

# Barnstaple Leg Club: An introduction to leg ulcer care

It is estimated that 1%–2% of the general population of the USA, Canada, UK, Europe and Australia will suffer with a leg ulcer at some point in their lives (Myles, 2007; Edwards et al, 2005a).

Chronic venous leg ulceration has an estimated prevalence of between 0.1% and 0.3% in the UK, with approximately 1% of the population suffering from leg ulceration in their lives.

The natural history of the disease is characterised by a life-long cycle of wound healing and breakdown, and chronic venous leg ulcers are associated with considerable morbidity and an impaired quality of life. Leg ulcers in patients from the most deprived communities take longer to heal and are more likely to be recurrent (SIGN, 2010).

Leg ulcers are defined as any skin damage below the knee that takes more than four to six weeks to heal (Royal College of Nursing, 2006; Benbow, 2005). The affected tissue may take several months to heal but some patients live with such a wound for many years (Nemeth et al, 2007; Moffatt et al, 2006; Graham et al, 2003).

Two-thirds of patients whose ulcers have healed will have at least one recurrence (Morris and Sander, 2007). As older people are at increased risk of developing arterial and venous incompetence (both are underlying causes of leg ulceration), improved life expectancy suggests that the number of people with ulcers is likely to rise (Franks and Moffatt, 2007).

Over a decade ago, treating leg ulcer patients was reported to cost the UK approximately £400 million a year (Ruckley, 1997). More recent estimates average from between 1.0% and 2.5% of the UK's total health care costs (Abbade and Lastoria, 2005). In 2009, one Primary Care Trust estimated (based on prices from 2006–2007) that they were spending £1.69 million on dressings and compression bandages and £3.8 million on nursing time (Vowden et al, 2009). In 2003, The European Wound Management Association estimated that the average weekly cost of treating an individual ulcer was £29. This was based on the cost of dressings used and nurse time spent on treatment, but excluded any secondary care referrals that might occur.

A literature review by Vowden and Vowden (2006) found that leg ulcer management in the UK is largely nurse-led, and estimated that over 80% of leg ulcers are being cared for in the community by district nurses and takes up around 50% of their time. It is estimated that delaying ulcer recurrence by as little as a month could result in a saving of as much as 8% of community nursing time.

Indirect costs include the hidden financial burdens on the community that are a result of: pain, ill health, loss of mobility, decreased independence in activities of daily living, loss of participation in the workforce and society. Additional costs are linked to lost productivity, the provision of social support for people with limited mobility and health complications stemming from prolonged immobility (Edwards et al, 2008).

A recent article by Stephen-Haynes (2010) concluded:

“Qualitative studies of patients with leg ulcers indicate a need for changes in how services are delivered, who they are delivered by and where they are delivered. Pain, isolation and frustration are repeatedly identified as affecting patients with leg ulceration.

MARK ELSTER  
*Patient Safety and Quality  
Manager, New Devon CCG*

ANDREW KINGSLEY  
*Lead Nurse: Healthcare Acquired  
Infection, New Devon CCG*

TONY LAYTON  
*Contract Manager, New  
Devon CCG*



*“The Lindsay Leg Club model, pioneered by Ellie Lindsay, provides nursing care in a nonmedical, social environment, has demonstrated numerous benefits that we wanted for the people of Devon.”*

“Many patients with chronic leg ulcers are cared for on an individual basis at home or in a clinic setting by health professionals ... however, this does not provide the social and psychological support that the literature indicates is necessary to effectively manage chronic disease and improve quality of life.

“Systems of care should offer an environment that reduces social isolation and increases support to this patient group.”

Current care for lower leg ulcers is broadly focused on treatment and does not address prevention. Venous leg ulcers and mixed venous/arterial ulcers account for approximately 85% of all ulcers. At least two-thirds of these patients will experience repeated ulcers.

Early assessment, effective compression and continuing aftercare provide an effective treatment and prevention programme. Ensuring that referrals to secondary care specialists are correctly identified will further aid cost control and maximise outcomes for patients. Healing ulcers and ensuring they remain healed is likely to contribute in reducing GP appointments, prescriptions for antibiotics to treat ulcer infections and admissions for ulcer-associated complications, such as cellulitis.

It is recognised that there may be clear benefits in reviewing the current delivery of leg ulcer care within the community, which has the potential to improve outcomes for patients with a leg ulceration on the community nursing case load. One such model is the Leg Club.

#### **THE BARNSTAPLE LEG CLUB**

The Lindsay Leg Club model, pioneered by Ellie Lindsay, provides nursing care in a nonmedical, social environment, has demonstrated numerous benefits that we wanted for the people of Devon. These benefits are that Leg Clubs help to remove the stigma associated with leg ulcers and aid isolated older people to reintegrate into the community. This, in turn, improves concordance and has a positive impact on healing and recurrence rates. The Leg Club model was designed to be run within a social setting, with all the associated health benefits that this brings. It allows patients to drop in, thus allowing them to receive their treatment when it suits them and offering them increased ownership of treatment in a measured and controlled way.

