



## Surgery doesn't end in the theatre

"I need to know my incisions will heal. So my patients can get back to normal as soon as possible."

Getting you closer to zero surgical site complications

 **smith&nephew**  
**PICO<sup>®</sup>**

Single Use Negative Pressure  
Wound Therapy System



Supporting healthcare professionals

## Closed surgical incisions are common and so are surgical site complications<sup>1</sup>

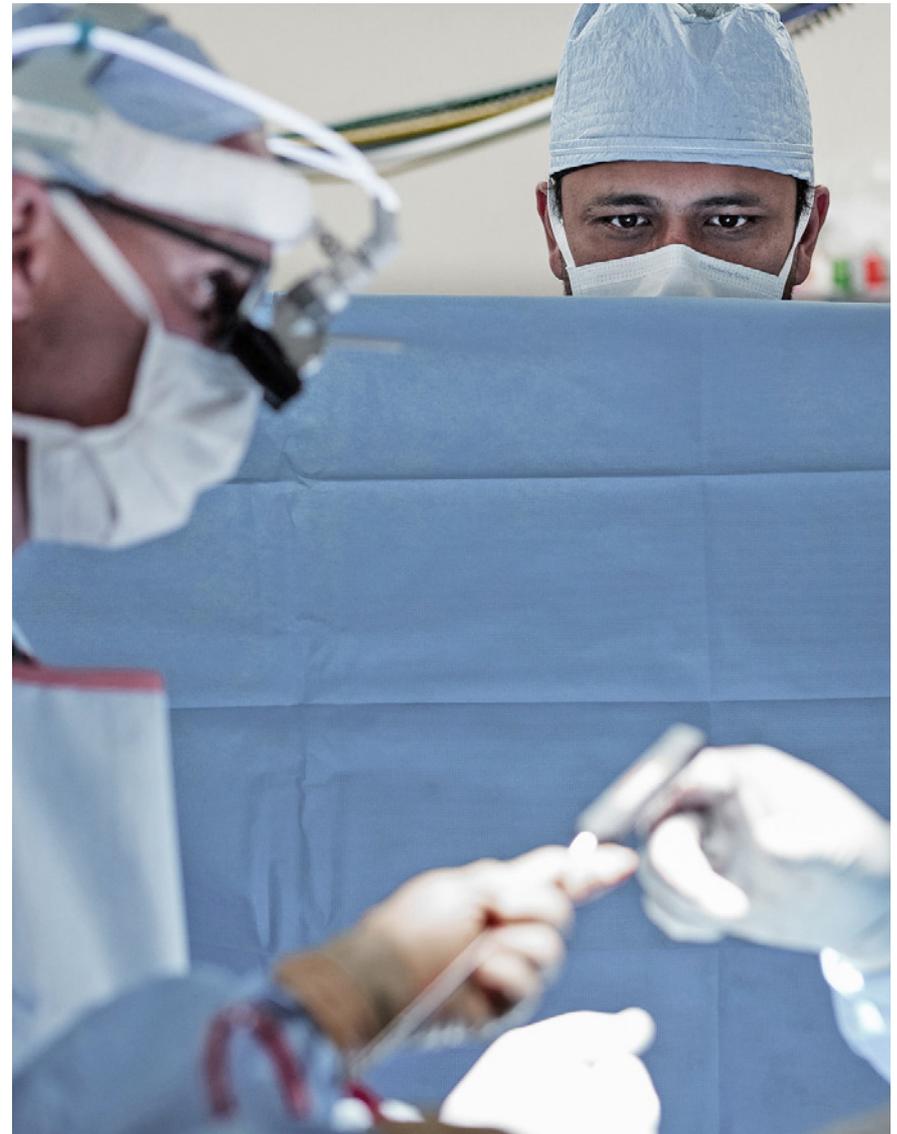
Most surgical wounds are categorized as acute wounds and they heal without complication within expected time frames.

