Leg Clubs®: a clinically and cost-effective approach to lower limb management

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ABSTRACT

Leg ulcers affect 55 000-90 000 people, predominantly aged over 65, in the UK at any one time. Traditional care, delivered in people's homes by district nurses or in GP clinics, is costly and often not effective, with slow healing rates and a high incidence of recurrence. A social model of leg ulcer clinics developed by the author has been shown to improve healing and reduce recurrence within a highly cost-effective framework that delivers genuine patient empowerment, public health education and social outreach. This paper outlines the rationale for the Leg Club, its clinical and social impact, and the infrastructure behind it. It also considers the challenges to establishing and running a Leg Club.

KEY WORDS

◆ Concordance ◆ Holistic care ◆ Leg Club ◆ Leg ulcer ◆ Patient empowerment ◆ Quality of life ◆ Social clinic

Leg ulcer management is a major component of community nursing services in terms of both time and cost. In one UK study, the overall incidence rate of venous leg ulcers among those aged 65 years and over was estimated at 0.76 per 100 person years for men and 1.42 for women. This estimate was based on patients seeking and/or receiving medical care and, since many people with leg ulcers are reluctant to access care, is therefore an underestimate of the true extent of the problem (Margolis et al, 2002). According to available studies (Callam et al, 1985; Bosanquet, 1993; Franks et al, 2004) between 55 000 and 90 000 people are living with a leg ulcer at any one time in the UK.

The financial burden of leg ulcers is highlighted when data from studies in the UK are combined; indicating that 1.5% of total health expenditure is accounted for by chronic leg ulcer treatment, most of it delivered by community nursing services (Margolis et al, 2002; Cherry, 1990; Lis and Mann, 1994). The situation is exacerbated when poor healing results from patients' non-concordance with treatment. Costs of recurrence are also high. Many patients have lived with open wounds for many years and have seen them heal only to break down again following a minor knock or being bumped by a shopping trolley. They have therefore been through endless cycles of healing and breakdown, with each cycle lasting many weeks or months.

The social cost of leg ulceration includes isolation from others, and the social stigma attached to leg ulcers can lead to depression. There can also be significant financial cost to the patient in terms of time off work, and travel to far-away centres or hospitals.

Responding to literature reviews citing a correlation between social isolation and non-concordance the author developed a new type of clinic (the Lindsay Leg Club Model) in which patients are stakeholders in their care and are empowered to make informed decisions regarding treatment.

The benefits of patient empowerment have been widely promoted in such documents as *Our Health, Our Care, Our Say* (Depatment of Health (DH), 2006). However, the advent of commissioned services for leg ulcer management in the community has presented new challenges to a patient-centred approach to care delivery. For example, there are indications that many leg ulcer services may become assimilated within the existing GP surgery framework, in which clinics conventionally focus on clinical need, the treatment of 'sickness' and the alleviation of symptoms. The formal clinic environment reinforces 'sick role' behaviour, in which patients attend when they believe they require treatment and in which they assume a passive role in their care delivery. This culture is further encouraged when clinics are incentivized on patient contacts and procedures rather than the ongoing maintenance of 'well legs' within the practice population.

Such pressures are understandable, as commissioning bodies have the responsibility to meet, as best they can within a limited funding envelope, the health needs of a pre-defined population. The emphasis must be on value for money, measurable outcomes and cost-effectiveness. In this environment, however, it is easy to lose sight of the importance of the caring ethos and the quality of patients' lives.

The Leg Club model of care shows that these two seemingly incompatible aims can be united, delivering excellent clinical results at greatly reduced cost, while also dramatically improving the quality of life of patients.

A new approach to leg ulcer management

Leg Clubs have the following objectives:

- To empower patients to be involved in making decisions pertaining to their own treatment
- To meet the social needs of socially isolated people by providing a venue for social interaction, peer support and

positive role models
- To implement strategies to de-stigmatize and rebuild the self-esteem of people with leg ulcers
- To provide an informal forum for health promotion and education, encouraging informed beliefs and positive health behaviours
- They are characterized by four binding principles that differentiate them from conventional clinics:
  - A non-medical setting – e.g. community/church/village hall. This avoids the stigma or fear of attending a medical setting and reinforces the community ownership of the Club
  - Informal, open access, no appointment required. This encourages opportunistic attendance for information and advice, providing greatly increased opportunities for early diagnosis and leg ulcer prevention and helps isolated older people reintegrate into their community
  - Collective treatment; People share their experience, gaining peer support, and encouraging them to take ownership of their treatment
  - Integrated 'well leg' regime, supporting maintenance of healthy legs, positive health beliefs and broad health promotion.