The Barnstaple Leg Club pilot was launched in April 2012 and is the first of its kind in the South West of England. It is a multiagency, multisector project, funded by the Devon Primary Care Trust and now supported by the Northern Locality of the North, East and Western Devon Clinical Commissioning Group. It is clinically supported through the Barnstaple Cluster Community Nursing Team and Tissue Viability Services at Northern Devon Healthcare NHS Trust.

The Barnstaple Leg Club is also supported by a Volunteers Committee who provide the social element of the Club and front-of-house administration, through the support of the North Devon Voluntary Services (NDVS).

After looking at other Leg Club schemes that were in place across the UK, it was clear that we needed to identify a number of outcomes for The Barnstaple Leg Club, which captured and demonstrated the value of the scheme in Devon. These included:

- ▶▶ Quicker healing and improved healing rates and associated cost savings.
- ▶▶ A reduction in ulcer recurrence, and associated cost savings.
- ▶▶ A positive patient experience and increased satisfaction, especially since a patient's reduced social isolation may improve their compliance and reduce the recurrence of the ulcer.

In addition, it was possible to link The Barnstaple Leg Club pilot with a number of the core strategies, priorities and objectives developed by the NEW Devon Clinical Commissioning Group (CCG) and Northern Locality. The core strategies were as follows:

- ▶▶ The Leg Club model is closely aligned with the core strategies of the CCG. It has been shown nationally that it is a sustainable, clinically led model with impressive member benefits. It makes the very best use of limited resources which allows the nursing teams to provide good quality care in a unique social setting and it lends itself to other specialties being “bolted on”.
- ▶▶ The Leg Club promotes well leg care and is focused on prevention and maintenance which has had a really positive impact on the quality of life for the patients attending the Leg Club.

The CCG's priorities include:

- ▶ Care closer to home: This helps to build communities, and delivers enhanced results while minimising unnecessary referrals to secondary care interventions.
- ▶ Joining up health and voluntary sectors: The CCG's worked with NDVS and built up a group of volunteers who support the running of the Club and undertake fundraising.
- ▶ Reducing chronic wounds: This leads to reduced prescribing (including antibiotics) and costs from the complications of chronic wounds (including some hospital admissions).

### The Barnstaple Leg Club outcomes

An evaluation of the pilot findings collected from The Barnstaple Leg Club over the past 18 months, indicate several outcomes.

#### Outcome one: Quicker healing and improved healing rates at 6 months

The baseline for UK healing rates in primary care, reported by Guest et al (2012), after 6 months was only 6%–9%. These data prompted discussion in the *Journal of Wound Care* regarding current healing rates for leg ulcers in UK community care, suggesting a lack of consensus over this key outcome measure.

Within this debate, White et al (2012) reported healing rates across a range of UK community leg clinics, suggesting that healing at 12 weeks would be 12% and healing at 26 weeks would be 30%. Interestingly, almost 50% of the leg ulcers remained unhealed after more than a year of treatment.

The national rates of leg ulcers healed at 6 months was 9% (Guest et al, 2012), while the rates of leg ulcers healed at 6 months at The Barnstaple Leg Club was 42%.

The pilot data show that, for Leg Club members, there is a marked improvement in the healing rate at 6 months, with healing rates at 33% above the national figures (Guest et al, 2012).

#### Outcome two: Reduction of leg ulcer recurrence

The current national rate for recurrence of leg ulcers at 6 months (24 weeks) is 46% (Vandongen and Stacey, 2000). The pilot audit data from the author's study confirmed that the rate of recurrence of leg ulcers at 6 months (24 weeks) for The Barnstaple Leg Club was 7%. What is also

important to note is that there was no further recurrence of leg ulceration at 6 months for 93% of Leg Club members.

The pilot data also showed that members receiving care through the Leg Club model have clearly benefited from having increased support, from other Leg Club members and community nursing staff, which has led to increased levels of personal ownership and ulcer awareness. According to the author, these benefits have helped to support the marked local improvement against the nationally recognised reoccurrence rates.

#### Outcome three: Member experience

The Leg Club model provides more than good cost-effective clinical care. There are tangible improvements to the quality of life of Leg Club members, though these are hard to quantify in monetary terms.

Notably, the experience of enabling people that were previously housebound to increase their independence and the form many new friendships. It is a reasonable assumption to attribute some of the good clinical outcomes to the communal atmosphere of the Leg Club, since it helps members cope with their ulcers and concord with treatment plans by sharing their experiences of improvement and healing with fellow members.

