

A Summary of

Pressure Ulcer Prevention: Effectiveness of Heel Off-Loading Methodologies¹

Showcasing

PRUventor™

Heel Off-Loading Device



HEEL PRESSURE
RELIEF MADE SIMPLE

 DeRoyal®
Improving Care. Improving Business.®

PRUventor™ heel off-loading device provides many benefits to the Patient and Clinician

Benefits to **Patient:**

- Soft, elastic straps that stretch in multiple directions help ensure that no pressure is directly applied to the patient's foot.
- Fluid, stain, and bacteria resistant interior¹ and exterior is soft and cool to the touch.
- No sharp or hard edges help prevent skin breakdown on even the most sensitive patients.
- Fluid-like sensation inside the device absorbs pressure away from bony prominences.
- Lightweight and smooth surface reduces friction from bed sheets.

Benefits to **Clinician:**

- **The PRUventor Heel Off-Loading Device** is an open concept boot with minimal strap closures provides quick and easy application as well as visualization of the foot.
- **Silbac's** Fluid, stain, and bacteria resistant materials¹ can be cleaned and disinfected if soiled (using facility's cleaning protocols and procedures).
- **Open heel design** suspends pressure point which allows 100% off-loading in addition to allowing the area to breathe to help prevent decubitus ulcers.
- **Fully adjustable:** Elastic hook and loop **Lower leg securement straps** provides full customization for comfort and compliance. While elastic hook and loop **bi-lateral straps** help to prevent foot drop.
- **Bi-lateral SCD/ICD** tubing exits help accommodate most compression devices outlined by blue stitching.
- **Anti-Rotation Wedge** comfortably positions leg to help prevent foot rotation.

SILBAC
ANTIMICROBIAL TECHNOLOGY

The **PRUventor™** Heel Off-Loading Device has the ability to reduce elevated levels of bacteria without causing change of normal skin bacterial flora with the use of the **Silbac™** antimicrobial technology. Wipeable properties of the **Silbac™** material are continuous throughout the life of the product even after disinfecting.



"Pressure ulcer development in hospitalized patients is considered by CMS a never event, however, according to the literature, occurs in 33% of patients outside of the ICU and up to 44% of patients in the ICU."¹

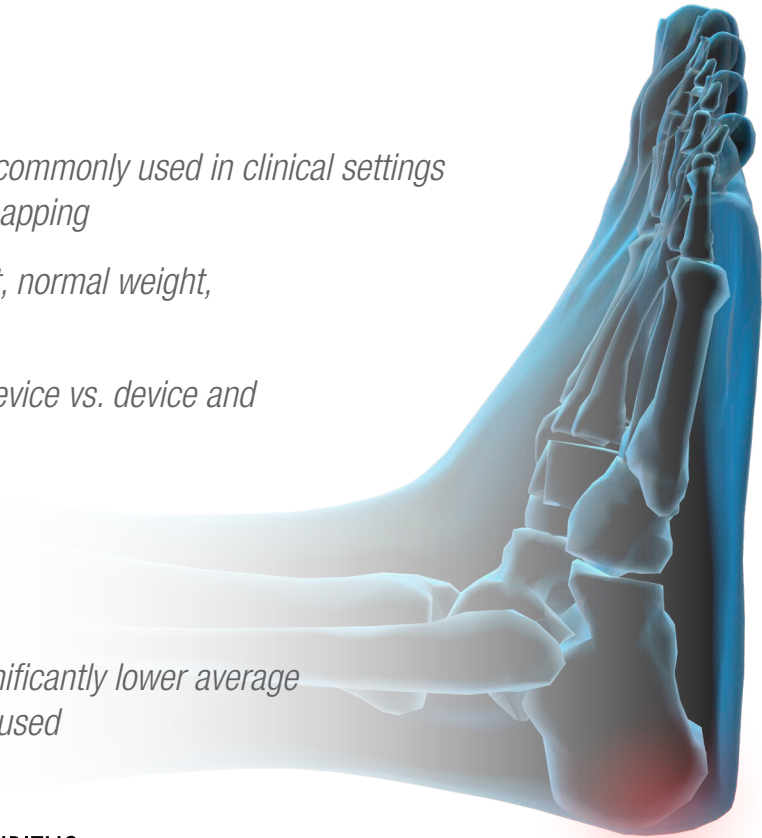
- Open Journal of Nursing, 2015, 5, 909-916

