

**Royal Hospital for Women (RHW)
COVER SHEET**



Health
South Eastern Sydney
Local Health District

Ref T24/32346

NAME OF DOCUMENT	Peripheral Intravenous Cannula - Insertion, securement and line management
TYPE OF DOCUMENT	Clinical Business Rule
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FORMER REFERENCE(S)	Peripheral Intravenous Cannula- insertion and dressing
EXECUTIVE SPONSOR	S Bolisetty (Medical Co-Director Newborn Care Centre); S Wise (Nursing Co-Director Newborn Care Centre)
AUTHOR	R. Dunkerley (RN), KB Lindrea (CNC)
SUMMARY	To guide clinicians on intravenous cannula insertion and securement

Royal Hospital for Women (RHW) NEONATAL BUSINESS RULE

Peripheral Intravenous Cannula - Insertion, securement and line management

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1. BACKGROUND

Peripheral intravenous cannulas (PIVCs) are used to administer fluids, blood products and medications. Sterile technique principles must be adhered to throughout the insertion procedure. The management of intravenous lines includes insertion under sterile technique, secure dressing and safe removal.

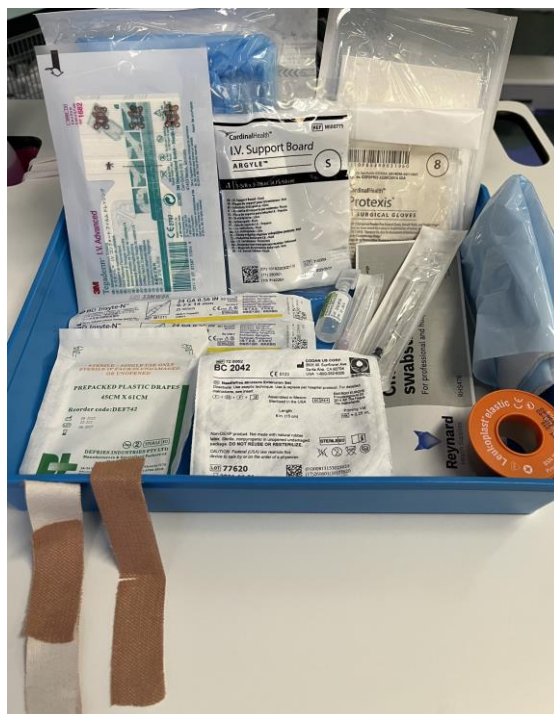
2. RESPONSIBILITIES

Medical and Nursing

3. PROCEDURE

3.1 EQUIPMENT (Picture 1)

- Blue tray
- Dressing pack
- 0.9% Sodium Chloride 5mL ampoule
- 24/26 Fg cannula
- 1mL luer-lock syringe
- Blunt drawing up needle
- Needle free Minibore extension set
- Sterile plastic drape (60cm x 45 cm)
- Blue-Inco sheet
- 0.5% Chlorhexidine Maxi Swabstick x 2
- Sterile gloves and sterile paper towels
- Transparent dressing for securement
- Elastoplast
- Arm-board
- Oral Sucrose 24%



