

DISPOSABLE NEGATIVE PRESSURE WOUND THERAPY COST SAVING AND PATIENT SATISFACTION

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INTRODUCTION

Management of chronic wounds have become a costly venture. It's been an ongoing challenge to offer advanced wound care modalities to patients at home due to nursing availability, cost, infection and exudate control, and patient compliance. The newer NPWT are disposable battery powered devices that can be continually used for 28 days with the ability to change wound dressing as needed. The cost associated with tracking and updating the re-usable NPWT device is drastically reduced. The machine can be used continuously and then disposed. Patients do not have to remember to plug in the device to recharge and therefore compliance and patient mobility is increased

METHODS

5 patients were selected that had a wound requiring NPWT based upon physician prescription. Patients who were having difficulty with regular nursing care due to location of residence, cost, or transportation were considered for the selection. A cost analysis and patient survey was completed and compared with traditional NPWT. Wound size, volume and closure rates were monitored over time. Adverse reactions associated with the treatment regime were noted.

DISCUSSION

The use of NPWT is priceless for many patients. Unfortunately, patients are denied access to this valuable tool due to costs, size of the machine, use of electricity, or nursing availability. 5 NPWT candidates were chosen who required the need to be ambulatory with a light weight smaller machine due to frailty or gait instability, lived in rural areas or did not always have access to electricity. These patients were chosen from Policlínica Presidente Remón de la Caja del Seguro Social in Panama. All patients who completed the study reported patient satisfaction in which they were able to remain mobile, and perform their Activities of Daily Living independently with the UNO NPWT machine. One patient healed completely. The other patients all improved either with size or quality of wound. The study was terminated at the 3 week mark due to supply quantity for the trial. Overall, it was noted that there was a notable cost savings even at the 3 week mark. Even if the patients used the machine and disposed of it after one week and replaced the unit weekly for 12 weeks, the cost savings would still remain at 56% less than the traditional NPWT as calculated below:

- (A) UNO 1 week cost= \$270
- (B) Standard of Care 1 week cost = \$610
- (A) \$270 X 12 weeks = \$3240
- (B) \$610 X 12weeks= \$7320

