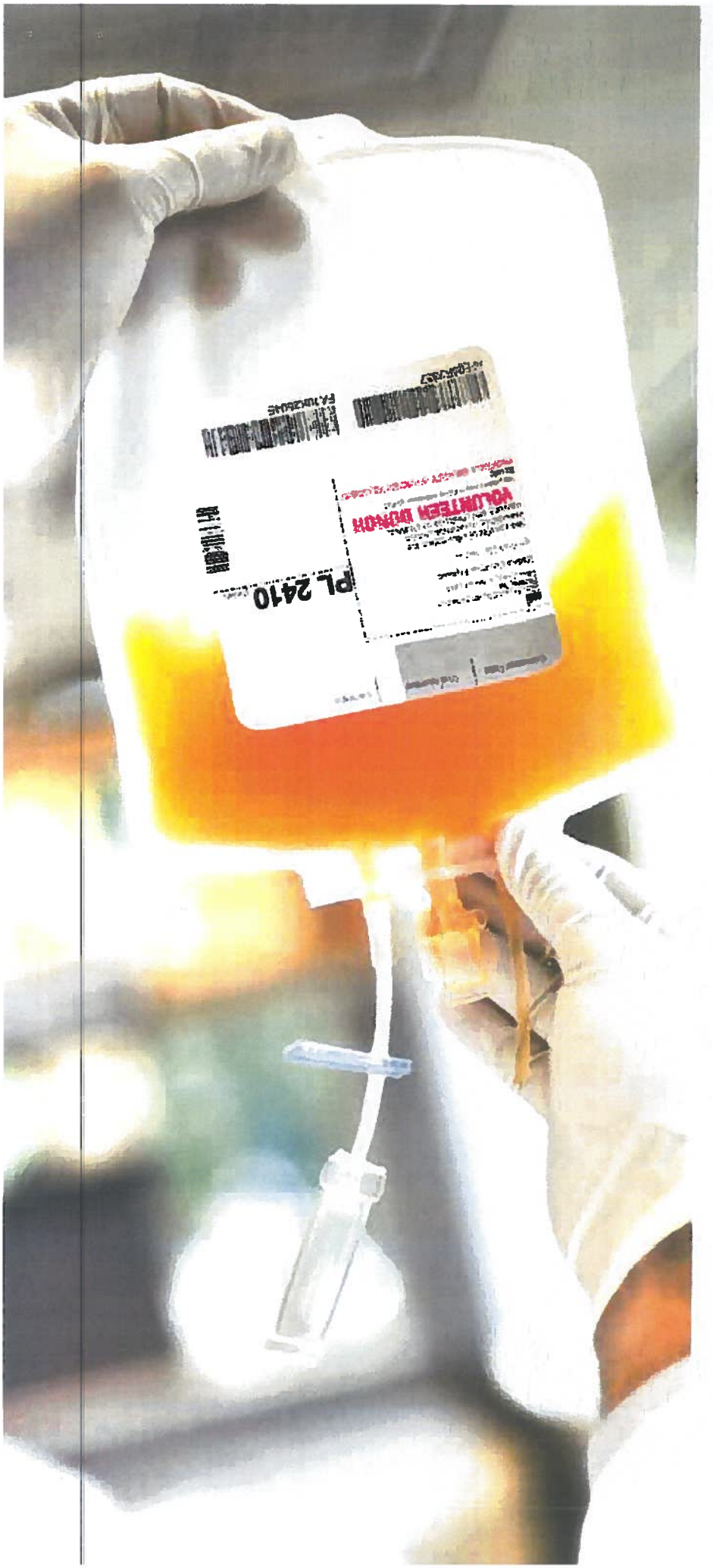
Item	Discussion	Action	Follow-up
Minutes			
ABO Retypes	ABO Retypes CAN be tested prior to the T&S. Please DO NOT cancel retypes even if you don't have a T&S specimen. Patients are not billed for retypes. At a minimum, we will have an ABO on file for the patient's next visit.	None	None
A_1-negative red cells	Our SOP states patients who have anti-A_1 need to receive A_1-negative red cells. Please DO NOT order A_1-negative red cells from ARC; simply give group O red cells. A_1 or O red cells are not needed if the anti-A_1 is not actively demonstrating.	None	None
New test for organ donors	In the next few weeks, we will have a new test for organ donors. 1. When a patient's family has agreed to donate the patient's organs, the patient will be discharged from the hospital. He/she will be re-registered with a new name (Donor,last name) and new MRN to location WRTC (Washington Regional Transplant Community). This is done, because WRTC takes over care at this point to include all fees/payment. 2. If the patient is group A or AB, they will order an A1 subtyping to determine if the patient is A1 positive. This is done, because A1-negative organs can be safely given to group B recipients. 3. WRTC will order test "Organ Donor A1 Subtype." This will cross to Sunquest like transfuse orders. THERE IS NO SAMPLE COLLECTION ASSOCIATED WITH THIS TEST, because we should already have a T&S on file. 4. The order will contain a "Previous MRN" field (similar to the MMRN field in the CHOLD sample). We will use the original MRN and the patient's last name to locate the original T&S sample. 5. A1 subtyping (ie testing with A1 lectin) will be performed on the T&S sample. Like other antigen typing, it is important that we use a pre-	None	None

