

EP056

Cost-effectiveness of a single-use, portable electrical stimulation device in the management of venous leg ulcers.

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BACKGROUND

- Electrical stimulation (ES) is a technology that can stimulate wound healing and relieve wound pain.
- A meta-analysis of published literature has demonstrated that electrical stimulation (ES) enhances chronic wound healing.¹
- Enhanced healing reduces the resource-burden and costs associated with wound management.

AIM

To explore the cost-effectiveness of using a single use, portable ES device* in patients with venous leg ulcers (VLU).

1. Khouri et al 2017. Wound Rep Reg (2017) 25 883–891

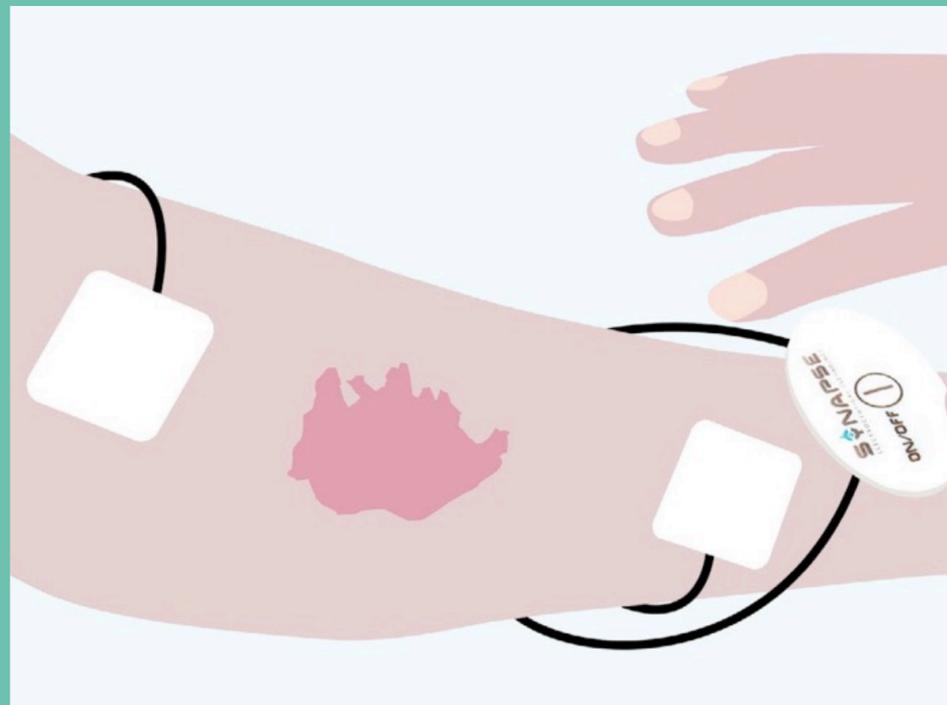


METHODS

- Post hoc analysis of an RCT in VLU
- ES + compression vs sham device + compression.²

