



# REGIONAL CVC MAINTENANCE RECORD – PEDIATRIC

CENTRAL VENOUS CATHETER GUIDELINE RESOURCES				
(for more details, see IV Therapy – Clinical Practice Manual)				
Type of Device	Short Term CVC (Open Ended and Non-Valved)	Long Term PICC (Open-Ended and Non-Valved)	Long Term Tunneled (Open ended and Non-Valved)	Long Term IVAD (Open- ended and Non-Valved)
1. <b>Flush solution and amount</b> Pre-flush, flush between meds, and after blood draw or injection of contrast media	Sterile <b>SODIUM CHLORIDE 0.9%</b> 3 mL	Patient <i>less</i> than 10 kg		Patient <i>less</i> than 10 kg
		Sterile <b>SODIUM CHLORIDE 0.9%</b> – 3 mL		Sterile <b>SODIUM CHLORIDE 0.9%</b> – 9 mL
2. <b>Frequency of flush for unused lumens</b>	Q24H	Patient <i>greater</i> than 10 kg		Patient <i>greater</i> than 10 kg
		Sterile <b>SODIUM CHLORIDE 0.9%</b> – 9 mL		Sterile <b>SODIUM CHLORIDE 0.9%</b> – 18 mL
3. <b>Lock solution and amount</b>	Sterile <b>SODIUM CHLORIDE 0.9%</b> 3 mL followed by 1.5 mL (15 units) of <b>HEPARIN</b> 10 units/mL	Sterile <b>SODIUM CHLORIDE 0.9%</b> 3 mL followed by 1.5 mL (15 units) of <b>HEPARIN</b> 10 units/mL		Sterile <b>SODIUM CHLORIDE 0.9%</b> – 9 mL followed by 2.5 mL (25 units) <b>HEPARIN</b> 10 units/mL
4. <b>Dressing change</b>	Initial post-insertion dressing to be a chlorhexidine (CHG) impregnated transparent semi-permeable membrane (TSM) dressing and changed Q7 Days and PRN or Gauze dressing Q48H and PRN.			<b>Post insertion:</b> Gauze dressing Q24H to Q48H and PRN. <b>Accessed IVAD:</b> Non-coring needle and TSM dressing change Q7 days and PRN.
5. <b>Patient experience</b>	Patient, caregiver and nurse conversation acknowledging process, treatment, and overall subjective experience (e.g., insertion steps, site assessment, and/or CVC removal).			
6. <b>Patency assessment</b>	Before each use – patency is assessed by the ability to aspirate for blood return <b>and</b> the ability to flush a CVC without resistance prior to the administration of parenteral medications and solutions. If line is not patent, assess for an occlusion (refer to IV Therapy – Clinical Practice Manual).			
7. <b>Site assessment</b>	<p><b>Assess and document at beginning of each shift:</b> Assess that dressing is secure, dry and intact, condition of site, palpate site, and check system.</p> <p><b>Assess site and connections Q1H:</b> Reassess site, connections, and line measurement visually and document if there are changes outside the norm or baseline.</p> <p><b>Assess line measurement at the beginning of each shift and with every dressing change (Short-Term CVCs and PICCs only):</b></p> <p><b>If the daily external CVC measurement is altered:</b> Greater than 1 cm <b>OUT</b> from insertion site: STOP infusion, consult PICC RN or MRP before re-starting infusion, a PICC RN or Competency Assessed RN may "withdraw" the CVC back to the original measurement.</p> <p><b>*Upper arm circumference:</b> Measure daily if arm is increasing in size with discomfort (mark measurement place on arm) (refer to IV Therapy – Clinical Practice Manual).</p>			
8. <b>IV cap change</b>	Q4 to Q7 days, after a blood draw through a cap, if removed, contaminated, damaged, and PRN. ***Alcohol impregnated caps <b>should not</b> be used for children under the chronological or developmental age of 4, unless it is safe to do so.			
9. <b>Administration set changes</b>	<p><b>Continuous infusions:</b> primary administration sets and secondary administration sets that are attached: Q7 days and PRN.</p> <p><b>Intermittent infusions:</b> includes primary and secondary sets not attached to patient continuously: After each use, when contaminated, or to a maximum of Q24H.</p> <p><b>Blood:</b> After 4 hours or after 4 units, whichever comes first, or between different blood components / products.</p> <p><b>Parenteral Nutrition:</b> For infusions containing amino acids / dextrose, tubing Q24H.</p> <p><b>Infusions containing lipid emulsion:</b> With each dose or a minimum of Q6H to Q12H.</p>			
10. <b>General considerations</b>	Always use aseptic technique and observe hand hygiene. Flushes must be done with a 10mL syringe. Use turbulent flush method (stop / start). Use Chlorhexidine 2% with 70% alcohol cleansing solution in single-use packages using friction motion. <i>Allow for complete drying before TSM application.</i>			
11. <b>Complications</b>	**Refer to IV Therapy – Clinical Practice Manual for further guidance on treatment options.			
12. <b>Removal</b>	If catheter not removed intact indicate embolism or breakage in Complications section. Further documentation required in progress notes.			