Collaborative working is the foundation of Leg Club culture. Patients and nurses work together in an open environment, where interactive learning is paramount. Treatment is undertaken collectively in an area where two or three people can have their legs washed and dressed in the same room, giving them the opportunity to compare healing and treatments. They are encouraged openly to discuss treatment issues with the care team, carers and other patients, and this offers them control over their own leg ulcer destiny. Treatment is undertaken with, rather than on, the patients.

This shared treatment also provides an open forum where excellence in practice can be observed, recognized, critically evaluated and mirrored by all the nursing staff (Lindsay and Hawkins, 2003).

Leg Clubs are not 'owned' by the health professional but by the local community. Established and run by volunteers in partnership with nurses, Clubs are self-funding, with patients and the community finding various ways of raising money for the rent, equipment etc. The only costs to the NHS are nursing time and dressings.

Clubs are run once or twice a week depending on local need and resources, with up to 40 patients attending each session. Leg Clubs currently operate in 20 locations across England, Wales and Scotland, and 10 in Australia.

Clinical and cost effectiveness

Data collected in Australia have demonstrated that the patient-centred, non-medical approach of the Leg Club has dramatically increased concordance and reduced prescription costs (Edwards et al, 2009). In the UK, Leg Clubs have achieved notable success in terms of increasing healing rates and prevention of recurrence (Lindsay, 2004), and apart from totally housebound patients, home visits for leg ulcer management have virtually been eliminated by certain Leg Clubs, yielding significant savings for primary care organizations (PCOs).

Leg Clubs have also proved to be extremely cost effective in the use of nursing resources, saving travel costs, reducing need for the duplication of equipment, simplifying planning and administration, and eliminating wasted home visits.

Significant savings are evident when costs associated with the use of the Leg Club Model are compared with conventional home visits (Gordon et al, 2006). Following a two-year randomized control study conducted in Queensland, Gordon et al (2006) concluded that the Leg Club model of care for patients with venous leg ulcers is a more economically efficient option than traditional community and home nursing.

Above all, patient healing rates and quality of life have improved as a result of the Leg Club initiative (Edwards et al, 2009). Where community nursing teams and management have been receptive to running a Leg Club and have adopted a positive approach to the challenge of introducing change, the attitude of patients and local communities to their own health has changed significantly.

What makes the Clubs a success?

Leg Clubs have a history of innovation in leg ulcer management. It is widely acknowledged that leg ulcer management is one of the most time- and cost-consuming activities in community nursing, a situation that is often exacerbated when poor healing results from patients' non-concordance to treatment (Lindsay, 2001). The Lindsay Leg Club® model of care aims to promote increased motivation and understanding of conditions of the lower limb to their members (patients) in order to increase concordance with treatment. Members are treated collectively and are able to follow their peers' progress in healing each week and through the 'well leg' regime members are able to communicate and interact freely with members whose ulcers are now healed. They are empowered and openly encouraged to discuss treatment issues with the skill mix team, carers and other members, and this offers them control over their own leg ulcer destiny. This openness is necessary to provide members with a sense of collaboration in their care, where a number of members are treated together, listening and observing the differing treatments.

Statistical data has been collected (Lindsay, 2008) and independently analysed since the inception of the first Leg Club in 1995. Clinically, non-concordance to treatment has been virtually eliminated and there is evidence of greater healing rates, illustrated by many patients whose long-standing ulcers either healed or greatly improved as a direct result of this change in approach. People's willingness to attend for 'well leg' checks and ongoing health education resulted in a dramatic reduction in the incidence and recurrence of leg ulcers.

Leg Clubs have also been found to provide a most effective forum for education in which training needs of nursing staff are highlighted, and addressed by means of workshops, tutorials and peer guidance. Clinical audit is undertaken to identify areas of practice within the PCO Leg Clubs and

A podiatrist in action at a Leg Club in Mildura, Australia

to ensure that standards are adhered to. Audit undertaken examines in detail reported practice of members being treated for preventive/leg ulceration management through the use of a questionnaire to:

- Ensure compliance with the key criteria of the Leg Club concept
- Observe through a process audit, the clinical care delivered to patients
- Identify areas of clinical practice which require examination and further educational input
- Provide evidence of management policies and information
- Compare the members' notes with an 'ideal' set of notes
- Observe whether the clinic practice conforms to the 'ideal'
- Provide suggestions on how the service could be improved.

