In an effort to preserve the blood supply due to anticipated shortages from COVID-19 the following transfusion guidelines should be followed and have been implemented immediately. These changes supersede existing SOPs and remain in place until the situation stabilizes or until December 31, 2020.

1. Reduce the number of unnecessary daily blood sample draws for CBCs, chemistries, type and screens, etc. to prevent iatrogenic blood loss.

2. For emergency release RBC units and massive transfusion protocol, all males (any age) and all females over the age of 40 years old will receive group O positive RBC units. Blood Bank will switch patients from group O RBC units to type-specific RBC units ASAP.

3. All massive transfusion protocols will be issued in coolers (standard red and white igloo coolers currently used for OR patients) from the Blood Bank in order to minimize product wastage.

4. Platelet transfusion guidance
   a. All requests for a second platelet transfusion in one calendar day will be reviewed by Pathology. Clinical and laboratory justification will be requested to release 2\textsuperscript{nd} unit.
   b. Transfusion triggers:
      i. \(< 10,000\) for stable non-bleeding inpatients and stable febrile non-bleeding inpatients
      ii. \(< 50,000\) for patients undergoing open surgical procedures
      iii. \(< 100,000\) for patients with neurological bleeds

5. Red Blood Cell (RBC) transfusion guidance
   a. For stable, non-emergent patients, all orders for 2 RBC units will be reviewed by Pathology. 1 RBC unit will be given. Clinical and laboratory justification will be requested to release 2\textsuperscript{nd} unit.
   b. Transfusion triggers:
      i. \(\text{Hb} < 7.0\) g/dL for stable non-bleeding inpatients
   c. Rh Negative patients will be switched to Rh positive at the discretion of the Transfusion Service. Decisions will be based on the rate of the bleed and inventory levels.

6. Plasma transfusion guidance
   a. Consider vitamin K and Prothrombin Complex Concentrates (PCC, K-Centra) to reverse coagulopathy due to warfarin.
   b. Transfusion triggers:
      i. \(\text{INR} > 2.0\)
      ii. 15-20 mL/kg dose must be ordered if \(\text{INR} < 2.0\)
      iii. Therapeutic plasma exchange patients – consider albumin as larger portion of exchange volume than plasma.

7. With rare exceptions will requests for blood products outside of guidelines be honored

8. Strict adherence to guidelines in the UVMMC Blood Shortage Policy.

Additional changes may be instituted based on supply and demand on an as needed basis.

\textit{Sarah Harm}

Sarah K Harm, MD

Medical Director Blood Bank, 3/18/2020
Resources

Blood Bank Guy podcast – COVID-19 and the blood supply:

FDA information on blood donation:
https://www.dropbox.com/sh/xio48e59hijhv14/AACRplyvrefo4_onBetzUHHya?dl=0&preview=FDA+CORONAVIRUS+PKG+3-12-2020.mp4