Item	Discussion	Action	Follow-up
	transfusion sample. If the patient/donor received emergency release red cells before the T&S was collected, we must note this in a comment as it will affect test results. In addition, if an organ donor needs transfusion, they are requesting that we give the patient CMV-negative donor units. We have added another indication for CMV-negative called "Washington Regional Transplant Community Protocol." When this reason is used, we DO NOT need to perform CMV Ab testing on the patient (the patient will be deceased prior to getting the results). Add the CMV marker and give CMV-negative units.		
O-neg RBC Inventory	Each month, ARC sends a summary report of everything we ordered at each site. They also track O-neg RBC and AB plasma usage. They expect that <10% of plasma will be group AB and <10% of red cells will be O-negative. We are consistently over these rates at both sites. I looked up AB plasma use. Much of this was related to the broken plasma thawer at WAH and recovery of our inventory. I am OK with use of plasma. I also looked up O-neg red cells. In most cases, we are giving O-neg red cells to non-O-neg patients prior to expiration. We are using very few O-neg units for O-neg patients including neonates. Please reduce the number of O-neg units in inventory to ensure we are being good stewards of this limited resource. Target inventory levels of O-neg red cells: • WAH = 10 • SGMC = 10 If we have 10 in inventory, please document in the comment section of the managed inventory form that we do not need them to send additional O-neg RBCs.	None	None
Short-Dated Inventory	Each night we pull a report showing red cells that will expire within the next 7 days. Every time you crossmatch/issue a red cell, you should be looking at this list and pulling the short dated units. Begin transfusing them IMMEDIATELY when they appear on the list; DO NOT wait until they are within 24 hours of expiry. When you issue or crossmatch a short-dated unit, document the status on the form that is attached to the refrigerator. This will help others to see what is still left for issue.	None	None
New Platelet Product	In the near future, we will be receiving PAS platelet products. PAS stands for platelet additive solution. Platelets are collected, then 65% of the plasma is removed and replaced with additive. I would consider these platelets to be equivalent to a CPDA-1 vs Adsol unit. Benefits: 1. Reduced plasma results in fewer transfusion reactions (febrile, allergic, TRALI, etc). 2. Reduced plasma means lower rates of passive ABO antibody transfer. 3. Possible that the expiration date of PAS platelets may be extended to 7 days in the future, but FDA has not agreed to this yet. Unsure how these platelets will be used yet as ARC does not have enough inventory to provide for all patients. However, it is very likely that we will preferentially give these to oncology/OIC/transfusion dependent patients. ARC currently only distributes this product in Maryland (Hopkins did the testing for FDA licensure). We are also looking into the possibility of giving out-of-group PAS platelets to neonates instead of volume-reducing, but no decision has been made at this time.	None	None

