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No conflicts of interest to disclose.

# BACKGROUND

- The use of 2 or 4 layer compression wraps to manage edema Reusable Velcro compression wraps were used in place of and aid in wound healing is common in the treatment of 2/4 layer wraps. edema and venous insufficiency.<sup>1</sup> • Three different brands of Velcro wraps were trialed.
- Disposable 2 and 4 layer compression wraps are costly and • Each patient had been treated with 2 or 4 layer compresrequire specialized training and skill to apply. sion wraps for at least 2 weeks prior to being admitted to • Due to the nature of the disease, after wounds have healed, the study.
- patients will need continued compression to prevent reoc-• Patients included had an Ankle-Brachial Index test (ABI) currence of ulcerations. performed with results >0.8.
- The key to good maintenance is adequate graduated com-• Before the trial began, the nursing staff were trained in pression, which not only requires patient compliance, but also the application of the Velcro closure compression wrap. the availability of suitable garments for the affected limb.
- The patient and/or family were trained on how to apply • Compression hose are difficult to don, which can lead to the Velcro garment. In addition, a full explanation of the patient non-compliance. evaluation was given to each patient along with written information about the product and its application.

#### Research project

With nursing care and product costs continually increasing, we wanted to test the reusable Velcro compression wrap in place of the two or four layer compression system to ensure edema was managed and wounds continued to heal.





A: JuxtaLite by Medi **B:** Farrow Wrap a BSN Medical Company **C**: ReadyWrap by L&R USA INC.

# Evaluation of Replacing Compression Wraps with a Compression Garment for Cost and Ease of Use

### METHOD



#### REFERENCES

- . Ratliff, C. R., Yates, S., McNichol, L. & Gray, M.(2016). Compression for Primary Prevention, Treatment, and Prevention of Recurrence of Venous Leg Ulcers An Evidence-and Consensus-Based Algorithm for Care Across the Continuum. Journal Wound Ostomy Continence Nurses, 43(4), 347-364.
- 2. Atkin, L. & Tickle, J. (2016). A new pathway for lower limb ulceration. Wounds UK 12(2).

#### Evaluation

The initial limb circumferences and wound measurements were recorded for each patient at the outset of the evaluation.

Weekly assessment completed including the following:

- Ankle and calf circumference
- **Wound site**
- Wound dimensions
- **V** Tissue type, e.g. the presence of granulation or slough, and the percentage of these tissue types
- **Exudate volume and consistency**
- Periwound skin
- Signs of infection

# RESULTS

- The average cost savings for our agency was \$100-\$150 per week, this did not include the nursing visit or other wound care product.
- Two patients did not like the Velcro wraps. However, they didn't like the 2/4 layer compression either.



• All of the patients continued to have their edema managed and the wound measurements decreased as they continued to heal.

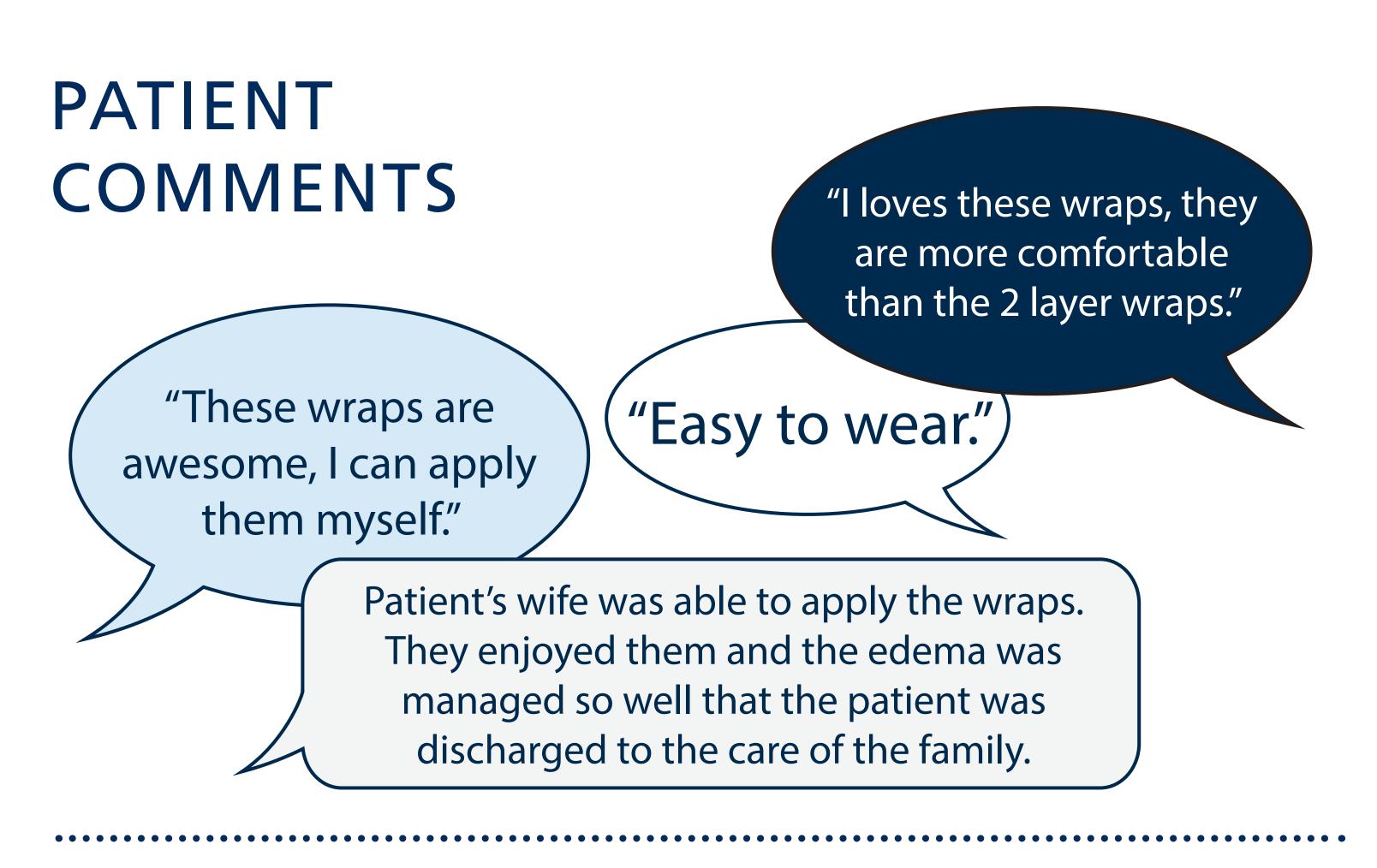
# NURSES COMMENTS



"The wounds are healing and edema is managed."

"Doctor was very impressed with results."

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# DISCUSSION

- The Velcro compression wraps were initiated on 30 patients; 15 female and 15 male patients.
- Patients ranged in age from 50 to 90.
- Velcro system is covered by insurance, if ordered while the patient had open wounds.
- The patients and family members were pleased with the change. The patient was able to shower more easily and was happier with the Velcro system, leading to increase compliance with care.
- The nursing staff was pleased with the ease of use and patient compliance and felt that the study showed very positive outcomes.

# CONCLUSION

- With growing costs of healthcare the use of a reusable compression garment will reduce the cost of treatment while maintaining good quality outcomes.
- The added benefit to the patient is the use of the Velcro compression system as a maintenance garment once the wounds have healed decreasing the risk for recurring ulcerations.
- The Velcro compression system is now being rolled out across our home care agencies as an option in place of the 2/4 layer compression wraps