

AN EVALUATION OF SHAPED DERMAL PAD AND THEIR INFLUENCE ON THE INCIDENCE OF PRESSURE ULCERS IN AN ACUTE NHS FOUNDATION TRUST.

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Introduction

As most pressure ulcers are preventable, the author's trust uses the development of pressure ulcers as an indicator of the quality of care provided. The author's trust is therefore committed to adopting a proactive attitude to pressure ulcer prevention and management having a zero tolerance to hospital acquired pressure damage.

This approach enhances the work already being undertaken by the Trust to improve patient safety. A No Avoidable Pressure Ulcer (NAPU) strategy group was set up to look at how improvements could be made to reduce pressure ulcer incidence. The group identified areas of improvement and small test

of change was implemented using the Plan, Do, Study, Act (PDSA) method. One of these small tests included the evaluation of sacral and heel shaped Dermal Pads from Spenco Healthcare International Ltd (SHIL), a recent introduction into the healthcare market.

This evaluative study was undertaken to identify whether the Dermal Pads were suitable for the needs of high risk patients within the acute NHS Foundation Trust, when used in conjunction with existing methods of pressure area care such as repositioning and regular skin inspections.

The evaluation was carried out over a three-month period from April 2008 until June 2008. It was decided to use the pressure ulcer incidence monitoring data, from the wards, to monitor the effectiveness of the product, by comparing the incidence, severity and number of pressure ulcers in the three-month period prior

to the evaluation, with the data during the evaluation period. SHIL supplied over 80 sacral and heel Dermal Pads. 4 clinical areas were selected to participate in the evaluation (Elderly medicine (2 Wards), orthopaedics and general surgery) due to their high incidence (2.5% fig 1) of hospital acquired pressure ulcers.

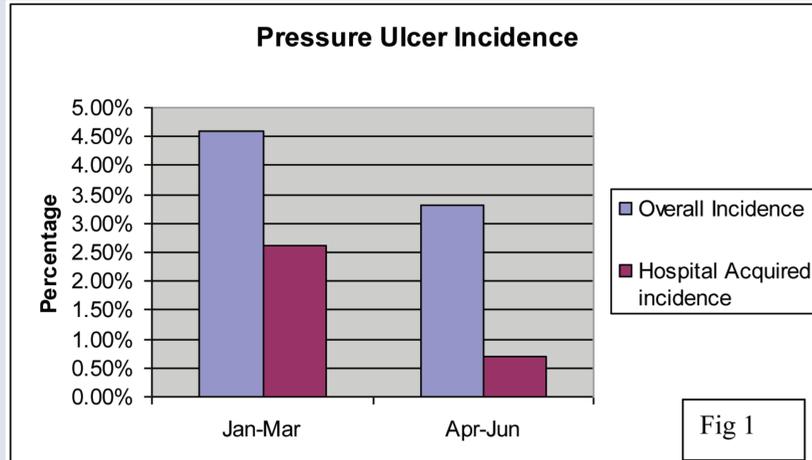
A SHIL representative using the European Pressure Ulcer Advisory Panel Grading system (EPUAP 2005)¹ provided training in the use of Dermal Pads to all staff involved. In line with trust policy all patients were assessed using the Waterlow Risk Assessment Tool, and pressure damage graded



