

 <b>Saskatchewan Health Authority</b>	<b>POLICIES &amp; PROCEDURES</b>  Title: <b>PHLEBOTOMY - THERAPEUTIC</b>  <b>RNSP: RN Procedure</b>  I.D. Number: 1183
Authorization:  <input checked="" type="checkbox"/> Former SKtnHR Nursing Practice Committee	Source: Nursing Date Revised: Date Effective: February 28, 2018 Scope: Former SKtnHR - <b>Acute Care</b>

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## DEFINITIONS

**Most Responsible Health Practitioner (MRHP):** means the Health Practitioner who has the responsibility and accountability for the specific treatment/procedure(s) provided and prescribed to a patient and who is authorized by Saskatoon Health Region (SHR) to perform the duties required to fulfill the delivery of such a treatment/procedure(s) within the scope of their practice.

**One unit of blood:** One unit of blood is approximately equal to 500 grams or 470 mls.

**Therapeutic phlebotomy:** The removal of a specific amount (volume) of blood from a patient for treatment of a specific condition or disease. (INS P&P for Infusion Nursing. 2016).

## 1. PURPOSE

1.1 To safely remove a specific amount of blood from a patient with a clinical indication as ordered. The three most common reasons for therapeutic phlebotomy are:

- Polycythemia (rubra) vera –to decrease red cell mass
- Porphyria – to reduce clinical symptoms in patients with metabolic disorders of heme synthesis which may be associated with hepatosplenomegaly, photosensitivity, hyperpigmentation and distinct red colour in the urine
- Hereditary hemochromatosis –to reduce iron overload in the setting of a genetic iron loading disorder.

## 2. ROLES

**Registered Nurses (RNs):** RNs identified by their manager in targeted practice settings will be certified in the RN Specialty Practice: RN Procedure: Therapeutic Phlebotomy.

### 3. POLICY

- 3.1 The RN shall perform therapeutic phlebotomy under MRHP order. The order shall include amount and frequency of blood withdrawal.
- 3.2 The RN shall not perform therapeutic phlebotomy if the client is clinically unstable. The MRHP shall be notified.
- 3.3 Sterile technique shall be followed.

### 4. PROCEDURE

#### 4.1 Review the MRHP order.

##### 4.1.1 The order **must** include:

- Amount of blood to be withdrawn (max of 500 grams)
- Frequency of procedure

##### 4.1.2 It **may** also include:

- any pre-or post blood work to be drawn at time of phlebotomy.
- pre-phlebotomy hematocrit and hemoglobin levels.
- post phlebotomy target for hematocrit, hemoglobin and ferritin levels.
- fluid replacement, including type of fluid, rate, route, and amount.

#### 4.2 Gather supplies:

- Chlorhexidine/alcohol swabs
- Tourniquet
- Phlebotomy bag with citrate SKU 50560
- Scale that will weigh to 500 grams. May obtain from:
  - RUH Oncology Day Unit ( ODU)
  - SCH Clinical treatment Center
  - SPH Ambulatory Care
- 16 or 18 gauge cathlon (if not using phlebotomy needle)
- Injection adapter 7/8 male SKU 41192
- Personal protective equipment (PPE) (ie clean gloves)

#### 4.3 Confirm patient's identity with 2 identifiers.

#### 4.4 Assess patient for allergies, current medications / pre-admission meds, and medical diagnosis. (allergy Intolerance record)

#### 4.5 Obtain and document baseline vital signs.

**Note: if systolic blood pressure is less than 90 mmHg and or pulse greater than 130 beats per minute, contact physician before proceeding with phlebotomy.**

#### 4.6 Provide patient education including:

- need for hydration before and after procedure

## *Therapeutic Phlebotomy*

- potential side effects such as hematoma, syncope, and nausea/vomiting.
- 4.7 Place phlebotomy bag on scale and zero scale.
  - 4.8 Perform hand hygiene and don PPE.
  - 4.9 Assess upper extremities for an appropriate vein. The antecubital fossa medial vein is preferred, but large forearm veins may be used. Select a vein that is straight with no visible branching.
  - 4.10 Cleanse site with chlorhexidine/alcohol swab using back and forth motion in 2 directions and allow to dry.
  - 4.11 Apply tourniquet 5 cm above site. Tourniquet should not be left in place for greater than one minute.
  - 4.12 Initiate venipuncture with phlebotomy bag needle or cathlon. If cathlon is used attach injection adapter. Insert phlebotomy needle into adapter after venipuncture.
  - 4.13 Remove tourniquet. Cover site with sterile gauze and tape in place. If site is in antecubital fossa, instruct patient to keep arm straight.
  - 4.14 Observe patient during collection. **Patient should not be left unattended.**
  - 4.15 If the patient experiences adverse effect:
    - stop the procedure
    - lay patient flat or in Trendelenburg
    - apply oxygen at 3l/NP
    - notify MRHP as soon as possible
  - 4.16 Once required amount of blood has been removed:
    - clamp tubing
    - remove needle
    - apply pressure to site until bleeding has stopped
    - dress with gauze and tape
  - 4.17 Dispose of blood and sharps in appropriate biohazard container
  - 4.18 Remove PPE and perform hand hygiene.
  - 4.19 Check vital signs at 15 minutes post procedure and until patient is stable. Give 1-2 cups of oral fluids or IV fluid if ordered by MRHP.
  - 4.20 Document:
    - vital signs post procedure
    - venipuncture site and amount of blood removed
    - patient's response to procedure
  - 4.21 Assist patient to ambulate when stable and discharge.

## **5 REFERENCES**

CINAHL Nursing Guide **Date:** March 18, 2016 Therapeutic phlebotomy: performing. Retrieved December 29, 2017

Cook, L. S. Therapeutic phlebotomy: A review of diagnosis and treatment considerations. *Journal of Infusion Nursing*, Volume 33. Pp 81-88 2010.

Infusion Nurses Society (2016) Therapeutic phlebotomy Policies and procedures for infusion nursing pp 252-255.

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