Hemodialysis: Blood/Blood Product Transfusion

Site Applicability

PHC Hemodialysis Units

Practice Level

1. Specialized: Nurses who have completed specialized training to work in hemodialysis unit can perform the procedure.
2. Only registered nurses can transfuse blood and blood products.
3. Licensed Practical Nurses (LPNs) may be the second person required for the process of patient/product identification but CANNOT act as the transfusionist.
4. Employed Student Nurses (ESNs) and Student Nurses (SNs) CANNOT act as the transfusionist or the second person for patient/product identification but can observe the transfusionist.

    - Completion of initial education and annual nursing competency is required for nurses

Requirements

1. A provider order is required for the administration of all blood/blood products and transfusion cannot begin until one of the following is obtained:
    a. Consent for Transfusion of Blood and/or Blood Products (PHC-MR030/Form ID 2750)

    OR

    b. Certification of Need for Emergency Transfusion of Blood and/or Blood Products: Emergency Waiver (PHC-MR029/Form ID 2749)
2. If there is a Refusal to Accept Transfusion of Blood and/or Blood products (PHC-MR031/Form ID 2751), **do not** transfuse until consent is obtained.

Need to Know

1. **The RN is responsible** for initiating blood/blood products, assessing and monitoring the patient before, during and after transfusion.
2. **LPNs** may take and record vital signs and report any concerns to RN
3. Recombinant products (e.g. some Factor VII, IX) do NOT require consent as they contain no donated human product. If you are unsure check with the Transfusion Medicine Laboratory (TML)
4. In an emergency, nursing staff are authorized to act on an order to initiate a transfusion when the Certificate of Need for Urgent Transfusion of blood/blood products (PHC-MR029/Form ID 2749) is

completed (Refer to Consent for Health Care policy). Document any actions pertaining to informed consent

5. Medications may not be added to blood products or to administration sets used for transfusion. This includes any secondary lines or ports for push or minibag medications
6. The amount per unit of packed red blood cells to be transfused during dialysis should be added to the total fluid removal amount to prevent volume overload.
7. Two qualified people are required to check the blood product prior to administration (see procedure/steps below in checking blood/blood products
8. If previous in placed identification wristband is missing/not available with patient on the day of blood product administration, a new identification wristband shall be re-attached to the patient.
9. Blood/blood products should be administered with an infusion pump. Ensure appropriate IV tubing is used for all blood/blood products (See Appendix C)
10. Vascular (venous) access is required for the transfusion of all blood/blood products; approved forms of access are:
    a. Peripheral IV catheter all gauge sizes: 16, 18, 20, 22, 24 (26 to 29 gauge in neonate/pediatrics).
    b. Midline catheter 3Fr or 4Fr: use with CAUTION and monitor for signs of upper extremity deep vein thrombosis
    c. Central lines: PICC, non-tunneled CVC, tunneled CVC, HD CVC (ONLY in renal/critical areas)
11. Compatible solution is used to flush before/after transfusion (Appendix C)
12. An order for transfusion must include:
    a. Patient identification (first and last name, unique identifier)
    b. Type and amount of product
    c. Date, time and rate of administration
    d. Sequence in which multiple components are to be transfused (if applicable)
    e. Modifications to product or special requirements if any
    f. Use of special equipment (other than blood warmer in critical care)
    g. Pre and post transfusion medication orders, if any
    h. Recommended but not required: reason for transfusion.
13. If more information on a product is required the product monograph can be requested from TML
14. Infusion for generic IVIG on adult has recommended rate see Appendix E.
15. If Transfusion is not commenced within 30 minutes of issue or product removal from transfusion medicine approved refrigerator, return immediately to transfusion medicine or transfusion medicine approved refrigerator
16. The product compatibility tag **MUST** remain attached to the product throughout the transfusion. At the end of the transfusion, if no reaction has occurred, discard the tag in the

confidential waste. If a reaction has occurred leave tag attached to the product and return to TML. If a product is found hanging without a product compatibility tag attached, immediately stop the transfusion and call the provider/most responsible physician (MRP) and TML. Immediately return administration line and product to TML

Collecting Group and Screen:

For outpatients and Inpatients (Appendix A) and the DST: Group and Screen Sample Collection: Patient Identification, Specimen Collection and Labeling

1. A group and screen is required for the transfusion of all human derived blood/blood products
2. A group and screen should be collected **PRIOR** to the administration of emergency group O unmatched red blood cells
3. Transfusion medicine requires positive patient identification for all group and screen collections

Red Blood Cells (RBC):

1. RBC transfusion in dialysis patients may be necessary to manage chronic anemia.
2. A group and screen (GRS) is valid for 3 days with day of collection as day **0** (see Appendix C)
3. Circulatory overload and hyperkalemia are risks associated with transfusions in patients with chronic kidney disease. Risk factors for transfusion-related hyperkalemia include the rate and volume of the transfusion, the use of a central venous infusion and/or pressure pumping, the use of irradiated blood, and the age of the blood infused.
4. An increase in potassium (K+) concentration of the supernatant plasma or additive solution may be due to leakage of intracellular K+ from RBCs.
5. Transfuse RBC through the arterial blood line (pre-dialyzer) to prevent the risk of hyperkalemia and/or circulatory overload (Appendix C)
6. An IV tubing with 180 micron filter, two spikes and a y-site is used in order to remove small blood clots and aggregates that may have formed during storage (see Appendix C)

Platelets:

1. A group and screen is required only on patient's current admission (see Appendix C)
2. Platelet transfusion is indicated for treatment/prevention of bleeding in patients with decreased or dysfunctional platelets.
3. Platelets should be administered through an IV pump using a blood infusion set with filter (see Appendix C).
4. It is recommended that platelets are given after completion of hemodialysis treatment using patient's vascular access. There is a risk of damage to the platelets resulting in reduced platelet function when it is connected to the arterial blood line pre-dialyzer when it is being infused through an extra blood pump.

