

**Registered Nurses' Association of Ontario (RNAO)
Multiple IV Infusion Safety and Nursing Education Implications
Webinar**

Monday, June 29, 2015, 12:00-1:00 p.m. EDT

Moderator:

Grace Suva, MN, RN
Program Manager, International Affairs & Best Practice Guidelines Centre

Presenters:

Sonia Pinkney, PEng, MHSc
Human Factors Engineer
HumanEra
University Health Network

Christine Koczmar, RN, BSc
Consultant
Institute for Safe Medication Practices Canada (ISMP)
Canada

Questions and Answers from the Webinar:

Questions	Answers
Where can I download the modules to view?	Please visit http://elearning.rnao.ca/ and click on Multiple IV Infusions to expand the descriptions for each module. Click on a module title to view (you must create an account to view the material). Alternatively, organizations can download the module SCORM files directly onto their learning management systems (LMS) here .
Can I share the modules with colleagues?	Yes, however you must log-in to http://elearning.rnao.ca/ and create an account in order to view (stream) the modules.

<p>Is there any new information on TKVO rates, particularly with multiple infusions?</p>	<p>This topic was outside of the project scope. Generally speaking the TKVO rate varies depending on the access used. Some accesses may be sufficient with a lower rate, whereas some central lines, specifically continuous venous chemotherapy and dialysis catheters, need a greater TKVO rate.</p>
<p>The need to run a secondary infusion below a maximum flow rate to prevent unintended concurrent flow from the primary line wasn't something I was previously aware of. Is the rate the same for all infusion pumps?</p>	<p>The quick answer is no. Please ensure that you check with your vendor or operations manual on what the flow rate is for the specific pump and IV tubing that you use.</p> <p>There are multiple factors that affect concurrent flow:</p> <ul style="list-style-type: none"> • pump design; • head height differential (distance between the top of the fluid level in the primary and secondary IV bags); • design of the back check valve in the primary IV tubing; • viscosity of the fluid; and • many other considerations. <p>Some pumps won't allow you to program a secondary infusion with a high flow rate value while others will. Again, please check your operations manual or speak with your vendor representative.</p>
<p>I use the clamp on my primary IV tubing to prevent concurrent flow when administering a secondary infusion instead of lowering the primary IV bag. Is this an acceptable practice?</p>	<p>Some primary IV tubing come with a clamp above the pump, but it may not always be best practice to use the clamp above the pump to prevent concurrent flow when administering a secondary infusion. Some pumps support the use of the clamp above the IV tube, while others don't because it can introduce other issues, including air in the line at the end of the infusion. Please check with your vendor representative for further information.</p> <p>Some pump manufacturers are starting to remove the clamps above the pump on primary IV tubing (for tubing with a secondary infusion port. Note: there is still a clamp below the pump), so it is important to understand the concepts presented in the e-learning module (e.g. why the primary IV bag needs to be lowered). Using</p>

	<p>this clamp above the pump to administer a secondary infusion may be a particular issue when migrating from a pump that has a clamp to a pump that doesn't use a clamp (e.g. work at a new site, new pumps implemented).</p>
<p>Can we use these modules to meet Accreditation Canada's infusion pump training requirement?</p>	<p>You need to confirm with Accreditation Canada. Accreditation Canada (2013) requires that, "the organization provides ongoing, effective training for service providers on all infusion pumps". Effective training should cover, "client clinical needs, staff competency, staff continuity, infusion pump technology and the location of the pumps" (Accreditation Canada, 2013). Organizations need to show, "documented evidence of ongoing, effective training on infusion pumps" (Accreditation Canada, 2013)</p> <p>These e-learn modules may help support these goals, but you will need to confirm with Accreditation Canada as to the extent to which the e-learn fulfills these requirements.</p> <p>Reference: Accreditation Canada (2013). <i>Required organizational Practices Handbook 2014</i>. Retrieved from: https://www.accreditation.ca/sites/default/files/rop-handbook-2014-en.pdf</p>
<p>When there is secondary infusion added, what is the practical solution to correcting the error of administering the primary solution that remains in the shared tubing at the rate of the secondary infusion?</p>	<p>Upon secondary infusion initiation, the pump immediately switches from the programmed primary rate to the secondary rate and pushes the primary medication volume infusion in the shared tubing into the patient at the secondary rate (i.e. the shared infusion volume in the primary tubing downstream of the secondary port). If the secondary rate is significantly higher than the primary rate, the quick administration of the primary medication in the shared infusion volume can cause patient harm. Therefore, do not connect a secondary infusion to a high alert primary infusion.</p>
<p>It was mentioned that it could be an issue when discontinuing a secondary line IV infusion. Could you give an example of this?</p>	<p>Picture this situation: If the patient has a primary line of continuous pain medication and you notice adverse reaction symptoms from</p>

	<p>the medication in the secondary line, when you discontinue the secondary line you have to remember that there is still medication (which caused the adverse reaction), in the shared volume tubing (e.g. patient catheter and connectors). If another infusion i.e. primary line of continuous pain medication, shares the access port (e.g. TKVO), the residual medication (which caused the adverse reaction) will continue to be administered to the patient until the line is fully cleared of this medication.</p>
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All resources regarding additional resources can be found on the '[Care and Maintenance to Reduce Vascular Access Complications](#)' best practice guideline website.

[HumanEra Multiple Intravenous Infusions Phase 2B: Laboratory Study](#)

[Organizations and LMS](#)

[E-Learning Modules](#)