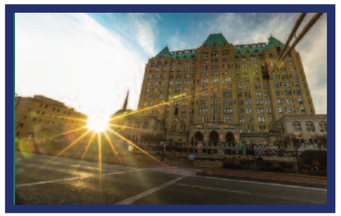

RESULTS

- **Data Analysis using Fisher's Exact Test**
- **Both boots resulted in fewer incidence of heel pressure injuries**
- **Soft Boot incidence rate was <0.1%**
- **Podus Boot incidence rate was <1.0%**
- **Soft Boot incidence rate resulted in a 10-fold lower incidence rate than the Podus Boot**

CONCLUSION

Through research and advancements in new technology, WOCNs have been able to achieve and sustain significant decreases in facility acquired pressure injuries nationwide. Implementation of new products should be evidence based and lead to improvement in patient outcomes. Often, we, as WOCNs are on the front line establishing the evidence for new products. This study adds to the growing body of evidence that some heel off loading devices are more effective in the prevention of pressure injuries.

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IRB Approved Study

Comparison Between Two Heel Off-Loading Devices in Pressure Injury Prevention

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BACKGROUND

Pressure ulcer prevention has become an essential role of the CWOCN, especially since the Centers for Medicare and Medicaid Services (CMS) began holding acute care hospitals accountable for hospital acquired Stage 3 and Stage 4 Pressure injuries (HAPI). We are to utilize evidence based practice and remain fiscally responsible. While utilizing a venous thrombosis embolism sleeve, pressure injuries were developing along the Achilles and heel area of our critically ill patients wearing a plastic frame podus boot, resulting in device related pressure injuries. After trialing two heel suspension boots recently introduced to the market, we chose the newest product, a soft upholstered heel off-loading boot (soft boot). We needed to ensure we had an effective tool to reduce our incidence of heel pressure injuries.

METHODS

The purpose of this study was to compare the effectiveness of two types of medical heel off-loading devices in preventing hospital acquired pressure injuries (HAPI) to the heel and foot.

- A retrospective comparison study was designed to evaluate the two different heel offloading devices and the incidence of heel/foot HAPI in the facility.
- An IRB was obtained, protocol number 27149
- Data was collected for 4 month periods over three years: 2014, 2015 and 2016.
- Medical records of 2,872 patients were reviewed for heel/foot HAPI.
- Patients identified with heel/foot pressure injuries had additional information collected including Braden score, gender, age and stage of wound.
- Using statistical software, the one and two sided Fisher's exact test was completed.
- SAS® version 9.4 (Statistical Analysis Software, Inc.(SAS) Cary, NC) was utilized for all calculations.

OUTCOMES

STATISTICAL ANALYSIS BY YEAR	Jan – Apr 2014 Plastic, Podus Boot	Jan – Apr 2015 Plastic, Podus Boot	Jan – Apr 2016 Soft Boot
Total Patients (Consults) (#)	721	1073	1078
Incidence Rate (%)	1.25%	0.56%	0.09%
Average Age (#)	67	62	60
Average Braden Score (#)	14.6	12.83	13.33
Average CMI (#)	1.70	1.80	1.82
Total DTIs/Pressure Injuries (#)	9	6	1

INJURY LOCATION	Plastic, Podus Boot	Soft Boot
Ankle	3	0
Heel	8	1
Heel Lateral	1	0
Heel Left	1	0
Heel Right	2	0
TOTAL	**15**	**1**

PRESSURE INJURIES by BOOT TYPE