International research and current data findings from this social model of care clearly demonstrates the advantages of nursing staff and members working together in a unique open forum partnership, adhering to best practice guidelines. First and foremost, patient healing rates and quality of life have improved as a result of this initiative (Edwards et al, 2009). The PCO management and community nursing teams have been receptive and have adopted a positive approach to the challenge of introducing change, acknowledging the benefits for Club members. The attitude of members and local community to their own health has changed significantly. Apart from totally housebound patients, home visits for leg ulcer management have been reduced or in some instances eliminated, yielding significant PCO savings. The ongoing running costs for the hire of the community venue are met by the members and local community through weekly fundraising (raffles) and donations.

The Leg Club Foundation (CRN 1111259) provides guidance, support and training during the setting up phase. Health and safety and infection control are primary considerations for Leg Clubs, clearly covered by documented guidelines and risk assessment. Although the model has its own documentation, guidelines, and referral pathways covering all disciplines, the guidelines state that their local PCO protocols and procedures were also adhered to. During the embryonic stage of introducing a Leg Club, ensuring all aspects are covered, the nursing teams are recommended to meet and liaise with their tissue viability nurse, lymphoedema nurse, consultant vascular surgeon/nurse specialist, infection control nurse and the director of provider services. The changes in the working culture and practice require full support by the PCOs, a factor critical to the success of any innovation.

The community Leg Club model of care provides additional benefits to promote healing apart from the provision of consistent, evidence-based clinical treatment. The Leg Club concept provides a model to address many factors likely to influence healing of chronic leg ulcers. Such factors include loneliness, decreased sense of control and morale, lack of knowledge and motivation and non-adherence to compression therapy. Further, the model provides an excellent opportunity for staff development as

nurses can examine, discuss and implement practices based on current evidence. With the enthusiastic support of its members and community, the Clubs have rapidly developed and steering groups has been formed, consisting of members (the expert patient), community leaders and volunteers. Every member receives an informative Members Handbook, and in working alongside and supporting the individual members and their families, some of the clinicians deliver educational talks within the Clubs' local communities. The Club's health promotion now includes raising awareness of preventative management of all aspects of lower-limb-related problems to the general public. Every week certain Clubs have an educational folder and display area which includes sections on leg health, skin care and social benefits.

It is estimated that up to 50% of community nurses' time is spent on caring for clients with chronic leg ulcers (Simon et al, 2004). Apart from visits from professionals, as stated above, many individuals suffering with leg ulcers are isolated and therefore lonely. The Leg Club Model, however, treats sufferers holistically and meets many of their social needs as well as their medical ones. Leg Clubs in the UK are already providing medical and social care to circa 5000 people.

The ethos of the Lindsay Leg Club Model is to encourage 'wellness' rather than treat 'illness' in all age groups. It is a proven alternative to the traditional management of leg conditions. For example, the fact that Leg Clubs encourage people to be fully involved in their treatment provides real motivation to individuals who are living with chronic wounds. One facet of the Leg Club model is the 'well leg' programme aimed at prophylaxis, education and advice, and prevention and maintenance of further leg-related problems once the ulcer has healed.

In accordance with Leg Club guidelines, every Leg Club offers patients the option of receiving treatment in private (that is, they are not treated in view of other members). However, internal data show that in practice less than 1% elect so to do, and that patients overwhelmingly favour collective treatment (that is, in a communal treatment area).

As many nurses work in the community in isolation from their colleagues, there is a significant danger of them becoming entrenched in their own way of working, not calling on colleagues for further advice and not sharing information. In these situations the patient may not receive the best possible treatment/care. The collective treatment undertaken in the Leg Club overcomes these problems by enabling nurses to share best practice and constructively critique their own clinical skills.

The notion that the 'social element' in itself defines the model, which can therefore be transposed to an institutional setting, is a denial of the fundamental research-based principles of patient empowerment. Patient empowerment is a high priority for health professional policy makers in many countries. By increasing the role of patients, health-care providers should become more responsive to patients' needs and preferences and deliver better quality care and patients can participate in health care in many ways (Wensing, 2000).

The experience of visiting the Leg Club is wholly positive. Many patients who rarely venture out of their houses attend the Club. Many of them have made new friends and relationships have blossomed. The Clubs are run by a group of dedicated community volunteers, who provide refreshment, entertainment and transport. They give their time freely and are rewarded richly by the positive feedback from the Club members.

