There has been a common, well-intentioned, practice of transfusing clinically stable hospitalized anemic patients, routinely with 2 units of RBCs. Many studies over the last decade have shown that this practice may be harmful to patients and is often wasteful of RBC units.\textsuperscript{1-4}

The Transfusion Medicine Laboratory Network supports evidence-based transfusion practice across province. The TM Network endorses the \textit{Choosing Wisely Canada} transfusion related recommendations, developed jointly by the CMA and CSTM, and the more “restrictive” AABB RBC Transfusion-Clinical Practice Guideline.\textsuperscript{5} In conjunction with your laboratory, we hope to conduct prospective audits in the future that will assist us in providing feedback to physicians.

The Choosing Wisely Canada campaign identified the following \textit{Five Things Physicians and Patients Should Question} in regard to transfusion:

1) \textbf{Don’t transfuse blood if other non-transfusion therapies or observation would be just as effective.}

2) \textbf{Don’t transfuse more than one Red Blood Cell (RBC) unit at a time when transfusion is required in stable, non-bleeding patients.}

3) Don’t transfuse plasma to correct a mildly elevated (<1.8) international normalized ratio (INR) or activated partial thromboplastin time (aPTT) before a procedure

4) Don’t routinely transfuse platelets for patients with chemotherapy-induced thrombocytopenia if the platelet count is greater than \(10 \times 10^9/L\) in the absence of bleeding.

5) Don’t routinely use plasma or prothrombin complex concentrates for non-emergent reversal of vitamin K antagonists.
The AABB Clinical Practice Guideline outlines additional details for limiting the use of RBCs. The following is a summary of the guideline which has been endorsed by the (Canadian) National Advisory Committee (NAC) on Blood and Blood Products.

Recommendations:

- **Adherence to a restrictive RBC transfusion strategy *(70-80 g/L)* in hospitalized, stable patients
  - Adult and pediatric ICU patients: consider transfusion at 70 g/L or less
  - Post-operative surgical patients: consider transfusion at 80 g/L or less

- **Adherence to a restrictive RBC transfusion strategy (≤80 g/L) in hospitalized, stable patients with preexisting cardiovascular disease**

- **Considering RBC transfusion for patients with symptoms (chest pains, orthostatic hypotension, tachycardia unresponsive to fluid resuscitation, congestive heart failure)**

- **RBC transfusion decisions should be influenced by symptoms as well as hemoglobin concentration**

*Adherence to a restrictive transfusion strategy means that RBC transfusion may be considered at a certain hemoglobin level. However, this hemoglobin level alone does not make the RBC transfusion obligatory and the clinical condition and preferences of the patient must be considered.*

In conclusion, let’s practice good blood management. A hemoglobin (Hb) ≥70 g/L is considered acceptable in most clinically stable anemic patients (≥80 g/L in symptomatic patients). Use of RBC transfusions to raise the hemoglobin above 100g/L, in these patients, is usually inappropriate. Patients scheduled for elective surgery associated with any significant risk [>10%] for blood loss should be screened for anemia at least 4 weeks prior to surgery; if anemic, the anemia should be investigated and managed immediately. Minimize your patient’s blood loss and avoid unnecessary phlebotomies [lab tests] in all patients, especially once hospitalized, as this may lead to anemia. Finally, in the non-urgent setting, a policy of “TRANSFUSE ONLY ONE RBC UNIT AT A TIME AND REASSESS” should be followed prior to making the decision to transfuse another RBC unit.

The entire Choosing Wisely Canada text can be found at:


The entire NAC document which includes audit information can be found at:


In addition, parallel Choosing Wisely recommendations sponsored by the American Board of Internal Medicine Foundation in conjunction with the AABB are discussed in Transfusion and may be found at:

References:


