

## Appropriate Red Blood Cell Utilization- Inpatients

### Background Information:

Manitoba is one of the highest users of red blood cells per capita in Canada. While each unit transfused has benefits; it also carries inherent risks to the patient and uses valuable laboratory and nursing resources and in some cases provides no health benefit to the patient. The Shared Health Transfusion Medicine Program, BestBlood Manitoba and Choosing Wisely Manitoba have teamed up to use evidence-based practice in order to optimize laboratory and clinical transfusion practices and improve the appropriateness of each unit transfused. We will be providing 24/7 transfusion on call resources to consult on complex cases.

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

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

### Phased Process Implementation:

The process change will be rolled out in multiple phases, having started with Southern Health-Santé Sud in January 2020, allowing time to gather experience and feedback from staff, to improve the subsequent roll outs in the regions that may have larger, more complex facilities.

### References/Resources:

- <https://choosingwiselycanada.org/perspective/transfusion-toolkit/>
- <https://blood.ca/en/hospital-services/transfusion-practice>
- <https://bestbloodmanitoba.ca/for-clinicians/>

### Patient Impact:

- Some positive patient impacts may be fewer adverse transfusion reactions and fewer developments of antibodies. In cases where transfusion of one or additional units are inappropriate, better patient wellness and outcomes overall.

### System Improvements:

- Improvement to our health system will be improved use of nursing and laboratory time, more blood available in the system for those who really need it and cost avoidance.

### Contact Information:

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