Nursing Audits	As you know, we have seen some issues with nursing documentation for transfusion. We have decided to perform unit-based training at both sites. I will be doing this training from now until the end of 2014. On Jan 2, 2015, SGMC will be requiring charge nurses to perform real-time, concurrent audits of transfusion documentation on 100% of blood products issues. Beginning in January, BB will have audit forms. We will complete the date/time dispensed and put a unit number sticker on the form. The form will be issued with the blood product. The charge nurse must complete the audit and return to BB during the same shift. BB will track return of the forms similar to how we track products through the pneumatic tube. We will match the returned audit forms with the pick-up slip to ensure all are returned. We will call the floors if we don't get the forms back within 5 hours if product issue. Goal: 1. Charge RN will note errors and omissions and discuss these with the transfusionist in real time. 2. Charge RN and transfusion will correct problems when they are noted. 3. Compliance will improve. WAH has decided to hold off on implementation of this process until AFTER SGMC shows improvement.	None	None
Pink Forms	Nursing staff has suggested we cross through the bottom half of the pink form to prevent them from using it for transfusion documentation. I have ordered a stamp to do this. We will block off this area using the stamp as soon as it arrives.	None	None
Second Tech Review	I am asking every staff member to perform second tech reviews as soon as you start your shift. We have had some data entry errors lately that potentially affected patient care. This could have been prevented if the second check was performed in a more timely manner. If you work a shift that has more than one person trained in BB (even if the second person is not scheduled in BB), please ask the second person to perform the second tech review in real time. If this doesn't apply to you, please help the incoming tech remember to review your work immediately when they come on shift. Also, please PAY ATTENTION to what you are entering in the LIS. Most of our errors are due to computer entry and not testing problems. These can be avoided if you slow down and pay attention to what you are doing. One example is I have seen the "ADTS" entered as AbID, Ag typing, indication for transfusion etc. Luckily, this is not a result, so it does not result in an RQI. However, it does show that people are letting their fingers run ahead of their brains.	None	None
Audits	BB performs several internal audits each year. One audit looks at blood product entry and disposition. One of the elements of this audit is ensuring that we have documentation that a visual inspection was performed on all blood products when they are put into inventory. We accomplish this task by stamping the ARC invoice with the "Visual Inspection OK" stamp. This year, we noted that many of you are using the wrong stamp for this task. You are using the "Reviewed by" stamp which does not document that the visual inspection was actually performed. This also does not meet regulatory requirements. Please note this and ensure you are using the correct stamp in the future.	None	None

Meeting adjourned			
Next meeting week of December 1, 2014			

Stephanie Codina
Recorder



American Red Cross

Platelets Stored in InterSol® Solution (PAS Platelets)

Platelet additive solution (PAS) is a nutrient media used in place of plasma for platelet storage.

PAS replaces ~65% of the plasma in a platelet dose, allowing a decreased volume of plasma to be transfused.

For more information about PAS platelets, contact your American Red Cross representative.

InterSol® Platelet FAQ

Fenwal Amicus® Separator with InterSol® Platelet Additive Solution
Hospital Frequently Asked Questions

Product Information

InterSol platelets are handled and transfused like platelets stored in plasma.

How much plasma storage volume is replaced with InterSol solution?
InterSol solution is added to platelets at the time of collection such that ~ 65% of plasma storage volume is replaced with InterSol solution.

Why isn't 100% of the plasma replaced with InterSol solution?
InterSol solution is designed to work at a ~ 65%/35% ratio. The small volume of plasma provides essential nutrients to the platelets, mainly glucose, which helps better sustain the platelets.

Is the color of InterSol platelets different?
Platelet product color is variable from donor to donor. InterSol platelets exhibit this same variability.

Do platelets in InterSol solution exhibit swirl?
Yes. The swirling effect observed when the re-suspended platelets are rotated under a light source is not different with platelets stored in InterSol solution.

What are the components of InterSol solution?

