## Legacy Transfusion Guidelines and Audit Criteria for Pediatric Patients Greater Than or Equal to Four Months of Age

All transfusions are subject to quality assurance review. Guidelines have been established by the Transfusion Committee and approved by the Medical Staff and do not constitute indications or triggers for transfusion. Specific clinical situations may dictate practices that differ from review criteria. The guidelines are based on current literature and are reviewed and modified as new data becomes available.

### Red Blood Cells

1. Hemoglobin/Hematocrit less than 8 g/dL or 24%:
   a. Symptomatic medical and surgical patients
   b. While on chemotherapy/radiotherapy
   c. Chronic/congenital anemias
2. Acute blood loss greater than 10-15% of total blood volume
3. Hemoglobin/Hematocrit less than 13 g/dL or 40% with:
   a. Severe pulmonary disease
   b. ECMO
   c. Complications of sickle cell disease

### Platelets

1. Platelet count less than 5,000-10,000 in a non-bleeding patient with failure of platelet production.
2. Platelet count less than 20,000 in a non-bleeding patient with failure of platelet production and risk factors (e.g. sepsis, fever, coagulopathy, etc.)
3. Platelet count less than 50,000 with impending surgery or invasive procedure
4. Platelet count less than 100,000 and:
   a. Trauma/massive transfusion
   b. CNS or ocular surgery
   c. Major surgery with bleeding
5. Treatment with certain antithrombotic/anticoagulant agents (e.g. Plavix)
6. Diffuse microvascular bleeding and no platelet count available.
7. Bleeding in patient with qualitative platelet function defect

### Frozen Plasma

1. PT INR greater than 1.5, aPTT greater than 60 seconds, or factor assay less than 25% and active bleeding, or anticipated major surgery/invasive procedure within 24 hours.
2. Diffuse microvascular bleeding and PT/PTT not available.
3. Plasma exchange in TTP/HUS or cryo-poor FP
4. Protein C, protein S, or ATIII deficiency if purified concentrate not available
5. Initial stabilization on ECMO circuit
6. Emergency reversal of bleeding associated with Coumadin, TPA, Streptokinase, Urokinase, etc.

### Cryoprecipitate

1. Hypofibrinogenemia (fibrinogen less than 100 mg/dL) and:
   a. Active bleeding
   b. Anticipated surgery or major invasive procedure
2. Factor XIII deficiency
3. Uremia with bleeding unresponsive to non-transfusion therapy
4. Fibrin glue
5. Active bleeding and Hemophilia A or vWD when purified factor concentrates not available (e.g. Humate P for vWD).

### Granulocytes

1. Absolute neutrophil count less than 500/mL
2. Sepsis unresponsive to traditional antibiotic therapy