Research into the effectiveness of the Lindsay Leg Club® model

KEY WORDS
- Social model of care
- Leg club model®
- Quality of life
- Wellbeing
- Cost-effectiveness

The psychosocial Lindsay Leg Club® model of care has been in operation since 1995 and was specifically designed to provide a social model of care for people suffering from or at risk of leg ulceration. Leg Clubs are partnerships between nurses, volunteers, members (the people attending for leg ulcer treatment or prevention) and committed healthcare companies. There are more than 45 Leg Clubs across the UK, Europe and Australia, and the numerous local and national awards awarded to nurses who have set up Leg Clubs are a testament to the recognition the model now enjoys within the wound care community.

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In many parts of the UK and Australia the Leg Club model is recognised by commissioning groups and healthcare providers as a valued part of the ongoing care of the elderly and other members of the community at risk of health breakdown. This paper outlines the latest evidence for the effectiveness of Leg Clubs and discusses the future role that a social model of care can play within the wound management arena.

Much Leg Club research has been retrospective, and the Leg Club Foundation has spent many years identifying the best methods for creating a data entry system that is robust and simple to use at the local level but that can be analysed in a variety of ways at the macro level. The Leg Club database may be one of the largest single repositories of data on leg ulcer progression; therefore, it is hoped it will become a useful tool for all those involved in managing the provision of care and treatment in this area.

One priority of Leg Club research is to examine effectiveness not only in terms of clinical outcomes but in terms of member (patient) satisfaction, quality of life or wellbeing, and cost effectiveness. In short, there is no point proposing a social model of care involving multiple stakeholders if we cannot draw conclusions about its effectiveness outside the purely clinical arena. This paper examines and discusses past and present work relating to outcomes, member satisfaction, wellbeing and and cost-effectiveness.

OUTCOMES

At the beginning of 2014, the Leg Club network initiated a new outcomes data entry and reporting system (Renyi and Cottrell, 2016). We examined wound progression in 3,124 members from 10 Leg Clubs within the network based on reports from the system for the second half of 2015. During this period, 4,311 leg treatment visits took place, along with 6,769 "Well Leg" visits (meaning monitoring visits for healed legs). Analysis of these data confirmed that the majority of healed ulcers achieved healing within 2 months. More recent reports from the top 20 Leg Clubs in the period 1st October 2016 to 31st March 2017 (exceeding half of all members in the network) confirmed that 64% of all healed ulcers achieved healing within 12 weeks.

Since the inception of the first Leg Clubs, documentation has been provided and collated by the Professor Michael Clark. At the end of 2013, Professor Clark examined recurrence rates for all UK-based Leg Clubs. Healing was reported at 24, 48, 72 and after 96 weeks of treatment, while recurrence was calculated at 24 and 48 weeks — the period when most leg ulcers recur (Vowden and Vowden, 2006; Clark, 2013). *"Recurrence rates in Leg Clubs were markedly lower than reported in non-Leg Club settings,"* concluded Professor Clark. In fact, at 12.5–15.8% the recurrence levels were just half the national average for this period of 26–33% with good concordance to treatment and 56%

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with poor concordance to preventive care (Vowden and Vowden, 2006). The Leg Club's own database (2017–2018) confirms a similar figure to that found by Professor Clark: 10% recurrence from 20 Leg Clubs when measured at 25 weeks.

MEMBER SATISFACTION

The most recent reports from the Leg Club database confirm that the main clinical reason for attending Leg Clubs is not simply treatment of an ulcer but to receive "advice and maintenance". In fact, the majority of members (56% in the period 1st April 2017–31st March 2018) were in the "Well Leg" rather than the "treatment" bracket, which means that they were being monitored and advised rather than treated. Their continued attendance indicates a certain level of satisfaction with the Leg Club model, as treatment is not necessary. The non-medical setting, we would assume, enhances the experience.

These points are corroborated by an Australian study comparing patient satisfaction with care received at Leg Clubs as opposed to at home (Edwards et al, 2009). The results pointed towards improvements within the "Leg Club" cohort with respect to:

- Quality of life with regards to health
- Morale and self-esteem
- Functional ability and leg ulcer healing
- Decreased pain.

This information was built upon by a member satisfaction questionnaire, conducted in 2011 that included 124 members from five Leg Clubs in the UK (Clark, 2012). Few expressions of dissatisfaction were offered by this member group, with 92.2% and 91.2% of prior and first-time attendees, respectively, describing themselves as "very satisfied" with their Leg Club. As a consequence of visiting their Leg Club:

- 67.0% of members considered that they were better able to cope with life
- 68.1% of members were better placed to keep themselves healthy
- 75.5% of members felt better able to understand their leg problems
- 76.8% of members considered themselves better able to cope with their legs.

HIGHT LEVELS OF SATISFACTION WITH LEG CLUB NURSING STAFF

A social survey of Leg Clubs was conducted in 2017 by the University of Canberra to assess levels of member satisfaction with Leg Club nursing staff. Survey questions were assessed on a scale from 1 to 6, where 6 represented the highest level of satisfaction and 1 a high level of dissatisfaction (University of Canberra, 2017). It was found that:

- 90.3% of members were very or extremely satisfied by the frequency with which they were able to access Leg Club nurses
- 96.7% of members were very or extremely satisfied by the quality of time that they spent with nursing staff
- 96.7% of members were very or extremely satisfied with the quality of care provided
- 94.3% of members were very or extremely satisfied with the continuity of care provided
- 95.9% of members were very or extremely satisfied with the advice being given by Leg Club nurses.