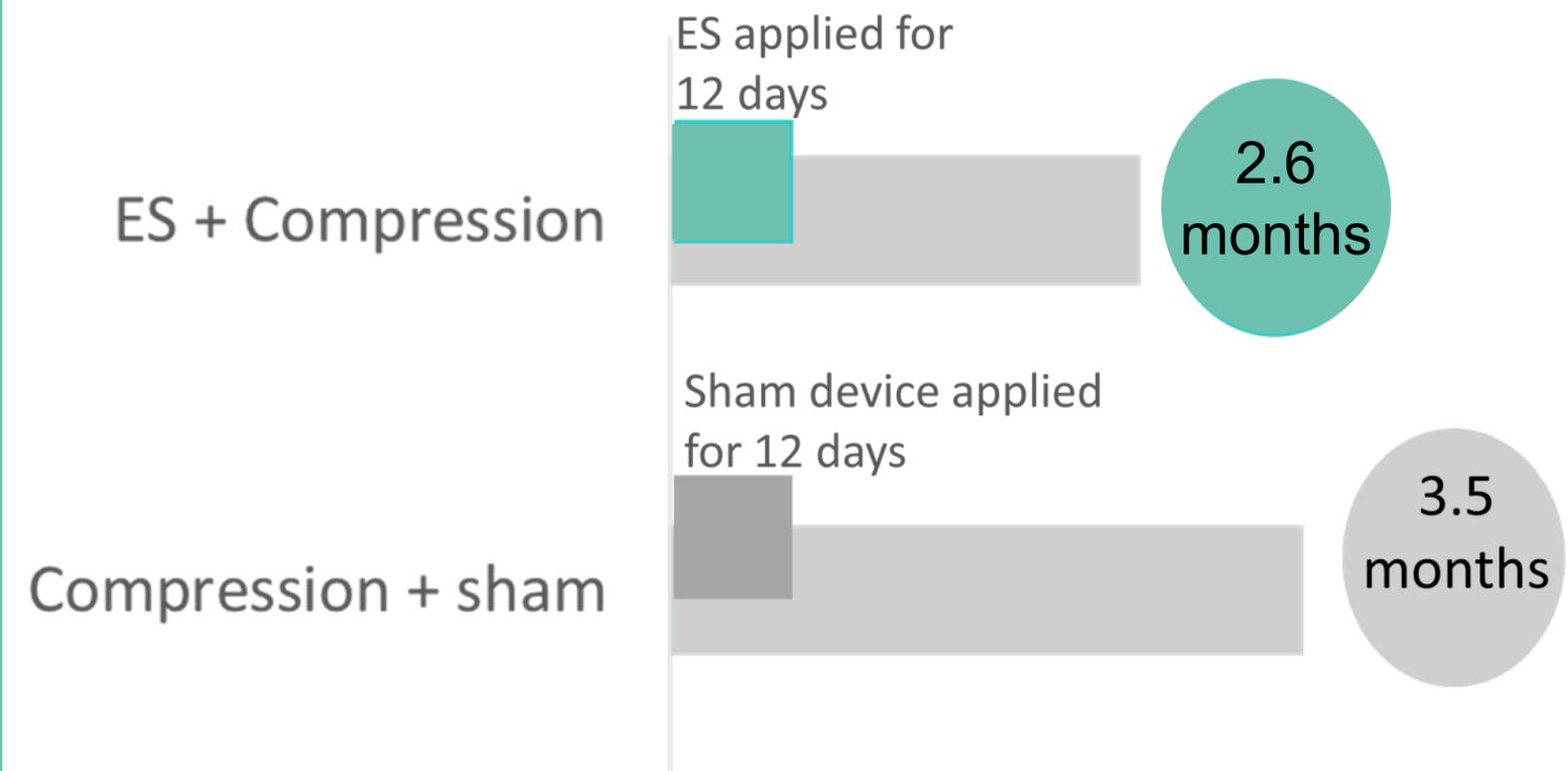
Application

- Electrode pads applied either side of wound
- Usual dressing applied and pads were connected to ES device OR a sham device



Results of the RCT had shown that:

- Overall, 34% of patients healed during the study.
- Overall, time to healing with ES was shorter by 3.6 weeks versus placebo (2.6 vs. 3.5 months)