However, due to more obesity, older patients, and more comorbidities, surgical caseloads are becoming progressively more complex and high risk.<sup>2</sup>

Every year over **250 million surgical** procedures are performed and a significant proportion of them will develop a surgical site complication (SSC) such as infection, dehiscence or seroma.<sup>1</sup>



With single use systems such as PICO<sup>®</sup> the access and usage of NPWT has never been easier and surgical wounds, closed or dehisced, are increasingly being managed with NPWT to achieve better patient outcomes.<sup>3</sup>



Consequences of wound complications

# Consequences of wound complications on the healthcare system

Up to 60% of all surgical site infections are preventable, but they continue to be a huge burden on the healthcare system.<sup>1</sup>

Post-procedural complications are known to add additional costs to the patient episode of care.

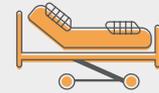
Post-procedural complications including SSI are estimated to cost an additional **\$20,000** on average and can increase length of stay by **7-13 days**.<sup>4,5</sup>



**Surgical Site infections  
and dehiscence<sup>1</sup>**



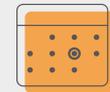
**Prevention of wound  
complications** is vital to  
improve patient outcomes,  
reduce length of stay and  
significantly reduce costs



**Readmission<sup>4,6</sup>**



**Surgical  
re-intervention<sup>4</sup>**



**Extended length  
of hospital stay<sup>4</sup>**

# Impact to patients' wellbeing

Surgical site complications may delay healing and result in considerable morbidity, mortality and socioeconomic costs.<sup>1</sup>

Post-procedural complications including SSI or dehiscence can have significant impact on patient wellbeing.

- Pain and distress
- Reduced mobility
- Sleep disturbance and fatigue
- Embarrassment and anxiety
- Odour
- Delay in returning home/work, loss of income



SSIs are financially costly, resulting in around \$53 million in excess costs in ANZ, with over 53,500 lost hospital bed-days.<sup>5</sup>





PICO<sup>◇</sup> achieves  
proven outcomes in  
reducing surgical site  
infections<sup>7,8</sup>