WELLBEING

Quality of life and wellbeing are somewhat interchangeable; however, it is believed that wellbeing is a more meaningful term in the clinical setting as it encompasses a person's perceived ability to cope with his or her own personal circumstances. In 2013 and 2014, a team of health psychologists undertook a detailed assessment on wellbeing levels and potential changes in wellbeing in people attending a Leg Club (Upton et al, 2014; Upton et al, 2015). This research took place over 2 years, and had three distinct stages:

- A thorough literature review on quality of life and wellbeing with regards to venous leg ulceration
- Validation of a wellbeing assessment tool for patients suffering from venous leg ulceration (the Wellbeing with a Wound Inventory)
- Use of the assessment tool among Leg Club members.

Repeated Wellbeing in Wounds Inventory measures during the final state of research provided initial evidence that Leg Club attendance impacts wellbeing over time. A significant interaction was found between length of Leg Club attendance and changes in 'personal resources' for people who had attended Leg Club for between 1 and 2 years. The main conclusions from the study were that:

- Leg Club attendance positively impacts wellbeing
- Social support provided at Leg Club plays an important role in member wellbeing.

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The WOWI tool is the copyright of: Urgo Medical, The Lindsay Leg Club Foundation and Upton (D. Upton Dominic.Upton@canberra.edu.au) The outcomes from the satisfaction questionnaire could not have been undertaken without the support and participation from the Leg Club members, volunteers and clinical team and BSN Medical on behalf of the LCIP members.

Establishing a connection between wellbeing and wound outcomes will complete the picture of effectiveness that the Leg Club model demonstrates. For the present it is reasonable to conclude that the Leg Club model provides an effective solution for healthcare providers and clinicians alike when looking to improve outcomes, cost-effectiveness, satisfaction and wellbeing in their patients.

COST-EFFECTIVENESS

The Leg Club model provides a fixed weekly time and venue for treatment. This can provide considerable time savings for district nurses, who can schedule their workload in a more effective way and avoid unnecessary home visits. These savings in district nursing time were demonstrated in Powys, Wales, in 2014, in an award-winning study. Powys has approximately 3,000 patients who need treatment for leg ulceration, 2,300 of which are Leg Club members. The study found (conservative) gross cost savings to Powys Teaching Health Board of £4,056 per annum per patient, which equates to £932,880 in total, based on the average cost of £78 per district nurse visit, with each patient receiving one visit per week (Griffin, 2014). Excluding the £227,136 cost of placing an average of five nurses in each of the seven Leg Clubs in the health board once a week, this translated into an overall net saving of £705,744, excluding additional savings in district nurses' travel expenses (Griffin, 2014). Dressings, equipment and in-patient hospital stays were excluded from the study.

A review has been conducted by the Swansea Centre for Health Economics using national statistics and available data to estimate the change in resources and costs that would be incurred by the UK NHS if a Leg Club model of care were to be widely implemented (Cullen et al, 2018). Bearing in mind the tentative nature of the conclusions inherent with this type of modelling, the estimated cost savings from rolling out Leg Clubs ranged from £95,000 in an urban area with a younger population, to £2.18 million for a rural population with a high proportion of older people. If Leg Clubs were introduced across the UK, suggested the review, NHS could save an estimated £107 million per year. Several reasons were suggested for the savings, including shorter healing times, lower recurrence rates and improved allocation of resources. It is also important to remember that with Leg Clubs the voluntary sector and community remove some of the cost burden, for example equipment might be donated and clinics are run by volunteers rather than paid staff.

There is more research to be done. The final validation of the outcomes database set up by the Lindsay Leg Club® Foundation, including the integrity of the data entered by individual Leg Clubs, is yet to be achieved. Despite this, the conclusions drawn are based on information from Leg Clubs whose data has been examined and verified. The indications from all the above is that, in the right circumstances, Leg Clubs are effective.

DISCUSSION

The very recent research showing high levels of satisfaction with nursing staff is very encouraging. It hopefully demonstrates that the nursing care that members receive is at least as high as it would be in a traditional clinical environment, and that this is recognised by those receiving the care.

Initial work on wellbeing suggests that the model improves wellbeing, and that social interaction has a key part to play in this aspect of holistic management. Members' shared experience appears to be the influencing factor here; further qualitative research could be extremely useful in assessing this.

We need to be more tentative with our conclusions on the cost-effectiveness of Leg Clubs. There are clearly potential savings in district nursing time, as demonstrated in Powys. We can see why attending a fixed location at fixed times can markedly reduce the time and effort expended by district nurses in visiting patients in their homes. This was in fact one of the key reasons the model was developed. The economic model needs to be developed further; however, it seems likely that there are considerable savings to be made on four levels, namely on nursing time, the opportunities for sharing resources, the opportunities for prevention of major adverse events as members are regularly observed, and finally the contributions made by the voluntary sector, taking considerable pressure off a challenged NHS. In each of these cases, there is potential for further study. WUK

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