LPN IV Medication Administration

Site Applicability

All VCH Acute Care Sites and Coastal Home Health Program

Practice Level

- **Licensed Practical Nurse (LPN): Advanced Skill**
  - o Upon successful completion of additional education

Manager approval required to register for education sessions

- **On-Line Education (pre-classroom session)**
  - o Learning Hub Course LPN IV Medication Administration
- **Classroom Session through VCH Orientation**
  - o LPN IV Medication Administration Lab
- **LPN IV Competency Validation (see Appendix A for competency checklist)**
  - o Three validations required prior to administering IV medication independently

Requirements

LPNs can **only** administer:

- IV medications to adults
- IV medications by the peripheral intravenous (PIV) route (including midline peripheral catheters)
  - o For midline catheters, LPNs are to connect with their program clinical leads/clinical educator and/or Vascular Access Team for care and maintenance practice guidance.
- IV medications requiring **BASIC monitoring** as per the Parenteral Drug Therapy Manual (PDTM) Client Monitoring Levels

    > **Exception:** Potassium Chloride continuous infusion requires intermediate monitoring. LPNs may administer a continuous maintenance infusion of Potassium Chloride (maximum 40 mmol /1000 mL) that has been compounded commercially or by a pharmacy.

LPNs **cannot** administer

- IV medications IV direct (push)
- IV medications via a Central Venous Catheter (CVC)
- IV medications requiring titration (e.g. IV heparin, IV insulin)
- IV cytotoxic medications as per DST Cytotoxic Agents – Administration and Handling
- Parenteral radiopaque dye
- IV medications requiring INTERMEDIATE and ABOVE monitoring as per the PDTM Client Monitoring Levels
- IV Medications that are Special Access Program (SAP) or an investigational/study medication

Procedure

Follow procedures as outlined in the resources listed below for administration of IV medications. For the Elsevier Clinical Skills links below, please copy and paste them to Google Chrome.

- o Elsevier: Medication Administration: Intermittent Infusion Methods
  - • Procedure section for Piggyback step 7C – Incompatible medication and/or fluid:IV medication must be compatible with the other fluids and medications that are infusing into the IV line you use for the IV medication administration. The process outlined in step 7C does not align with VCH practice. This may mean the IV medication may need to be given via a different central line port or via separate peripheral IV line. https://login.elsevierperformancemanager.com/systemlogin.aspx?virtualName=VancouverCoastalHealth&hhc_url=https%3A%2F%2Flms.elsevierperformancemanager.com%2FContentArea%2FNursingSkills%2FGetNursingSkillsDetails%3FskillKeyId%3D378%26skillId%3DGN_21_7
- o Elsevier: IV – Dose and Flow Rate Calculation https://login.elsevierperformancemanager.com/systemlogin.aspx?virtualName=VancouverCoastalHealth&hhc_url=https%3A%2F%2Flms.elsevierperformancemanager.com%2FContentArea%2FNursingSkills%2FGetNursingSkillsDetails%3FskillKeyId%3D154%26skillId%3DCC_153
- o DST: Medication Dilution and Administration Practices

Documentation

Document medication administration in the Medication Administration Record and as per organizational documentation processes.

Related Documents

Policies
- • Medication Administration Policy
- • Documentation Policy

Guidelines:

Regional

- • Independent Double Check and Double Check of Medication
- • IV Therapy, Peripheral: Insertion, Care and Maintenance
- • Extravasation Management Adults
- • VCH: Medication Dilution and Administration Practices
- • Cytotoxic Agents – Administration and Handling

Vancouver Acute/Richmond Only

- • VA: Medication Administration and Documentation
- • VA/RH: Paper/Electronic Documentation Standards

Resources
- Elsevier Clinical Skills
- Lexicomp
- PDTM
- PTDM Client Monitoring Levels

References

BCCNM. Scope of Practice for Licensed Practical Nurses. (2020). Retrieved from
https://www.bccnm.ca/Documents/standards_practice/lpn/LPN_ScopeOfPractice.pdf

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Approved By: *(committee or position)*	VCH
	Endorsed by: (Regional SharePoint 2nd Reading) Health Authority Professional Specific Advisory Council Chairs (HAPSAC) Health Authority Interprofessional Advisory Council Chairs (HAIAC) VCH Operations Directors VCH Professional Practice Directors **Final Sign Off:** Vice President, Professional Practice and Chief Clinical Information Officer, VCH
Owners: *(optional)*	VCH
	Development Team Lead: Practice Initiatives Lead, Professional Practice, Nursing, VA

