Perioperative Blood Management Program: Referral Criteria

Policy:

A referral may be accepted from:
- The surgeons office
- PAC Nursing or Anesthesia
- Family Physician (in consultation with the Surgeon or Interventionist)

Medical Criteria

1. **All Patients** requiring one of the following surgical procedures **AND** present with a Hb < 135
   a) Revision, bilateral or staged hip or knee replacement
   b) Cardiac surgery
   c) Spine surgery booked for > 4 hours
   d) Uterine myomectomy
   e) Radical cystectomy

2. **All Patients** who have a:
   a) Surgical request on Regional OR Booking form
   b) Request for a G&S AND Hb < 110 or
   c) Request for a G&S AND Hb 110 - 130 AND weight < 65kg
   d) Signed Blood Products Refusal Form and a surgical procedure where a G&S would normally be requested
   e) Request for preoperative autologous blood donation
   f) Documented history of a bleeding disorder

Key Points:
- All requests for the PBMP will be reviewed by the PBMP Anesthesia.
- If clinically indicated, the PBMP Anesthesia may recommend the deferral of an elective surgical intervention to allow for appropriate anemia investigation and intervention

3. **Requirements** for all Anemia Management or Hb optimization referrals:
   1. Request must be within a minimum of 21 days prior to scheduled OR date
   2. Request must include a Patient weight
   3. Blood work (sample collected within 30 days):
      - CBC
      - Ferritin
      - Fasting Iron Studies
      - C-reactive protein
      - Renal function
   4. If refusal is reason for referral, a signed Refusal for Accept Administration of Certain Blood Components/Products/Alternatives (Form M-161) should accompany the referral

November 2014
**Perioperative Blood Management Program**

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<thead>
<tr>
<th>Procedure</th>
<th>Pt Weight:</th>
<th>Surgical Date:</th>
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**Referral Date:** ____________  **Referral Source:** ______________  **Received by PBMP RN:** ______

**Reason for Referral:**
- Pt scheduled for and Hgb <135:
- Revision, bilateral or staged hip or knee replacement
- Cardiac Surgery
- Major spine booked for >4 hours
- Uterine Myomectomy
- Radical cystectomy

**Blood Work**

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<tr>
<th>Date</th>
<th>HgB</th>
<th>MCV</th>
<th>RDW</th>
<th>Ferritin</th>
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<th>TIBC</th>
<th>% Sat</th>
<th>CRP</th>
<th>eGFR</th>
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**Interventions**

- No recommendations to be made at this time, will review again when surgery date established.
- No recommendations as per PBMP physician. Patient signed off for surgery.

- Oral Iron Recommended
  - Ferrous Fumarate PO DAILY
  - Ferrous Fumarate PO BID

Patient contacted and advised on:
- Date: ____________
- RN: ____________
- Update on Excel

- IV Iron Recommended
  - GP to arrange at local hospital
  - MDC VGH or ____________

  Dose #1: ____________
  Dose #2: ____________
  Dose #3: ____________

- Eprex Recommended
  - No Eprex Assistance Requested
  - Eprex Assistance Sent: Date: ____________
  - Eprex administered: Date: ____________

- Update on Excel

**PBMP recommendations for Anesthesia Intraop:**

- Cell Saver
- Anti-fibrinolytic
- ANH

PBMP Physician Initials
Initial phone call: RN: __________ Date & Time: __________ @ ______ Left Message ____ Spoke with pt _____
Notes: _____________________________________________

Second Attempt: RN: __________ Date & Time: __________ @ ______ Left Message ____ Spoke with pt _____
Notes: _____________________________________________

**After 2nd attempt, if no call back within two weeks of message, close file.**

File Closed on: ___________ Reason: _______________________ RN: ___________

**Patient’s History**

- **Allergies:** _______________
- **Oral Iron:** No ___ Yes _ Type: __________ Dose: __________ Date Initiated: ____________
- **Hematologist:** _______________________ Location: _______________________