Albumin:

1. Albumin is generally only used if the patient's serum Albumin level is below normal (normal result for hemodialysis patient is more than 35 g/L as per KDOQI and KDIGO guideline, 2009).
2. In hemodialysis, 25 % Albumin, a blood volume expander and a very effective osmotic agent, is used to increase the plasma oncotic pressure during episode of ultrafiltration and hypotension.
1. During hemodialysis, 25 % Albumin is infused through the arterial port of the arterial chamber. A vented straight Low Sorbing set IV tubing with **NO** ports should always be used with albumin (see Appendix C).
3. A unit (50 to 100 mL) of 25 % Albumin may be administered over a period of 10 to 15 minutes during the first half of a hemodialysis treatment (see Appendix C).
4. 25 % Albumin is administered up to 2 times only during hemodialysis session at 30 minute intervals. It should not be given at the last hour of treatment

Equipment and Supplies

1. Blood/blood product
2. Transfusion Medicine Laboratory Transfusion Record (comes with the product PHC-LA009)
3. Patient's Record of Admission
4. Non sterile gloves
5. Normal Saline bag (50 mL or 100 mL)
6. Infusion pump
7. Appropriate administration tubing (Appendix C)
8. Transfusion Reaction Line – Primary IV set (macro tubing) and 500 mL/1 liter bag normal saline (During an Online primed HD treatment only)
9. Compatible IV solution for flushing (Appendix C)

Procedure

Steps

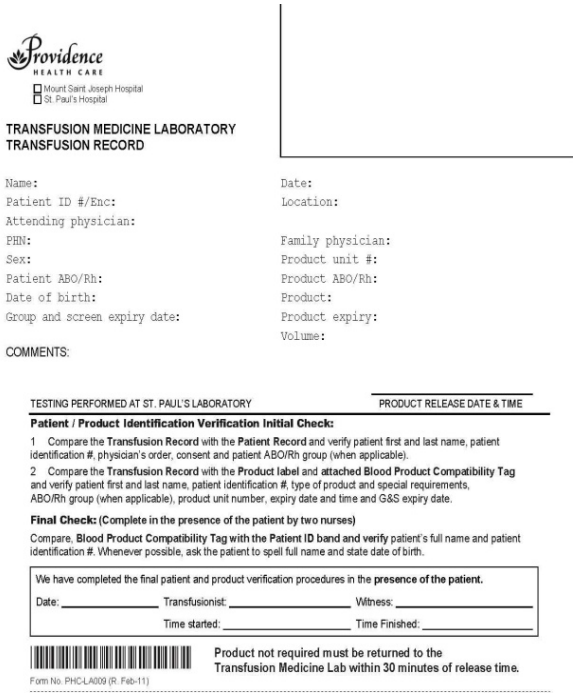
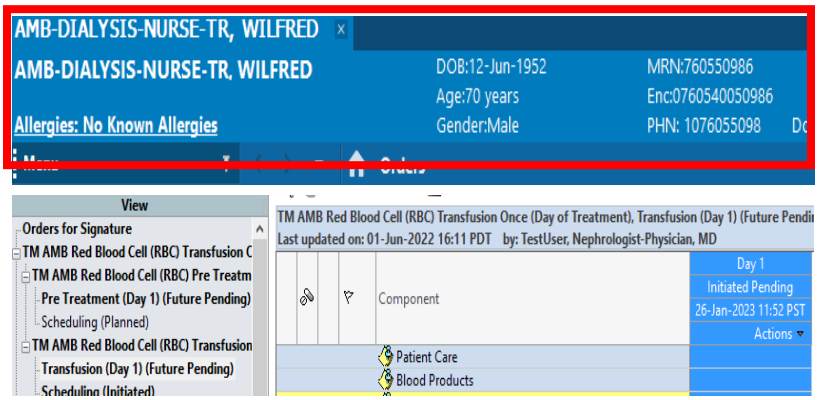
Prepare for Transfusion
1. Ensure the following are available: a. Complete provider's order b. Group and screen as required for product being administered c. Completed Consent for Transfusion of Blood and/or Blood Products (PHC-MR030/Form ID 2750) or Certification of need for Emergent Transfusion of Blood/Blood Products: emergency Waiver (PHC-MR029/Form ID 2749))
2. Order product in Cerner (See Appendix D)

3. Ensure patient has vascular access
4. Ensure patient has identification wristband and allergy wristband (if appropriate) in place
5. Prepare and administer pre medications (as/if ordered)
6. Conduct a baseline patient assessment within 30 minutes of transfusion that includes: a. Vital signs: BP, HR, To, RR and SpO_2 b. Signs and symptoms that may be confused with a transfusion reaction 1. c. Focused systems assessment based on history: e.g. cardiovascular assessment if circulatory overload is a risk
7. Ensure transfusion reaction line available at bedside (**for online prime treatment only**)
Obtain Product
1. Obtain blood/blood product from transfusion medicine when the product is ready. Complete "Request for Blood/Blood Product" (PHCNF166) and hand it to porter/ward aide to take to TML (Blood Bank) to pick up the product (See Appendix D)
2. Inspect product for any discoloration, clumps or leaks. Call TML if any concerns. Anticipate returning the product
3. Blood transfusion must begin within 30 minutes from the time product issued from TML. If transfusion is delayed return product immediately to Transfusion Medicine
4. Other: a. DO NOT refrigerate platelets b. Albumin/IVIG bottles – OK to keep on unit after 30 minutes I. DO NOT refrigerate on unit II. Return unused bottles if order changes for patients and/or not used during shift
Checking Blood/Blood Products
1. The following are checked on the Transfusion Record, Record of Admission, Product Tag, a. Product Label and Patient Identification Wristband b. Patient first and last name (including spelling) c. Patient unique identifier (MRN) d. Patient date of birth e. Type of product and ABO group (e.g. red blood cells, A positive) e. Product unit number/Lot number f. Product expiry date and time g. Any special requirements (e.g. irradiation)