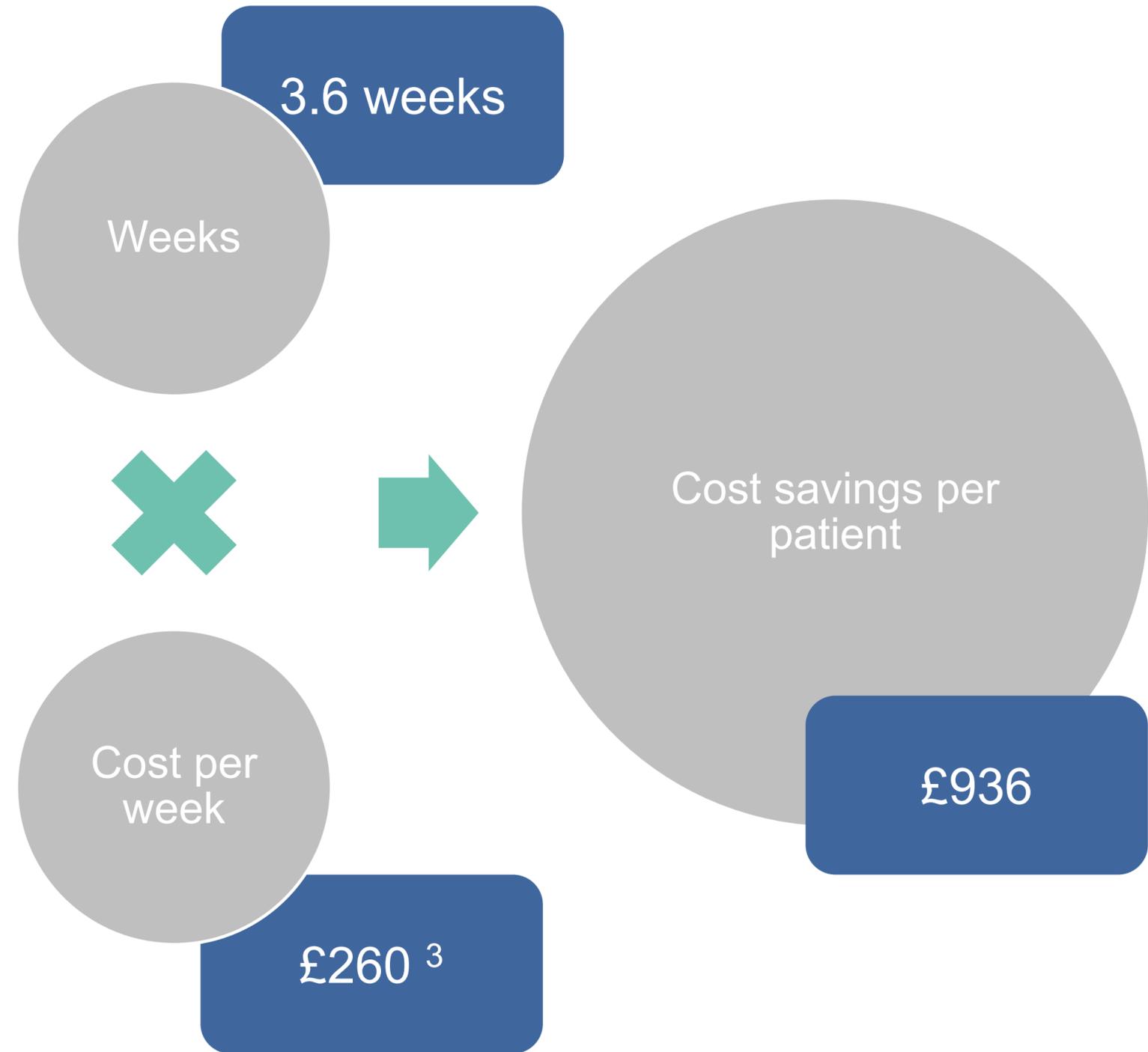


2. Guest et al 2018. J. Wound Care 2018; 27(4):230–243.

RESULTS

- A separate study had calculated the weekly cost of treating wounds >1 year duration
 - £260 per week³
- This was used as a basis to calculate the potential savings associated with electrical stimulation.

The faster healing time achieved in the RCT with ES could save up to £936 per patient healed.



3. Guest et al 2017. Int Wound J. 2017; 14(2):322–330.

RESULTS continued

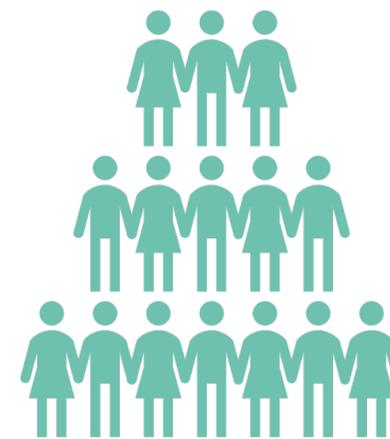
- Taking into account the *proportion* of patients who achieved healing in the study (34%)² and the cost of the device, the overall cost saving in the study cohort was £78 per patient
- This was driven by a reduced number of nursing visits

CONCLUSION

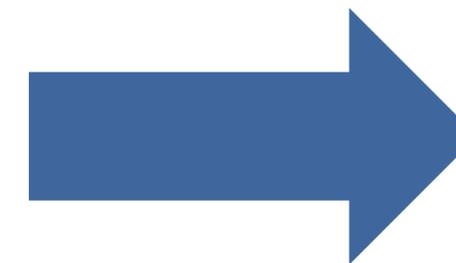
When used along with compression, electrical stimulation may reduce the overall cost of healing in VLU and reduce the resource burden associated with non-healing wounds.



Average savings per patient



Every 100 patients treated ...



... frees up 122 weeks of nurse/GP time

2. Guest et al 2018. J. Wound Care 2018; 27(4):230–243.