# PICO<sup>o</sup>

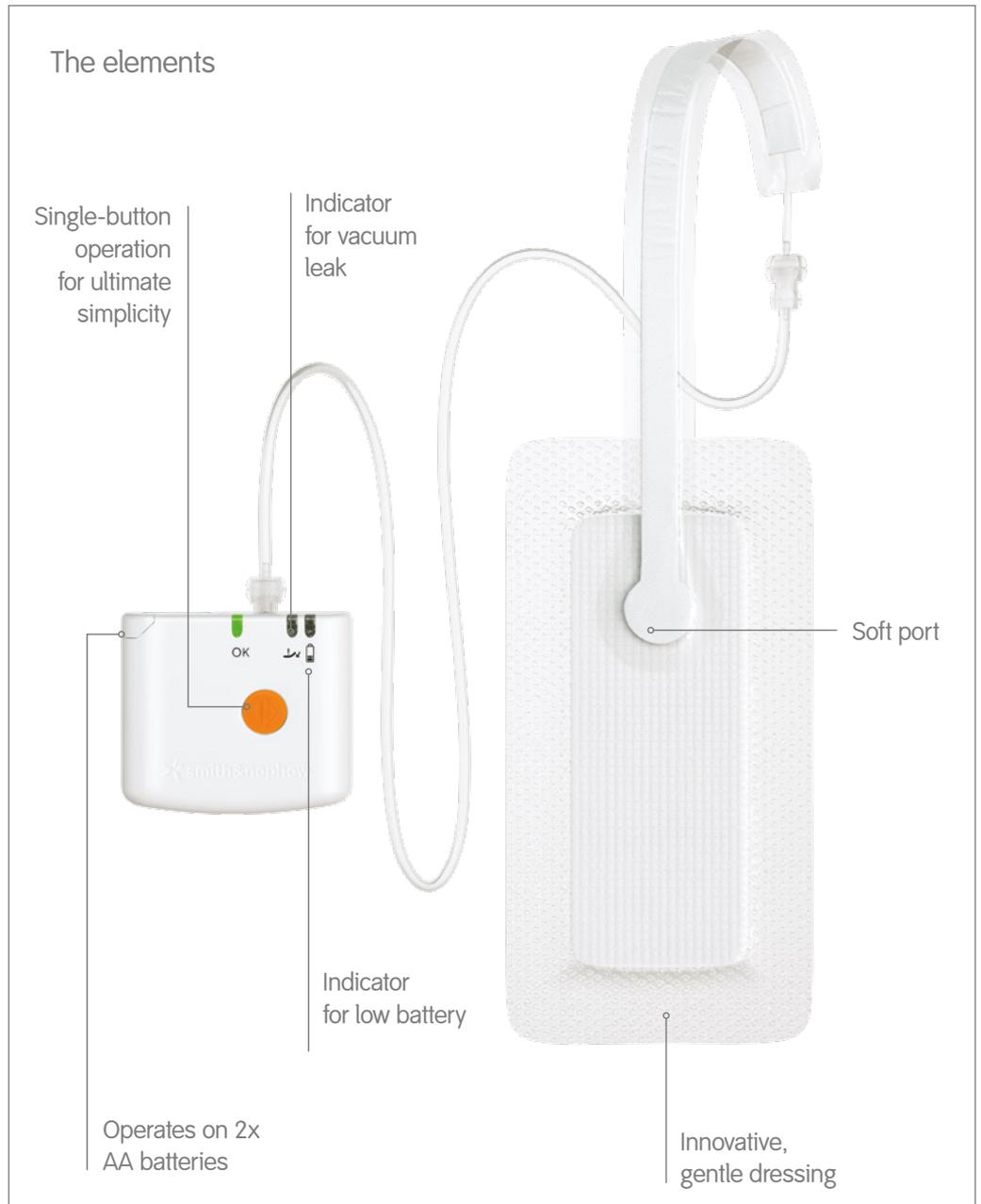
## Pioneering technology

PICO is indicated for

- Closed surgical wounds
- Chronic wounds
- Acute wounds
- Traumatic wounds
- Subacute and dehisced wounds
- Partial-thickness burns
- Ulcers (such as diabetic or pressure)
- Flaps and grafts



PICO is a novel, canister-free, single use Negative Pressure Wound Therapy system offering a portable, accessible and affordable negative pressure wound therapy for suitable wounds with low to moderate exudate.<sup>9,10</sup>



# PICO dressings with AIRLOCK<sup>◊</sup> technology leading the way in NPWT for closed surgical incisions

PICO<sup>◊</sup> multi-function dressing:

- Enables clinically effective NPWT to be delivered to the wound<sup>11</sup>
- Manages exudate through absorption and evaporation<sup>11</sup>

