

Health economic evaluation of two types of compression systems used for the local treatment of venous leg ulcers, leading to conclusions, whose relative implications are likely to be universal irrespective of geography.

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OBJECTIVE

The main objective of this study is to estimate the complete healing rate of venous leg ulcers treated with a compression system recommended by the French healthcare experts. Secondary objectives include estimating the time to healing of leg ulcers and the cost of management per cured ulcer. This system, UrgoK2, contains both short and long stretch bandages in the same kit, and each layer has visual indicators to allow the correct compression to be applied to the lower limb.

METHOD

- **Data used:** National Health Data System (SNDS) (SNIIRAM-PMSI), reflecting 99% of the population residing in France during the period 2018-2020
- **Study population:** all French patients with a first
- **Ulcer episode:** cured or not
- **Treatment time:** healing time, over a maximum period of 26 weeks
- **Probability of cure over time:** modeled by a Kaplan-Meier curve, for all patients and according to the type of product used.
- **Costs:** related to the pathology and reimbursed by social security for healed patients

RESULTS

Of the 25,255 patients who used a single product type over the entire duration of treatment, it was observed :

- A significantly higher healing rate at 3 months with multilayer bandage systems: 42% vs. 35% for short stretch bandages.
- 25% (p<0.001) higher odds of cure at 1 month of treatment for patients treated with multilayer bandage systems compared to short stretch bandages. They remain significantly higher at 3 months (17%; p<0.001).
- A median time to healing of venous leg ulcers estimated at 137 days in the short stretch bandage group versus 115 days in the multilayer group.

Finally, due to the reduction of healing time, the multilayer bandages allow from reduce the cost from treatment by average patient by 20% patient by 20% compared to short stretch bandages (2 875€ and €3,580 respectively).

OBJECTIVE

This new real-life data confirms the superior effectiveness of multilayer compression systems in healing rate and time to healing and the savings generated by the use of these systems compared to other compression systems recommended by healthcare authorities in France. Similar comparatives were also observed by comparing the two most represented products for each type of bandage with URGO K2 for representing the multilayer bandages versus another leading short-stretch bandage brand also available in France.

Treatment duration	Healing rate		RR	p-value
	SSB	MLB		
1 Month	0.08	0.11	1.25	<0.001
3 Month	0.35	0.42	1.17	<0.001
6 Month	0.60	0.67	1.11	<0.001
12 Month	0.78	0.81	1.04	<0.001

Type of bandage	Mean	Median	Lower Quartile	Upper Quartile
Short-stretch Bandage	208	137	68	300
Multilayer Bandage	185	115	60	253

Table 1: healing rate by band type

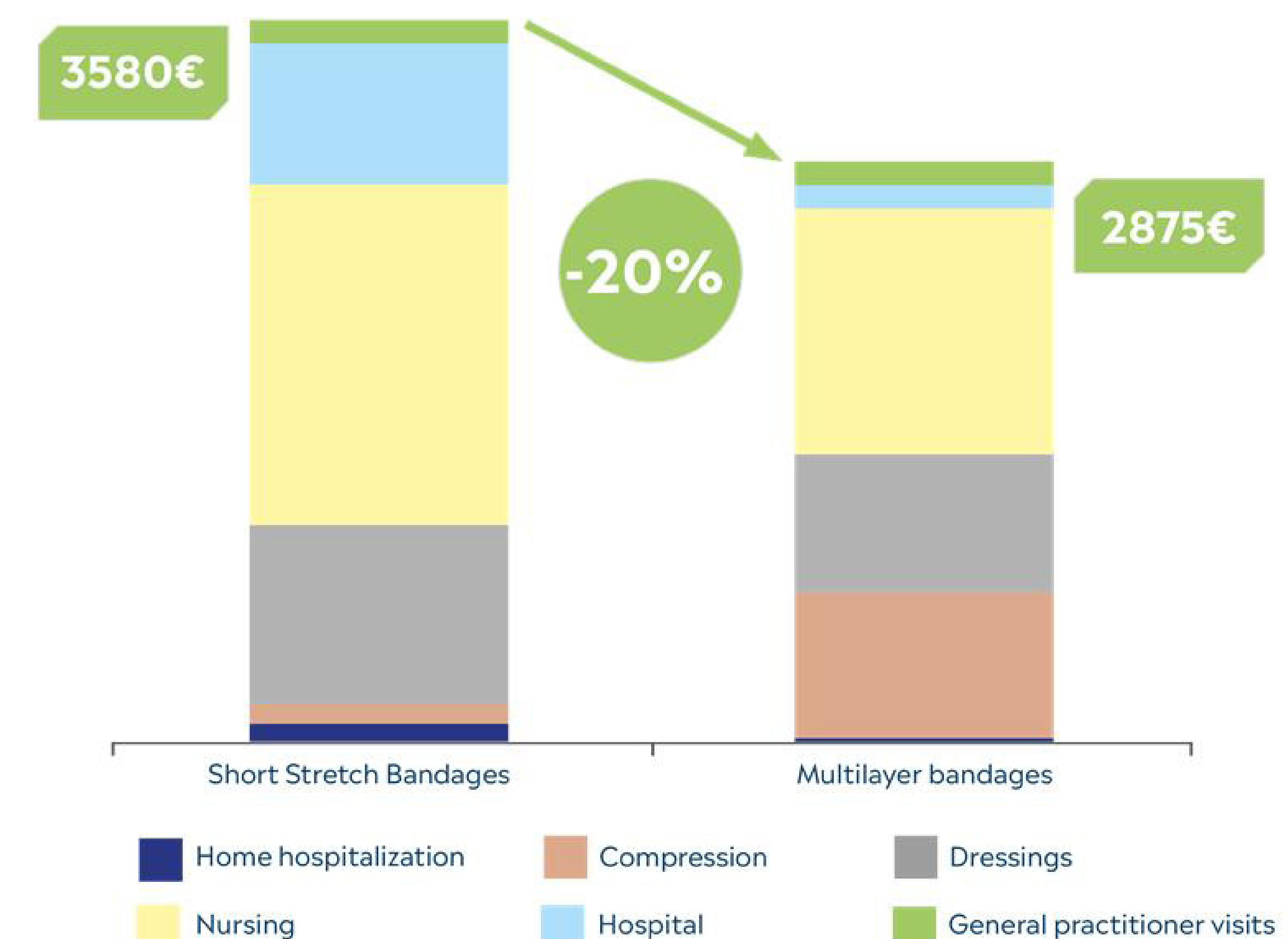


Figure 1: Average cost per patient for the treatment of a healed venous leg ulcer, broken down by expenditure item (in euros)

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