

A concept-based approach to align catheter use with clinical needs and promote patient-centred care.

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BACKGROUND Peripheral intravenous catheters (PIVCs) are the most commonly used invasive devices in healthcare, yet they are frequently associated with complications and unnecessary use. Current guidelines remain overly generic and do not distinguish between the diverse clinical purposes and durations of PIVC use.

OBJECTIVE Introduce a simple clinical framework to guide PIVC use, supporting decision-making on device choice, insertion strategy, and maintenance according to clinical needs.

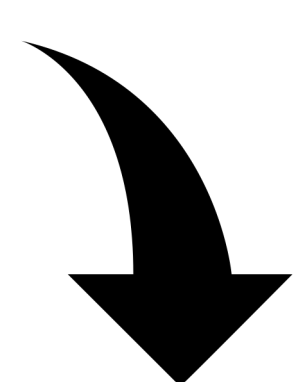
One question changes everything

Is this catheter for a procedure or for therapy?

Prioritise First-attempt success

Simple & cost-effective devices

Early removal



Complications
Costs

Procedural PIVC

Expected dwell time <24h
e.g., CT scan, ED short stay

Immediate Risk

First-attempt failure
Local trauma

Therapy PIVC

Predict dwell time > 24h
e.g., Antibiotics, Hospitalisation

Delayed complication

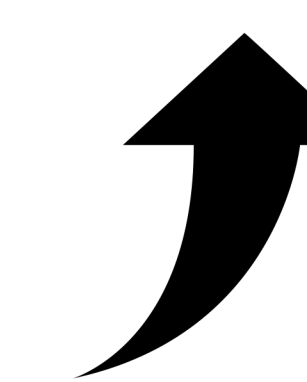
Phlebitis
Infection
Occlusion

Prioritise complication prevention

Better disinfection / devices / Fixation

Daily reassessment

Patient comfort
Guideline applicability



Full Publication