Absorption<sup>11</sup>

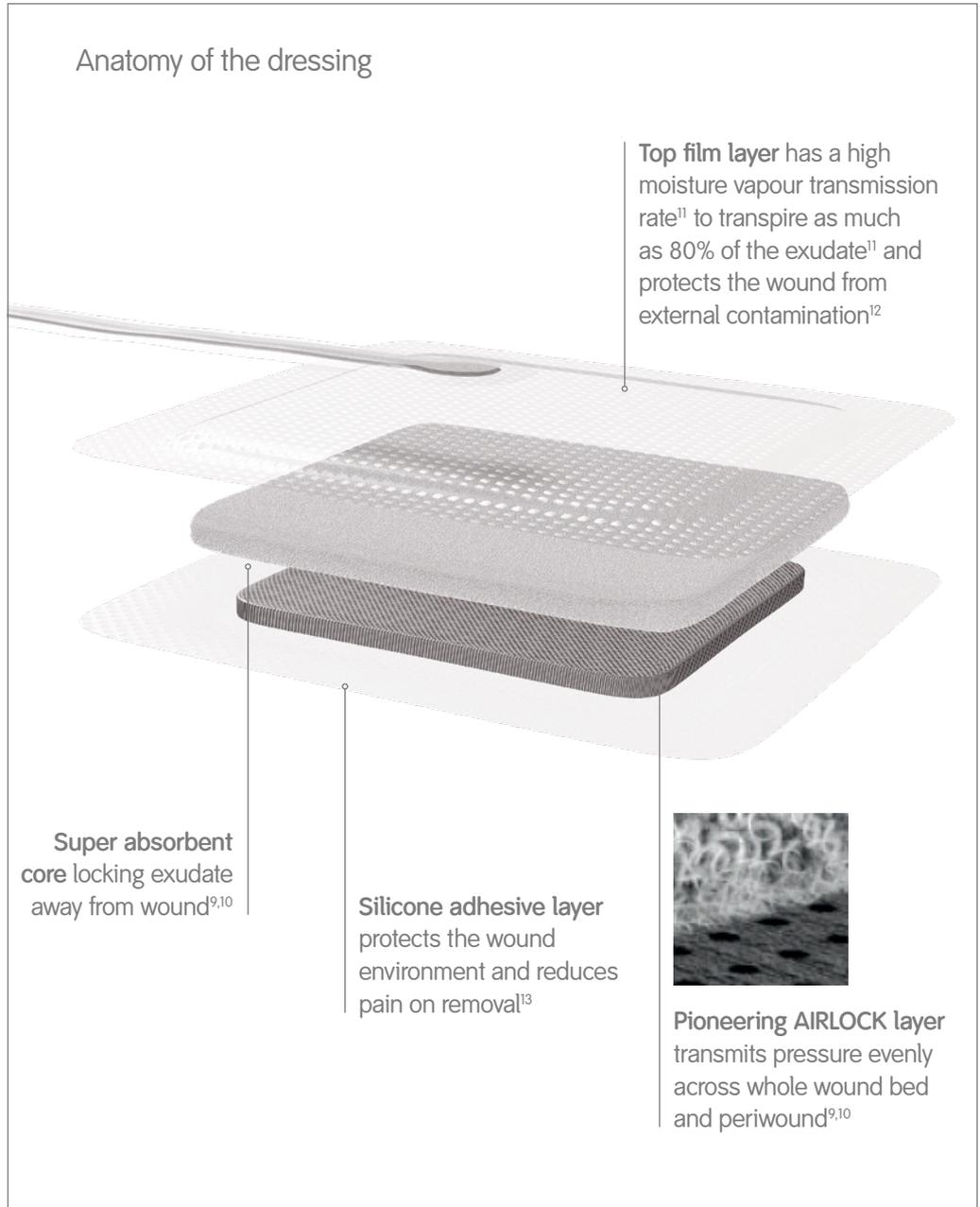
**20%**

Approximately 20% fluid still remains in the dressing

Evaporation<sup>11</sup>

**80%**

On average 80% of the exudate is lost by evaporation



Improving outcomes with PICO<sup>o</sup>

# Improving outcomes with PICO<sup>◇</sup> single use Negative Pressure Wound Therapy system

Supporting you in protecting your patients against post-operative infection and complications is Smith & Nephew's priority. Let your patients benefit from an innovative incision management tool.



The Mechanism of Action of NPWT can help improve the speed, strength and quality of incisional wound closure, thus minimizing the failures of healing that may lead to infection and/or dehiscence.



# PICO significantly reduces wound complications compared with standard dressings

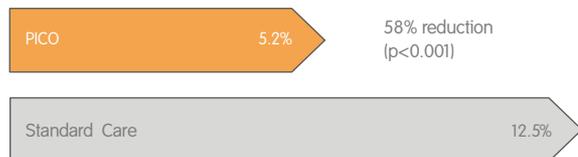
The PICO system has been studied on closed surgical incisions including:

- Caesarean section
- Hysterectomy
- Total Hip Replacement
- Total Knee Replacement
- Sternotomy
- Colorectal Surgery
- Calcaneus Fracture
- Mastectomy
- Breast Reduction



A meta analysis of 16 studies demonstrated **PICO significantly reduced surgical site infection by 58%** versus care with standard dressings<sup>17</sup>

## Percentage of SSIs<sup>7</sup>



## Proven clinical effectiveness

### Wound complications<sup>18</sup>



### Wound dehiscence<sup>19</sup>



### Seroma<sup>20</sup>



# PICO<sup>◊</sup> leads to time and cost savings due to fewer wound complications

Implementation of an incision management protocol including PICO may contribute to a number of hospital objectives.<sup>21</sup>



## Improved capacity

By reducing post-operative complications that can lead to extended hospital stay or readmission.



