Demonstrating value-based healthcare by using a SAP-containing silicone bordered dressing under compression in a Lower Limb Clinic

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Introduction

Chronic wounds, particularly of the lower limb are recognised as a significant health-economic pressure within the NHS.[1] Early intervention is a key aspect of wound care, the aim being to prevent wounds becoming chronic and reducing the burden on the healthcare system whilst also improving patient quality of life.[2] Specialist wound care clinics allow for ambulatory patients to be seen in a timely manner which frees up primary care and community nurse appointments to allow for better use of resource as in line with the NHS long term plan.

This evaluation demonstrates the positive impact of early intervention when treating lower limb wounds with a SAP containing silicone bordered dressing alongside compression therapy.

The Lower Limb Specialist Wound Care Clinic in York was set up to reduce variation of lower limb management and improve standardisation of care in line with the National Wound Care Strategy Programme (NWCSP).

Figure 1.

	Usual standard of care	Drug Tariff Oct 2024	Lower Limb Clinic Standard of Care	Drug Tariff Oct 2024
Contact layer	Urgotul 10 x 10cm	£3.16	Not required	£0.00
Superabsorbent dressing	KerramaxCare 10x10cm	£1.32	RespoSorb® Silicone Border 15x15cm	£4.20
Compression	UrgoK-Two Multi-layer compression bandage kit 25-32 (10cm)	£9.47	Compression hosiery – JOBST UlcerCare kit x 2 £34.09 per kit	£68.18
Cost of products		£13.95		£72.38
Nursing time	2 x clinic / practice nurse appointments	£31.32	1 x clinic 1 x patient self-management	£15.66
Total weekly cost		£59.22		£24.06
Cost for 8 weeks of treatment		£466.13		£250.42

Method

123 patients were seen in the Lower Limb Specialist Wound Care Clinic in York between July 2023 and July 2024, of these 13 patients healed by the time they presented at the clinic. Therefore 110 patients have been actively treated in the clinic - of these 52 were treated using RespoSorb® Silicone Border (formerly Zetuvit® Plus Silicone Border) – a SAP - containing silicone bordered dressing alongside compression therapy in the form of hosiery or wrap system.

The other 58 patients were treated with various other primary dressings such as foams or an antimicrobial if infection was indicated. In nearly 50% of the patients treated RespoSorb® Silicone Border was the dressing of choice because of the ease of use – the clinicians stated it is easy to apply and can manage exudate more effectively in comparison to foam dressings which are often the alternative dressing to be used under compression hosiery/wrap system.

Results

Of the 52 patients treated with the SAP-containing silicone bordered dressing alongside compression therapy; 81% (42) healed within 10 weeks with the majority (50 patients) healing within 16 weeks. The average healing time was 7.67 weeks.

The cost of treatment regime described above has also been compared to the usual standard of care provided by community nurses prior to the lower limb clinic being established. Fig. 1. demonstrates the cost effectiveness of the treatment provided in the Lower Limb Clinic.

Discussion

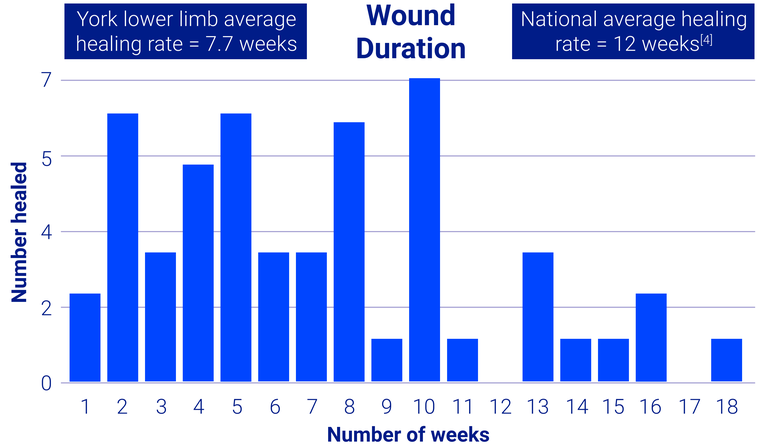
Due to the current health-economic pressures on the NHS early intervention is key to prevent lower limb wounds becoming chronic. Guest et al[1] demonstrated the significant burden these wounds can place on the healthcare system. In response to the Burden of Wounds study, NWCSP[2] developed guidance for lower limb management to aid early identification and implementation of evidence-based practice. These recommendations specify that in the absence of red flags 20mmHg of compression can be applied immediately alongside a “simple, low adherent dressing with sufficient absorbency”.

RespoSorb® Silicone Border allows for atraumatic dressing changes due to the silicone interface and provides sufficient absorbency due to the dressings containing super-absorbent polymers (SAPs). Recent evidence has demonstrated the ability of SAP-containing dressings to balance the microclimate of the wound bed[3]. This reduces potentially harmful biomarkers which in turn enables the wound to re-establish an acute like state to facilitate faster healing.[8] Implementing SAP-containing silicone bordered dressing as an early intervention helps maintain an optimal wound environment from the outset, supporting better healing outcomes. When combined with compression therapy, it aligns with the best practices outlined by the NWCSP.

The Lower Limb Specialist Wound Care Clinic achieved an average healing time of 7.67 weeks, significantly faster than the national average (fig. 2). Guest et al.[4] reported that only 53% of VLUs heal within 12 months, with an average healing time of 3 months. These results highlight the importance of early intervention and how compression therapy, combined with appropriate dressing selection, can lead to improved healing outcomes, as demonstrated in this case with the use of compression and an SAP-containing silicone-bordered dressing.

The dressing choice alongside a compression hosiery or wrap system also allowed for patients, relatives, or carers to participate in their own care if they wished. One such example taken from this clinic was a patient with lymphoedema and associated lymphorrhea who was struggling to self-care with previously used dressings. Due to the ease of application and adherence of RespoSorb® Silicone Border the patient was able to maintain their independence by being able to apply the dressing themselves underneath their compression wrap; thus reducing nurse visits. This is an example of supported self-management and has the potential to result in significant cost savings. As demonstrated in Figure 1; if a patient participates in supported self-management by changing their own dressing once a week there is the potential for significant cost savings. Supported self-management is providing personalised care to support better health outcomes as demonstrated by the personalised care model from NHS England[7]

Figure 2. - Total number of wounds healed per week in Lower Limb Clinic York



Conclusion

The findings from this Lower Limb Specialist Wound Care Clinic underscore the critical role of early intervention in wound care. By using RespoSorb® Silicone Border dressings in conjunction with compression therapy, the clinic achieved significantly faster healing times compared to national averages. These results demonstrate that implementing evidence-based strategies can effectively optimise wound healing conditions, reduce the chronicity of wounds, and alleviate the economic burden on the NHS. Aligning with the NWCSP, this approach not only enhances clinical outcomes but also improves patient quality of life.

References

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