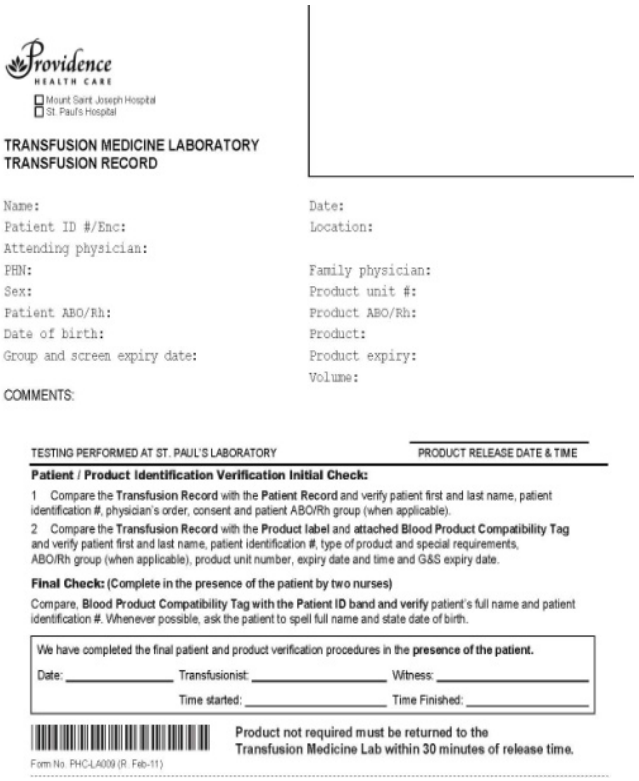
2. If **ANY** information does **NOT EXACTLY** match from one document to the next immediately contact the TML for further instruction (and prepare to return the product)

Patient and Product Identification

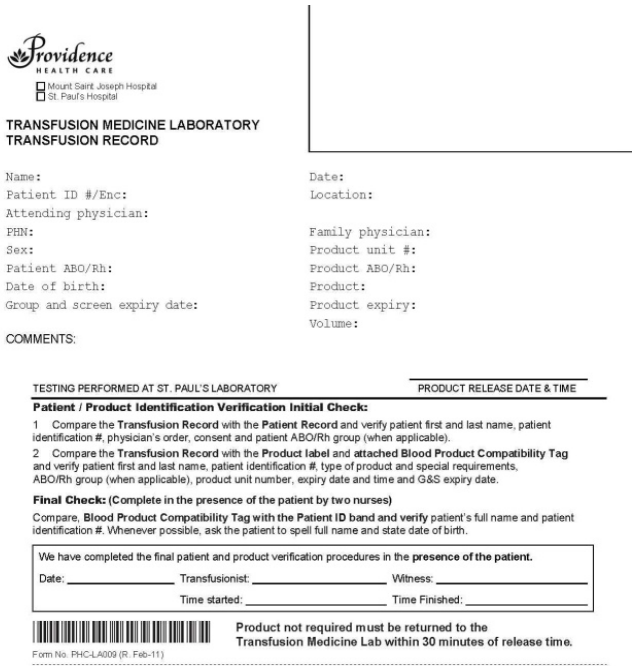
Step 1:

Transfusionist	Person Two
	
Using **Transfusion Record** (say it out loud and spell it out loud) a. Patient first and last name b. Patient unique identification number (MRN) c. Date of birth	Read back to confirm from the **banner bar in Cerner** (say it out loud and spell it out loud) a. Patient first and last name b. Patient unique identification number (MRN) c. Date of birth
Confirm information is exactly the same on both the record and in Cerner	

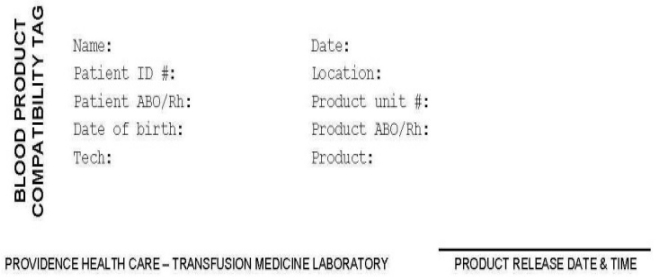
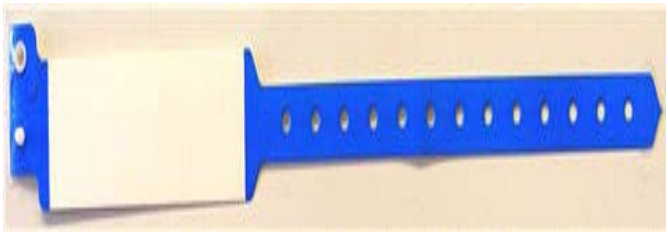
Step 2:

Transfusionist	Person Two
	
Read from **blood product compatibility tag** (say it out loud and spell it out loud) a. Patient first and last name b. Patient unique identification number (MRN) c. Date of birth	Read back to confirm from **Transfusion Record** (say it out loud and spell it out loud) a. Patient first and last name b. Patient unique identification number (MRN) c. Date of birth
Confirm information is exactly the same on both documents	

Step 3.