- **HTN:** _controlled ___ uncontrolled
- **CAD**
- **Angina**
- **MI:** Year _____
- **Angioplasty/Stent_____**
- **Previous Cardiac Surgery:** Year _____ Procedure: ___________________________
- **Hx of Stroke:** _______ Hx of DVT or PE: _______
- **Hx of Seizures:** _________________________
- **Extended Health Coverage:** No ___ Yes ___%  
- **Rheumatoid Arthritis**
- **Chronic Inflammatory Conditions:** __________________
- **Diabetic:** Type ___1 ____ 2
- **Kidney Disease:** _____________________________
- **Menorrhagia**
- **Vegetarian**
- **Oncology**
- **Chemo Last Dose:** __________
- **Radiation Last Dose:** __________

**Additional Information:** __________________________________________________________________________________________________________

**TASKS**

- **OR Scheduler updated with PBMP designation**
  Date: ___________ 
  RN: ___________
- **Patient sent for BW**
  Date: ___________ 
  RN: ___________
- **Family Physician Letter sent**
  Date: ___________ 
  RN: ___________
- **5 Week Letter to Surgeon sent**
  Date: ___________ 
  RN: ___________
- **Hematology Consult sent**
  Date: ___________ 
  RN: ___________
- **Update on Excel**
  Date: ___________ 
  RN: ___________

**Follow up Blood Work:**

Date: ___________ Sent for: ___ CBC ___ Ferritin ___ Iron Studies 
RN: ___________

Date: ___________ Sent for: ___ CBC ___ Ferritin ___ Iron Studies 
RN: ___________

**Progress Notes:**

________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________

**Discharge File**

- **Post Op Day 1 Date:** __________ Hgb: __________ 
  RN: ___________
- **Post Op Day 7 Date (discharge):** __________ Hgb: __________ 
  RN: ___________

**Blood or Blood Products Utilized:** No ___ Yes: ____________________________
Date: ___________________________ Time: ___________________________

Patient weight: ___________ kg

☐ Physician has reviewed chart: No recommendations for treatment.

CONSULTS:
☐ Haematology Consult: Complete and Fax Request Form – VGH: 604-875-4763
– SPH Haemophilia Clinic: 604-806-8855

LABORATORY:
- CBC, ferritin, iron studies, C-Reactive protein at baseline (place results in chart)
- if patient on intravenous or oral iron, repeat CBC, ferritin, iron studies Q12 weeks
- CBC preoperatively (within 7 days of surgery)
- if patient on erythropoietin, repeat CBC preoperatively upon admission for surgery
☐ Other ________________________________

INTRAVENOUS:
sodium chloride 0.9% IV infused at 50 mL/h

MEDICATIONS:

Iron - Intravenous:
☐ iron sucrose 300 mg IV in sodium chloride 0.9% 250 mL. Give every 2 to 7 days for a total of ______ doses. Administer at a rate of 100 mg/hour.

Iron - Oral (Patients to use their own medication):
☐ ferrous FUMARate 300 mg (100 mg elemental iron) PO DAILY
*OR*
☐ ferrous FUMARate 300 mg (100 mg elemental iron) PO BiD
*OR*
☐ other iron formula ________________________________ (maximum 180 to 200 mg elemental iron per day)

Erythropoietin (Patients to use their own medication):
☐ 20,000 units SUBCUT every 7 to 10 days x ______ dose(s)
*OR*
☐ 40,000 units SUBCUT every 7 to 10 days x ______ dose(s)

Slating Comments:  ☐ IV iron ☐ EPO ☐ ANH ☐ Antifibrinolytics ☐ Cell Saver

If clinical assistance is required, contact the Slating Anaesthetist (pager 87-03108) for the PBMP physician on call.

If you received this facsimile in error, please call 604-875-4077 immediately.
1. My doctor ______________________________________________ (doctor’s name) has told me that during my
treatment for _________________________________________________________ (name condition) it may be
necessary to receive the administration (transfusion, infusion, or injection) of blood products (blood,
blood components or other blood products) such as red blood cells, plasma, cryoprecipitate, factor
concentrate, platelets, albumin or immunoglobulins.

