

CATEGORY: ADVANCED WOUND THERAPY

MAKING THE CASE

WOUNDEXPRESS

INTRODUCTION

WoundExpress (Huntleigh Healthcare Ltd) is an advanced wound therapy proven to contribute to the healing of hard-to-heal venous leg ulcers (VLUs). Therapy is delivered via a unique intermittent pneumatic compression device, which is applied to the thigh of the ulcerated limb, away from the actual wound site. Used as an adjunct to standard wound treatment, WoundExpress is applied and managed by patients themselves, in their own homes. The therapy has been demonstrated to elicit improved venous and arterial blood flow at the wound site (Morris et al, 2020); two hours of daily use has resulted in significant reductions in both wound size and wound-related pain (Naik et al, 2019; Ivins et al, 2020) with concomitant improved quality of life for patients and cost savings for health care providers.

THE COST OF HARD-TO-HEAL WOUNDS

The annual cost of managing patients with VLUs in the UK has been estimated to be in the region of £2 billion (Phillips et al, 2019). This substantial cost can be attributed to two factors: firstly, VLUs are highly prevalent, affecting between 0.1% and 0.3% of the UK population (NICE, 2020) and, secondly, a large proportion of VLUs are recalcitrant or 'hard to heal'. A study by Guest and colleagues showed that, of 440 patients with VLUs who were in gold standard compression, 48% had not healed within 12 months (Guest et al, 2018). The annual cost of managing an unhealed VLU is 4–5 times more than that of managing a healed VLU: £2,981 per healed VLU versus £13,455 per unhealed VLU (Guest et al., 2018). Furthermore, these costs will continue to rise as the total number of chronic wounds is growing by 12% annually, hence underlining the need for the development and utilisation of novel, advanced therapies to treat such problematic wounds (Guest et al, 2017).

IMPACT ON THE PATIENT

The significant negative effects of chronic wounds on patient quality of life are well documented – potentially causing isolation and depression, and limiting activities of daily living (Wounds International, 2012). Furthermore, the longer healing is delayed, the greater the negative effects for the patient (Vowden, 2011).

THE NEED FOR ADVANCED ADJUNCTIVE THERAPIES

It is clear that current standard wound care is not effective for all VLUs. The Wounds UK Best Practice Statement for the Treatment of Venous Leg

Ulcers recommends that if a wound has failed to progress towards healing after 4 weeks of treatment, reassessment and identification of any contributing factors should occur; the use of advanced adjunctive therapies can also be considered at this timepoint (Wounds UK, 2019).

EVIDENCE IN PRACTICE

A clinical study by Naik et al (2019) recruited 21 patients with hard-to-heal wounds (mean duration of 45 months prior to study entry). Participants used the WoundExpress for 2 hours daily for 8 weeks; 10% of wounds healed completely and a further 85% of wounds progressed towards healing, with mean reduction in wound size of 46%. Furthermore, reported wound related pain was also significantly reduced in 83% of patients.

A recent case series study also recruited 27 patients with recalcitrant wounds (mean wound duration: 45 months) from 6 UK sites. Participants utilised the WoundExpress for 2 hours daily for a 16-week period. 33% of VLUs healed completely and a further 62% progressed towards healing, with a mean surface area reduction of 66% (Ivins et al, 2020). Reported pain reduced in 80% of patients and significant improvements were observed in patient quality of life in all cases (Ivins et al, 2020). The ease of use of WoundExpress resulted in good levels of concordance, optimising the success of treatment (Ivins et al, 2020).

TIME AND COST SAVINGS

The introduction of advanced therapies in hard-to-heal wounds can, if used appropriately, result in long-term savings — both financial and in terms of clinician time — despite initial increased treatment costs (Vowden, 2011). Examples of cost savings achieved via use of the WoundExpress are outlined in Figure 2 (Naik et al, 2019).

Current nurse shortages and significant pressures on the health service mean that efficient use of nurse time is imperative. A typical VLU requires on average 2 nurse visits per week and this, along with hospital costs, is responsible for 80–85% of the total cost of managing VLUs (Phillips et al, 2019). Use of the WoundExpress does not require any additional nurse time as the therapy is patient-administered. Furthermore, increased healing rates as a result of its use can reduce the frequency or eliminate (in the event of healing) the need for nurse visits.

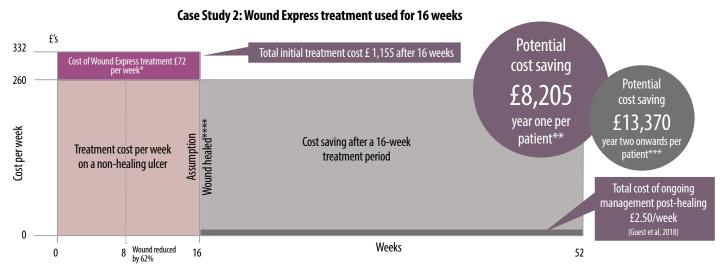




Explanation of how to use this guide: This document can be used to make the case for implementing effective prevention and management measures and may be supported by data from your own care setting. As well as economic impact, it is important to know the impact of interventions on patient quality of life and outcomes.



*Wound Express costs (£84 per week) based on 8 weeks rental (£60 per week) and 1 garment at £195. ***Cost saving £10,765 calculated from £11,440 (260 x 44 weeks) - £675 based on healing after 8 weeks. *Year two saving calculated from £13,370 - £130 (£2.50 per week ongoing management costs)



*Wound Express costs (£72 per week) based on 16 weeks rental (£60 per week) and 1 garment at £195. **Cost saving £8,205 calculated from £11,440 (260 x 36 weeks) - £1,155 based on healing after 16 weeks. ***Year two saving calculated from £13,500 - £130 (£2.50 per week ongoing management costs). ****Assumption based on the linear extrapolation of the 8 weeks healing rate.

SUMMARY: WHAT DIFFERENCE CAN WOUNDEXPRESS MAKE?

For patients: Improves outcomes and wellbeing

WoundExpress is a comfortable, effective treatment that is easily applied, fits with different lifestyles, can reduce pain and can improve previously hard to heal VLUs

For health care professionals: Maximises efficient use of time and resources

WoundExpress provides a cost-effective option for treatment, while also encouraging patient participation in their own therapy routine, releasing much needed time and resources

For health care providers: Reduces costs

Wound Express is an accessible, easy-to-acquire technology that provides opportunity for significant costs avings through method of delivery and the significant costs are considered as the significant cosand wound improvement

References

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