**Prairie County Hospital District**

**Policies & Procedures**

**SUBJECT: DECLOTTING CENTRAL VENOUS CATHETERS Nursing**

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**Written / Revised By: Susan K Morgan, RN, DNS Original Date:**

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**Approved By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Recent Change Date:**

**Board of Trustees, Chair**

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**Policy:** Patency of central line catheters obstructed by clotted blood or fibrin will be restored.

**Purpose:** The purpose of this policy is to describe the procedure for declotting central venous catheters and access devices utilizing CathFlo Activase.

**General Considerations:**

1. A thrombolytic agent, such as CathFlo, may be utilized to declot catheters if ordered by a medical provider.
2. Use of CathFlo for catheter declotting is contraindicated in patients with the following:
	1. Active internal bleeding (within 2 months)
	2. Recent cerebral vascular accident (within 2 months)
	3. Surgery, obstetrical delivery, percutaneous biopsy of viscera or deep tissues, or puncture of non-compressible vessels (within 48 hours)
	4. Intracranial neoplasm
3. This procedure is performed by a Registered Nurse

**Practice:**

1. A medical provider order is required for the use of CathFlo to declot catheters
2. Before administering the CathFlo, explain the procedure to the patient and family. Answer any questions.
3. Equipment and Supplies needed
	1. Luer-lock syringes (1) 10 mL, (1) 3 mL, (1) 30 mL
	2. Sterile 3-way stopcock
	3. Use 5 micron filter needle
	4. Alcohol wipes
	5. Sterile water for injection. DO NOT USE BACTERIOSTATIC WATER FOR INJECTION
	6. CathFlo vial diluted to the concentration of 1mg/mL (dilute according to step 2 below)
4. Document the administration of CathFlo and the outcome in the nurses’ notes and on the MAR
5. CathFlo should be administered according to procedure below:

**Procedure:**

1. Clamp catheter as appropriate to prevent air emboli, remove the cap, and attach a 3-way stopcock to the catheter hub
2. Dilution of CathFlo
	1. Aseptically withdraw 2.2 mL of Sterile Water for Injection. DO NOT USE BACTERIOSTATIC WATER FOR INJECTION
	2. Inject 2.2 mL of Sterile Water for injection inot the CathFlo Activase vial, directing the stream into the powder. Slight foaming is not unusual; let the vial stand undisturbed to allow large bubbles to dissipate.
	3. Mix by gently swirling until the contents are completely dissolved. Complete dissolution occurs within 3 minutes. DO NOT SHAKE. The reconstituted preparation results in a colorless to pale yellow transparent solution containing 1 mg/ mL CathFlo Activase.
	4. CathFlo Activase contains no antibacterial preservatives and should be reconstituted immediately before use. The solution may be used for intracatheter instillation within 8 hours of reconstitution
	5. Fill the 3 mL syringe with 2 mL CathFlo for patients weighing 10 to < 30 kg. Fill the syringe with 110% of the internal lumen of the catheter, not to exceed 2 mg in 2 mL
3. Prior to instilling CathFlo, attempt to aspirate the NS from within the catheter
4. Excessive pressure should be avoided when instilling a thrombolytic agent into the catheter in order to avoid ruptures of the catheter or expulsion of the clot into the circulation.
5. Attach the CathFlo-filled syringe to the stopcock port opposite the catheter hub and attach an empty 10 mL syringe to the side port; turn off the stopcock to the CathFlo-filled syringe which will open the stopcock to the empty syringe.
6. Pull back on the empty syringe plunger to the 8 mL mark and while maintaining negative pressure turn off the stopcock to the empty syringe which will open the stopcock to the CathFlo-filled syringe
7. Allow the CathFlo to fill the lumen slowly; reclamp the catheter, remove the stopcock and aseptically cap the hub.
8. Allow the CathFlo to dwell for 30 minutes
9. Clamp the catheter and remove the cap
10. Attach an empty syringe to the external hub of the catheter, unclamp the catheter, and attempt to aspirate. If the catheter is functional, go to Step 16. If the catheter is not functional go the Step 14
11. After 120 minutes of dwell time, assess catheter function again by attempting to aspirate catheter contents. If the catheter is functional, go to Step 16. If the catheter is not functional go to Step 15.
12. If catheter function is not restored after one dose of CathFlo Activase , a second dose may be instilled, repeating the above procedure.
13. If the catheter function has been restored, aspirate 4-5 mL of blood to remove CathFlo Activase and residual clot, and gently irrigate with 0.9% Sodium Chloride