Picture 1

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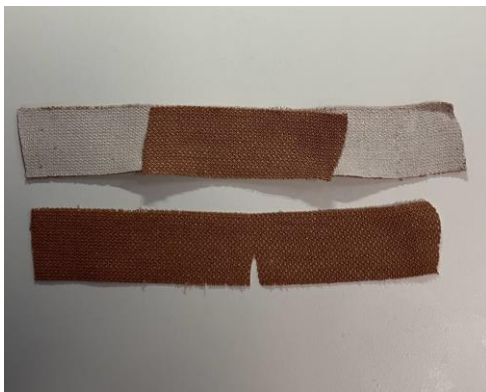
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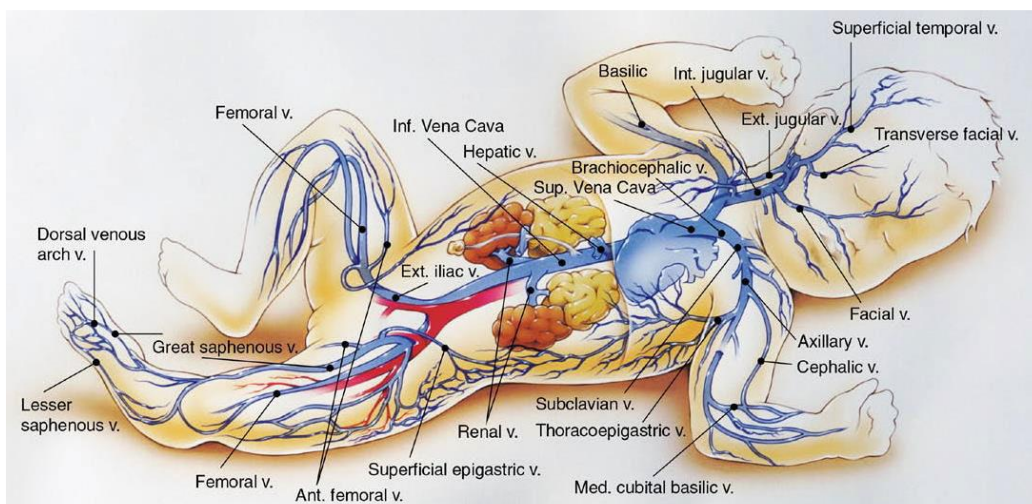
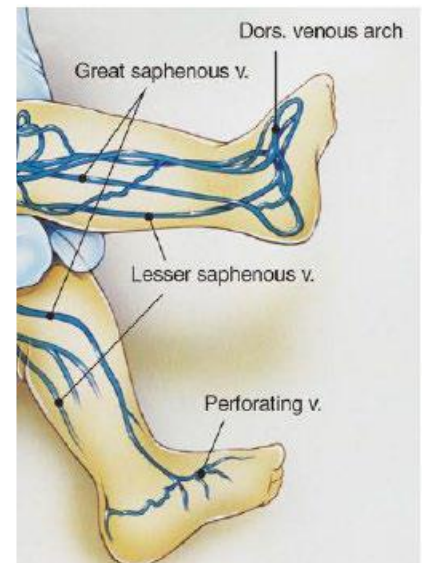
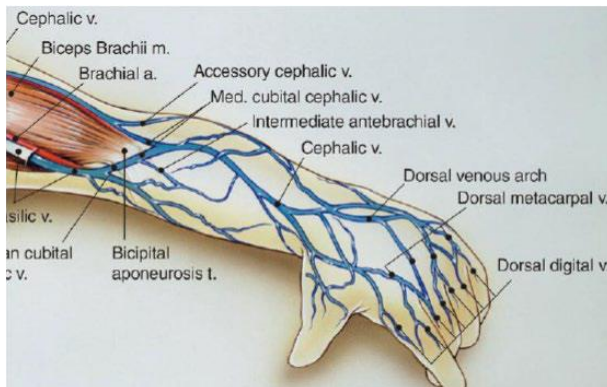
3.2 Clinical Practice

- **Setup**

- Perform identification check with bedside nurse for patient name and MRN
- Collect equipment (Picture 1)
- Clean work surface
- Position a sharps bin close by
- Prepare strapping to secure arm-board by cutting x1 Elastoplast with backing and 1 x Elastoplast with middle slit (Picture 2)
- Select an appropriate vein to cannulate (Picture 3)



