

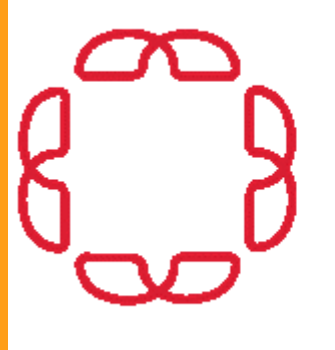
Clinical Outcomes from a next generation Negative Pressure Wound Therapy Device utilized in North American Post-Acute Care Settings

Leticia Vallejo,¹ Angela Arsenault,² Melissa Gosse,² Julie Murdoch,³ Mandy Spitzer³

¹Wound Care Plus Education and Research Center and Department of Health Sciences Universidad Ana. G. Méndez, San Juan, Puerto Rico.

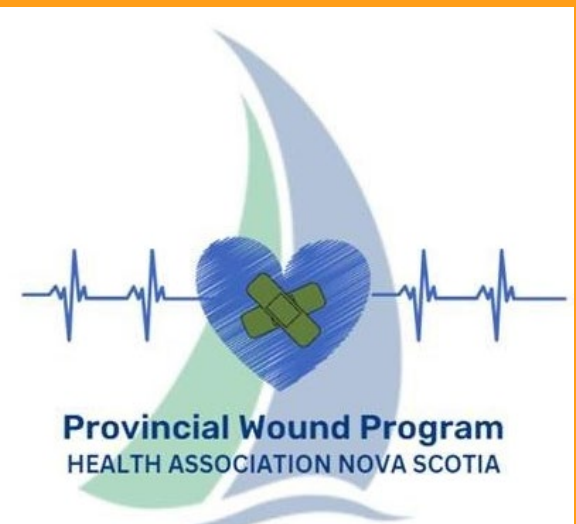
²Health Association Nova Scotia/igility, Nova Scotia, Canada.

³Global Clinical Strategy, Advanced Wound Management, Smith+Nephew, Watford, UK.



ANA G. MÉNDEZ
UNIVERSITY

UAGM



Provincial Wound Program
HEALTH ASSOCIATION NOVA SCOTIA

Smith+Nephew

Introduction

- Dressing application and pump operation, maintenance, and patient concordance are obstacles often associated with Traditional Negative Pressure Wound Therapy (tNPWT)¹.
- A new tNPWT system* has recently been introduced, specifically designed to improve upon known clinical, operational, and patient barriers to NPWT.

Methods

- Case information between August 2023 and November 2024 was extracted retrospectively and recorded on anonymized forms for 6 wounds treated in the post-acute setting in Canada and Puerto Rico with the new tNPWT system*.
- Patient demographics and comorbidities, wound types, locations, characteristics, dressing application, and therapy selection until discontinuation was captured.

Results

- Multiple approved fillers and wound contact layers, different pressure and therapy delivery settings, and dressing application techniques were utilized (Figure 1).
- Despite the variations in approach, the 6 wounds were observed to fully close or improve in tissue quality, area, and volume (Table 1).

Discussion

- The cases presented here demonstrate the efficacy of the new tNPWT system and provide insight into the varied approaches that can be taken to apply tNPWT.

Reference:
¹Fife C WD. The Challenges of Negative Pressure Wound Therapy in Clinical Practice. *Today's Wound Clinic*. 2012.

*RENASYS™ EDGE System, Smith and Nephew, Hull, UK
**ACTICOAT™ FLEX Dressing, Smith and Nephew, Hull, UK
†RENASYS™-F Foam Dressing Kit with Soft Port, Hull, UK

Figure 1. Case 6 example (cm)



Presentation:

A 71-year-old male with hypertension, obesity, and diabetes mellitus presented to the wound clinic following right knee replacement with surgical wound dehiscence.

Treatment:

Sulfate powder was applied at the first application of NPWT only. For all visits, the wound was lined with a nanocrystalline silver dressing contact layer**, filled with black foam†, and the tNPWT pump set to deliver continuous or variable intermittent pressure.

Outcome:

Traditional NPWT was discontinued after 25 days of therapy. The wound was fully closed at day 32.

Table 1: Mean percentage change in wound dimensions by area (cm2) and volume (cm3)

Case	Wound Location	Wound dimensions at presentation		Wound dimensions at discontinuation of tNPWT		Percentage wound dimension change (%)	
		Area (cm ²)	Volume (cm ³)	Area (cm ²)	Volume (cm ³)	Area (cm ²)	Volume (cm ³)
1	Buttock	42	210	1.4	2.8	96.67	98.67
2	Heel	36.4	50.96	4.42	2.21	87.86	95.66
3	Arm	1.5	0.75	0	0	100.00	100.00
4	Abdomen	6	6	0	0	100.00	100.00
5	Back	54	54	45	45	16.60	16.67
6	Knee	7	2.8	0	0	100.00	100.00