

# Is standard care delivering substandard outcomes?

Helping to improve wound closure rates and reduce SSCs with the power of PICO Single Use Negative Pressure Wound Therapy (sNPWT).

## PICO<sup>◇</sup>

Single Use Negative Pressure Wound Therapy System



# Designed for a higher standard

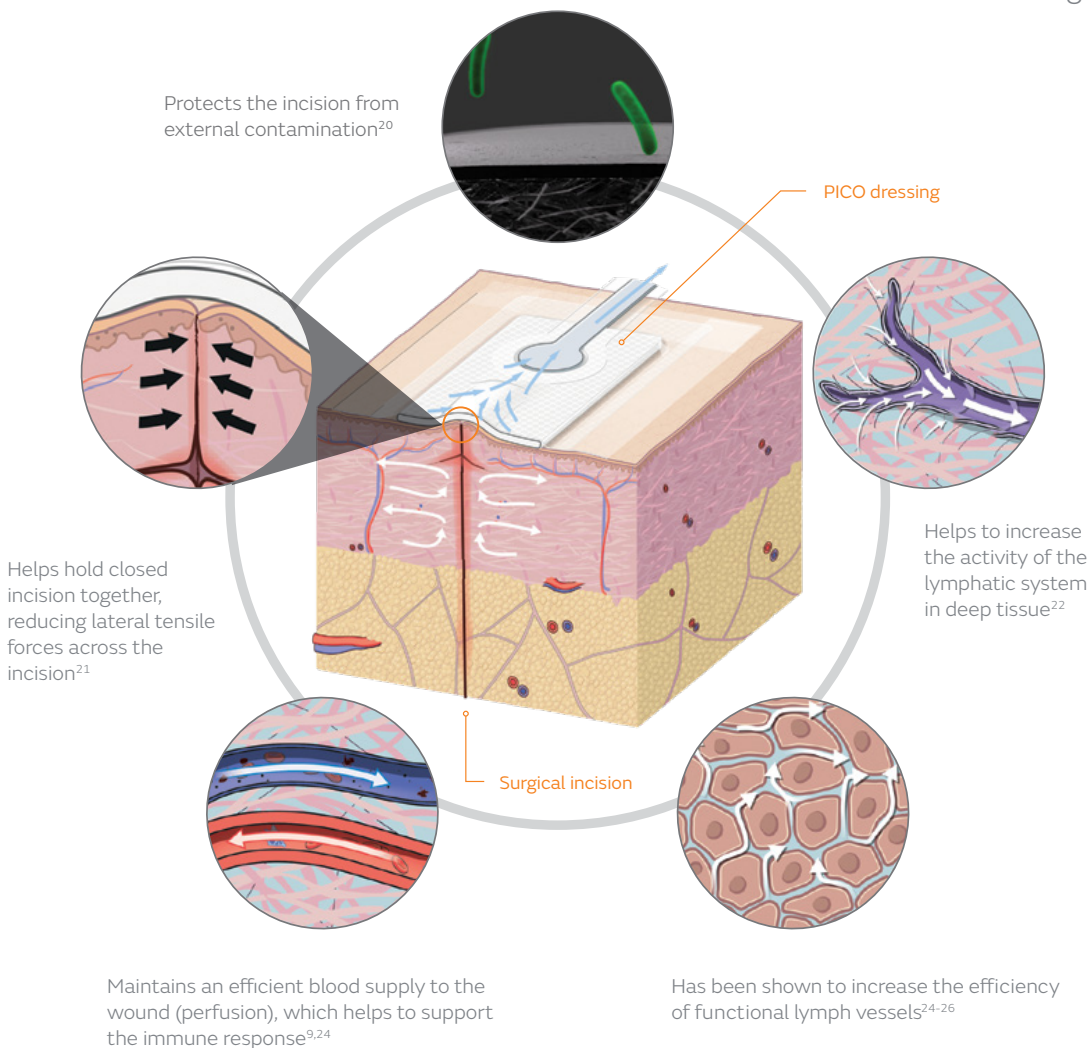
PICO<sup>◇</sup> sNPWT features an exclusive mode of action that enables delivery of negative pressure wound therapy across the entire dressing to the wound or incision and periwound, while simultaneously removing exudate.<sup>18,19</sup>

## For high-risk surgical incisions, PICO:

- ✓ Protects the incision from external contamination<sup>20</sup>
- ✓ Helps hold the incision together, reducing lateral tensile forces across the incision<sup>21</sup>
- ✓ Helps to increase the activity of the lymphatic system in deep tissue via reduction in wound fluid<sup>22</sup>