Picture 2



Picture 3

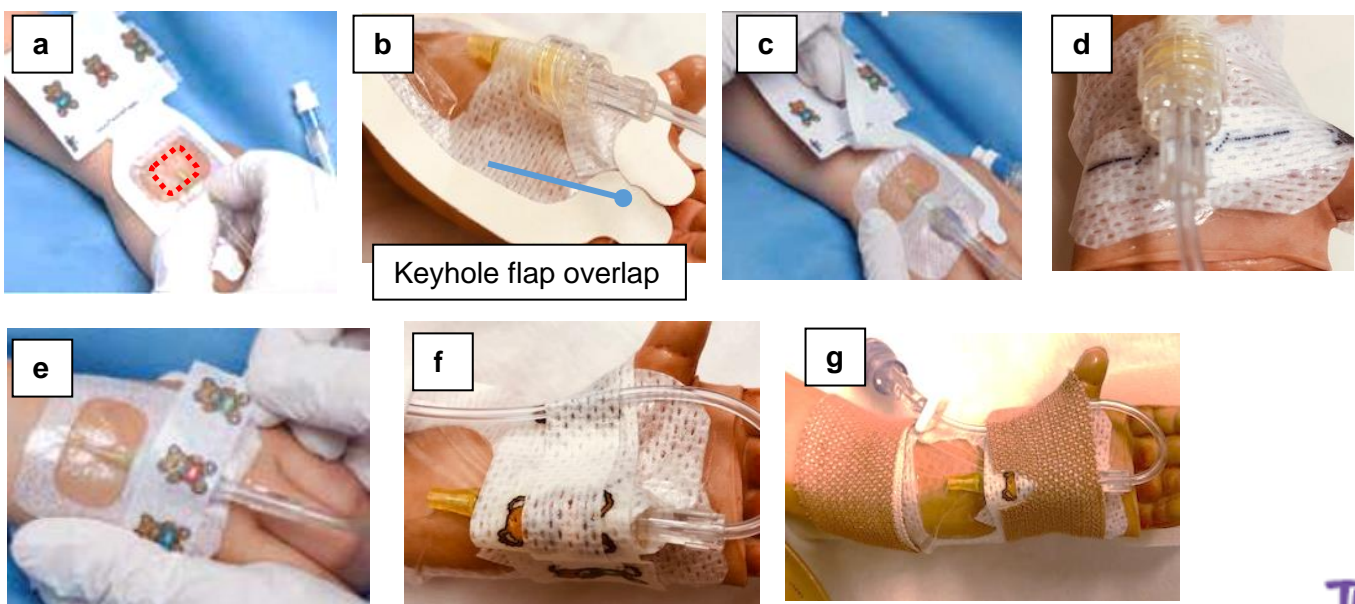
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- **Preparation for cannulation**
 - Position infant in comfortable position, wrap snugly and provide EBM/ sucrose/ for pain relief
 - Make a fenestrated hole in the blue inco-pad to pull through selected limb for cannulation
 - Perform thorough hand wash. Don sterile gloves
 - With assistance from nursing staff, prepare equipment on sterile field
 - Open dressing pack onto blue tray
 - Open all other equipment onto dressing pack
 - Prime Needlefree Minibore extension set with 0.9% Normal Saline
 - Leave syringe attached to the extension set
 - Make a small hole in the sterile plastic drape
 - Hold the selected limb for cannulation with a piece of sterile gauze
 - Clean the whole limb with a chlorhexidine swabstick focusing on the insertion site
 - Repeat cleaning with another swabstick
 - Insert the limb through the fenestrated sterile plastic drape
 - Use a sterile gauze to apply tourniquet to the limb
 - Cannulate the vein whilst protecting key parts and key sites from contamination
 - Remove/loosen tourniquet when cannulation is successful
 - Remove stylet from cannula and attach the primed T-extension set making a tight connection
 - Dispose sharps in yellow sharp bin
 - Flush the cannula with the attached 0.9% Normal Saline

- **Securement of PIVC**
 - Ask for assistance to secure the cannula with transparent dressing. Secure as follows:
 - Position clear window directly over insertion site
 - Overlap notch flaps under cannula-extension connection
 - Remove paper backing
 - Secure notch flaps with one thin strip
 - Apply large 'teddy bear' strip directly over connection
 - Create safety loop with additional thin strip
 - Secure appropriate size arm board with prepared Elastoplast tapes (Picture 2)



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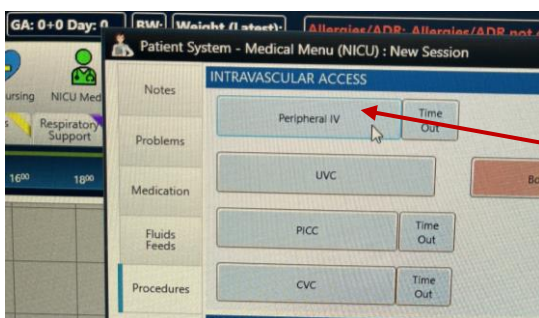
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- Documentation

- Medical



Locate 'NICU Medical' tab on top panel.

