

Improving the treatment of lower limb wounds in primary care to address local commissioning challenges

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Introduction

Local commissioning arrangements can provide challenges for clinicians when attempting to optimise treatment. This can vary dependent on the organisation. The authors faced the following issues when attempting to optimise timely interventions for patients with lower limb wounds in one Primary Care Network (PCN). Practice nurses (PNs) were not commissioned to provide strong compression (40mmhg), only mild compression (20mmhg) using hosiery. PNs must manage wounds on the lower limb for 6 weeks before able to refer to the local community leg ulcer clinic (LUC). A further challenge was the LUC had a large waiting list resulting in further delays in access to mild and high compression bandaging.

To address this situation the local PCN developed an early intervention pathway in line with National Wound Care Strategy Programme's (NWCSP 2023) recommendations for the immediate and necessary care of lower limb wounds in the absence of red flags. This facilitated the assessment for, and timely application of mild compression using hosiery. (Figure 1) Primary Care followed the pathway until the section including 'IF NO RED FLAGS' and no further. The rest of the pathway applies to community care.

The authors identified that it was important to optimise local wound treatment to promote faster healing via a standardised approach. **UrgoStart Plus Border** was chosen as the primary wound treatment on the pathway because of the evidence demonstrating improved healing times (NICE MTG42 2019). **UrgoClean Ag** was chosen to address infection and/or biofilm because of its multidimensional action of cleaning the wound bed and managing bacterial burden. The hypothesis was that if both compression therapy and topical wound treatment were optimised within the commissioning constraints, healing rates would improve reducing need for onward referral. (Figure 2 & Figure 3).



Method

An audit was completed for the previous 12 months using electronic patient records (EPR) in the participating clinic to identify the healing rates of all patients with lower limb wounds (n=16)

The pathways were then implemented in a cohort of new patients presenting with lower limb wounds (n=20). The pathway was implemented until the wound had healed. Data was collected using a wound outcome tracker and included duration of wound prior to treatment, previous treatment regime, wound size and progression over time, along with treatment used.

Consent was obtained from all patients to have their wounds photographed and patient data was anonymised.

Results

The previous 12 months data demonstrated that of the 16 patients that had their records audited, 56% (n=9) were treated in compression equivalent to mild compression. The remaining 44% (n=7) had no compression despite no record of contraindications. Healing rates varied from 4.1 weeks to 51 weeks. This resulted in a mean healing time of 26.43 weeks.

Of the 20 patients treated according to the new pathways, 17 healed with healing times varying from 1 week to 9 weeks. Mean healing time 4.12 weeks. 3 patients were discontinued from the audit due to hospital admission during treatment.

Discussion

Pre pathway implementation it was clear from auditing the EPR that there was no consistent approach to the use of mild compression therapy even though this is considered best practice in immediate and necessary care. It also identified that a wide variety of wound treatment regimes had been utilised often with no clear rationale documented. The effect of this inconsistent approach to care is reflected in the prolonged healing time of 26.43 weeks. The patients that were treated in mild compression pre pathway had a healing rate of 19.26 weeks (n=9) All patients remained in the care of the practice nursing team despite being referred at 6 weeks to the LUC as per commissioning requirements. This was due to the extended waiting lists.

The implementation of the pathway provided structure and guidance to all members of the clinical team providing care. The patients all received appropriate mild compression in the form of compression hosiery in line with commissioning requirements. The first line use of a topical treatment of **UrgoStart Plus Border** demonstrated its efficacy with the mean healing time of 4.12 weeks. This resulted in all 17 patients healing often prior to the 6 week referral requirement (n=14) and those that were referred (n=3) healed prior to being seen in the local LUC. This healing rate also confirms that the structured approach to wound care with evidence based treatments is required to further improve healing. Where there was variance in wound care approach but consistent application of mild compression pre pathway, the healing rate was 19.26 weeks compared to 4.12 weeks following the pathway (Figure 4). Using these healing rates to calculate the average cost per patient dependent on approach to care, an overall cost saving of 73.99% is achieved (£429.20 vs £111.65). (Figure 5 & Figure 6). When evaluating performance and cost effectiveness, it is important to consider not just unit costs but also the costs involved in the entire patient journey (Wounds UK 2023).

