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BACKGROUND AND OBJECTIVE

Midlines, peripheral venous catheters, allow prolonged administration of intravenous therapy to patients with low venous capital. It is essential to test them to limit further misuse or complications as part of tendering procedure.

Objective: To assess two midlines to meet the expectations of medical teams and improve patient's care.

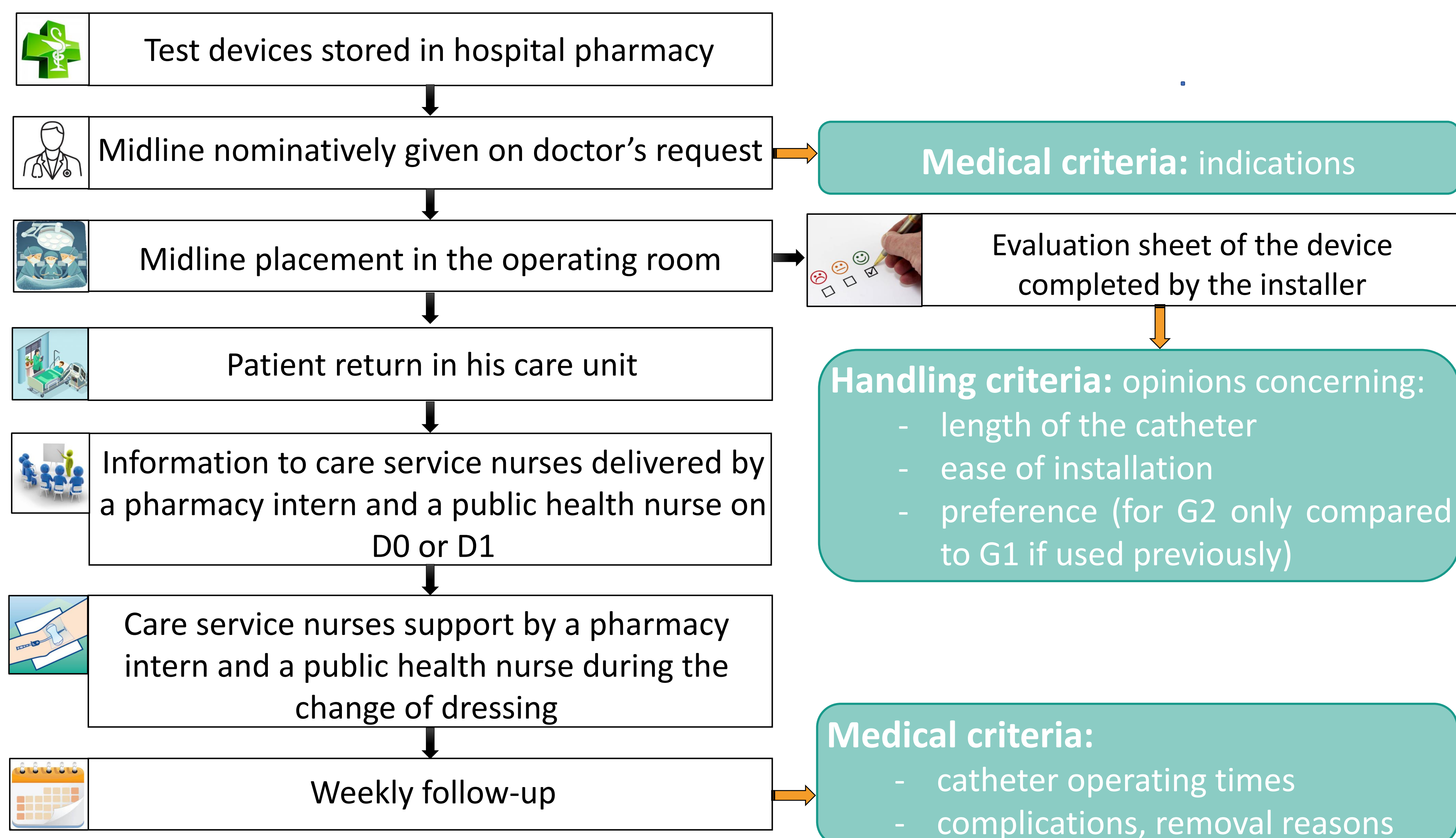
MATERIALS AND METHODS

Medical teams expectations

4 MONTHS OF TESTING : G1 then G2

Referencing a Midline

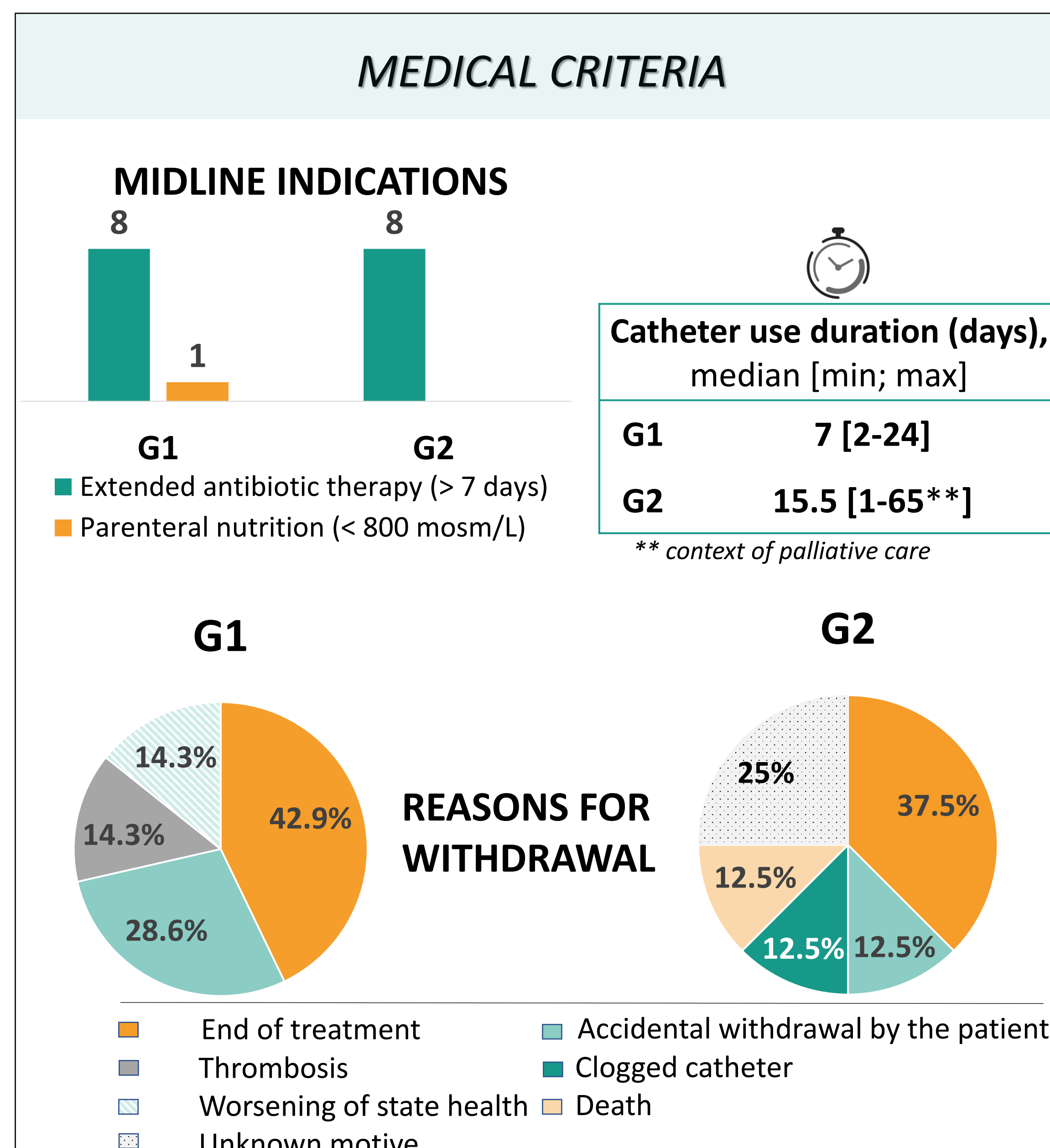
	SMART® MIDLINE Vygon = G1	ARROW® MIDLINE Teleflex = G2
Composition	Polyurethane	Polyurethane
Length (catheter)	15 cm	20 cm
Ø (catheter)	4F	4F
Introduction method	Direct Seldinger	Modified Seldinger
Puncture needle	4.5 cm	7 cm
Guide	Steel guide (0.018" x 50 cm)	Nitinol guide (0.018" x 45 cm)



RESULTS

PATIENTS AND INSTALLERS DATA		
Patient characteristics	G1	G2
Number	9	8
Average age; σ (years)	74; 15	70; 17
M/F gender ratio	0.5	0.6
Installers Data	G1	G2
Trade, N (%)		
Anaesthetist	8 (94%)	8 (100%)
Surgeon	1 (6%)	0 (0%)
Successful insertion, N (%)	7 (70%)*	8 (100%)

* 3 failures on 2 patients (2 failures on the same patient) due to venous access difficulties.



HANDLING CRITERIA

Positive views (%)	G1	G2
Length of the catheter	100%	33%
Ease for installation	86%	67%

Most frequent comments:
 For G1: "rigid guide"
 For G2: "complexity of handling a peel-away sheath"

Among the installers who tested the 2 devices:

Group	Percentage
G1	80%
G2	20%

CONCLUSION AND RELEVANCE

The various patients clinical situations and the small number of patients made the **medical criteria** not relevant enough to be considered. Finally, it is **handling criteria** and **practicality**, as evaluated by caregivers, which led to the **referencing of Smartmidline™ (G1)**. To secure its use, a **hygiene protocol** is implemented already in the hospital. To facilitate the interface between hospital and community cares, **instructions for patients, doctors and pharmacists have to be reinforced**.