\$7320 - \$3240= \$4080 Difference or 56% Savings in 12 weeks

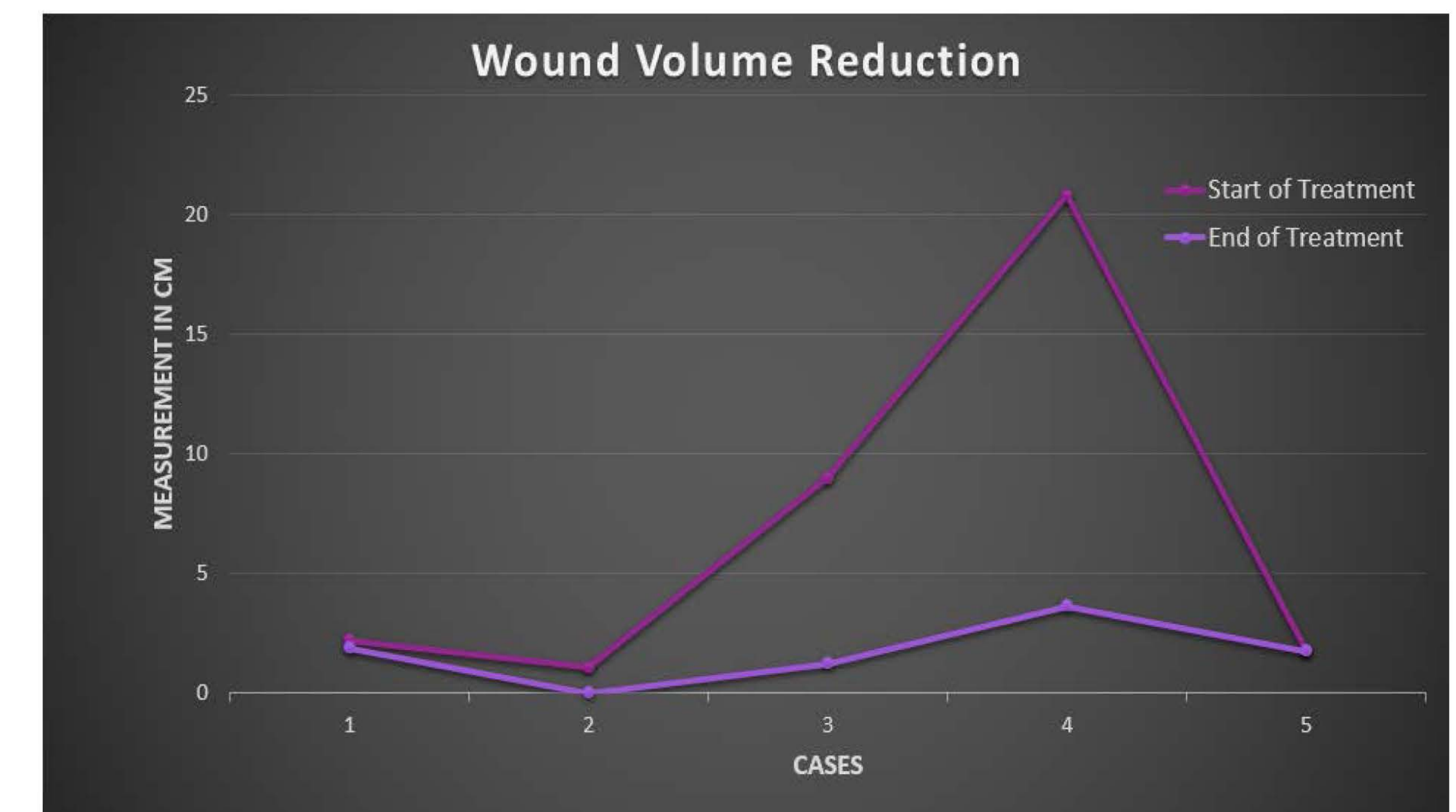


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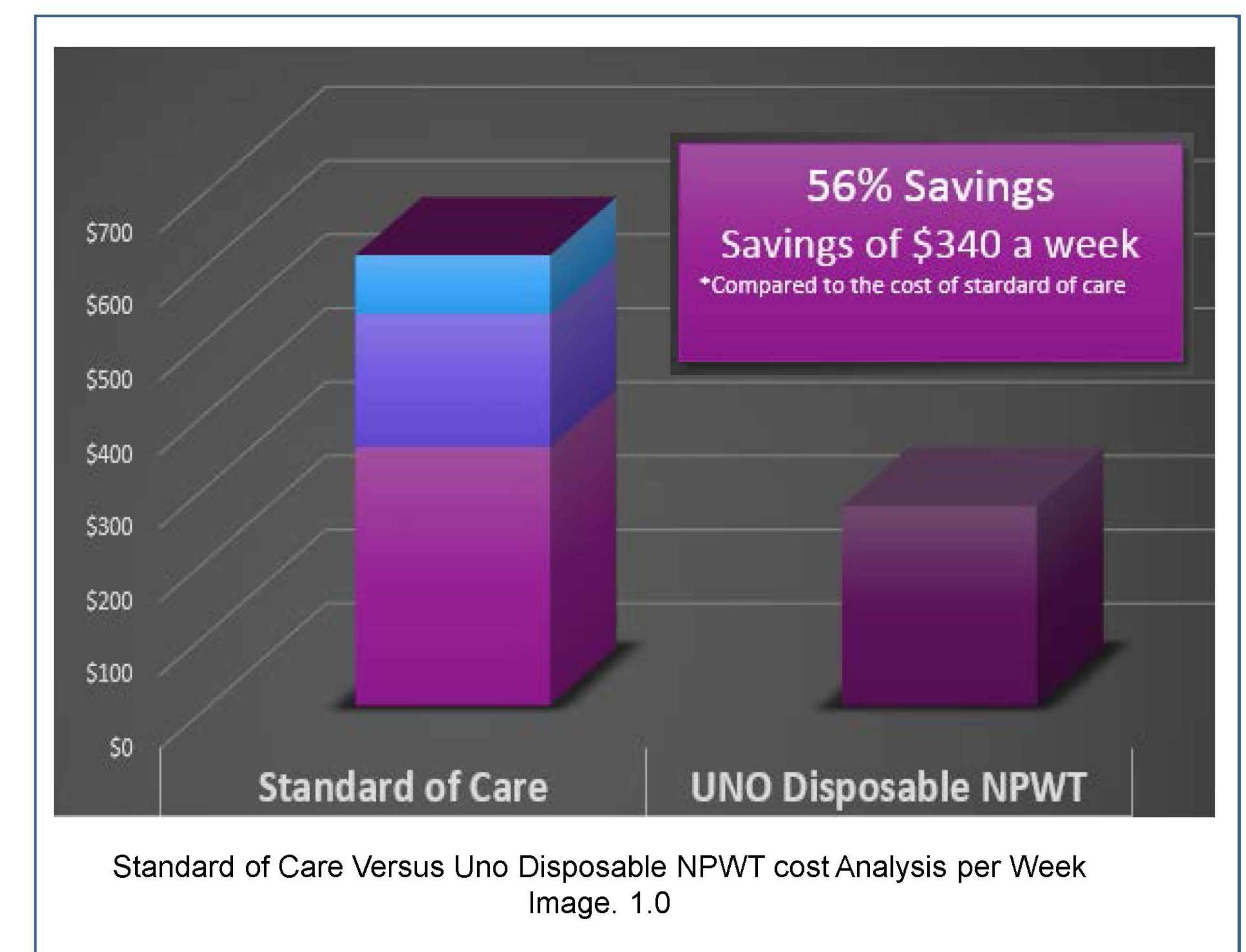
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RESULTS

Total number of wounds: 5
Mean age 65.4 ± 9 years
One dropped from study due to machine malfunction
Duration of care 3 weeks



Heal Rate: Of the 5 treated wounds, one was healed at the end of the study, 3 patients acquired 100% granulation with reduced size and 1 patient was discontinued from the study because the machine was dropped on day 1 and have had battery problems since then. There is an average of 43% decrease in wound volume in 3 weeks span



Standard of Care= \$610/ week (includes 3 dressing changes, 2 canisters and machine rental for 1 week)

UNO Disposable NPWT= \$270/ week (includes 2 dressing changes, 2 canisters and machine)

A cost savings of 56% was found as compared to the traditional NPWT devices. Patient satisfaction was improved which we extrapolated to improved patient compliance with the machine especially at night or during bathing times