

**IV Nurse Consultants (IVNC)**

**CARE AND MAINTENANCE OF IV LINES**

NOTE: The nurse is responsible for reviewing individual facility and their pharmacy complete policy for indicated therapies before performing infusion therapy.

DEVICE -Access location - May be valved or non-valved	HOW TO CHOOSE THE APPROPRIATE LINE AND THEIR DWELL TIME	PROTOCOLS FOR FLUSHING The nurse administering the flush is responsible for assessing the resident for any condition that may require a change in concentration and/or volume.		The following care, use and maintenance information is not intended as a substitute for pharmacy and/or institutional protocol, but rather, to describe IVNC's guidelines and recommendations that can be used successfully with the following lines.				
		<u>Maintenance Flush or Intermittent Flush</u> NS each lumen & <i>If Manufacture Recommends (IFMR) - Heparin Strengths</i>	Blood Draws	MAINTENANCE OF SITE		ADMINISTRATION SET CHANGES (frequency by administration type)		
				Transparent Dressing Changes	Needless Access Device	PPN or TPN	Continuous (Primary and secondary set)	Intermittent (Primary and secondary sets)
<b>Peripheral</b> Hand/arm vein	-Site change every 48-72 ° - replace sooner as needed -therapy duration less than 7 days	<u>Maintenance</u> Q12° use 3-5ml NS <u>Intermittent</u> 3-5ml NS, infuse medication then Use 3-5ml NS <i>(IfMR) 2ml 10 units/ml heparin</i>	Consider blood sampling through a short peripheral catheter for patients who require multiple laboratory test, are at risk for bleeding, and/or have limited or difficult venous access	When compromised	- With each new insertion	24°  No TPN  PPN only	No more frequently than every 72 to 96°	Every 24°
<b>Midline</b> -2 fingers below or above the antecubital -Upper arm -Tip placement upper arm below auxiliary	- pH above 5 and below 9 -osmolarity less than 600 mOsm/L -dextrose concentration below 10% -therapy duration anticipated 1 to 4 weeks	<u>Maintenance non-valved</u> Q12° use 5ml NS, <i>(IfMR) 3ml 10 units/ml heparin</i> <u>valved catheter</u> 10ml NS Q week <u>Intermittent non-valved</u> 5ml NS, infuse medication then use 5ml NS, follow with <i>(IfMR) 3ml 10 units/ml heparin</i> <u>valved</u> 10ml NS, infuse medication, then use 10ml NS	5ml NS, 5ml discard, draw labs, then 10ml NS <u>If non-valved follow with</u> 5ml 10 units/ml heparin <i>(IFMR)</i>	24° post insertion or on admission then Q 5-7 days & PRN  <b>If a Biopatch has been placed, it needs to be changed at the time of dressing changes</b>	- On admission - Q week - PRN - After blood transfusion	24°  No TPN  PPN only	Administration sets, including add-on devices, will be changed at established intervals depending on the type of administration and infusate.  Administration set changes, including add-on devices, will coincide with peripheral vascular access device replacement and central vascular access device insertion.	
<b>PICC lines</b> Non-Valved Valved  <u>PowerPICC</u>  PICC lines are confirmed by CXR: PICC tip should be located in lower 1/3 superior vena cava	-pH below 5 and above 9 -osmolarity greater than 600 mOsm/L -dextrose concentration above 10% -parenteral nutrition, irritants, or continuous vesicant administration -therapy duration anticipated to be greater than 4 weeks (power injectable infusion devices can withstand high-pressure injections)	<u>Maintenance non-valved catheter</u> Q12° 5ml NS <i>(IfMR) 5ml 10 units/ml heparin</i> <u>valved catheter</u> 10ml NS Q week <u>Intermittent non-valved</u> 5ml NS, infuse medication then use 5ml NS, follow with <i>(IfMR) 5ml 10 units/ml heparin</i> <u>valved</u> 10ml NS, infuse medication, then use 10ml NS	5ml NS, 5ml discard, draw labs, then 10ml NS <u>If non-valved follow with</u> 5ml 10 units/ml heparin <i>(IFMR)</i>	Measure Upper Arm Circumference and External Catheter Length	- On admission - Q week & PRN - Q 24° w/ TPN - After blood draws - After blood transfusion	24°	Administration sets, including add-on devices, will be changed immediately when contamination is suspected or when product integrity is compromised.  Administration sets used with lipid-based infusates, such as intravenous fat emulsions (IVFE), will be free of di-ethylhexyl-phthalate (DEHP)	

Dressing Changes: Gauze dressings are used if resident has allergies or problems with transparent dressing. Physician order is required. Frequency of change - at every 48° and prn.

