



A new response to heel protection is reducing costs and improving lives

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The development of heel ulceration remains an unwelcome problem for bed-bound patients both in hospital and the community. Heel ulcerations are notoriously difficult to heal, and management and treatment can be costly. From the patient's perspective this has an undeniable impact on their quality of life in terms of pain — which can be constant — delayed mobilisation, increased length of stay in hospital and, at its worst, amputation.

The key management modality for heel ulceration is pressure relief. In attempting to achieve pressure relief many factors must be considered: rapid reduction in pain, ease of application and bulk of the device, cost, patient concordance and their ability to mobilise while wearing it. Traditionally, pressure relief for bed-bound patients involves specialist mattresses, inflatable heel troughs, sponge boots and limb protectors. Unfortunately, the evidence regarding efficacy of any of these modalities is limited.

The Foot Protection Team, NHS Manchester reflected on the model of care provision given in one district of the trust. Reviewing more than 50 heel ulcers, of which more than 60% were acquired in hospital, we found that key aspects of heel ulcer management were delivered in a fragmented, inconsistent manner: Generally district nurses were managing heel ulcers, sometimes with the involvement of the tissue viability nurse, infrequently with input from a podiatrist and in cases of rapid deterioration, from the GP.

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In response to our appraisal of the existing care provision we introduced a Heel Protection Team initiative as part of our Primary Care Foot Protection Service. The Heel Protection Team provides a one-stop service, integrating with existing care provision in the community. Our team includes five high-risk foot specialist podiatrists and a TVN. Patients are referred using a rapid-access mechanism and are seen within one working day. Following assessment, management would include debridement

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of the wound (by the podiatrist), management of infection and application of a bespoke heel cast to offload the ulcer and provide immediate reduction in pain. Two of the team are non-medical prescribers able to provide timely and appropriate wound care and antibiotics where appropriate in partnership with GPs and secondary care physicians.

The skills and confidence of the team members have developed from, and were nurtured within, the secondary care diabetic foot clinic. The symbiotic extension of the service and the broad skill mix allows the team to provide holistic care, creating greater strength in

the healthcare team across both hospital and community settings.

The crucial core to this service has been the underlying rigidly enforced governance structure. This structure involves robust application of protocol-based care which has ensured that the service provides a timely appropriate response to the needs of our local population.

One of the innovations that we have implemented is a method of casting, initially developed in the secondary care clinic, which is now unique to our primary care team. We have created a lightweight, inexpensive device which provides a rigid exoskeleton over the ulcerated area and is framed by a soft single layer of the flexible Soft Cast material (3M Healthcare, Loughborough).

In the four months after adopting this model, we reduced costs to the service by more than £45,000. We no longer use expensive mattresses to reduce pressure nor do we use heel troughs, which are 10 times the cost of the new device.

But where is the evidence to back up this treatment option? Currently there is no standard against which to measure efficacy. But what we have seen is an immediate measurable reduction — and often elimination — of pain, rapid healing times (even in diabetic foot disease) and a high level of patient concordance — all at a fraction of the cost.

In street parlance this is a 'no-brainer'. We shall continue to develop the service and strive further to help patients avoid heel ulceration — and would recommend that other trusts attempt to set up a similar service. **WUK**