Transfusionist	Person Two
	
Read from **Transfusion Record** (say it out loud) a. Type of product and ABO group b. Product Unit number and Lot number (if present) c. Product expiry date and time d. Any special requirement e.g. irradiation	Read back to confirm from **blood product label** on product (say it out loud) a. Type of product and ABO group b. Product Unit number and Lot number (if present) c. Product expiry date and time d. Any special requirement e.g. irradiation
Confirm information is exactly the same in both places	

Step 4.

Transfusionist	Person Two
	
Final Check – completed in the presence of the patient Read from **blood product compatibility tag** (say it out loud and spell it out loud) a. Patient first and last name b. Patient unique identification number (MRN) c. Date of Birth	Read back to confirm from **Patient Identification Wristband** (say it out loud and spell it out loud) a. Patient first and last name b. Patient unique identification number (MRN) c. Date of Birth
Confirm information is exactly the same in both places	
Optional additional check: a. Have the patient state their first and last name and date of birth b. A photo identification record or facial recognition with patient photo and ID label may be used (See Appendix F)	

Transfuse Product
1. Ensure baseline assessment completed and documented
2. For a product being administered by IV infusion: 1. In the presence of the patient, spike bag/bottle and prime IV administration/infusion blood set (Ref# 2477-0007) with blood/blood product or with compatible IV solution 2. Connect tubing to patient's vascular access (Appendix C) 3. Do not administer blood through add-on manifold sets attached to tubing-it is difficult to fully flush through manifold ports and prevent occlusion 4. Commence infusion at slow rate x 15 minutes (See Blood Product Information: Quick Reference Guide (Appendix C)

5. Transfusionist must remain within view of the patient for the first 15 minutes. After 15 minutes, if no reaction noted, increase transfusion rate as per Provider's order and based on volume and infusion time or "time ordered" (e.g. over 2 hours)
   Check the actual volume of the product for pump programming (VTBI) and for fluid removal calculation in hemodialysis
6. Refer to Provider's Orders for specifics about total infusion time/duration

3. For products being administered IV Direct or IM see specific product monograph for administration rates

4. When transfusing multiple units/products change blood administration set:
   a. Between each product type
   b. After 4 hours or 2 units (whichever comes first)
   c. For Rapid infuser only – change the filter every 3 hours or as flow slows down/decreases.

Patient Assessment

1. Transfusionist to remain in view of patient for at least 15 minutes after initiation of transfusion

2. Observe for signs and symptoms of transfusion reaction

3. Monitor and document patient's vital sign and assess for signs and symptoms of transfusion reaction:
   a. Check 15 minutes after start of EACH transfusion
   b. Check At minimum of every hour during transfusion
   c. Check At end of transfusion.
   d. PRN If at any time patient has signs or symptoms of a transfusion reaction

If at any time patient has signs or symptoms of a transfusion reaction

- STOP the transfusion
- Disconnect transfusion line
- Connect Transfusion reaction line (infuse NS)
- Notify physician/NP & implement orders/ resuscitative measures
- Follow instructions on Transfusion Reaction Report form (PHC-LA018)

Transfusion End:

1. For IV infusion: flush blood tubing with a 50 mL minibag of compatible IV solution using the second IV spike. It is not necessary to flush between units of same product if using same administration set within 4 hours (e.g. two units being infused within 4 hour period).

2. Leave administration set connected to the port of the HD extracorporeal arterial line; or disconnect and discard in biohazard waste bin (unless a transfusion reaction occurred then follow guidelines in protocol See Blood and Blood Product Administration

Documentation in Cerner Sites

Blood and Blood Product Administration in the iView band
1. Complete Transfusion section that includes type of blood product, number of Units, volume amount, and blood product transfusion education. 2. Ensure two signatures appear on record (witness and transfusionist) a. File in the patient's chartlet. i. In the O.R., ED and Critical Care: when pre-checks are completed the two staff completing the checks will both sign as witness; the staff administering the product will sign as Transfusionist.
3. Document patient response in the nursing narrative notes (both outpatient & inpatient) or free text in the documentation menu section a. Any existing clinical manifestations that may be confused with transfusion reaction b. Any interruptions to transfusion c. Any pre/post transfusion medications administered d. Any patient teaching e. All vital signs 4. Document as a free text note any change in patient condition related to the transfusion or any interruptions to transfusion.
Cerner
1. Record the volume amount per unit of packed red blood cells to be transfused during dialysis in the interactive view and I&O pre-dialysis and add to the total fluid removal amount to prevent volume overload
2. Document in the Blood Product Administration Band in the Interactive View and I&O section • Vascular access device transfused through (i.e. PIV, CVC, PICC, or IVAD, etc.) – choose appropriate Dynamic Group and Lumen Type. • Blood product transfusion education • Vital signs • Volume of product infused at end of transfusion
3. Record on applicable form for the clinical area and/or in iView Blood Administration band: a. Type and volume of blood/blood product b. Time transfusion started and stopped c. Other fluid infused e.g. flush fluid
4. Once all the product in the order has been administered complete the Cerner task.