Formulation	(mg/100 mL)
Dibasic Sodium Phosphate, Anhydrous, USP	305
Monobasic Sodium Phosphate, Monohydrate, USP	93
Sodium Citrate, Dihydrate, USP	318
Sodium Acetate, Trihydrate, USP	442
Sodium Chloride, USP	452
Water for Injection, USP	Quantity sufficient

What are the platelet count and storage fluid volumes of InterSol platelets?
Platelet counts and storage fluid volumes are the same for both InterSol and plasma platelets.

What are the platelet collection procedures and storage containers for InterSol platelets?
The platelet collection procedure and storage containers are the same as current Amicus apheresis platelets in plasma.

Can InterSol platelets be volume-reduced, irradiated, washed and/or leukoreduced?
InterSol platelets are handled like conventional platelets. All Amicus collected platelets are process leukoreduced, whether they are stored in plasma or InterSol solution. *In vitro* studies were performed on irradiated InterSol platelets that data can be found in the Directions for Use. Volume-reduction, washing and irradiation should be performed at the Medical Director's discretion and applicable standard operation procedures.

What is the shelf life of InterSol platelets?
InterSol platelets may be stored for up to 5 days under standard storage conditions.

Adverse Transfusion Reactions

Is there a difference in allergic transfusion reaction rates when using InterSol platelets?

Data from the INTRADE[3] post-market study shows an adverse event rate of 0.55% for InterSol platelets as compared to 1.37% in plasma platelets. The end point of the study was that the overall rate of transfusion related adverse events in patients receiving InterSol platelet transfusions was not more than double the rate in patients receiving plasma platelets.

Does the use of InterSol platelets reduce the risk of TRALI?
There are several publications that may address the potential clinical benefits of a reduced volume of plasma in the platelet product, but there are no published studies designed to assess the ability of InterSol solution to decrease such risks.

Product Labeling

Does this require new platelet product codes?
Yes, new ISBT codes and Codabar P-codes were issued that specify platelets stored in InterSol solution and plasma. There are no other special labeling requirements for InterSol platelets.

What is the difference between PAS-C, PAS-3, and InterSol Solution?
PAS-C is the ICCBA (International Council for Commonality in Blood Banking Automation) name for platelets stored in 65% InterSol and 35% plasma. InterSol Solution is the brand name and PAS-3 is the generic name.

Transfusions

Should a different filter be used for InterSol platelet transfusion?
A standard filter should be used. The Circular of Information states: "All blood components must be transfused through a filter designed to remove clots and aggregates (generally a standard 170 to 260 micron filter)."

What will happen in massive transfusion with InterSol platelets?
Since 65% of the plasma will be replaced by InterSol solution, there will be an impact on coagulation factor values. The published coagulation factor values in platelet concentrates in the AABB Technical Manual will not be applicable to platelets in InterSol solution, and will be less. Policies on use in massive transfusion are at the discretion of the Medical Director and applicable standard operation procedures.

Would InterSol platelets be acceptable to hospitals that do not use RBCs with red blood cell additive solution for neonates?
Unlike red cells in some additive solutions, InterSol solution does not contain mannitol, adenine or dextrose. The contents of InterSol solution should be reviewed with the appropriate hospital decision makers.

Is there a minimum volume of platelets that needs to remain in the component bag for hospitals if aliquots are made?
The minimum volume needed for the InterSol platelet component is defined in the Amicus Operator Manual version 3.2 or later. The total storage fluid requirements are the same regardless of whether the storage fluid is 100% plasma or 65% InterSol and 35% plasma.

[1] Houghton JR, Heber C, Brantigan B, Cunningham J, Davey J. Evaluation of the effect of PAS III (InterSol) on automated platelet counter and flow cytometer performance. Journal of Clinical Apheresis 2010; 25:1–43 (61).

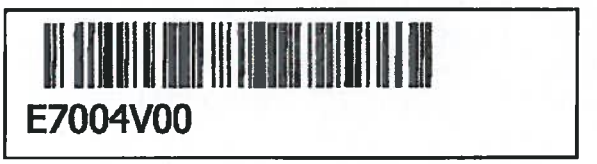
[2] Trinkle AT, Requena HR, Leparc G, Montgomery MM. Serological Crossmatch of platelets stored in InterSol Platelet Storage Media. Journal of Clinical Apheresis 2010; 25:1–43 (59).