Purpose of Study

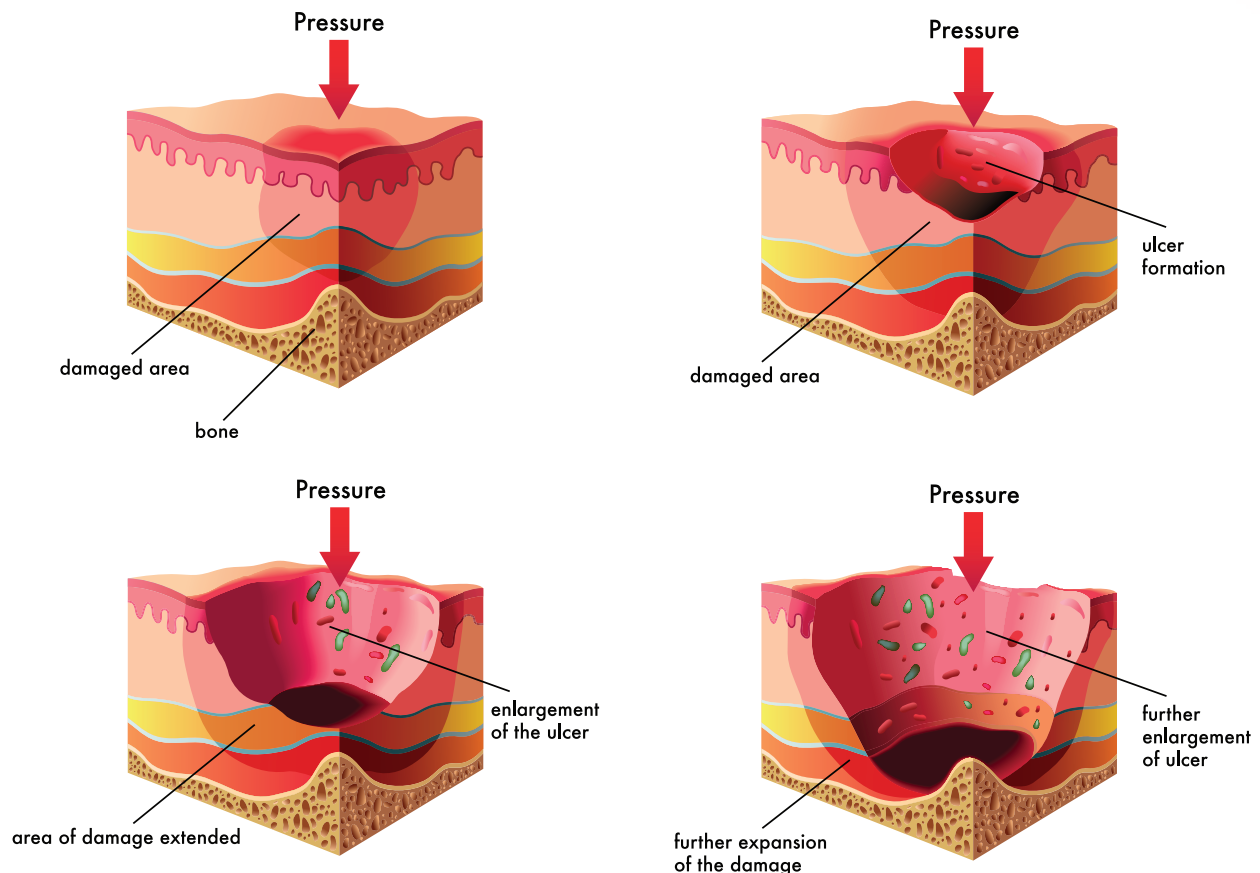
- Investigate the efficacy of 6 off-loading methods commonly used in clinical settings to decrease heel contact pressure via pressure mapping
- Contact pressures were evaluated in underweight, normal weight, and overweight simulations
- Pressure mapping measured between foot and device vs. device and surface (table/bed)
- Bench-side study

Outcome

- PRUventor™ heel off-loading device exhibited significantly lower average pressure values than other off-loading strategies used



DECUBITUS ULCER



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Study Objective:

To investigate the efficacy of 6 heel off-loading methods commonly used in clinical settings to decrease contact pressure via pressure mapping.