## For complex open wounds, PICO:

- ✓ Protects the wound from external contamination<sup>11</sup>
- ✓ Improves wound contraction<sup>9</sup>
- ✓ Assists in stimulation of granulation tissue formation<sup>9</sup>
- ✓ Promotes changes in blood flow, and the formation of new blood vessels<sup>15,25</sup>
- ✓ Manages up to 300mL of exudate<sup>9,10</sup>



# The human and economic burden of wounds

**8+ million**

Medicare recipients with chronic and infected wounds<sup>1</sup>

**\$96+ billion**

Annual Medicare expenditures for wound care<sup>1</sup>

## Surgical and diabetic wounds

In 2014, surgical and diabetic wound infections were the most prevalent, while surgical wounds and diabetic foot ulcers drove the highest costs<sup>1</sup>

Risk factors increase the odds of surgical site complications (SSCs), wound chronicity, and associated morbidity and mortality.<sup>2-7</sup>

- Obesity
- Diabetes
- Smoking
- Hypertension
- Immune deficiency

**Reduce complications for surgical incisions.**  
**Kickstart progression for stalled wounds.**

PICO<sup>®</sup> sNPWT is a pioneering negative pressure wound therapy system that raises the level of care:

- Indicated for use on closed **surgical incisions and open wounds**
- Manages low to moderate levels of exudate<sup>9-11</sup>
- Delivers compression-like therapy to the wound, **wound margin and periwound**<sup>12</sup>
- **Canister-free and portable**, which can help improve patient mobility<sup>13,14</sup> and increase satisfaction rates<sup>15</sup>
- **Provides therapy for up to 14 days** with PICO 14 and 7 days with PICO 7/7Y
- **Waterproof** dressing, allowing patients the ability to shower<sup>13</sup>

As compared to standard dressings, PICO has been shown to help:



Reduce the risk of surgical site infections<sup>5,6</sup>



Reduce hospital readmissions<sup>7</sup>



Improve wound closure rates<sup>8</sup>



Increase patient satisfaction rates<sup>8</sup>

**7x**

Obesity raises the risk of surgical site infections (SSIs) by as much as seven times<sup>3-7</sup>

**2.4x**

Patients with diabetic foot ulcers have a 2.4-times increased risk of death<sup>8</sup>

# Open wound management powered by PICO<sup>◇</sup>

PICO sNPWT is a game changer for patients with open wounds of low to moderate exudate levels, especially with early intervention,<sup>27</sup> providing **portable, canister-free therapy** with or without a filler – plus a pump duration of up to 14 days.

In a clinical study of responding chronic wounds, PICO sNPWT was shown to:

- Help reduce the size of chronic wounds up to 6 times faster than standard care<sup>28</sup>
- Reduce the size of chronic wounds by an average of **21%** per week<sup>28</sup>
- Achieve this wound size reduction on average 10 weeks earlier, compared to that predicted with standard care<sup>28\*</sup>

**73.1%** reduction in wound area<sup>15</sup>

In the treatment of lower extremity ulcers, a recent study comparing PICO with traditional NPWT demonstrated PICO to result in:

- **73.1% reduction in wound area<sup>15</sup>**
- **48.1% reduction in wound depth<sup>15</sup>**
- **61% reduction in wound volume<sup>15</sup>**

In a study evaluating the benefit of early intervention, PICO sNPWT was shown to help:

- Improve the healing trajectory of hard-to-heal wounds, when compared with standard care<sup>27</sup>
- Reduce dressing costs by a predicted 11.2% annually<sup>27</sup>
- Save an overall estimated cost of 33% on healed wounds and wounds on a healing trajectory compared to predicted care with standard dressings<sup>27</sup>

## Case study: Diabetic foot ulcer



PICO sNPWT initiated



Day 7: 30% reduction in wound volume and reduction in drainage



Closure achieved in part due to approximately 30 days of PICO sNPWT use (Individual results will vary)

\*Based on a cohort case study of 9 patients with chronic leg ulcers or pressure ulcers.

# Fewer SSCs + More peace of mind

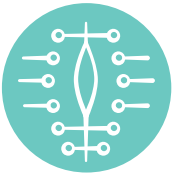
The PICO System is the first Negative Pressure Wound Therapy System, to be indicated to aid in the reduction of the incidence of both superficial and deep incisional SSIs, in Class I and Class II wounds, post-operative seroma and dehiscence\*

\*PICO 7/14 sNPWT, for up to 7 days of therapy.



