

Innovations in the care of leg ulcer patients in Australia

This short report describes the recent introduction of new models of care in Australia aimed at disseminating the evidence base for leg ulcer care to health professionals. These innovations have contributed to the establishment of a Cooperative Research Centre with researchers, health professionals, health service and industry partners.

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CHANGING THE APPROACH TO LEG ULCER CARE

Implementation of new models of care has resulted in successful outcomes for both patients and health services and generated significant interest from health service providers and individual health professionals throughout Australia. As a result, new services based on the Lindsay Leg Club model of care have been established in three states of Australia; over 100 health professionals have visited the Wound Healing Community Outreach Service (WHCOS) at Brisbane; and grants were awarded to the WHCOS to provide further outreach education for multidisciplinary health professionals caring for patients with chronic leg ulcers. These initiatives contributed to a successful bid to establish a Wound Management Innovation Cooperative Research Centre – a collaboration of multidisciplinary researchers, clinicians, health service providers and industry partners to lead research and development of future innovations in wound care.

Nurse practitioner-led wound care

Australia's first nurse practitioner-led, community-based wound clinic was opened by Queensland University of Technology's Institute of Health and Biomedical Innovation in January 2008. Outcomes from the WHCOS have been presented at state and national conferences and include improved rates of wound healing and quality of life outcomes^[1,2].

The service is based on a self-management model of health and combines evidenced-based treatments with peer support, health promotion and prevention strategies.

Unlike most wound clinics, individuals do not require referral to attend the service. This helps to improve access and reduce

Key innovations

Three key innovations have been initiated for people with leg ulcers in Australia:

1. Establishment of the first nurse practitioner-led Wound Healing Community Outreach Service (WHCOS)
2. Implementation of new community nursing models of care based on the Lindsay Leg Club model of care in the UK
3. Establishment of a new Wound Management Innovation Cooperative Research Centre to lead research and development of future innovations in wound care

waiting times, especially for the proportion of the population who do not currently access traditional health services, such as the homeless and disadvantaged. Approximately 40% of people attending the service live alone and the majority are more than 70 years of age. Clients are never discharged – they are always welcome to access the service for regular health checks and to participate in social, peer support and health-prevention activities.

Analysis of data collected in 2008 and 2009 demonstrated that 90% of leg ulcers healed within 24 weeks of care provided by the WHCOS, encompassing 94% of venous leg ulcers, 72% of mixed venous/arterial leg ulcers and 54% of arterial leg ulcers. Before admission to the service the average duration of ulceration was 26 weeks^[1].

The successful development of an evidence-based WHCOS has enabled strong partnerships to be formed between the

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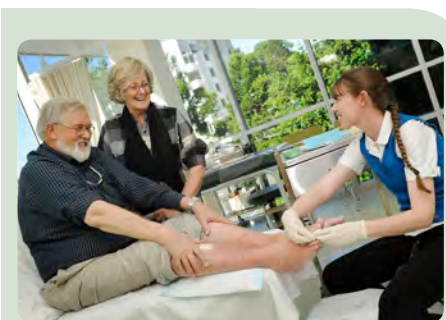


Figure 1 – Client and family receiving care at Queensland University of Technology's WHCOS

service, healthcare providers, community support structures and consumers. By working collaboratively with other healthcare providers, nurse practitioners are in an ideal position to help restructure the healthcare system to better meet the needs of people with chronic wounds [Fig 1].

There is a significant gap between research and practice in chronic wound care. Protocols used within the service are based on current evidence-based clinical practice guidelines ensuring that evidence is incorporated into clinical practice. The WHCOS offers education and clinical support to community nursing organisations, nursing and podiatry students and other clinicians to promote dissemination of evidence-based wound care and transfer of evidence into practice. Responding to demand, funding was obtained for an educational outreach project for health professionals.

Outcomes include a suite of wound management education seminars and workshops delivered in various locations throughout Queensland for over 340 clinicians; while over 100 clinicians and students have visited the WHCOS to observe and learn new techniques. The service and project have helped address the widely acknowledged need to translate evidence and research findings about chronic wound management into everyday clinical practice.