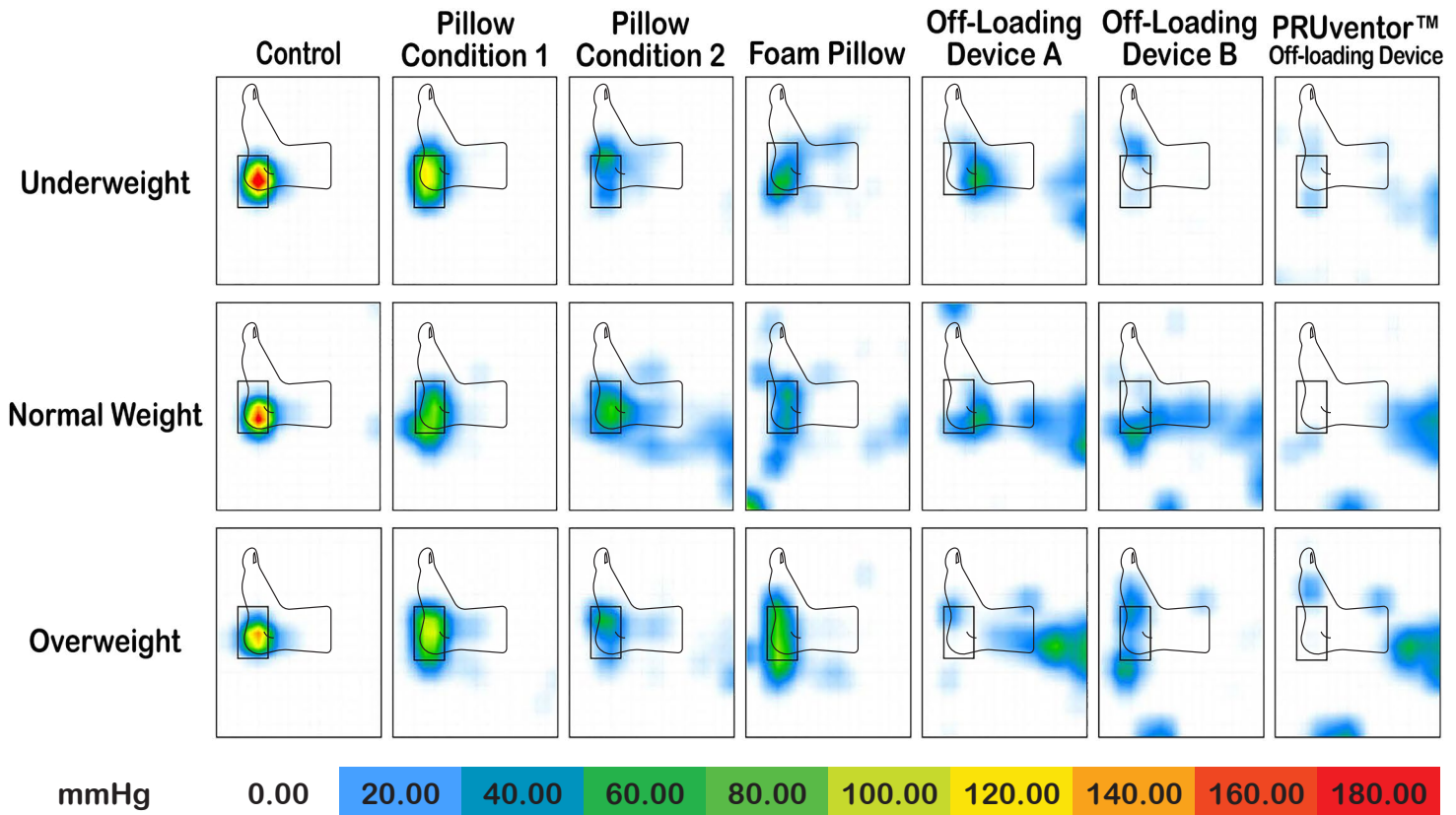
Methods:

- Heel contact pressures were evaluated in underweight, normal weight, and overweight simulations
- Pressure mapping measured between foot and device vs. device and surface (table/bed)
- Bench-side study

Outcomes:

- **PRUventor™ Heel Off-Loading Device** exhibited significantly lower average pressure values than other off-loading strategies used
- **PRUventor™ Heel Off-Loading Device** efficiently suspends the heel in the boot and from the surface