## Improved profitability

By reducing post-operative complications that can contribute to extended hospital stay/increased treatment costs.



## Reduced readmissions

By reducing complications that occur post-discharge.



## Improved quality

By reducing complications, which can impact positively on hospital performance indicators.



PICO provides rapid healing discretely, with proven cosmetic results, enabling patients to recover quickly, and reducing post-operative complications and SSIs by nearly as much as 50%.<sup>3,17</sup>

# PICO<sup>o</sup> makes it possible

Smith & Nephew can support you with a revolutionary single use Negative Pressure Wound Therapy system, that can help you achieve great things, with the management of your surgical incisions.

## Closer to Zero Surgical Site Infections



PICO promotes **faster healing** and protects incisions against post-operative complications and SSIs<sup>3</sup>



PICO is proven to reduce surgical site infections by more than **58%**<sup>17</sup>

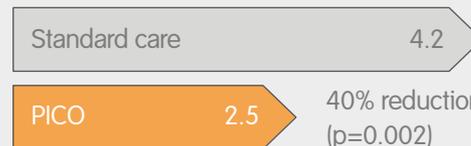
## Closer to Zero wasted healthcare resources



PICO has been shown to have a positive effect on healthcare resource use, reducing readmission and decreasing hospital LOS and frequency of dressing changes<sup>18</sup>

In patients undergoing primary hip and knee arthroplasty, patients treated with **PICO had 40% fewer dressing changes** compared to care with standard dressings<sup>18</sup>

### Mean dressing changes



220 patient study



In patients with closed laparotomy wounds following abdominal surgery, those treated with **PICO had significantly reduced hospital stays**, that on average were 8.6 days shorter than those treated with standard dressings<sup>22</sup>

## PICO<sup>°</sup> Ordering information

### Two dressing and one pump kits

Product code	Product Description	Pad Size (guidance)	Qty
66801358	PICO <sup>°</sup> 10 x 20cm	5.6 x 15cm	Kit/1
66801359	PICO <sup>°</sup> 10 x 30cm	5.6 x 25cm	Kit/1
66801360	PICO <sup>°</sup> 10 x 40cm	5.6 x 35cm	Kit/1
66801361	PICO <sup>°</sup> 15 x 15cm	10 x 10cm	Kit/1
66801362	PICO <sup>°</sup> 15 x 20cm	10 x 15cm	Kit/1
66801363	PICO <sup>°</sup> 15 x 30cm	10x 25cm	Kit/1
66801364	PICO <sup>°</sup> 20 x 20cm	15 x 15cm	Kit/1
66801365	PICO <sup>°</sup> 25 x 25cm	20 x 20cm	Kit/1

Product code	Product	Dressing Size (cm)	Qty
66801356	PICO <sup>°</sup> Small Multisite	15 x 20cm	Kit/1
66801357	PICO <sup>°</sup> Large Multisite	20 x 25cm	Kit/1
66800918	Carry Bag		Unit/1
66801021	PICO <sup>°</sup> Foam	10 x 12.5 x 1.5cm	Ctn/1
66801020	PICO <sup>°</sup> Gauze	15 x 17cm	Pk/5

### One dressing and one pump kits

Product code	Product	Pad Size (guidance)	Qty
66801553	PICO <sup>°</sup> 10 x 20cm	5.6 x 15cm	Kit/1
66801554	PICO <sup>°</sup> 10 x 30cm	5.6 x 25cm	Kit/1
66801555	PICO <sup>°</sup> 10 x 40cm	5.6 x 35cm	Kit/1



## PICO<sup>o</sup> Single Use Negative Pressure Wound Therapy

# Now supported by World Health Organization (WHO) Guideline

The panel suggests the use of prophylactic negative wound therapy in adult patients on primarily closed surgical incisions in high-risk wounds for the purpose of the prevention of SSI, while taking resources into account.<sup>23</sup>



## Supporting healthcare professionals for over 150 years

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Please consult product labels and inserts for any indications, contraindications, hazards, warnings, cautions and instructions for use.