3 INTRADE data on file at Fenwal

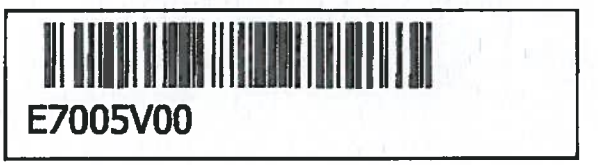
Platelets Aph ACD-A PASC LeuRed

Platelets Aph ACD-A PASC LeuRed Cnt1

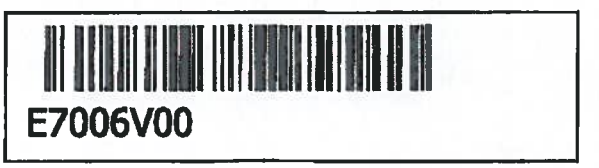
Platelets Aph ACD-A PASC LeuRed Cnt2



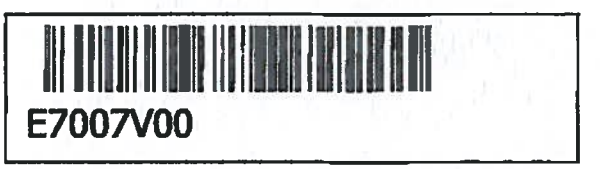
Platelets Aph ACD-A PASC LeuRed Cnt3



Platelets Aph ACD-A PASC LeuRed Irr



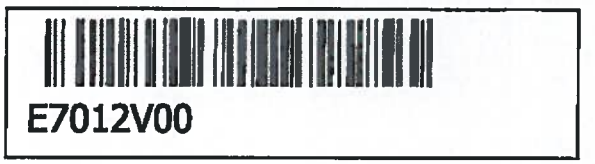
Platelets Aph ACD-A PASC LeuRed Irr Cnt1



