

+ Evidence in focus

Publication summary: Dowsett C, et al. *Wounds International* (2017)*

Smith+Nephew

PICO[®] Single Use Negative Pressure Wound Therapy System (sNPWT) significantly improved the healing trajectory of hard-to-heal wounds compared with standard care, resulting in cost savings and released nursing time

+ Plus points



Significant improvement in wound area reduction

with PICO sNPWT versus the pre-PICO sNPWT phase (p=0.006)



33.1% estimated cost reduction

with PICO sNPWT compared with predicted standard care



Estimated released nursing days at 26 weeks with PICO sNPWT compared with predicted standard care

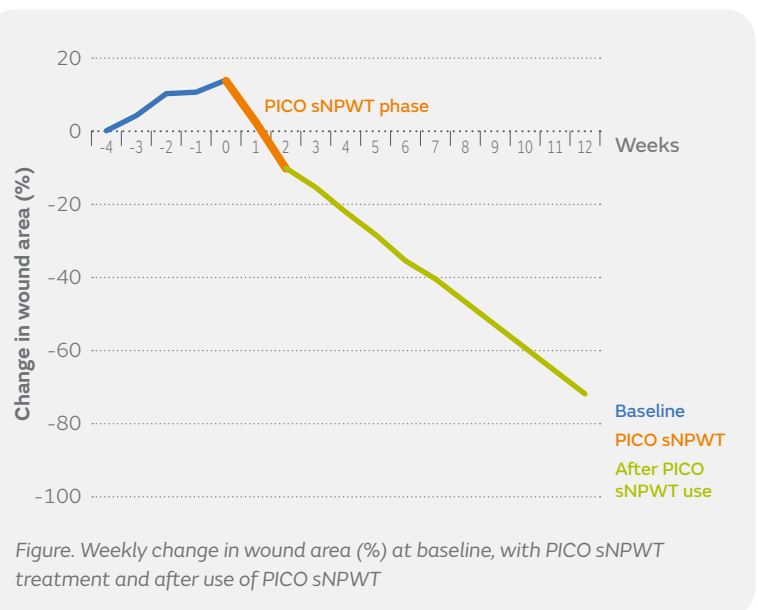
119 days

Overview

- A prospective cohort study of 52 hard-to-heal wounds of varied etiology and duration from 10 sites across Canada, Denmark, Sweden and the UK
- Wounds were treated according to the PICO sNPWT pathway, developed to support clinical decision making, in which they were switched from standard care to treatment with PICO sNPWT at Week 0 for at least two weeks
- Patients were followed up for 12 weeks and then a model was used to predict outcomes at 26 weeks

Results

- PICO sNPWT improved the wound healing trajectory across all wound etiologies (Figure):
 - During PICO sNPWT treatment, wound area reduced by 13.4% more per week than before its use (p=0.006)
 - Wound area reduced 9.6% more per week after the PICO sNPWT phase than during the pre-PICO sNPWT phase (p=0.001)
- PICO sNPWT improved the trajectory of wounds of over 1 year, and healing rates were almost three times greater in wounds of <3 months duration (94.1 vs 33.3%)
- In total, 61.5% of wounds had healed (14 of 52) or were on a trajectory to heal within 26 weeks (18 of 52); only four wounds were predicted to heal with standard care
- Compared with predicted outcomes for standard care, implementing the PICO pathway was estimated to:
 - Reduce total costs by 33.1% (\$72,463.77) over 26 weeks
 - Reduce nursing costs by 49.7%
 - Release of 119 nursing days



Conclusions

PICO sNPWT helped to significantly improve the healing trajectory of hard-to-heal wounds, resulting in reduced estimated costs and nursing time compared with previous standard care.

Important Safety Information:

The information herein is intended for healthcare professionals. The PICO 7 pump contains a MAGNET. Keep the PICO 7 pump at least 4 inches (10 cm) away from other medical devices at all times. Failure to do so can cause the other medical devices to fail which can result in serious harm including death. Excessive bleeding is a serious risk associated with the application of suction to wounds, which may result in death or serious injury. The risk information provided herein is not comprehensive. For full product and safety information, please see the Instructions for Use.

Citation

*Dowsett C, Hampton J, Myers D, Styche T. Use of PICO[®] to improve clinical and economic outcomes in hard-to-heal wounds. *Wounds International* 2017;8(2):52–58. Available at: *Wounds International*