Patient and Family Education

- Review purpose of transfusion. Give "About Blood Transfusion" pamphlet (if available)
- Instruct patient to report to staff any unusual symptoms promptly. See Blood and Blood Product Administration
- Give **"After your Transfusion"** pamphlet for aftercare and delayed transfusion reaction reporting information
- Patient education pamphlets are available in English, Chinese, Vietnamese and Punjabi from the **Transfusion Medicine** web page or the Print Health Education Resources **Catalogue**

Related Documents

1. B-00-12-10065 - Blood/Blood Products: Transfusion Reaction Identification and Management
2. B-00-13-10068 - Blood and Blood Product Administration
3. B-00-13-10218 – Group and Screen Sample collection: Patient Identification, Specimen Collection and Labelling
4. B-00-13-10130 - Hemodialysis: Anaphylaxis protocol
5. B-00-13-10164 - Intravenous Immunoglobulin (IVIG): Patient Care and Administration
6. PHC Nursing Competency Blood/Blood Product Administration in Learning Hub
7. Transfusion Medicine Laboratory Manual

References

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Appendices

Appendix A: Steps for Group and Screen for Inpatients and Outpatients

Appendix B: Blood (Phlebotomy) Tube Labelling

Appendix C: Blood and Blood Product Administration in Hemodialysis

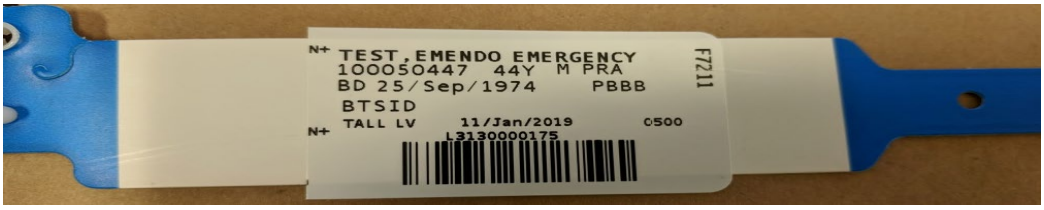
Appendix D: Blood Product Request Form

Appendix E: Generic IVIG Rate Table - Adult

Appendix F: Photo Identification Record

Appendix A: Steps for Blood Group and Screen Collection for Outpatients and Inpatients

Out-patient group and screen collection follows the same procedures as with the in-patients except the inpatient encounter is used. The use of regular in-patient arm banding system and Cerner label attached on the arm band are followed together with Cerner-generated paper requisition print out with an order or electronic positive patient identification from Sunquest collect



A. Identification Wrist Band

St Pauls Hospital

TRANSFUSION MEDICINE SERVICES REQUISITION

TRANSFUSIONMED, ALPHA

BC PHN: 9874061861
MRN: 740019402
DOB: 01JAN1990
Age: 32 Years
Sex: Male
Enc #: 7400000044126
Patient Loc: SPH MSSU OPAT
Room:
Bed:

Ordering Phys: TestON, Oncologist/Hematologist/BMT–Physicia
Attending Phys:
Ordered By: TestON, Oncologist/Hematologist/BMT–Physicia
Requested Date/Time: 21Sep2022 12:03

Order: Group and Screen
Priority: ROUTINE
Frequency: once

Please DISCARD this requisition if Sunquest Collect was used to collect the specimen.

Prior to collection and in the presence of the patient:

Confirm that the patient's first and last name, DOB and MRN on the patient armband ID, specimen label and requisition are an identical match.

Patient identification provided by:

☐ **Patient**
or
☐ **Alternate (family member, guardian or second health care provider not the collector). Provide details:**

Name of Alternate: _____
PRINT NAME

Complete the section below:

"I have confirmed that the information on the patient ID, label and requisition matches."

Date: _____ Time: _____

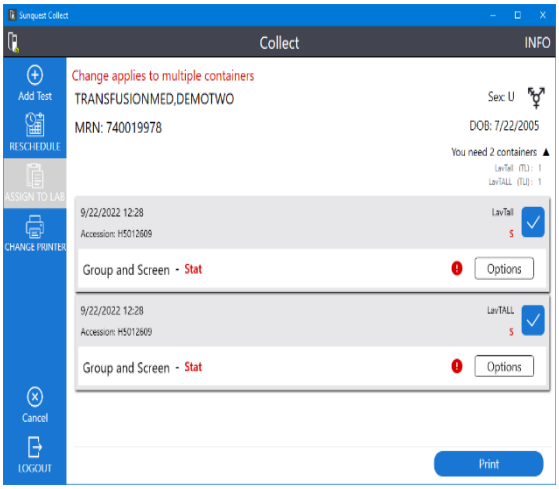
Collected by: _____ Initials: _____
PRINT NAME OR LAB CODE

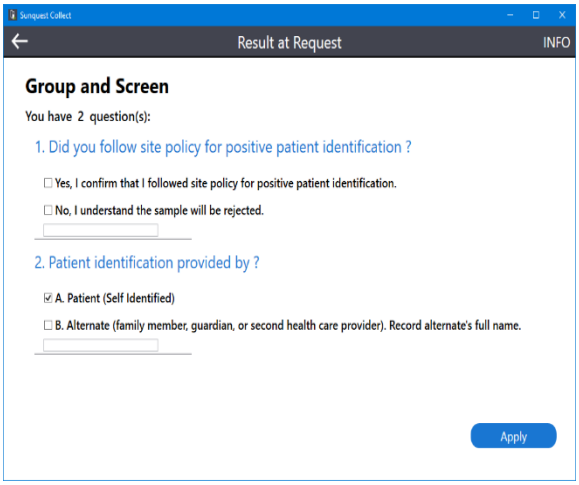
LAB USE ONLY

Accession #	# Samples	ABO/Rh	Ab Screen	Technologist	Comments

Group and Screen Requisition Form (Cerner-generated and manual entry during downtime)