Vancouver CoastalHealth

Appendix A: LPN IV Medication Administration Competency Validation Tool

LPN IV MEDICATION ADMINISTRATION COMPETENCY VALIDATION/SKILLS CHECKLIST

TITLE OF SKILL: Intravenous Medication Administration (Secondary Line)

NAME: _____   UNIT: _____

Instructions:

Competency validation in the clinical setting must be evaluated by an acceptable mentor (RN, PCC, CNE). * You are expected to successfully complete *THREE* competency validations using the following skills/checklist. Three different in scope IV Medications should be administered for each evaluation. You may prepare and administer within scope IV Medications for you own patients and those of the RN, with an appropriate mentor. The mentor must complete the Competency Validation Skills Checklist.

*After successfully completed three competency validations, if you still do not feel confident, we encourage you to seek support for further practice opportunities with a mentor before carrying this skill independently.

The CNE/CRN/PCC MUST COMPLETE THE FINAL COMPETENCY VALIDATION/SKILLS CHECKLIST

Competency Validations #1-3

THE NURSE DID:	#1 Date:			#2 Date:			#3 Date:		
	Yes	No	COMMENTS	Yes	No	COMMENTS	Yes	No	COMMENTS
1. Check prescriber's orders									
2. Assess for contraindication									
3. Review medication references (PDTM)									
4. Check compatibilities									
5. Patient Assessment (i.e. Physical Assessment, allergies, IV site, patency of IV site)									

THE NURSE DID:	#1 Date:		#2 Date:		#3 Date:	

6. Equipment Selection
    a. Prescribed therapy
    b. Check expiration date on the medication						

7. Gather equipment and supplies (e.g. prepared medication with correct label, secondary administration set, tubing label, alcohol pads, saline flush, and Alaris pump)						
8. Perform hand hygiene						
9. Verify the correct patient using two identifiers						
10. Explain procedure to the patient, confirm patient agrees to the treatment						

11. Ensure the seven rights of medication safety
    a. Right medication
    b. Right patient
    c. Right dose
    d. Right time
    e. Right route
    f. Right reason
    g. Right documentation						

12. Ensure tubing has been changed per site policy. Set up and label new tubing as required.						

THE NURSE DID:	#1 Date:			#2 Date:			#3 Date:		
13. Prime the secondary tubing using a backflush technique, as required. a. If adding a new secondary line, clean the port closest to the primary IV bag per site policy. Attach and lower the secondary line, opening the secondary roller clamp until the secondary drip chamber is approximately 1/3 full. Close secondary roller clamp. b. If the secondary medication to be administered is <u>incompatible</u> with the previous mini-bag, back flush the secondary line by lowering the line and opening the roller clamp until approximately 25mL of IVF enters the previously infused mini-bag. Empty the drip chamber into the mini-bag, and close the secondary roller clamp. c. If the secondary medication to be administered is compatible with the previously infused medication, no back flushing is required.									
14. Hang the medication to be infused on the IV pole.									

THE NURSE DID:	#1 Date:			#2 Date:			#3 Date:		
15. Spike the secondary medication to be infused using aseptic technique 　　a. Ensure the clamp on the secondary administration set is closed									
16. Squeeze drip chamber, as required, to ensure secondary drip chamber is approximately one half full.									
17. Program the pump									
18. Connect primary tubing to the patient, per site policy, if not already in place									
19. Begin infusion, ensuring secondary roller clamp is open									
20. Verify that the primary infusion is at the rate ordered using the IV infusion pump and that it restarts after the secondary medication solution is complete.									
21. Validate that the medication has infused completely									
22. If disconnecting from patient, flush and lock PIV. If another PIV medication will be administered within 24Hrs, cap tubing with sterile cap (i.e. red dead-ender) and leave secondary bag and tubing in place at the patient's bedside.									
23. Reassess patient and insertion site									
24. Discard supplies in appropriate receptacle and perform hand hygiene									

THE NURSE DID:	#1 Date:	#2 Date:	#3 Date:
25. Document the procedure in the patient's record as appropriate, including MAR and Fluid Balance Record.			
	Mentor(please circle) RN　　CRN　　PCC Signature:_____ Date:_____/_____/_____	**Mentor(please circle)** RN　　CRN　　PCC Signature:_____ Date:_____/_____/_____	**Mentor(please circle)** RN　　CRN　　PCC Signature:_____ Date:_____/_____/_____