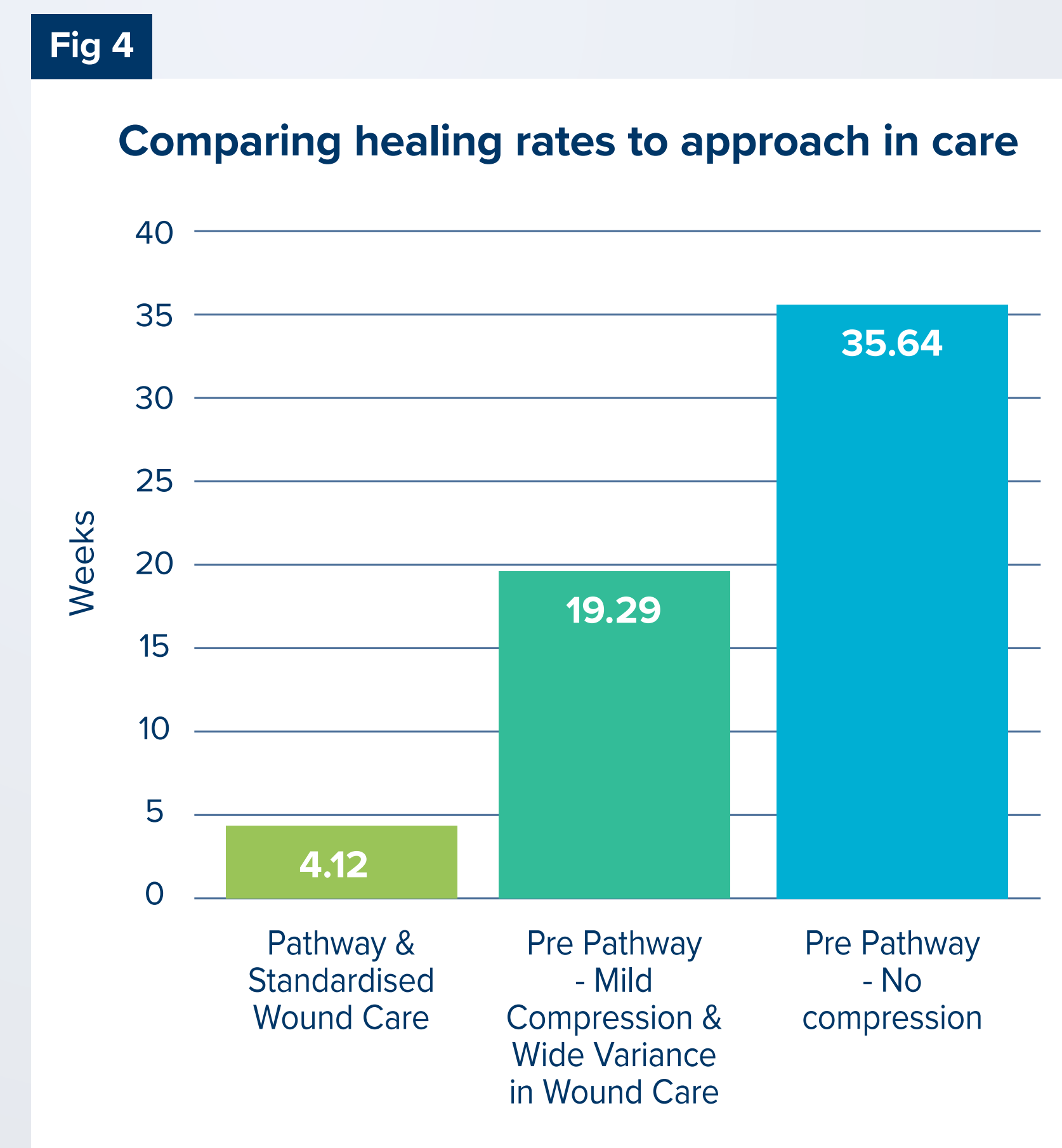
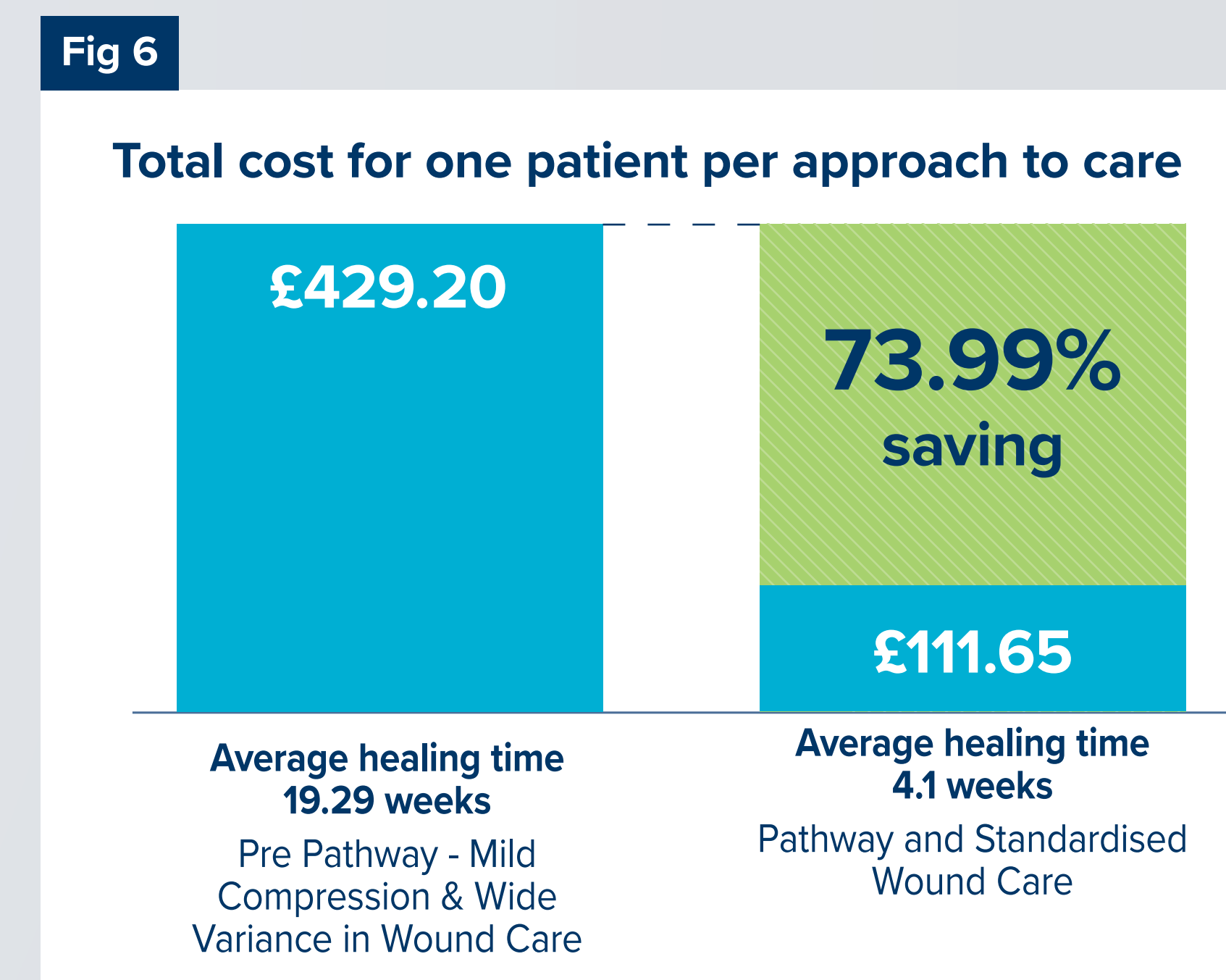


Fig 5
Total cost for one patient per approach to care

	Pre Pathway - Mild Compression & Wide Variance in Wound Care	Pathway & Standardised Wound Care
Nursing time per 15 mins appt ⁴	£13.25	£13.25
Dressing costs	£1.52 ⁵	£6.37 ⁶
British Class 1 Hosiery	£7.48	£7.48
Total cost per week (one dressing change)	£20.00	£24.85
Multiply by average healing rate (wks)	19.29 wks	4.12 wks
Total cost for one patient	£429.20	£111.65



1 Wounds UK (2023) Best Practice Statement: Development of a wound care formulary using clinical evidence and ensuring effective change management. Wounds UK London.
2 National Wound Care Strategy Programme: (2024) Recommendations for Leg Ulcers.
3 UrgoStart for treating leg ulcers and diabetic foot ulcers, <https://www.nice.org.uk/guidance/mgt42>, January 2019
4 Band 5 Nurse. The unit costs of health and social care <https://kar.kent.ac.uk/105685/> The University of Kent's Academic Repository KAR
5 Neutral foam and iodine wound contact layer (NHSSC)
6 UrgoStart Plus Border (NHSSC). All other prices are NHSSC