Implementation of new models of community care for leg ulcers

Edwards *et al* (2009) undertook a randomised controlled trial to evaluate the effectiveness of the Lindsay Leg Club model of care for clients with chronic leg ulcers^[3]. The Lindsay Leg Club concept and model was developed in the UK as a result of the response of a community nurse, Ellie Lindsay, to the needs

of patients with chronic leg ulcers. Using an empathic approach, she recognised the burden the condition placed on people with chronic leg ulcers through social isolation and put into practice a plan to address the problem. The collaborative project aimed to improve healing rates, quality of life and cost-effectiveness of care through the establishment of 'Leg Clubs', which provide evidence-based wound care, treatment, information and social support activities in an informal, friendly environment. The clubs aim to be consumer owned and managed.

Results from a randomised trial^[3] found that in comparison to people receiving individual home care, people attending leg clubs had significantly:

- improved healing rates
- reduced levels of oedema and venous eczema
- reduced levels of pain
- improved quality of life
- improved independence in daily activities
- improved morale and self-esteem.

In addition to improved outcomes, the model was shown to be a cost-effective alternative for health service providers^[4].

The successes of the first Leg Clubs have been widely recognised and health service providers from three states across Australia have now started this type of service.

Establishment of a research centre

A new Wound Management Innovation Cooperative Research Centre (CRC) has been allocated AU\$28 million for research over the next eight years. The CRC is led by Professor Zee Upton from the Tissue Repair and Regeneration Program at Queensland University of Technology's Institute of Health and Biomedical Innovation and Professor Helen Edwards of Queensland University of Technology's School of Nursing and Midwifery. The centre will concentrate on investigating mechanisms of wound healing, the development of novel wound therapies and products to diagnose and predict healing outcomes, and clinical processes and prevention strategies.

FUTURE FOCUS

The establishment of the Wound Management Innovation CRC is expected to lead to a new understanding of the biological processes underpinning wound healing and the

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Useful links

Leg Club Foundation – <http://www.legclub.org>

development of novel diagnostics, therapies and clinical processes. To ensure these developments are translated into superior patient outcomes, it is crucial to evaluate the effectiveness of models of care in facilitating the transfer of research findings into clinical practice and improving patient outcomes. Further research into the effectiveness of strategies to facilitate the transfer of evidence into practice will support this process.

Our research into chronic leg ulcers has been inspired by earlier articles on alternative models of care^[5,6], which revealed new ways of approaching the serious problem of chronic leg ulcers. In addition, the Royal College of Nursing's clinical practice guidelines for treating patients with venous leg ulcers is an excellent resource^[7]. The realisation that many models of care for patients with leg ulcers do not facilitate the provision of evidence-based care has led to our commitment to

the development, implementation and dissemination of innovative new models of care and educational initiatives to improve outcomes for individuals with chronic wounds.

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Expert Commentary

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The paper by Edwards et al describes initiatives undertaken in Australia aimed at improving outcomes for patients experiencing leg ulcers. The focus of these initiatives is innovation in evidence-based care delivery. New care delivery structures and the establishment of a multidisciplinary research programme for the development of innovative wound management solutions are presented.

The authors cite the introduction of the innovative patient-centred UK Leg Club® social model in Australia and describe its subsequent adaption to a clinical outreach setting. The benefits of the core themes of this nurse-led model: evidence-based practice, patient empowerment through education and self-management, peer support, drop-in access, health promotion and preventative care are demonstrated by data collected by the Wound Healing Community Outreach Service (WHCOS). The environment and funding of the WHCOS is not explained, so the significance of potential differences with established Leg Clubs, which take place in a non-medical setting and are 'owned' by patients and local community, cannot be ascertained.

By evaluating and implementing contemporary examples of evidence-based innovation, delivering extensive education, disseminating care initiatives and establishing a resource for collaborative research into future advancements, the authors provide foundations for both short and long term strategies for leg ulcer management in Australia.

In undertaking these initiatives, the team has promoted innovation and enhanced collaborative relationships by:

- *replicating a successful model of innovative patient-centred care*
- *understanding multidisciplinary roles and promoting partnership in care and a collaborative, seamless service*
- *sharing innovative practice – providing in-house and external education and training programmes, overcoming territorial barriers in the clinic setting*
- *establishing a new Wound Management Innovation Cooperative Research Centre – developing innovative solutions to improve healing and quality of life for patients with wounds, such as chronic leg ulcers*
- *facilitating effective partnership between vascular consultants / surgeons, physicians, nurses, community clinicians and healthcare industry, working as a collective group in response to the health needs of the community.*