## Orthopedic surgery

In primary hip and knee arthroplasties, PICO has been shown to reduce superficial SSCs by **76%**.<sup>40</sup>



## Cesarean section

Following cesarean section surgery,\* PICO 7 has been shown to:

- Reduce relative surgical site infections by **50%**<sup>17</sup>
- Reduce relative exudate (versus standard dressings) by **31%**<sup>16</sup>



## Mammoplasty/Mastectomy

For breast surgery patients, PICO 7Y combines our unique mode of action with a dressing design that **treats two wounds simultaneously** and has demonstrated the potential to significantly reduce SSCs and dehiscence and improve surgical scar appearance (versus standard dressings).<sup>29,30</sup>



## Complex procedures

For more high-risk patients undergoing complex surgeries, such as coronary artery bypass grafting procedures and abdominal hysterectomies, PICO 14 delivers the unique benefits of the PICO System with a **pump duration of up to 14 days** to allow therapy for longer hospital stays.<sup>31,32</sup>



PICO 7Y is a game changer for breast surgery incision care, combining our unique mode of action with a dressing design that treats two incisions simultaneously.



\*In women with a pre-pregnancy BMI > 30

# Fewer complications + More convenience

PICO<sup>◇</sup> sNPWT features an ultraportable, canister-free design that has been shown to increase patient satisfaction rates across the clinical spectrum:<sup>15</sup>

- May improve scar quality<sup>29,33-35</sup>
- Portable system allows patients the freedom to continue daily activities<sup>13</sup>
- Gentle silicone adhesive makes application and removal easy<sup>13</sup> while minimizing pain<sup>10,34-37</sup>
- Waterproof dressing, allowing patients the ability to shower<sup>13</sup>
- Quiet system better enables patients to sleep<sup>13</sup>

## Clinically effective meets cost effective

**\$649** PICO was estimated to reduce costs for high-risk coronary artery  
*estimated savings* bypass grafting surgery by \$649 per patient<sup>38</sup>

**\$91** A suitable alternative to tNPWT for more than 88% of wounds treated  
*savings/day* in long-term care facilities, enabling cost savings of up to \$91/day<sup>39</sup>

## PICO Reimbursement Helpline

1-888-705-0061 Monday - Friday 9:00 a.m. to 5:30 p.m. EST

## Important Safety Information

The PICO pumps contain a MAGNET. Keep the PICO pumps at least 4 inches (10 cm) away from other medical devices at all times. As with all electrical medical equipment, failure to maintain appropriate distance may disrupt the operation of nearby medical devices. For full product and safety information, please see the Instructions for Use.