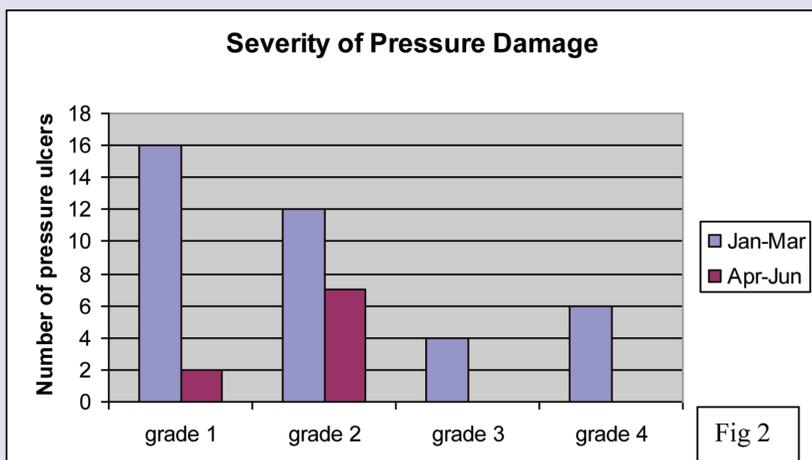
Methodology

Results

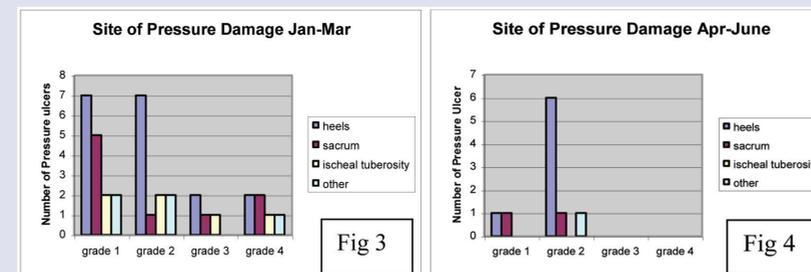
There was an overall reduction of 87% (fig 1) in hospital acquired pressure damage when Dermal Pads were added into the existing regime.



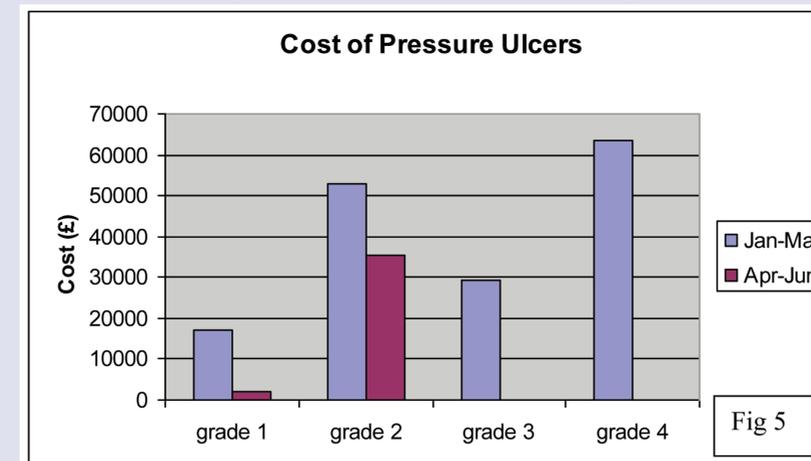
There was a decline of 75% in the overall number of pressure ulcers from 38 (in Jan-Mar) to 9 (in Apr-Jun) fig 2, all of which were superficial.



The introduction of Dermal Pads (SHIL) has also caused a reduction in the number of patients developing multiple areas of pressure damage. In January a total of 22 pressure ulcers on ten patients were reported; this reduced to 5 pressure ulcers developing on 3 patients in June. Figures 3 and 4 clearly identify the reduction in frequency and severity of pressure damage to the sacrum, ischial tuberosity and heels, during the evaluation period.



Based on Bennett et al's (2004)² calculations the pre evaluation cost of treating the Trust's hospital acquired pressure ulcers was £162K, the cost during the evaluation period was £37K for the treatment of ulcers, This would have increased to £39.5K if payment had been made for the Dermal Pads, demonstrating a 76% reduction in expenditure (fig 5).



Discussion

The outcomes show an overall reduction in the incidence of pressure ulcers and that the Dermal Pads, when used in conjunction with other elements of the Trust's pressure ulcer policy, are suitable for patients identified as high risk. Further analysis of

data is required as the study did not detail patient's mobility or repositioning schedule.

Staff Comments

"Easy to use"

"Simple and effective in protecting the patient's vulnerable areas such as heels and sacrum"

"The colour could be more distinctive as the product was sometimes thrown out with the laundry"

"The company training was excellent"

Conclusion

This evaluation has demonstrated that, when used in conjunction with other modalities in the trust's pressure ulcer policy, the Dermal Pad was extremely effective in reducing the incidence of pressure ulcers, enhancing the safety of patients when they are admitted to hospital.

Such has been the success of this evaluation, 80% of wards are now ordering the product including A&E and theatres.

References

- 1 Pressure ulcer classification. Classification agreed by European Pressure Advisory Panel (EPUAP) (www.epuap.com)
- 2 Bennett G, Dealey C, Posnett J. The cost of pressure ulcers in the UK. Age & Ageing. 2004, 33(3): 230-530