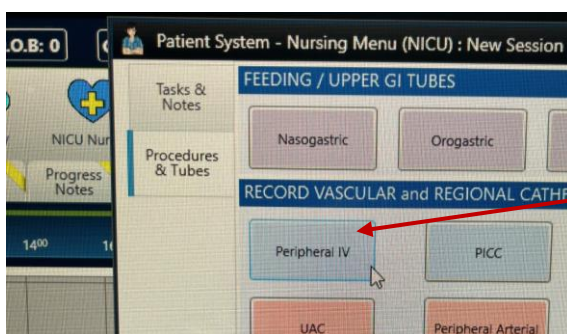


Click on Procedures → Peripheral IV. Complete prompted form.

- Nursing



Locate 'NICU Nursing' tab on top panel.



Click on Procedures & Tubes → Peripheral IV. Complete prompted form.

3.4 Abbreviations

PIVC	Peripheral Intra Venous Cannula	IV	Intra Venous
MRN	Medical Record Number	EBM	Expressed Breast Milk

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3.5 References

1. NSW Health Policy Directive, 22nd September 2017. Clinical Procedure Safety. Doc No. PD2017_032, File No. CEC 17/238. Department of Health, NSW.
2. NSW Department of Health Safety Alert SN: 003/07. Extravasation of IV fluids – care of the cannula site in neonates and children. Document No. PD2007_07.
3. Royal Children's Hospital Melbourne; Clinical Practice Guidelines: (2019). Intravenous access – Peripheral. <https://www.rch.org.au/clinicalguide>

4. RELATED BUSINESS RULES AND POLICY DOCUMENTS

- Medical - Extravasation and infiltration injuries prevention and management
- Intravenous Line Management

5. CULTURAL SUPPORT

- When clinical risks are identified for an Aboriginal family, they may require additional supports. This may include Aboriginal health professionals such as Aboriginal liaison officers, health workers or other culturally specific services.
- For a Culturally and Linguistically Diverse CALD family, notify the nominated cross-cultural health worker during Monday to Friday business hours.
- If the family is from a non-English speaking background, call the interpreter service: NSW Ministry of Health Policy Directive PD2017_044-Interpreters Standard Procedures for Working with Health Care Interpreters.

6. IMPLEMENTATION PLAN

This CBR will be distributed to all medical, nursing and midwifery staff via @health email. The CBR will be discussed at ward meetings, education and patient quality and safety meetings. Education will occur through in-services, open forum and local ward implementation strategies to address changes to practice. The staff are asked to respond to an email or sign an audit sheet in their clinical area to acknowledge they have read and understood the revised CBR. The CBR will be uploaded to the CBR tab on the intranet and staff are informed how to access.

7. RISK RATING

- Low

8. NATIONAL STANDARD

- Standard 1 Clinical Governance
- Standard 3 Preventing and Controlling Infections
- Standard 4 Medication Safety
- Standard 5 Comprehensive Care
- Standard 6 Communicating for Safety
- Standard 8 Recognising and Responding to Acute Deterioration

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9. REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval
2005	1	KB Lindrea (CNC) RHW NCC LOPs Committee
2016	2	KB Lindrea (CNC) RHW NCC LOPs Committee
2020	3	KB Lindrea (CNC) RHW Quality & Patient Safety Committee
2023	4	R Dunkerley (RN), KB Lindrea (CNC), Endorsed by RHW NCC CBR Committee
23.4.24		Endorsed at BRGC