Feedback from The Barnstaple Leg Club members has been extremely positive, with high levels of satisfaction and positive responses obtained through a number of informal interviews and the development of a member's questionnaire.

An example of responses from Club members to the question: "Have you noticed any change since having your leg dressed here?" included:

"Healing improving since coming, less pain, mobility improved. Boots given at the Club which protects feet – very comfortable."

"Yes, my ulcer is healing very well since I've been having it dressed here, especially since I've been in compression bandaging."

"My leg is healing and becoming less painful as the weeks go by."

"Thanks to the nurse and her team and the Leg Club, I won't lose my right leg."

*"The pilot data show that, for Leg Club members, there is a marked improvement in the healing rate at 6 months."*

***“We are now looking to implement our next Leg Club locally and are aiming, in time, to rollout many Leg Clubs across the Clinical Commissioning Group in order to ensure that the clearly identified benefits of this model can be made available for all people living in Devon who could potentially benefit from it.”***

Responses to the question: “Has the Leg Club helped you to carry out other activities?” included:

“It cheers me up if I am feeling down, which makes life easier.”

“I’ve been able to sleep better since my ulcer is healing and I can walk better too.”

“No, not other activities but it is good to meet other members in the same position as yourself.”

“Mobility improving — exercise a lot at home now.”

When asked to provide additional comments, responses included:

“Expertise of the nurses is great! Good atmosphere and appreciate the length of time spent for treating my leg, (unable to have that time spent in a normal surgery).”

“Everyone is so friendly.”

“No appointment needed, good parking.”

“Very satisfied with the Club, leg ulcers heal better here. Really enjoy the Club — able to chat to other people.”

“Whole concept is wonderful.”

“Very friendly, made to feel welcome. You are told how your leg is progressing.”

“No appointments with district nurses, very good, lots of different nurses.”

“Very welcoming and friendly. You are kept up to date on the progression of your healing.”

### **Best foot forward: next steps for Devon**


We recognise that the Leg Club model challenges the traditional set up within community nursing of delivering care in a patient’s home environment. Establishing The Barnstaple Leg Club has been challenging respect to perceptions of how care is best delivered in a clinically and cost-effective

way, which also reaps social rewards and provides shared benefits for provider, commissioner and, most importantly, Leg Club members.

It was interesting to see that both Leg Club members and community nurses quickly accepted and supported the pilot implementation, despite earlier voiced concerns and anxieties about the change in approach. The patient experience data is overwhelmingly in support.

The arrangements developed for The Barnstaple Leg Club pilot have enabled the project team to identify where further refinements to the service delivery model would be beneficial for future wider implementation.

It is clear, also, that any further rollout would be supported by the implementation of the wound care pathway in primary care which, in turn, will ensure a consistent approach to leg ulcer management up to the point in time that the pathway would support Leg Club intervention and referral.

We are now looking to implement our next Leg Club locally and are aiming, in time, to rollout many Leg Clubs across the CCG in order to ensure that the clearly identified benefits of this model can be made available for all people living in Devon who could potentially benefit from it. 

### **REFERENCES**

- Edwards H et al (2008) A community nursing model of care for people with chronic leg ulcers. In: Lindsay E, White R (eds) *Leg Ulcers and Problems of the Lower Limb: An holistic approach*. HealthComm UK, Aberdeen
- Etfugh CN, Phillips TJ (2007) Venous ulcers. *Clin Dermatol* 25(1):121–30
- EWMA (2003) *Understanding compression therapy: Position document*. MEP Ltd, London
- Guest JF et al (2012) Relative cost-effectiveness of a skin protectant in managing venous leg ulcers in the UK. *J Wound Care* 21(8):389–98
- Ruckley CV (1997) Socioeconomic impact of chronic venous insufficiency and leg ulcers. *Angiology* 48(1):67–9
- SIGN (2010) *Guideline 120 Management of Chronic Venous Ulcers: A National Guideline*. Available at: <http://www.sign.ac.uk/pdf/sign120.pdf> (accessed 07.10.2013)
- Stephen-Haynes J (2010) The Leg Club model: a survey of staff and member’s perceptions of this model of care. *J Wound Care* 19(9):380–4
- Vandongen Y, Stacey M (2000) Graduated compression elastic compression stockings reduce lipodermatosclerosis and ulcer recurrence. *Phlebology* 15(1):33–7
- Vowden, KR, Vowden, P (2006) Preventing venous ulcer recurrence: a review. *Int Wound J* 3(1):11–21
- Vowden K, Vowden P, Posnett J (2009) The resource costs of wound care in Bradford and Airedale primary care trust in the UK. *J Wound Care* 18(3):93–4, 96–8, 100
- White R, Whayman N, Brown A (2012) Venous leg ulcer healing in primary care: preliminary data. *J Wound Care* 21(11):570–1