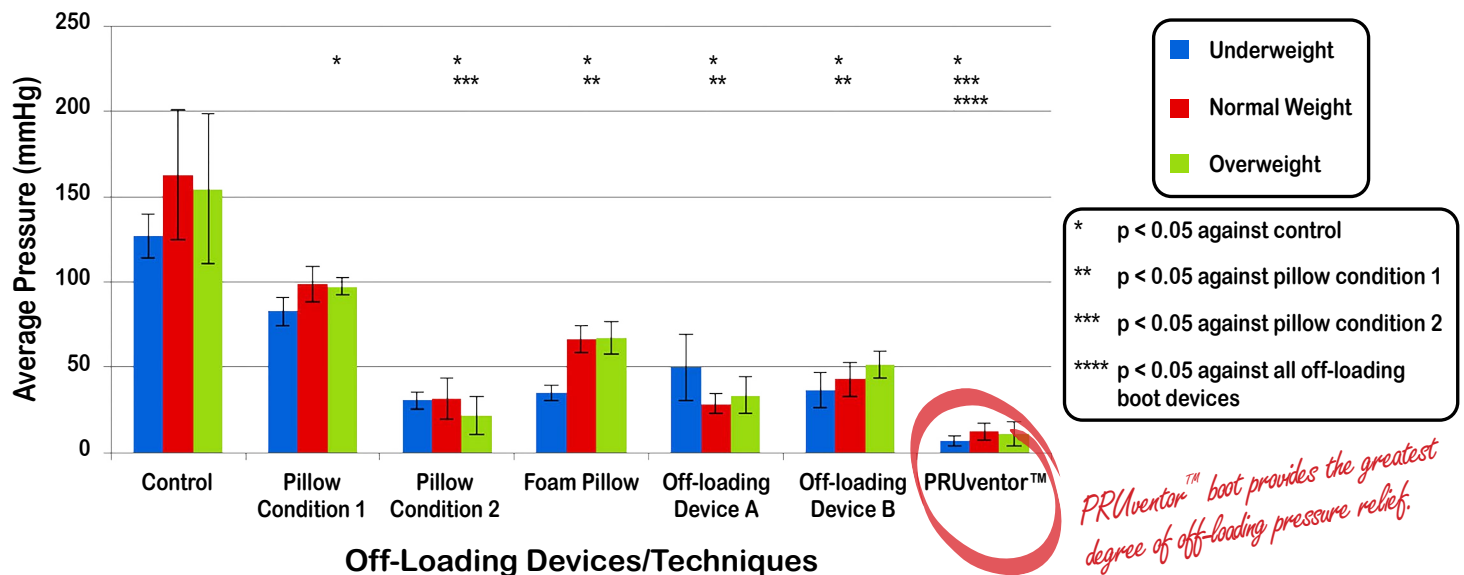
Comparison of Pressure Mapping of Heel Off-Loading Techniques



“...statistical analysis of the measured heel contact forces demonstrates that all devices reduce heel pressure, **with Off-loading Device C (PRUventor™ heel off-loading device) providing the greatest degree of off-loading pressure relief compared to other conditions.**”¹

- Open Journal of Nursing, 2015, 5, 909-916

A comparison of average heel pressure and off-loading techniques



The data averages for each off-loading condition is separated by the loading amount. Standard error bars are displayed for each data set. Averages cover a twelve frame mask of heel forces averaged together over a ten second interval. Asterisks denote data significance as according to paired t-tests with a 5% significance level.

1. Open Journal of Nursing, 2015, 5, 909-916: C. Griffin, C. , Dean, T. , M. Cayce, J. and Modrcin, M. (2015) Pressure Ulcer Prevention: Effectiveness of Heel Off-Loading Methodologies. Open Journal of Nursing, 5, 909-916. doi: 10.4236/ojn.2015.510096.

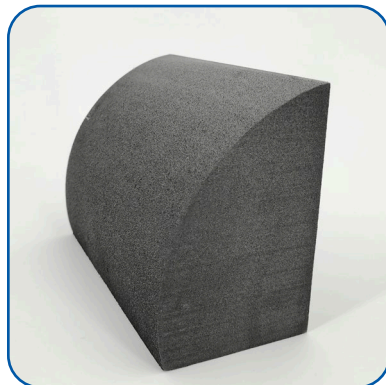
PRUventor™ Heel Off-Loading Device proved to provide the greatest amount of heel off-loading across all three BMIs.

PRUventor™ Heel Off-Loading Device

Description	Length	Qty	Product #
Universal Short	9"	1 Each	M70-100S
Universal Long	13"	1 Each	M70-100L
Universal Long	13"	6 Each	M70-100LB
Long without Anti-Rotation Wedge	13"	1 Each	M70-100NW
Universal X-Long	15"	1 Each	M70-100B

Accessories

Description	Qty	Product #
Foam Wedge Only	12/Case	M70-100FW
Extra Strap Only	12/Case	M70-100ST



M70-100FW



M70-100L



M70-100ST

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