**References:** 1. Nussbaum, Samuel & Carter, Marissa & Fife, Caroline & DeVanzo, Joan & Haught, Randall & Nusgart, Marcia & Cartwright, Donna. (2017). An Economic Evaluation of the Impact, Cost, and Medicare Policy Implications of Chronic Nonhealing Wounds. *Value in Health*. 21. 10.1016/j.jval.2017.07.007. 2. Järbrink K, Ni G, Sönnegren H, et al. The humanistic and economic burden of chronic wounds: a protocol for a systematic review. *Syst Rev*. 2017;6(1):15. Published 2017 Jan 24. 3. Choban PS, Heckler R, Burge JC, Flancbaum L. Increased incidence of nosocomial infections in obese surgical patients. *Am Surg*. 1995;61(11):1001-1005. [PubMed] [Google Scholar] 4. Nagachinta T, Stephens M, Reitz B, Polk BF. Risk factors for surgical-wound infection following cardiac surgery. *J Infect Dis*. 1987;156(6):967-973. [PubMed] [Google Scholar] 5. Friedman ND, Sexton DJ, Connelly SM, Kaye KS. Risk factors for surgical site infection complicating laminectomy. *Infect Control Hosp Epidemiol*. 2007;28(9):1060-1065. 6. Escandon, Julia & Vivas, Alejandra & Tang, Jennifer & Rowland, Katherine & Kirsner, Robert. (2011). High mortality in patients with chronic wounds. *Wound repair and regeneration* : official publication of the Wound Healing Society [and] the European Tissue Repair Society. 19. 526-8. 10.1111/j.1524-475X.2011.00699.x. 7. Darouiche R. Hospital infection control: Surgical site infections. *Infections Disease Advisor*. https://www.infectiousdiseaseadvisor.com/home/decision-support-in-medicine/hospital-infection-control/surgical-site-infections/ Published 2017. Accessed October 25, 2019. 8. Goodridge, Donna & Trepmann, Elly & Embil, John. (2005). Health-Related Quality of Life in Diabetic Patients With Foot Ulcers. *Journal of wound, ostomy, and continence nursing*: official publication of The Wound, Ostomy and Continence Nurses Society / WOCN. 32. 368-77. 9. Malmström M, et al. Biological effects of a disposable, canisterless Negative Pressure Wound Therapy system. *Eplasty* 2014; 14:e15. 10. Data on File DS/18/015/R. Summary Wound Model Report for Opal PICO 7. January 2018 11. Data on file reference 1102010 - Bacterial Barrier Testing (wet-wet) of PICO dressing with a 7 day test duration against S. marcescens; Helen Lumb, February 2011. 12. Smith & Nephew January 2018. Outcomes following PICO compared to conventional dressings when used prophylactically on closed surgical incisions: systematic literature review and meta-analysis. Internal Report. EO/AWM/PICO/004/v1. 13. Hurd T, Trueman, P., & Rossington, A. Use of portable, single use negative pressure wound therapy device in home care patients with low to moderately exuding wounds: a case series. *Ostomy Wound Management*. Volume 60, Issue 3, March 2014. 14. WMP11446.UEP/R3 Project Fairbanks Human Factors Summary Report Issue 5. G Walker, May 2017. 15. Kirsner R, et al. Randomized controlled trial on the efficacy and acceptance of a single-use negative pressure wound therapy system versus traditional negative pressure wound therapy in the treatment of lower limb chronic ulcers (VLU and DFU). Poster presented at Wild on Wounds National Wound Conference, September 12-15, 2018. Poster 18. 16. Hyldig N, Vinter CA, Kruse M et al. Prophylactic incisional negative pressure wound therapy reduces the risk of surgical site infection after caesarean section in obese women. A pragmatic randomised clinical trial. *BJOG*. 2019 Apr;126(5):628-635. 17. Fleming CA, Kuteva M, O'hannon K, O'brien G, McGreal G. Routine use of PICO dressings may reduce overall groin wound complication rates following peripheral vascular surgery. *J Hosp Infect*. 2018;99(1):75-80. 18. Smith & Nephew 2019. Pre-Clinical Assessment of Single-Use Negative Pressure Wound Therapy during in vivo Porcine Wound Healing. Internal Report. DS/19/313/R. 19. Smith & Nephew January 2018. Outcomes following PICO compared to conventional dressings when used prophylactically on closed surgical incisions: systematic literature review and meta-analysis. Internal Report. EO/AWM/PICO/004/v1. 20. Smith & Nephew February 2011. Bacterial Barrier Testing (wet-wet) of PICO dressing with a 7 day test duration against S. marcescens. Internal Report. 1102010. 21. Loveluck J, Copeland T, Hill J, Hunt A, and Martin R, . Biomechanical Modeling of the Forces Applied to Closed Incisions During Single-Use Negative Pressure Wound Therapy. *ePlasty*. 2016. 22. Kilpadi DV, Cunningham MR. Evaluation of closed incision management with negative pressure wound therapy (CIM): hematoma/seroma and involvement of the lymphatic system. *Wound Repair Regen*. 2011;19(5):588-596. 23. Lalezari S, Lee CJ, Borovikova AA, et al. Deconstructing negative pressure wound therapy. *Int Wound J*. 2017;14(4):649-657. 