

Red Blood Cell Utilization Guideline- Inpatients

Quick Reference

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1. Practice Guideline	Red Blood Cell transfusion is indicated for the treatment of symptomatic anemia. For non-bleeding adult patients, a single unit transfusion is recommended. Before a second unit is requested, evaluation of symptoms and hemoglobin should be performed to assess appropriateness.
2. Practice Outcomes	Appropriate transfusion ordering practices will enhance patient outcomes, improve safety and reduce utilization.
3. Inclusions	Adult hospitalized non-bleeding patients
4. Exclusions	<ol style="list-style-type: none"> 1. Intraoperative requests including recovery room 2. Emergency and critical care 3. Outpatients 4. Massive Transfusion Protocol 5. Labor and delivery areas including recovery room 6. Pediatric patients 7. Patients with hemoglobinopathies such as sickle cell disease or thalassemia
5. Process for ordering red blood cell transfusion	<ul style="list-style-type: none"> ➤ If most recent Hgb is 70g/L or less, order one unit of red cells and complete Request for Release (RfR). A repeat Hgb is required before issue of second unit. Repeat Hgb can be done immediately after the completion of single unit transfusion. ➤ If most recent Hgb is 71-80g/L, order one unit of red cells if indicated and complete RfR. Transfuse single unit, evaluate symptoms and repeat Hgb prior to request for second unit. All requests within this range will be reviewed for appropriateness by Transfusion Medicine. ➤ If most recent Hgb is 81g/L or greater, immediate approval by Transfusion Medicine. RBC will not be issued without approval. <p>The most recent Hgb value to be used should be the same day or within 24 hours of request.</p>
6. TM On Call Consultation	<ul style="list-style-type: none"> ➤ Clinician can contact the Transfusion Medicine physician on call 24 hours/day to collaborate on patient blood management through hospital paging system.
7. Transfusion associated risks	<ul style="list-style-type: none"> ➤ Transfusion associated circulatory overload (TACO), 1 in 700 ➤ Transfusion related acute lung injury (TRALI), 1 in 10,000 ➤ Acute hemolytic transfusions reactions, 1 in 25,000 ➤ Anaphylaxis, 1 in 40, 000 ➤ Delayed hemolytic transfusion reactions, 1 in 7000 ➤ RBC alloantibodies, 1 in 13