B. Electronic Positive Patient Identification from Sunquest Collect





Step 1 - Ensure there is a provider's order and signed consent for transfusion

Step 2 - **For inpatients**:

- Ensure that inpatient encounter number is being used
- Confirm if group and screen has already been drawn:
    - Check transfusion history in Cerner to check if allocated blood is available and crossmatch has been done
    - Phone blood bank and ask if blood is ready
- If group and screen has not been ordered and not collected yet:
    - Activate transfusion medicine PowerPlan in Cerner
    - Select the regimen for Order group and screen (crossmatch)
    - Proceed to release both labels and group and screen requisition form when ready
    - Labels will be printed to Cerner label printer and crossmatch requisition will be printed to specific 6D pod printer

For Outpatients:

- Order type and screen (crossmatch) in Cerner
- Proceed to release both labels and crossmatch requisition when ready
- Labels will be printed from Cerner label printer and crossmatch requisition form will be printed at the selected pod printer

Step 3 – **Obtain:**

- Two purple top 6 mL blood collection tubes
- Patient labels from Sunquest Collect
- Group and Screen Requisition Form (Cerner-generated; **Discard** if Sunquest Collect is used)
- Bio-hazard Ziploc bag

- Blood product request form (Cerner-generated)

Step 4 – **Positively identify the patient**

- Ask them to spell their first and last name and say date of birth.
- If the patient cannot self-identify have alternate complete the same process and then record process on Group and screen requisition.
- If patient is identified by alternate, alternate's relationship to patient/facility, name and signature must be documented on group and screen collections form.
- A photo identification record form (ID 7953) with patient digital photograph and Identification information label may be used as an optional additional check (See Appendix F)

Step 5 –

- Compare patient's first and last name, MRN, DOB on: group and screen requisition, identification ban and labels.
- If information does not EXACTLY match on all three resolve discrepancies before collecting sample

Step 6 –

- Collect the blood samples.
- Check again patient's label if first and last name and date of birth are correct in the presence of the patient.
- Stick the specimen labels on the blood tubes (see Appendix B)

Step 7 –

- Staff are **NO** longer required to fill out the GRS/ABO requisition if using Sunquest Collect for sample collection

Step 8 –

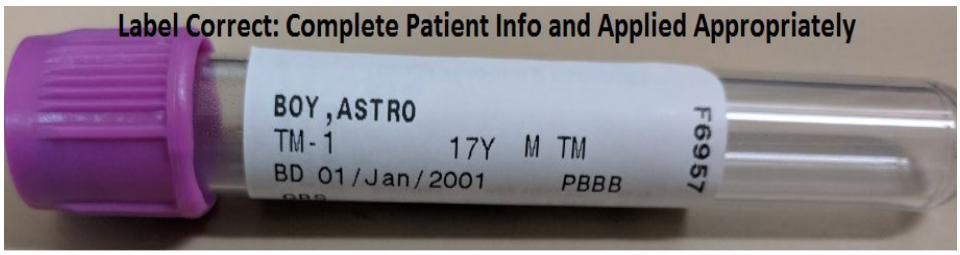
- Send completed group and screen requisition (*if Sunquest Collection is not used*) and labeled tubes to transfusion medicine in a biohazard Ziploc bag

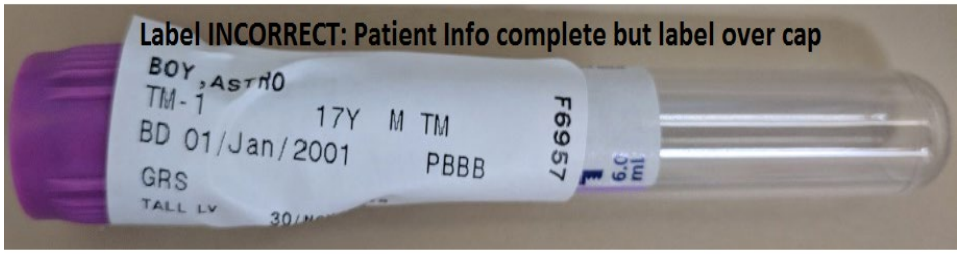
Step 9 –

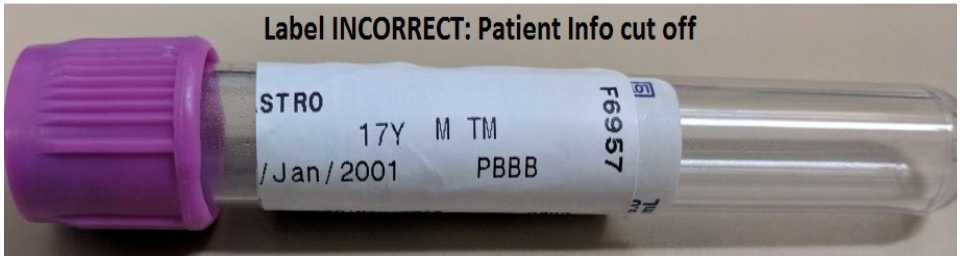
- Print blood product request form from Cerner PowerPlan regimen and give to the ward aide if blood/blood products are ready or available to be picked up from transfusion medicine (see Appendix D)

