

## Summary of Recommendations

RECOMMENDATION		*LEVEL OF EVIDENCE
<b>Practice Recommendations</b>		
Site Selection: Peripheral	1.0 Nurses will select a peripheral insertion site appropriate for the required therapy and with the least risk of complication.	IV
Site and Catheter Care Safety/Infection Prevention Control	2.0 Nurses will prevent the spread of infection by following routine practices and using additional precautions.	IV
Skin Antisepsis	3.0 Nurses will consider the following factors when performing catheter site care using aseptic technique: <ul style="list-style-type: none"> <li>■ Catheter material (composition);</li> <li>■ Antiseptic solution; and</li> <li>■ Client's tolerance (skin integrity, allergies, pain, sensitivity and skin reaction)</li> </ul>	IV
		IV
Tip Placement	4.0 Nurses will not use the central venous access device (CVAD) until tip placement has been confirmed.	
Dressings	5.0 Nurses will consider the following factors when selecting and changing VAD dressings: <ul style="list-style-type: none"> <li>■ Type of dressing;</li> <li>■ Frequency of dressing changes; and</li> <li>■ Client's choice, tolerance and lifestyle.</li> </ul>	IV
Securement	6.0 Nurses must stabilize the VAD in order to: <ul style="list-style-type: none"> <li>■ Promote assessment and monitoring of the vascular access site;</li> <li>■ Facilitate delivery of prescribed therapy; and</li> <li>■ Prevent dislodgement, migration, or catheter damage.</li> </ul>	III
Patency/Flushing/ Locking	7.0 Nurses will maintain catheter patency using flushing and locking techniques.	IV
	8.0 Nurses will know what client factors, device characteristics and infusate factors can contribute to catheter occlusion in order to ensure catheter patency for the duration of the therapy.	IV
Occlusion	9.0 Nurses will assess and evaluate vascular access devices for occlusion in order to facilitate treatment and improve client outcomes.	IV
Blood Withdrawal	10.0 Nurses will minimize accessing the central venous access device (CVAD) in order to reduce the risk of infection and nosocomial blood loss.	IV
Add-Ons	11.0 Nurses will change all add-on devices a minimum of every 72 hours	IV
Documentation	12.0 Nurses will document the condition of vascular access devices including: <ul style="list-style-type: none"> <li>■ The insertion process;</li> <li>■ Site assessment; and</li> <li>■ Functionality.</li> </ul>	III
Client Education	13.0 Nurses will help clients to attain the highest level of independence through client education.	IV

\* Please refer to page 12 for *Interpretation of Evidence*.

## Summary of Recommendations

RECOMMENDATION		*LEVEL OF EVIDENCE
<b>Education Recommendations</b>		
	<p><b>14.0</b> The principles and practice of infusion therapy should be included in the basic education curriculum, be available as continuing education, be provided in orientation to new employees and be made available through continuing professional development opportunities.</p> <p><b>15.0</b> Schools of Nursing will include RNAO best practice guidelines <i>Assessment and Device Selection for Vascular Access</i> and <i>Care and Maintenance to Reduce Vascular Access Complications</i> as reference material for core curricula.</p>	<p>IV</p> <p>IV</p>
<b>Organization &amp; Policy Recommendations</b>		
	<p><b>16.0</b> Health care organizations will have policies that address components of vascular access therapy in order to ensure positive client outcomes.</p> <p><b>17.0</b> Health care organizations, in collaboration with their infection control teams, will monitor complications of infusion therapy and use data to employ risk reduction strategies.</p> <p><b>18.0</b> Health care organizations will implement the use of safety engineered devices and equipment to reduce the nurse's risk of sharps injuries that can lead to blood borne diseases. The organization's risk management program will monitor assessment of these practices and incidents.</p> <p><b>19.0</b> Health care organizations have access to infusion therapy nursing expertise to support optimal vascular access outcomes.</p> <p><b>20.0</b> Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:</p> <ul style="list-style-type: none"> <li>■ An assessment of organizational readiness and barriers to education.</li> <li>■ Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process.</li> <li>■ Dedication of a qualified individual to provide the support needed for the education and implementation process.</li> <li>■ Ongoing opportunities for discussion and education to reinforce the importance of best practices.</li> <li>■ Opportunities for reflection on personal and organizational experience in implementing guidelines.</li> </ul> <p>In this regard, RNAO (through a panel of nurses, researchers and administrators) has developed the <i>Toolkit: Implementation of Clinical Practice Guidelines</i> based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of the RNAO guideline <i>Care and Maintenance to Reduce Vascular Access Complications</i>.</p>	<p>IV</p> <p>IV</p> <p>III</p> <p>III</p> <p>IV</p>

## *Interpretation of Evidence*

### Levels of Evidence

- Ia Evidence obtained from meta-analysis or systematic review of randomized controlled trials.
- Ib Evidence obtained from at least one randomized controlled trial.
- IIa Evidence obtained from at least one well-designed controlled study without randomization.
- IIb Evidence obtained from at least one other type of well-designed quasi-experimental study without randomization.
- III Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.
- IV Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.