24. Scalis A, Calamita R, Tartaglione C, et al. Improving wound healing and preventing surgical site complications of closed surgical incisions: a possible role of Incisional Negative Pressure Wound Therapy. A systematic review of the literature. *Int Wound J*. 2016;13(6):1260-1281. 25. Karlakki S, Brem M, Giannini S, Khanduja V, Stannard J, Martin R. Negative pressure wound therapy for management of the surgical incision in orthopaedic surgery: A review of evidence and mechanisms for an emerging indication. *Bone Joint Res*. 2013;2(12):276-84. 8. 26. Glaser DA, Farnsworth CL, Varley ES, Nunn TA, Sayad-Shah M, Breisch EA, et al. Negative pressure therapy for closed spine incisions: a pilot study. *Wounds*. 2012;24(11):308-16. 27. Dowsett C, Hampton K, Myers D, Styché T. Use of PICO to improve clinical and economic outcomes in hard-to-heal wounds. *Wounds International*. 2017;8(2):52-58. 28. Hampton J. Providing cost-effective treatment of hard-to-heal wounds in the community through use of NPWT. *Br J Community Nurs*. 2015; 20:S14-S20. 29. Galiano RD, Hudson D, Shin J, van der Hulst R, Tanayadin V, Djohan R, et al. Incisional Negative Pressure Wound Therapy for Prevention of Wound Healing Complications Following Reduction Mammoplasty Plastic & Reconstructive Surgery. *Global Open* 2018; 6(1):e1560. 1-8. 30. Galiano R et al. A prospective, randomized, intra-patient, comparative, open, multi-center study to evaluate the efficacy of a single use negative pressure wound therapy (NPWT) system on the prevention of post-surgical incision healing complications in patients undergoing bilateral breast reduction surgery. Poster presentation SAWC 2014. 31. O'Leary DP, Peirce C, Anglim B, et al. Prophylactic Negative Pressure Dressing Use in Closed Laparotomy Wounds Following Abdominal Operations: A Randomized, Controlled, Open-label Trial. The PICO Trial. *Ann Surg*. 2017;265(6):1082-1086. 32. Witt-Majchrzak A, Zelazny P, Snarska J. Preliminary Outcome Of Treatment Of Postoperative Primarily Closed Sternotomy Wounds Treated Using Negative Pressure Wound Therapy. *Przeegląd Chirurgiczny*. 2014;86(10):456-465. 33. Tanayadin V, et al. Randomized controlled study comparing disposable negative-pressure wound therapy with standard care in bilateral breast reduction mammoplasty evaluating surgical site complications and scar quality. *Aesthetic Plast Surg*. 2018. doi: 10.1007/s00266-018-1095-0. 34. Sharp, E. Single use NPWT for the treatment of complex orthopaedic surgical and trauma wounds. *Journal of Woundcare Cases supplement* 2013, Vol 22, No 10, S5-9. 35. Hudson, D; Adams, K; Van Huyssteen, A; Martin, R; Huddleston, E. Simplified negative pressure wound therapy: clinical evaluation of an ultraportable, no canister system; *International Wound Journal* 2015, 12: 195-201. 36. Payne C, Edwards D. Application of the single-use negative pressure wound therapy device (PICO) on a heterogeneous group of surgical and traumatic wounds. *Eplasty* Apr 2014, 14: e20. 37. Rossington, A; A prospective, open, non-comparative, multicentre study to evaluate the functionality and dressing performance of a new negative pressure enhanced dressing (NPED) in acute wounds. *CT09/02*, May 2015. 38. Nherera, L.M., Trueman, P., Schmoekel, M. and Fatoye, F.A., 2018. Cost-effectiveness analysis of single use negative pressure wound therapy dressings (sNPWT) compared to standard of care in reducing surgical site complications (SSC) in patients undergoing coronary artery bypass grafting surgery. *Journal of cardiothoracic surgery*, 13(1), p.103. 39. Adeyemi, Ayoade & Waycaster, Curtis. (2018). Cost-minimization Analysis of Negative Pressure Wound Therapy in Long-term Care Facilities. *Wounds* : a compendium of clinical research and practice. 30. E13-E15. 40. Karlakki SL et al. Incisional negative pressure wound therapy dressings (NPWT) in routine primary hip and knee arthroplasties: A randomised controlled trial. *Bone & Joint Research* (2016) Vol 5 (Issue 8); pp 328-337 doi:10.1302/2046-3758.58.BJR-2016-0022.R1.

To learn more about the  
PICO sNPWT portfolio and  
to order products, visit  
[www.possiblewithpico.com](http://www.possiblewithpico.com)



◇ Trademark of Smith & Nephew  
All ® Trademarks acknowledged  
© 2022 Smith & Nephew

PCPE26-34041-0322

MasVidaHealth.com | 877.790.5994  
133 Nursery Lane, Fort Worth, TX 76114

MVC - Smith and Nephew - Cobranded Materials - Pico Design - 051723 | QR - MVC - Home | QR - MVC - Home

All trademarks, service marks, and company names are the property of their respective owners. Any products or services offered by MasVida Health Care Solutions, LLC (MasVida) are subject to customer entering into a written customer agreement with MasVida. MasVida is a preferred post-acute distributor of Altra™.



 MasVidaHealth™  
CARE SOLUTIONS