5.2 Ordering Blood Products

I. Ordering Blood or Blood Products

   A. Pre-Admission Testing (PAT) for patients scheduled for elective surgery:
      1. Ideally, patients requiring pre-transfusion testing (Type and screen or type and crossmatch) for elective surgery should have a properly collected and labeled sample drawn and submitted to the Blood Bank prior to the day of admission so that unexpected compatibility problems may be resolved before the patient needs blood.
         a. Patients who have not been transfused or pregnant within the past 3 months may come to the Outpatient Laboratory within 7 days of surgery.
         b. Patients who have been transfused or pregnant within the past 3 months must have a sample submitted within 72 hours of the surgery.
         c. Specimens drawn more than 7 days prior to surgery will not be accepted for pre-transfusion testing.
         d. All Blood Bank samples must be drawn at Northwest Hospital. Samples or test results from outside laboratories will not be accepted.
      2. Requests for type and screen (ABORH and antibody screen) or type and crossmatch (ABORH, antibody screen and compatibility testing) indicating the number of units requested should be called to the O.R. posting desk along with the other surgical orders.
      3. O.R. will relay the posting information to in-patient reservations by the admissions report so that a Cerner encounter can be created.
      4. O.R. will transcribe the Transfusion Service request onto the posting sheet that is attached to the patient’s chart.
      5. The outpatient admitting clerk will place the Transfusion Service Request on the Testing Request Flow Sheet.
      6. Outpatient Lab should be faxed a prescription/physician order for the transfusion requirement for surgery. The type and screen or type and crossmatch will be ordered in Cerner Millennium by the Outpatient Laboratory technician. The sample and PAT Transfusion History Form will be sent directly to the Blood Bank for testing.
      7. The PAT-RN in the O.R. will review the chart prior to the
surgery date for completed blood bank orders. If the order has not been completed by the day of admission, the nurse will have a specimen collected, complete a Laboratory Downtime Requisition and send to the Blood Bank. This should be avoided, if all possible as unexpected serological problems may arise creating unnecessary delays.

B. Inpatient Transfusion Requests

1. Request type and screen (ABORH and antibody screen) or type and crossmatch (ABORH, antibody screen and compatibility testing) indicating the number of units required or other blood components. In CPOE areas this should be performed electronically in Cerner Millennium. Refer to the following link to BridgeNet detailed instructions for CPOE Blood Product Transfusion requests: [http://lbhweb/workfiles/erc/CBBIN_MD.pdf](http://lbhweb/workfiles/erc/CBBIN_MD.pdf)

   In non-CPOE areas, this should be written on a Laboratory Downtime Requisition.

   a. For Crossmatches: When the crossmatch or other product preparation has been completed, the computer will list compatible units in the Blood Product Availability (BPA) function in Cerner.

   b. Type and Screen results are available in Powerchart. To convert a Type and Screen to a crossmatch or to add additional orders for blood or components to a previously drawn, in-date specimen, a request for blood products order must be placed in Cerner Millennium (CPOE areas) or on a Laboratory Downtime Requisition (non-CPOE areas).

2. Informed Consent to Transfuse must be obtained prior to any blood product or derivative being issued from the Blood Bank. This consent must be obtained and documented on the patient chart.

   In emergency situations, where a blood product must be transfused before consent can be given, it is the responsibility of the physician to determine the emergent need. The person ordering the product must indicate on the Blood Delivery Request that there is NO consent and alert the Blood Bank that it is an Emergency.

C. Outpatient Transfusion Requests

1. Requests for outpatient transfusions should be scheduled through the Outpatient Scheduling Office at 410-521-8383. Informed consent to transfuse must be obtained and sent to
Outpatient Services for charting.

2. Outpatient Scheduling will coordinate the scheduling with the patient and the physicians office.

3. The Outpatient Lab will order the type and crossmatch in Cerner Millennium and submit proper samples to the Blood Bank for compatibility testing. If possible, all patients should visit the day prior to the scheduled transfusion so that a Blood Bank sample for compatibility testing can be collected. This will avoid delays due to unexpected serologic problems.

II. Ordering Frozen Plasma

Indicate the number of units requested in the electronic order or on the Laboratory Downtime Requisition. Fresh Frozen units are not thawed until needed. Once thawed, they outdate in 5 days.

- Prothrombin time (PT) and partial thromboplastin time (PTT) should be done before giving fresh frozen plasma.

- Approximately 30 minutes are needed to thaw a unit of frozen plasma. Once it starts thawing, the unit cannot be placed back in the freezer. It is very important to make sure that the patient definitely needs frozen plasma before ordering it. Wasted units are charged to the patient or cause unnecessary hospital expenses and lost resources.

III. Ordering Platelets

Indicate the number of apheresis platelet packs requested in the electronic order or on the Laboratory Downtime Requisition. Platelets are typically ordered as a standard adult dose of 5 equivalent units. Northwest receives a Standing Order of pheresis platelets weekly, and one dose of pheresis platelets is routinely maintained in the general inventory. Additional doses are ordered by the Blood Bank from Sinai Hospital or The American Red Cross on an as needed basis. Platelets requested from The American Red Cross or Sinai Hospital take approximately two hours to obtain.

Clinical history, patient’s condition, platelet count, other coagulation studies and peripheral blood smear are necessary in considering platelet transfusions. Each equivalent unit will raise the platelet count about 10,000 per uL depending on the blood volume of the patient. A post transfusion platelet count is usually evaluated at 1-2 hours and 24 hours.
IV. **Ordering Cryoprecipitate**

Indicate the number of units requested in the electronic order or on the Laboratory Downtime Requisition. Pooled Cryoprecipitate is thawed in pools of 5 units with a normal adult dose being a 10 unit pack. Cryoprecipitate is ordered from Sinai Hospital on an as needed basis. Allow a minimum of 2 hours for processing. Once thawed and pooled, cryoprecipitate outdates in 4 hours. Cryoprecipitate thawed is stored at Room Temperature.

V. **Ordering “Washed Red Blood Cells”**

Indicate the number of units requested in the electronic order or on the Laboratory Downtime Requisition. Red cell units will be washed at Sinai Hospital. Allow a minimum of 2 hours for processing. Blood is not washed until nursing is ready to transfuse. The washed unit should be transfused as soon as possible. The unit has a shelf-life of 24 hours after washing if kept in Blood Bank refrigerator.

VI. **Ordering “Irradiated Red Blood Cells”**

Indicate the number of units requested in the electronic order or on the Laboratory Downtime Requisition. Red cell units will be irradiated at Sinai Hospital. Allow a minimum of 2 hours for processing. The unit has a shelf-life of 28 days or expiration of the red cell units, which ever occurs first, if kept in Blood Bank refrigerator.

VII. **Ordering Rh Immune Globulin**

Indicate the number of vials needed in the electronic order or on the Laboratory Downtime Requisition. A properly labeled Blood Bank sample is needed for blood group typing and antibody screening. The Rh Immune Globulin is in a pre-filled syringe of 300ug. Rhophylac Rh Immune Globulin can be injected intramuscularly or administered intravascularly.

VIII. **Ordering Factor VIII, IX and other Lyophilized Concentrates**

Call Pharmacy to request factor concentrates. These products are dispensed through the pharmacy. Dosing of factor concentrates should be reviewed by a hematologist or pathologist.