Modernising leg ulcer services through preventing recurrence

Leg ulcers are common and expensive to treat, with the quality of care varying widely across different areas. The introduction of nurse-led community-based clinics has shown increased ulcer healing rates and lowered rates of recurrence. The author assesses the benefits of following this model of care and explains how providers can set up a business case for service redesign.

KEY WORDS

RAL compression hosiery
QIPP programme
CQUIN payment
Ulcer recurrence

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The NHS is facing uncertain times, with limited resources and high expectations from patients and commissioners.

The Quality, Innovation, Productivity and Prevention agenda (QIPP) is a large-scale transformational programme, aimed at improving quality and efficiency savings in the health service (Department of Health [DH], 2010). The QIPP agenda is challenging but the drive towards patient-focused outcomes and personalised care brings opportunities for those involved in the delivery of leg ulcer services.

Leg ulcers are common and costly to treat, and the quality of care provided to patients with this condition varies widely across different sites. The introduction of nurse-led community-based clinics has demonstrated increased ulcer healing rates and decreased rates of ulcer recurrence, but not all areas have followed this model of care. Redesigning leg ulcer services that included designated leg ulcer coordinators and regular support for tissue viability service has been shown to improve patient outcomes, increase productivity and reduce cost.

BACKGROUND

The NHS is facing real challenges with demands for cost-efficiency savings of £15–20bn by 2014/15, and a QIPP agenda aimed at improving quality, increasing productivity and ensuring greater patient satisfaction (DH, 2010). The expectations of commissioners, as well as patients, are rising and the opportunity now exists for 'any qualified provider' to bid to provide services for leg ulcer and wound healing services (DH, 2011). For those involved in the delivery of leg ulcer services the challenge is to demonstrate improved quality outcomes that meet the following expectations:

- Improved healing rates
- Reduction in recurrence
- Greater patient satisfaction
- Cost-efficiency savings.

Many leg ulcer services do not have a systematic approach to leg ulcer management (Dowsett, 2011), and do not accurately record or report healing rates for venous leg ulcers or recurrence rates. However, the development of quality indicators and metrics in wound care means that many services will have to collect this information and demonstrate year-on-year improvements. In some areas leg ulcer healing rates are monitored and used as key performance indicators. In addition, some areas have commissioning for quality and innovation (CQUIN) payments attached, whereby payment is awarded for high quality performance.

IMPROVING LEG ULCER RECURRENCE

Compression therapy is recognised as the mainstay of venous leg ulcer

treatment. Prevention of recurrence and nurse-led leg ulcer services that focus specifically on the patient with a healed ulcer have been shown to reduce recurrence rates from 18–20% to 5.8% (Dowsett, 2011). However, not all areas provide a coordinated approach to care and recurrence rates in the UK as a whole are reported variously as 45–70% (Palfreyman et al, 1998) and 15–71% (Kurz et al, 1999).

Increased patient choice means that many people are choosing where they would like to receive their care. In addition, provider organisations are required to publish quality accounts (DH, 2010), allowing patients to identify the areas where they are more likely to receive effective and efficient treatment. Poor quality care has been shown to be costly and results in patient suffering and poor outcomes for patients (Dowsett, 2010).

Delaying the healing of venous leg ulcers is costly and has been shown to increase the likelihood of recurrence (Barwell et al, 2000; McDaniel et al, 2002). It is estimated that delaying ulcer recurrence by a period of one month could result in a saving of as much as 8% of community nursing time (Peters, 1998). Given that approximately 50% of a community nurse's time is taken up with leg ulcer management, substantial savings could potentially be made if more attention was given to this aspect of care.

The concept of healed leg ulcer clinics or prevention clinics is not new. In Newham, East London, healed leg ulcer clinics have been running since 2005. The benefits of these clinics in terms of reducing recurrence rates and improving patient outcomes has been widely reported (Poore et al, 2002; Flaherty, 2005; Dowsett, 2011).

In East London NHS Foundation Trust, venous leg ulcer recurrence rates fell from 18–20% to 5.8% in 2010 and to 2.4% in 2011 following the redesign and modernisation of the leg ulcer service. This included:

- Introduction of RAL (German quality standard) compression hosiery
- Regular audit of key performance indicators (i.e. healing rates and recurrence rates)
- Making a business case for change that involved two band 5 community nurses being appointed to the role of leg ulcer coordinators and focusing specifically on improving leg ulcer care in their localities.