Platelets Aph ACD-A PASC LeuRed Irr Cnt2

Platelets Aph ACD-A PASC LeuRed Irr Cnt3

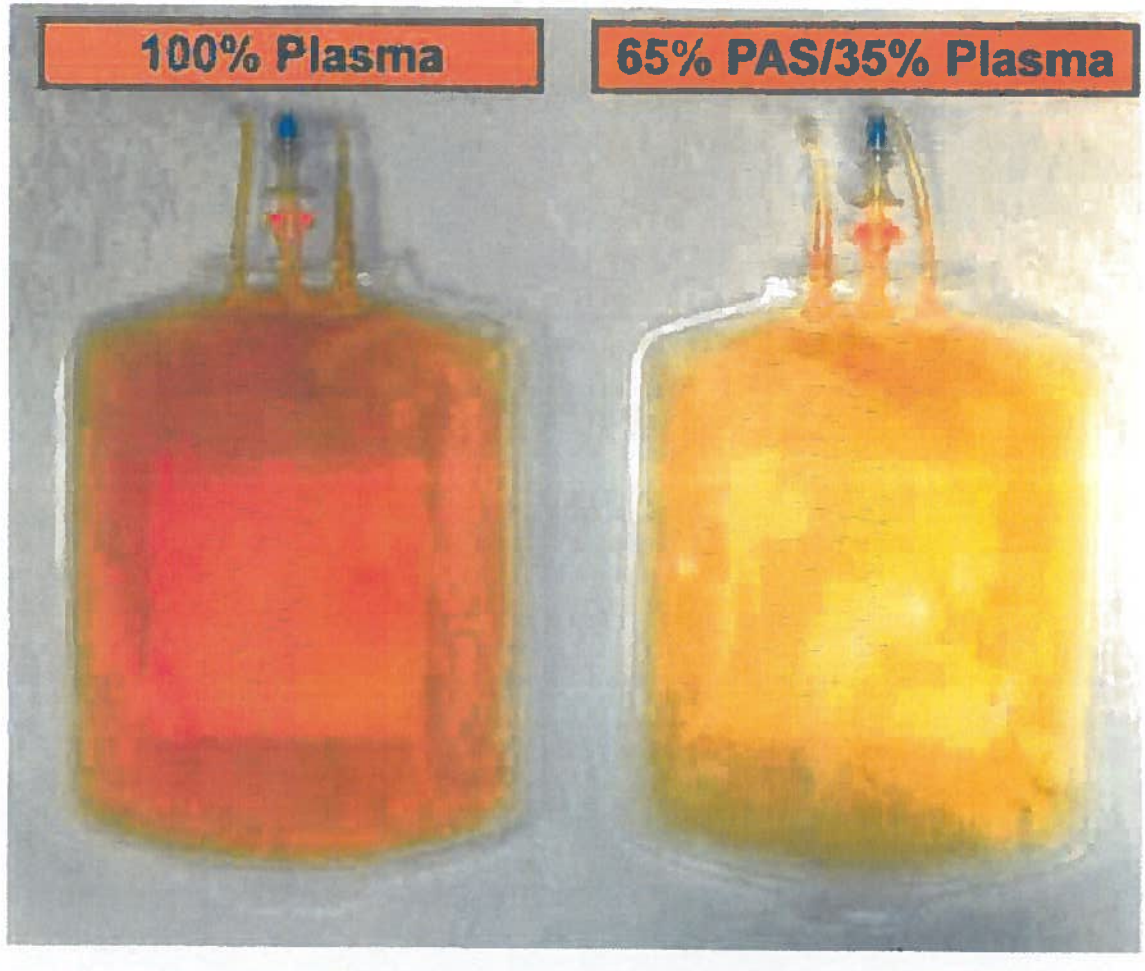
Platelets Aph ACD-A PASC <3log11 LeuRed



Platelets Aph ACD-A PASC <3log11 LR Irr


W2053 14 810958 8E
A
Rh POSITIVE
VOLUNTEER DONOR
25 SEP 2024
APHERESIS
PLATELETS
15
AFED4R2350
FA14024830

PAS Appearance



American Red Cross

Blood Product Administration Documentation Review

Patient Name		**Patient MRN**		**Blood Unit ID**	
Reviewed By		**Date Reviewed**		**Nursing Unit**	

Transfusion Documentation

Product Dispense Date		**Product Dispense Time**	
Transfusion Start Time		**Transfusion Stop Time**	

Transfusion Completed Within 4 Hours of Dispense? ☐ Yes ☐ No		
Order Reviewed ☐ Yes ☐ No		
Consent Verified ☐ Yes ☐ No		
Bedside Clerical Check Performed by 2 RNs?	Name 1:	Name 2:
Product Type	☐ Red Cells ☐ Plasma ☐ Platelets ☐ Cryoprecipitate ☐ Whole Blood (Neonatal Exchange Only)	
Equipment	☐ Y Blood Administration Set ☐ Straight Blood Administration Set ☐ Pump ☐ Warmer	
Volume Hung (mL)		
Volume Transfused (mL)		
Signs of Transfusion Reaction Field Answered ☐ Yes ☐ No		
Transfusion Completed ☐ Yes ☐ No	**If No, Reason Not Completed**	

Vital Sign Documentation

Pre-Transfusion	15 Minute	Hourly (Hr 1)	Hourly (Hr 2)	Hourly (Hr 3)	Transfusion Stop
Must be documented 0-15 minutes prior to transfusion start time	Must be documented 10-20 minutes after transfusion start	Must be documented 45-75 minutes after transfusion start	Must be documented within 75 minutes of prior VS documentation	Must be documented within 75 minutes of prior VS documentation	Must be documented within 60 minutes of transfusion stop time
Time Documented:	Time Documented:	Time Documented:	Time Documented:	Time Documented:	Time Documented:
		☐ Check (√) if transfusion completed prior to VS reading	☐ Check (√) if transfusion completed prior to VS reading	☐ Check (√) if transfusion completed prior to VS reading	

Barriers Noted	Solutions/Actions Taken
☐ Not Applicable	☐ Not Applicable

Return to Blood Bank Before the End of the Shift