Appendix B: Blood Tube Labelling

1. All samples must be labeled in the presence of the patient
2. Cerner- Sunquest generated blood labels must contain:
    a. Patient's first and last name
    b. Date of birth
    c. MRN
3. Label cannot be cut off, smudged or illegible; if time is critical a label can be hand amended
4. To affix label hold tube in left hand and place label on using right hand, apply label as close to top of tube as possible without covering the cap (See below)







Appendix C –Blood/Blood Products Administration in Hemodialysis

Important: Refer to **B-00-12-10065** –Blood/Blood Product Administration and **PHC Transfusion Medicine Laboratory**

Product	Transfusion Rate	When to Transfuse	Administration Set	Compatibility	Access	Infusion Pump	Volume to be Added to "target weight loss"	Other
Red Blood Cells	Over 30 to 60 minutes/ unit (unless specified by the provider) Initial rate-first 15 minutes at 120 mL/hour	Anytime	Standard blood set with **180** (170-260) micron filter (Y-site+2 spikes)	Normal Saline (for flush)	HD Arterial circuit Y connector	Recommended	Add 300 mL/unit to target weight loss unless otherwise specified by the physician	Change blood set if required. Deleucocyted by supplier Tubing can be primed with normal saline or blood itself GRS is valid only for 3 days
Plasma	As fast as possible after initial rate of 120 mL/hr for 15 minutes	End of dialysis over 30 to 60 minutes or less than 4 hours unless otherwise indicated (e.g. during tandem HD & TPE)	Standard blood set with **180** (170-260) micron filter (Y-site+2 spikes)	Normal Saline (for flush)	HD Arterial Y circuit connector Or HD Return Line with COMBO line (during tandem HD & TPE)	Recommended	Check with physician	Tubing can be primed with normal saline or blood itself GRS is required on patient's current admission or initial GRS is valid during treatment course

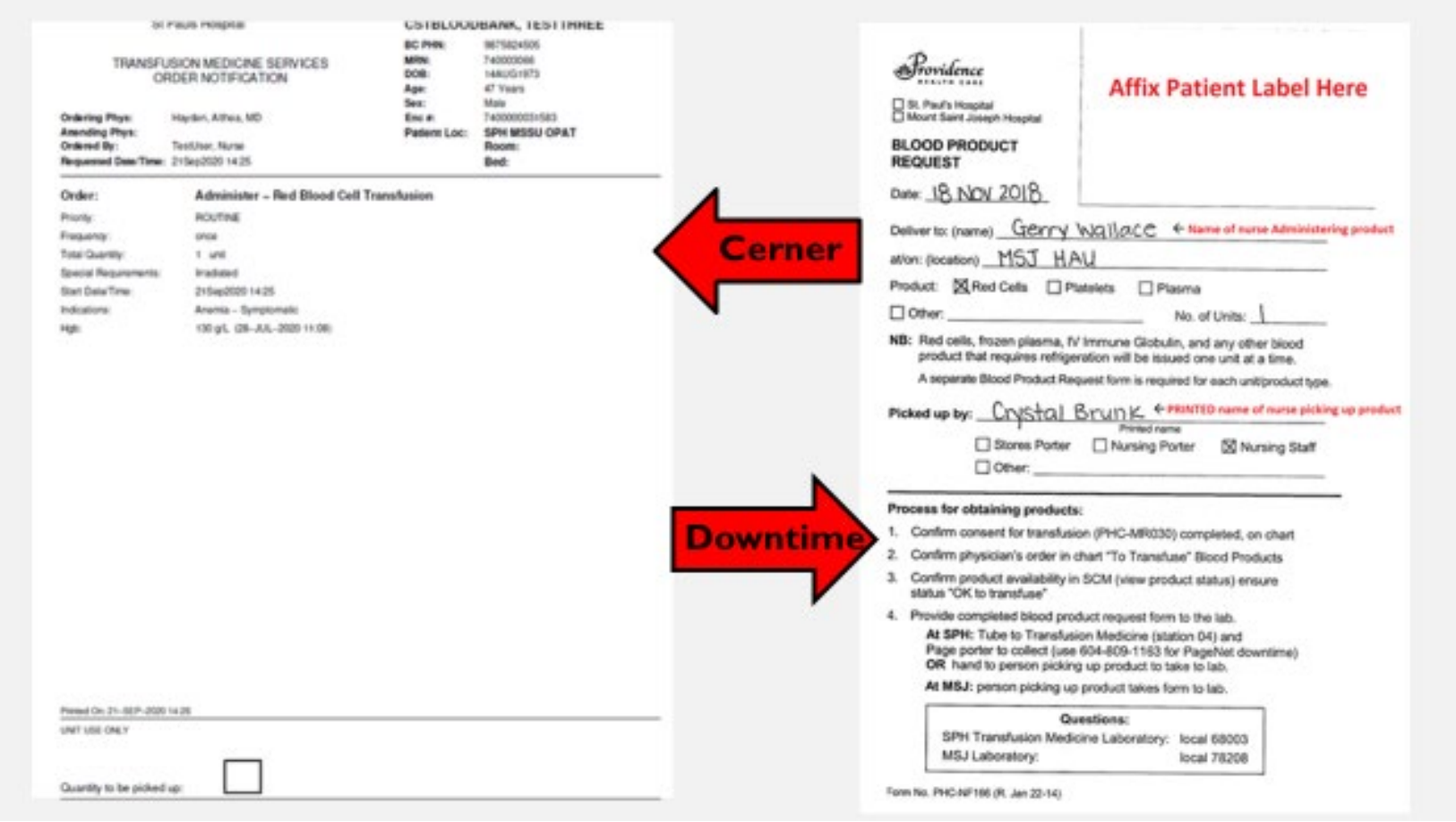
Product	Transfusion Rate	When to Transfuse	Administration Set	Compatibility	Access	Infusion Pump	Volume to be Added to "target weight loss"	Other
Platelets	As fast as possible (if tolerated) or after initial rate of 120 mL/hour for 15 minutes 1 dose within 30 to 60 minutes (average rate of 4 to 10 mL/minute)	Post dialysis	Standard blood set with **180** (170-260) micron filter (Y-site+2 spikes)	Normal Saline (for flush)	Vascular Access (CVC, AVF, AVG)	Recommended	Do <u>not</u> add volume to target weight loss	If given during HD, clotting may occur since platelets may adhere to system/tubing Should not be exposed to extra pump (e.g. HD machine blood pump) to minimize potential mechanical damage Should not be refrigerated Tubing can be primed with normal saline or blood itself GRS is required on patient's current admission or initial GRS is valid during treatment course