Patient satisfaction increased and non-attendance rates fell as patients were more likely to return to the healed leg ulcer clinics for their scheduled appointments as they had developed good relationships with the leg ulcer coordinators and had confidence in the care provided. In addition, the average nursing cost per clinic was reduced by 50%, producing an annual saving of £22,000 based on five clinics per week. Venous leg ulcer healing rates rose to 72% at 12 weeks, saving an additional £21,000 per year on materials such as dressings and bandages.

COMPRESSION HOSIERY

Patient concordance is an essential part of preventing leg ulcer recurrence. There are a number of reasons why patients do not comply with recommended treatments for the prevention of leg ulceration. These include:

- Lack of education and understanding about the treatment
- Pain and discomfort
- Difficulty putting on the stockings
- Inappropriate choice of garment (Moffatt et al, 2009).

Patients are more likely to comply with compression hosiery that is easy to use and fits well (Dowsett, 2010). Developments in hosiery, such as improvements to the range of available sizes and colours have led to an increase in patient concordance. In a UK study that followed 113 patients over 15 years, ulcer healing was 97% in patients who adhered to treatment and 55% in those who did not. For those who followed the treatment, the mean time of ulcer healing was 5.3 months and ulcer recurrence was 29% over a five-year period. In the non-adherent group all ulcers recurred at 36 months (Maybury et al, 1991).

Clinics that have introduced RAL compression hosiery have seen an overwhelmingly positive outcome for patients and leg ulcer coordinators.

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KEY POINTS

- Focusing specifically on the patient with a healed ulcer has been shown to reduce recurrence rates.
- If compression hosiery is easy to use and fits well patients are more likely to follow treatment.

Patients report a better fit, ease of application and are more likely to be concordant with treatment. Leg ulcer coordinators report that they have had to request less made-to-measure hosiery as the increased availability of sizes means more patients fit in sizes available on FP10 prescription.

To ensure patients receive their compression hosiery in a timely manner, these clinics carry a stock of RAL hosiery. Patients are measured, fitted and have their hosiery applied on the same day. Providers can then replace their stock on the first review visit once they have filled in their prescription. RAL hosiery stock levels are regularly monitored by the tissue viability team and the local hosiery representative.

SERVICE MODERNISATION

There are a number of challenges that need to be met when redesigning services and introducing new ways of working. Making the case for change involves using information gathered from:

- Audit
- Patient feedback
- Complaints/compliments
- New available evidence
- Resource implications.

The change must also involve stakeholders, including service users.

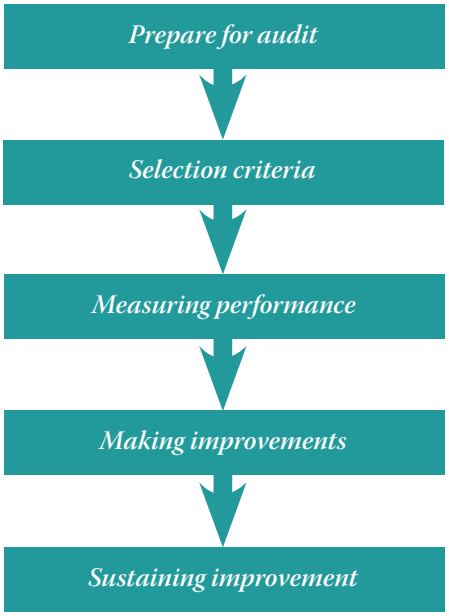

Figure 1. Best Practice Guidelines for Audit (NICE, 2002).

Some service redesigns will need a business case to be developed and approved, particularly if funding is needed. The starting point is always to audit the service to identify good practice and areas for modernisation.

CLINICAL AUDIT

Clinical audit is a process that seeks to improve the quality of everyday care provided to patients. Where services are performing well it provides information to confirm the quality of that clinical service. Audit is not just about collecting information to measure performance, it is about changing and improving practice and sustaining quality improvements. A well-conducted audit needs careful planning and the tools to collect the right information. For leg ulcer patients this includes collecting data on assessment, management and prevention.

Best practice guidelines for conducting clinical audit have been developed (NICE, 2002) and a summary of these is outlined in *Figure 1*.

Patient involvement is essential when preparing for audit. Feedback from user surveys, compliments and complaints can be useful in identifying key issues that need to be improved in a leg ulcer service. Tissue viability link nurses and leg ulcer coordinators can champion the audit and collect data with the support of the tissue viability team.

The results of the audit can be incorporated into a business plan to demonstrate where the service needs to be developed and what the likely cost and resource implications are for modernisation. A business plan is a formal statement that establishes a set of business goals, the reasons why they are believed attainable and a plan to reach those goals. It may also contain background information about the organisation, service or team attempting to reach those goals.

