COST-EFFECTIVENESS OF TWO-LAYER DUAL COMPRESSION SYSTEM* (DCS) BANDAGE IN THE MANAGEMENT OF VENOUS LEG ULCERS.

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OBJECTIVE

Estimate the cost-effectiveness (CEA) the two-layer bandage (2LB) system compared to a four-layer bandage (4LB) system for venous leg ulcers (VLUs)

STUDY APPROACH

Patient-level Monte-Carlo decision model based on randomized controlled trial data.

PERSPECTIVE & TIME FRAME

- Integrated healthcare systems
- 12 weeks

DATA COLLECTION

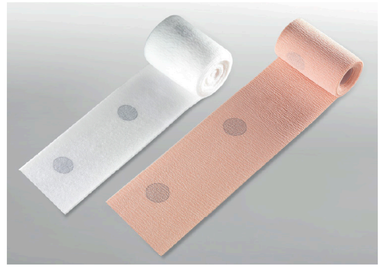
- Clinical data: RCT conducted by Lazareth et al. 2012
- Cost data: Structured literature review and pragmatic meta-analysis

ANALYSIS

- Incremental costs
- Incremental effects: rate of wound healing at or before 12 weeks
- Incremental cost-effectiveness ratios (ICER)

FIGURE 1 | DUAL COMPRESSION SYSTEM

The Dual Compression System consisting of a long stretch and a short stretch component, providing 24 hours of therapeutic compression to the patient whether the patient is ambulating or not.



RESULTS

	Base	Low	High
Duration & Utilization			
2LB follow up, weeks	9.51	5.91	13.11
4LB follow up, weeks	8.98	5.26	12.71
2LB dressing changes/week	2.08	1.87	2.23
4LB dressing changes/week	2.13	1.92	2.34
Effectiveness			
2LB wound healing, %	0.44	0.38	0.51
4LB wound healing, %	0.39	0.35	0.43
Cost			
2LB System	12.00	9.00	15.00
4LB System	9.00	6.75	11.25

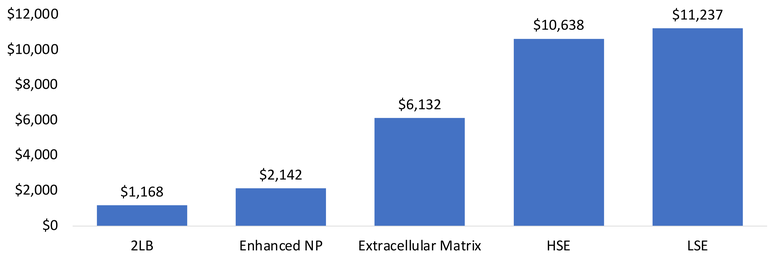
2LB – two-layer bandaged system. 4LB – four-layer bandage system.

	2LB	4LB
Cost	$235.04	$172.49
Incremental Cost	$62.55	-
Wound Healing	44%	39%
Incremental Wound-related Complication	5%	-
ICER	$1,168	-

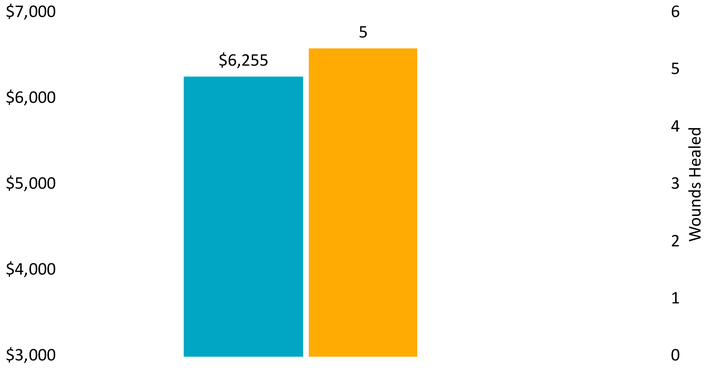
Key Findings

- 2LB was expected to cost $63 per patient over study period.
- 2LB was expected to increase absolute wound healing rate by 5% (13% relative rate).
- ICER was $1,168 per additional wound healed.

Comparison of 2LB ICER to Other VLU Treatment ICERs



RESULTS (CONT'D)



DISCUSSION

- 2LB system has favorable ICER compared to other treatments for VLU.
- For 100 patients we expect 5 additional wounds healed at an additional cost of $6,255.
- When considering cost to treat VLU ($4,567), we expect 2LB system to save $16,580 compared to 4LB system.
- This study did not consider cost of therapy, ancillary wound-related services, or lost productivity. If included this will increase the cost-effectiveness of 2LB system for VLU.

*UrgoK2 Bandage System, Urgo Medical North America

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