

Transfusion Stewardship- Red Blood Cells for Inpatients

Effective: March 30, 2020

Background Information:

The Shared Health Transfusion Medicine Program, Best Blood Manitoba and Choosing Wisely Manitoba have teamed up to implement an evidence-based clinical practice guideline for red cell transfusions that recommends a **restrictive transfusion threshold along with transfusing one unit at a time for non-bleeding patients that are admitted to hospital**. Such a strategy will maximize benefit to patients while minimizing over transfusion, reducing incidence of transfusion adverse events, improve blood utilization and save valuable laboratory and nursing resources. Transfusion Medicine on-call resources are available 24/7 for consultation with clinical teams.

The New Guidelines:

Red blood cell transfusion is indicated for the treatment of symptomatic anemia. For symptomatic non-bleeding adult patients, a single unit transfusion is recommended. If a second unit is required, evaluation of symptoms and hemoglobin should be used to guide appropriateness.

- **In symptomatic patients, if most recent Hgb is 70g/L or less**, order one unit of red cells and complete Request for Release (RfR). Reassessment of the patient including a repeat Hgb is required before the issue of a second unit. Repeat Hgb can be done immediately after the completion of a single unit transfusion.
- **In symptomatic patients, if most recent Hgb is 71-80g/L**, order one unit and complete RfR. Transfuse a single red cell unit, assess symptoms and repeat Hgb. A Transfusion Medicine physician is available to discuss need for transfusion and potential alternatives. All requests will be audited retrospectively for appropriateness
- **In symptomatic patients, if most recent Hgb is 81g/L or greater**, contact Transfusion Medicine on-call to discuss the need for a transfusion. Red cell units will not be issued without approval.

The changes will only apply to stable, non-bleeding in-patients and will not include transfusions in the following settings: paediatrics, emergency departments, intra-operative and actively bleeding patients.

References/Resources:

- https://bestbloodmanitoba.ca/wp-content/uploads/2020/01/Inpatient-RBC-Transfusion-Guide_V6.pdf
- https://bestbloodmanitoba.ca/wp-content/uploads/2020/03/RBC_Poster-March-13.pdf
- <https://choosingwiselycanada.org/perspective/transfusion-toolkit/>
- <https://blood.ca/en/hospital-services/transfusion-practice>

Patient Impact:

Positive patient impacts will be adherence to evidence based clinical practice, decreased exposure to unnecessary transfusions, lower rates of alloimmunization and lower rates of transfusion reactions.

System Improvements:

Improvement in blood inventories provincially – Manitoba has historically been one of the highest users of red blood cells per capita in Canada. Re-allocation of valuable nursing and laboratory resources with reduction in transfusion rates.

Contact Information:

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