Product	Transfusion Rate	When to Transfuse	Administration Set	Compatibility	Access	Infusion Pump	Volume to be Added to "target weight loss"	Other
Albumin 25%	As fast as possible after initial rate of 50 mL/hour for 15 minutes	During the first half hour of dialysis	Vented Straight (Low Sorbing) tubing with **NO ports**	Normal saline	HD Arterial circuit Y connector	Recommended	Do not add volume to target weight loss	If given by gravity, observe infusion closely due to vented tubing which may allow air to be drawn into the system; Supplied in 25% 100 mL bottles
Albumin 5%	As fast as possible	During total Plasma Exchange (TPE)	TPE Tubing Set (Y- Straight tubing) Vented straight (Low Sorbing) set tubing with **NO ports**	Normal Saline	TPE Y-set Replacement Tubing HD Arterial circuit Y connector	Not Applicable	Not Applicable	Supplied in 250 mL or 500 mL bottles
Cryoprecipitate	As fast as possible	End of dialysis	Standard blood set with **180** (170-260) micron filter (Y-site+2 spikes)	Normal saline	Vascular Access (CVC, AVF, AVG)	Recommended	Do not add volume to target weight loss	

Product	Transfusion Rate	When to Transfuse	Administration Set	Compatibility	Access	Infusion Pump	Volume to be Added to "target weight loss"	Other
IV Immune Globulin (IVIG)	As per Infusion Rates Table IVIG Administration and Blood/Blood Product Administration (35 mL/hour x 15 minutes)	Anytime	Straight tubing set with vent cap 15 micron filter (3 Y-sites)	Normal Saline (for flush)	HD Venous Chamber (post dialyzer)	Recommended	Add volume unless otherwise specified by physician	Observe closely when increasing rate(reactions may be related to infusion rates) Dose is weight based and may be fulfilled using multiple bottles. This ensures full dose is administered

SPH Renal Program, 2023. Table adapted from hemodialysis Policy and Procedure Manual Southern Alberta Renal Program July 30, 2015

Appendix D: Blood Product Request Form



Appendix E: Generic IVIG Rate Table-Adult

This table can be used for all IVIG products.

Specific products available will vary based on inventory at the local site and at Canadian Blood Services, always refer to product monograph or product insert for detailed information.

Start rate (for the first 30 minutes): 0.5 mL/kg/hour

If tolerated, gradually increase rates every 15 to 30 minutes in accordance with the infusion rate increments below. Assess patient for infusion side effects prior to increasing infusion rates.

Maximum recommended rate of infusion is 4 mL/kg/hour or 240 mL/hour whichever is reached first

Rate mL/kg/hr	Patient Weight (in Kilograms) used for Dose Calculation								
	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 to 99	100 to 109	110 to 119	120 and above
	Infusion Rate mL/hr								
0.5	20	25	30	35	40	45	50	55	60
1	40	50	60	70	80	90	100	110	120
2	80	100	120	140	160	180	200	220	*240
3	120	150	180	210	*240	*240	*240	*240	*240
4	160	200	*240	*240	*240	*240	*240	*240	*240

*This is the maximum recommended infusion rate endorsed by the **BC Transfusion Medicine Advisory Group**. Please consult the authorized provider if the ordered rate exceeds the recommendations on this document.

Caution!

- **Various vial sizes are available (1 gram = 10 mL). Ensure ordered dose is given**
- **Side effects and/or adverse reactions may be more likely when receiving IVIG for the first time, when changing to another IVIG brand, when there is more than 8 weeks since the previous infusion, with high doses of IVIG, with rapid infusion rates, and if the patient is not well hydrated. Consider slower infusion rates and adequate patient hydration (before/ during/after infusion) to minimize IVIG related side effects.**

Consult the product monograph or product insert for more detailed information.

Appendix F: Photo Identification Record (PHC)

Providence HEALTH CARE

PHOTO IDENTIFICATION RECORD (PHC)

* 7 9 5 3 *

Medications Administration Record

Add Patient Label Here

NAME:_____

ROOM:_____

Insert Digital Photograph

LONG TERM CARE

Meals taken in:
- ☐ Dining Room
- ☐ Room
- ☐ Other: _____

Diabetic:
- ☐ Yes ☐ No

Medication:
- ☐ Whole
- ☐ Crushed in _____

Preferred drink:

_____
- ☐ Thickened
- ☐ Thinned

SPECIAL NEEDS/INSTRUCTIONS:

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