

## Use of PICO<sup>®</sup> Single Use Negative Pressure Wound Therapy System (sNPWT) in a pathway for hard-to-heal wounds helped to kick start wound healing and was estimated to provide cost savings compared with standard care

Hampton J, Meagher H, Sharpe A, Styche T, Hughes J. Multi-centre, international practice-based evidence using PICO™ single-use negative pressure wound therapy: challenging current behaviours in wound care practice. *Wounds International*. 2022;13(2):46–53.

Available at: [Wounds International](#)

### Key points

Compared with standard care, use of PICO sNPWT in a pathway for hard-to-heal wounds resulted in:



### Overview

- An in-service evaluation of PICO sNPWT use in patients with a variety of hard-to-heal wounds (n=323) at 17 sites in Denmark, Ireland, Sweden and the UK
- PICO sNPWT was initiated using a previously published pathway for hard-to-heal wounds (Hughes J, et al. 2021)
- Inclusion criteria were: wounds >6 weeks in duration, <10% wound reduction over 4 weeks, no use of negative pressure wound therapy (NPWT) in the previous 6 weeks, no evidence of clinical infection, ankle brachial pressure index >0.8 and <1.3 for venous leg ulcers and no contraindications for NPWT
- Estimated mean wound duration at time of application was 26.5 weeks; most wounds were static (44.7%) or deteriorating (22.3%)
- Data on wound size and area, wound characteristics and dressing change frequency were collected weekly for 12 weeks or until wound closure, whichever occurred first
- Impact of PICO sNPWT use on material and nursing costs was estimated over 12 weeks
  - Assumptions: dressing changes, 31mins; standard care cost, £9.18 per dressing change; PICO sNPWT cost, £164.89 per week; nursing costs, £29.28 per dressing change
- Clinicians assessed ease of application, achieving a seal and removal, wear time, fluid handling and patient experience

### Results

- With use of PICO sNPWT in this hard-to-heal pathway, 52.0% of 323 wounds healed, 40.6% progressed and 7.4% did not respond
  - Mean weekly wound size reduction was 8.0% for wounds that progressed but did not fully heal
- Overall, the proportion of healed wounds was significantly greater for wounds <6 months than those of >12 months in duration (63.0 vs 28.4%; p<0.01)
- Mean time to heal was 6.3 weeks and mean duration of PICO sNPWT use was 3.3 weeks
- Mean weekly dressing change frequency reduced from 4.7 before the study to 3.0 with use of PICO sNPWT (and 3.1 after its discontinuation)
- Total estimated wound management cost over 12 weeks was lower with use of PICO sNPWT than without the pathway (£651 saving per patient; Figure)
- Across all assessed parameters, mean clinician rating of PICO sNPWT as 'good' or excellent' was 93% (all wounds)

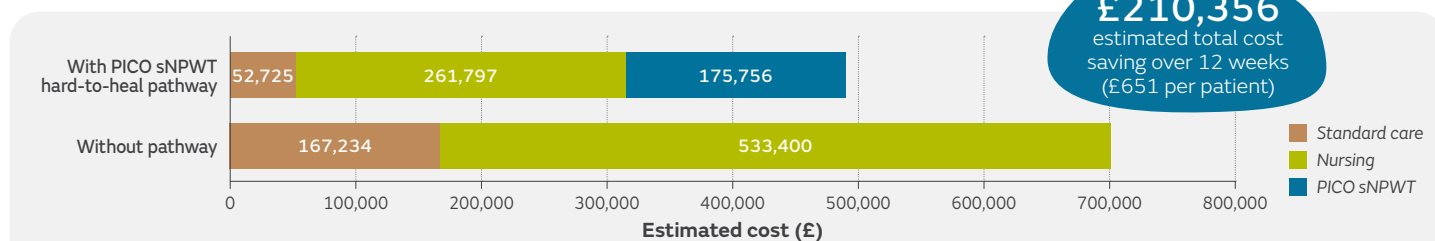


Figure. Estimated total costs with and without use of the hard-to-heal pathway over 12 weeks (n=323)

### Conclusions

With use of PICO sNPWT in a pathway for hard-to-heal wounds, more than half of wounds had healed in 12 weeks and dressing change frequency was reduced compared with standard care; clinician satisfaction was high and there were estimated savings in total wound care costs.

For detailed product information, including indications for use, contraindications, precautions and warnings, please consult the product's applicable Instructions for Use (IFU) prior to use.