Syringe Size: To prevent damage to catheter, the size of the syringe used for flushing should not be smaller than 10 ml.

IVNC's Recommends: Blood draws should be taken from Double Lumen Catheters and/or Lumens larger than 4 Fr due to an increase in catheter clotting with the smaller size.

The information contained in this form has been researched with the use of pharmacy policies, the recent 2011 standards of care set by Infusion Nurses Society (INS) and their Policies and Procedures for Infusion Nursing, 4th edition manual and some of IVNC's recommendations which have been noted.

**IV Nurse Consultants (IVNC)**

**CARE AND MAINTENANCE OF IV LINES**

NOTE: The nurse is responsible for reviewing individual facility and their pharmacy complete policy for indicated therapies before performing infusion therapy.

DEVICE - Access location - May be valved or non-valved	HOW TO CHOOSE THE APPROPRIATE LINE AND THEIR DWELL TIME	FLUSH PROTOCOLS		The following care, use and maintenance information is not intended as a substitute for pharmacy and/or institutional protocol, but rather, to describe IVNC's guidelines and recommendations that can be used successfully with the following lines.				
		The nurse administering the flush is responsible for assessing the resident for any condition that may require a change in concentration and/or volume.		MAINTENANCE OF SITE		ADMINISTRATION SET CHANGES (frequency by administration type)		
		Maintenance Flush or Intermittent Flush NS each lumen & Heparin Strengths <i>If Manufacture Recommended - (IfMR)</i>	Blood Draws	Transparent Dressing Changes	Needless Access Device	PPN or TPN	Continuous (Primary and secondary set)	Intermittent (Primary and secondary sets)
<b>Non Tunneled Central</b>	Up to 6 months	<p><b>Maintenance</b> non-valved Q24° 5ml NS <i>(IfMR)</i> 5 ml 10 units/ml heparin <b>valved catheter</b> 10ml NS Q week</p> <p><b>Intermittent</b> non-valved 5ml NS, infuse medication <b>then</b> use 5ml NS, <b>follow with</b> <i>(IfMR)</i> 5ml 10 units/ml heparin <b>valved</b> 10ml NS, infuse medication, <b>then</b> use 10ml NS</p>	5ml NS, 5ml discard, draw labs, <b>then</b> 10ml NS <b>If non-valved follow with</b> <i>(IfMR)</i> 5ml 10 units/ml heparin	On admission <b>then</b> Q week & PRN	- On admission - Q week & PRN - Q 24° w/ TPN - After blood draws - After blood transfusion	24°	Administration sets, including add-on devices, will be changed at established intervals depending on the type of administration and infusate.  Administration set changes, including add-on devices, will coincide with peripheral vascular access device replacement and central vascular access device insertion.	
<b>Tunneled Central</b>	Years	<p><b>Maintenance</b> non-valved Q24° 5ml NS <i>(IfMR)</i> 5 ml 10 units/ml heparin <b>valved catheter</b> 10ml NS Q week</p> <p><b>Intermittent</b> non-valved 5ml NS, infuse medication <b>then</b> use 5ml NS, <b>follow with</b> <i>(IfMR)</i> 5ml 10 units/ml heparin <b>valved</b> 10ml NS, infuse medication, <b>then</b> use 10ml NS</p>	On admission <b>then</b> Q week & PRN	24°				Administration sets, including add-on devices, will be changed immediately when contamination is suspected or when product integrity is compromised.
<b>Implanted Venous Port Central</b>	Years	<p><b>Maintenance</b> accessed Q24° not accessed Q month, 5ml 100 units/ml heparin <b>Valved port</b> accessed 10ml NS Q week not accessed 10ml NS Q month</p> <p><b>Intermittent</b> non-valved 5ml NS, infuse medication <b>then</b> use 5ml NS, <b>follow with</b> <i>(IfMR)</i> 5ml 100 units/ml heparin <b>valved</b> 10ml NS, infuse medication, <b>then</b> use 10ml NS</p>	5ml NS, 5ml discard, draw labs, <b>then</b> 10ml NS <b>If non-valved follow with</b> <i>(IfMR)</i> 5ml 100 units/ml heparin	On admission <b>then</b> Q week & PRN  Change non-coring needle Q week				24°

This form is intended to reflect current knowledge and practices of the clinical nursing specialty of infusion therapy. Based on ongoing research, clinical practices continually change. It is the individuals responsibility in the assessment of appropriateness and applicability of a policy or procedure in any specific instance. IVNC is not responsible for injury to persons or property, or other harm, arising from the use of this form.