Input from GPs is kept to a minimum. Requests are made for antibiotics when needed and occasionally for appropriate onward referral to vascular surgery when Doppler assessments reveal arterial problems.

The Leg Club model has proved to be a win-win situation in terms of cost-effective care and forms an ideal basis for commissioning. It is wholly patient centred and sits extremely well with modern teaching and government thinking.

Procedures and documentation

Health and safety and infection control are primary considerations of the Leg Club Model. They are clearly covered by Leg Club guidelines and risk assessment documentation written by an internationally renowned expert (EWMA, 2005; Kingsley, 2007). To date there has been no incidence of Leg Club-acquired infection. Working practices and lifting protocols are audited and approved by local representatives from the trust adopting the model. Documentation pathways provide nurses with protocols and policies addressing issues such as infection control, diabetes, vascular and dermatological disease and referrals. These are incorporated into the comprehensive documentation of the Leg Club Model that is provided to all Leg Clubs in paper and electronic format.

A handbook is provided by the Leg Club Foundation to be used during practice, to ensure all staff members working in Leg Clubs have a reference book that is simple and instructive. The aim of the manual is to provide informative, educational material to underpin evidence-based practice. Wound management requires the skill and science of nursing in terms of accurate assessment and the use of appropriate interventions. The handbook provides nurses and carers with a rationale for a holistic approach to wound-based care and is an excellent reference resource for pre and post-registration students visiting a Leg Club.

Although the model has its own documentation, guidelines, and referral pathways, the nursing team must also ensure that local PCO protocols and procedures are observed. In order to provide a seamless service the clinicians are encouraged to liaise with a tissue viability nurse specialist, consultant vascular surgeon, dermatologist, infection control specialist and the director of the service provider.

Leg Clubs evolve through continual improvement based on the reflective practice and shared experiences of the members, which are debated at meetings such as the Leg Club Forum where they share best practice and provides a support network to which they can refer for help and advice.

Implementation of change

Successful Leg Clubs are the product of competent, open-

minded and motivated nursing teams working to best-practice guidelines with PCO management support. Committed PCOs should perceive Leg Clubs as a way forward because they address themes within *The NHS Plan* (DH, 2000) and *Liberating the Talents* (DH, 2003), as well as the standards incorporated in the National Service Framework for Older People (DH, 2001). However, patient empowerment is not an easy concept, and it is inevitable that some nurses and nurse managers will be uncomfortable with the notion of moving from a 'nurse dominant/patient passive' relationship to one of an equal partnership in care. Also, delivering care in a collective environment exposes clinical practice to a level of scrutiny not experienced in one-to-one treatment.

By having the courage and motivation to implement change, engaging with their local community, exposing their practice to peer review, and empowering their patients to participate in care delivery, the nurses who have opened Leg Clubs have responded to core themes of NHS policy (Gordon et al, 2006). By overcoming barriers to change, and through true collaboration with their local community, their pioneering work has delivered tangible benefits for every stakeholder in the process of leg ulcer management:

- Improved healing and quality of life for patients
- Significant cost savings for the health professional
- Opportunistic early detection and treatment
- Identification of previously untreated cases through self-referral
- In-house education, training and health promotion for patients and staff.

Conclusion

To date, the key objective of the model has been the management of leg ulcers and the promotion of 'well legs'. Its clinical and cost effectiveness in this regard has been demonstrated by research and internal data collection. Planned further expansion of the model as a health promotion tool includes raising awareness of preventative management of all aspects of lower-limb-related problems among the general public.

The Leg Club Model is an innovative, research-based model for the management of leg-related problems, and a proven alternative to the way this large group of people has traditionally been managed in the community. **BJCN**

Further information about Leg Clubs can be found by visiting our web site: www.legclub.org.

Box 1. Benefits of the Lindsay Leg Club model

- Healing rates are excellent and recurrences are reduced.
- It is cost and time effective.
- Patients who rarely venture out of their homes attend the Club and benefit from social interaction.
- GP input is kept to a minimum.
- Practice nurse input is reduced.
- Falling rates of inappropriate referrals and antibiotics prescribing.

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Key points

- Leg ulcer management takes up a significant amount of the community nurse's time.
- Leg Clubs can take the pressure off of community nurses.
- Patient empowerment is a key component in achieving a positive outcome in health care.
- Leg Clubs can improve self-esteem, reduce social isolation and education to patients as well as promoting healing of leg ulcers.
- Clincally, non-concordance to treatment has been virtually eliminated in those attending leg ulcer clinics.