

# Flowchart for the nurse's management of the peripheral intravenous catheter for prevention of associated injuries in hospitalised children

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This flow chart summarises nursing actions and is to be used in conjunction with the full evidence-based practice guideline (available from author, via [cndu@uct.ac.za](mailto:cndu@uct.ac.za)) and appropriate staff training.

## Background

Sick children, especially neonates and infants, are susceptible to injuries due to their immature anatomy and physiology and developmental factors. These children often need a peripheral intravenous catheter (PIVC) which provides venous access necessary for therapeutic purposes, for the administration of intravenous fluid and medication, blood products and, on occasion, parenteral nutrition.

This intervention is very common but not without risks. Studies have shown that up to 98% of extravasation injuries involved peripheral intravenous catheters<sup>3</sup>. Phlebitis was observed in 17.4% of subjects and microbial colonisation with staphylococcus aureus 56.8% and staphylococcus epidermidis 18.1% were isolated from the hubs<sup>7</sup>. Care practices vary widely<sup>4</sup>.

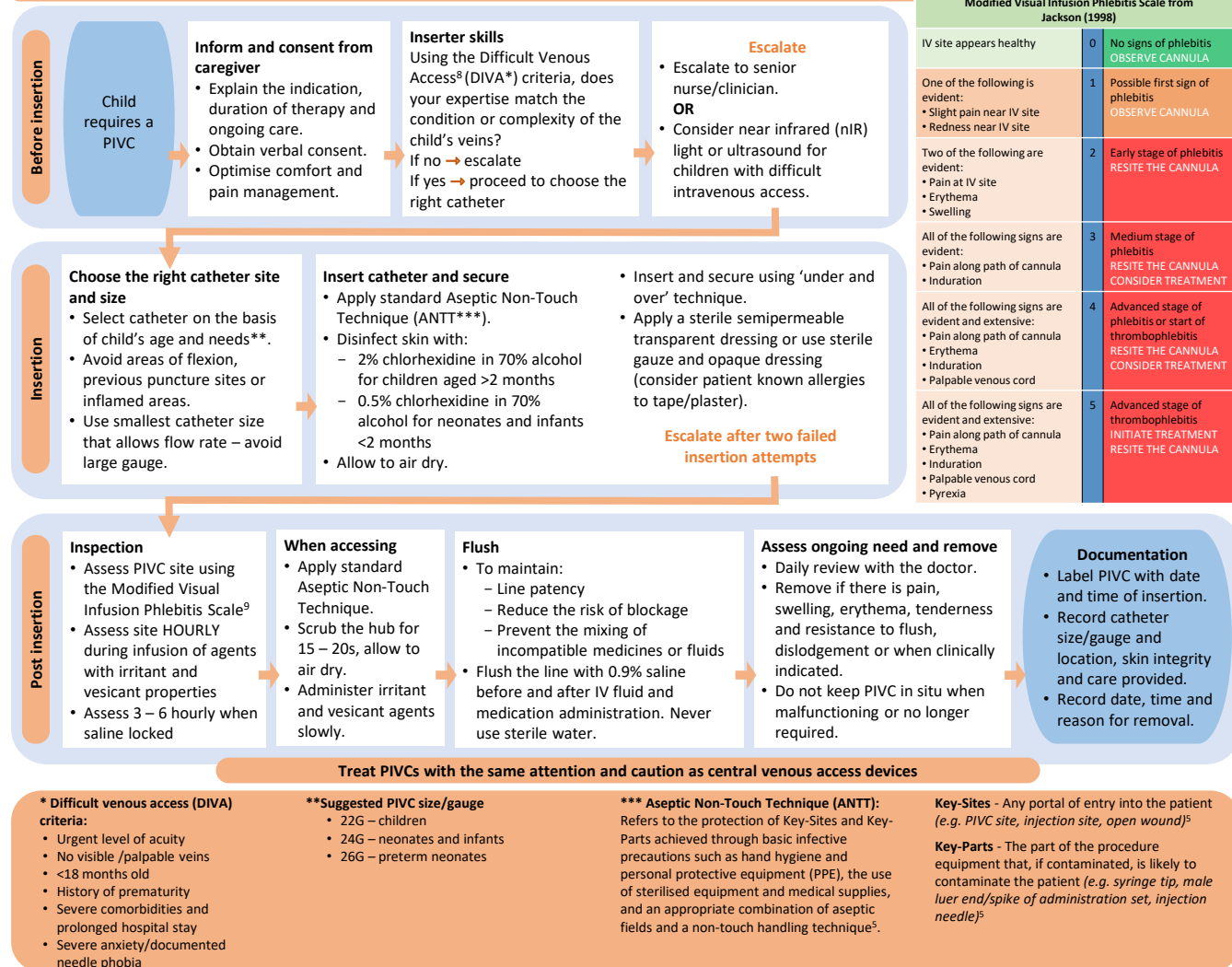
PIVC intervention is often regarded low risk and therefore receives less attention as nurses may underestimate injury risk.

## Purpose of this guideline

The purpose of this guideline is to decrease:

- Chemical injuries caused by infusates or skin antiseptics.
- Infectious injuries due to contamination or colonisation of the catheter or intravenous site.
- Mechanical injuries caused by a catheter that is too large for the vasculature, catheter movement, insertion trauma, or catheter material and stiffness.
- To standardise PIVC practice.

## Right care from the start to the end of the line



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