2. My doctor and I have discussed the possibility of using treatments other than administration of blood products. I
understand the benefits and risks of these alternative treatments, including the risks of not receiving blood
products which may include my death.

3. I have been given information on administration of blood products and the chance to ask questions about the
benefits and risks of blood products. My doctor has answered my questions to my satisfaction.

4. I understand that the hospital, its personnel, and the attending doctors will not be responsible for negative
reactions, complications, or unfavourable results, including death, because of my refusal to permit administration
of certain blood components, products or alternatives.

5. I understand this form and the facts given to me. I have the right to change my mind at any time about this
refusal. I also know that I may fall into a state in which it would be impossible for me to speak to cancel this
refusal.

6. I release Vancouver Coastal Health Authority and its directors, medical staff, employees, and/or agents from
liability for any loss, injury or damage arising from their compliance with my instructions concerning blood
components, products or alternatives. This release from liability shall be binding on my heirs, executors, and assigns.

7. I hereby refuse to receive blood products during my treatment except as detailed above. I understand
that this refusal is valid for this hospital admission or treatment as specified in paragraph 1 only. If I want to
refuse blood and/or blood products in all situations, I understand that I should carry with me written instructions
making my wishes clear to medical staff.

SIGNED: ______________________________________________ Date:___________________/________ HRS
(Patient or Person Legally Authorized to give Consent) (Date and time of Consent)

Relationship to Patient ________________________________________

Witness: __________________________________________________

Doctor/Surgeon
I have explained the benefits and risks of administration of blood products to the patient named or their
parent/legal representative above.

This refusal to accept administration of blood products must be obtained by the primary doctor or associate.

Doctor/Surgeon’s Signature: ________________________________

Print Name: ____________________________________________
Telephone Refusal (by Patient or Substitute Decision Maker)

I have discussed the nature and anticipated effects of the treatment outlined above, including the risks and alternatives, with ______________________________ (name of Patient or Substitute Decision Maker), and she/he has refused blood or blood products. If this refusal is by a Substitute Decision Maker, I have satisfied myself that he/she has authority to make this decision, the decision to refuse substitute consent is medically appropriate, and he/she is complying with any instructions or wishes the patient expressed while he or she was capable.

The refusal to accept administration of certain Blood components/Products/Alternatives must be obtained by the primary doctor or associate.

Doctor/Surgeon’s Signature: __________________________ Date: __________ / ______ HRS
date & time

Print Name: ______________________________________________________________________________

Blood Components/Products/Alternatives

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<td>Red Cells carry oxygen: a transfusion may be required to prevent damage to your organs as a result of a lack of oxygen.</td>
<td>Plasma is a fluid that contains substances called clotting factors required to make the blood clot.</td>
<td>Platelets are required to prevent or stop bleeding by forming the clot at the site of injury.</td>
<td>Cryoprecipitate is a source of fibrinogen which is necessary for clot formation. It is required to stop bleeding when the patient's fibrinogen level is low or not functioning properly.</td>
<td>Albumin is a protein from plasma that can be used to replace fluid that has been lost.</td>
<td>There are several products made from human plasma that can be used to replace a clotting factor or reverse the effects of a medication.</td>
<td>Proteins that help prevent or fight infection; sometimes used to treat immune-related disorders.</td>
<td>Epoetin alfa or Erythropoietin (EPO)</td>
<td>Acute Normovolemic Hemodilution</td>
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Acute Normovolemic Hemodilution

The patient’s own blood is collected immediately prior to surgery and replaced with IV fluid. This can be done in a continuous circuit.

Cell Saver

Blood loss is collected during surgery, washed and filtered and returned to the patient during surgery. This can be done in a continuous circuit.

Declaration by Interpreter:

I have accurately translated this document and acted as interpreter for the patient, who told me that he/she understood the explanation and refuses to accept blood products.

Signed: _____________________________________________________________

Date:_______________________/______________ HRS

Print Name: ______________________________________________________________________________