BUSINESS PLAN

Business plans are decision-making tools. There is no fixed content for a business plan but many trusts have templates that can be used. The content and format of a business plan is determined by its goals and decision-making criteria used to approve the plan. A business

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plan represents all aspects of the business planning process covering the vision and strategy as well as secondary issues, such as marketing, operations, human resources and finance (Stutely, 2007).

A good business plan should include:

- An executive summary of no more than one page
- An outline of current service provision, including strengths and opportunities for development
- Planned service direction and management strategy
- Service objectives
- Cost pressures
- Possible changes to investment needs
- Clinical governance and quality
- The involvement of service users and carers
- Possible changes in the level and type of workforce required.

Business case

A business case is used to obtain management commitment and investment approval for a service redesign, which encompasses projects and programmes as well as the rationale for investment.

The business case provides a framework for planning and management of the business or service change. Business cases can range from the comprehensive and highly structured, as required by formal project management, to informal and brief. An informal case might be, for example, a bid for capital to purchase new equipment. Information included in a formal case could be the following:

- Background information on the project, such as existing services and proposed changes
- Expected business/patient benefits
- Reasons for the options being considered
- Rejecting or carrying forward each options appraisal
- Expected costs of the project
- Gap analysis
- Expected risks
- Costs and risks of not carrying out the plan.

A business case should contain some or all of the following information types

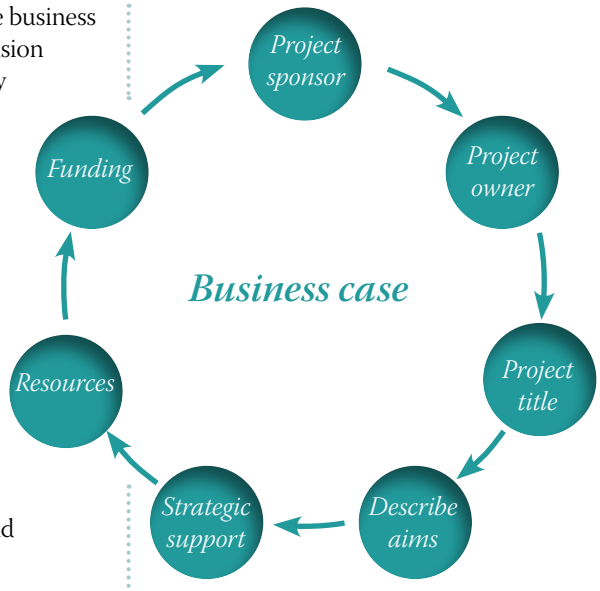

Figure 2. There are several steps involved in developing a successful business case.

(depending on the size, timing, scale and availability of information):

- Reference: project name, background and current service
- Context: service objectives and opportunities
- Value proposition: desired service outcomes, roadmap, quality indicators, savings
- Focus: problem and solution scope; assumptions and constraints; options and appraisals
- Deliverables: improvements to the service and adherence to QIPP agenda
- Project plan and schedule
- Resources required
- Funding.

It is useful when developing a business case to identify a sponsor and project (*Figure 2*) lead that can support the project. This may include your line manger, a commissioner or a patient representative. A service development plan can be included in the business plan and can also be used as a stand alone document to secure funding for service change that may or may not include funding.

CONCLUSION

The drive to improve the quality of care for patients is not new. As clinicians we have always strived to provide patients with high standards of care.

The motivation to increase productivity and cost-efficiency has led providers

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and commissioners to review services and benchmark them against best-practice areas.

It is important, therefore, that leg ulcer prevention and management services are able to demonstrate the valuable contribution they make to improving healing rates, preventing recurrence, increasing patient satisfaction and producing cost-efficiency. Not all service re-designs have to be complex or costly and sometimes just doing things differently can produce substantial rewards both for patients and providers.

Introducing a model of care that introduced leg ulcer coordinators into an existing well established leg ulcer service as well as endorsing the use of RAL compression hosiery has reduced leg ulcer recurrence rates from 18–20% down to 2.4% and cost-efficiency savings of approximately £43,000 per year.

There are a number of challenges that need to be overcome when re-designing services and introducing new ways of working. Making the case for change involves using information from clinical audit, patient feedback, complaints/compliments and new available evidence. The change must also involve stakeholders, including service users.

Results of audit can be incorporated into business plans and business cases with recommendations on how teams can deliver high quality, cost-effective leg ulcer prevention services that meet the patient's needs and expectations.

The challenge, however, will be to sustain the changes and ensure commitment to the delivery of high-quality patient care.

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