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**References:** 1. World Union of Wound Healing Societies. Consensus Document. *Closed surgical incision management: understanding the role of NPWT*. London: Wounds International; 2016. 2. Stannard JP, et al. Use of negative pressure therapy on closed surgical incisions: a case series. *Ostomy Wound Man* 2009; 55: 58-66. 3. Hylidig, N, et al. Meta-Analysis of Negative-Pressure Wound Therapy for closed surgical incisions. *BJS* 2016; 103: 477-486. 4. Jenks PJ, et al. Clinical and economic burden of surgical site infection (SSI) and predicted financial consequences of elimination of SSI from an English hospital. *J Hosp Infect* 2014; 86: 24-33. 5. Graves N, et al. Economic rationale for infection control in Australian hospitals. *Healthcare Infection* 2009; 14: 81-88. 6. De Lissovoy G, et al. Surgical site infection: incidence and impact on hospital utilization and treatment costs. *Am J Infect Cont* 2009; 37: 387-397. 7. Bullough L, et al. Changing wound care protocols to reduce postoperative caesarean section infection and readmission. *Wounds UK* 2014; 10: 84-89. 8. Karlakki SL, et al. Negative Pressure Wound Therapy for management of the surgical incision in orthopaedic surgery. *Bone Joint Res* 2013; 2: 276-284. 9. Roberts S. In-vitro wound model testing of PICO at a low exudate flow rate. Data on file; 2011: report DS/11/057/R2. 10. Roberts S. In-vitro wound model testing of PICO at a moderate exudate flow rate. Data on file; 2011: report DS/11/037/R2. 11. Malmsoj, M, et al. Biological effects of a disposable, canisterless Negative Pressure Wound Therapy system. *ePlasty* 2014; 14: 113-127. 12. Lumb H. Bacterial barrier testing (wet-wet) of PICO<sup>o</sup> dressing with a 7 day test duration against *S. marcescens*. Data on file; 2011: report 1102010. 13. Hurd T, et al. A multi-centre in-market evaluation of ALLEVYN Gentle border. *Wounds UK* 2009; 5: 32-44. 14. Loveluck J, et al. Biomechanical modeling of the forces applied to closed incisions during single-use Negative Pressure Wound Therapy. *ePlasty* 2016; 16: 183-195. 15. Pellino G, et al. Effects of a new pocket device for Negative Pressure Wound Therapy on surgical wounds of patients affected by Crohn's disease: a pilot trial. *Surg Innovation* 2013; 21: 204-212. 16. Selvaggi F, et al. New advances in Negative Pressure Wound Therapy (NPWT) for surgical wounds of patients affected with Crohn's Disease. *Surg Tech Int* 2014; 24: 83-89. 17. Strugala V, Martin R. Meta-analysis of comparative trials evaluating a prophylactic single-use Negative Pressure Wound Therapy system for the prevention of surgical site complications. *Surg Infect* 2017; 18: 810-819. 18. Karlakki SL, et al. Incisional Negative Pressure Wound Therapy dressings (INPWTd) in routine primary hip and knee arthroplasties: A randomised controlled trial. *Bone Joint Res* 2016; 5: 328-337. 19. Holt R, Murphy J. PICO<sup>o</sup> incision closure in oncological breast surgery: a case series. *Brit J Hosp Med* 2015; 76: 2-8. 20. Pellino G, et al. Preventive NPWT over closed incisions in general surgery: Does age matter? *Int J Surg* 2014; 12: S64-S68. 21. Bullough L, et al. Reducing C-Section wound complications. *The Clinical Services Journal* 2015; April: 1-6. 22. O'Leary DP, et al. Prophylactic negative pressure dressing use in closed laparotomy wounds following abdominal operations. *Ann Surg* 2017; 256:1082-1086. 23. World Health Organisation. Global Guidelines for the Prevention of Surgical Site Infection. Geneva: WHO; 2016.